CALIFORNIA COASTAL COMMISSION

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Important Hearing Procedure Note:

This is a substantial issue only hearing. Public testimony will be taken <u>only</u> on the question whether the appeal raises a substantial issue. Generally and at the discretion of the Chair, testimony is limited to 3 minutes <u>total</u> per side. Please plan your testimony accordingly.



W14a

Appeal Filed:	2/6/2014
49 th Day:	Waived
Staff:	S.Rexing - SF
Staff Report:	3/28/2014
Hearing Date:	4/9/2014

APPEAL STAFF REPORT SUBSTANTIAL ISSUE DETERMINATION

Appeal Number:	A-2-HMB-14-0004	
Applicant:	City of Half Moon Bay, Public Works Department	
Appellant:	James Benjamin	
Local Decision:	Approved with conditions by the Half Moon Bay City Council on January 21, 2014 (Local Permit Number: PDP-019-13).	
Project Location:	Thirteen different drainages located throughout the City of Half Moon Bay, San Mateo County.	
Project Description:	Flood control maintenance activities designed to restore flood control drainage function, including through removing debris and sediment, repairing sides and banks, replacing/repairing culverts, and managing vegetation (including removing non-natives).	
Staff Recommendation:	No Substantial Issue	

SUMMARY OF STAFF RECOMMENDATION

The Half Moon Bay City Council approved a coastal development permit (CDP) to allow for flood control maintenance of thirteen drainages throughout the City of Half Moon Bay in order to restore and maintain their historic and current flood control drainage function. The flood

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control maintenance activities proposed would include debris removal, sediment removal, vegetation management, repair of existing bank protection, in-kind culvert replacement, and removal of non-native vegetation to clear channel obstructions and maintain originally envisioned and pre-existing flow conditions.

The Appellant contends that the approved flood control maintenance project is inconsistent with Half Moon Bay Local Coastal Program (LCP) policies because: 1) the project activities and construction staging areas would occur within sensitive habitats (including raptor habitat, habitat for rare and endangered species, and wetland and riparian areas), and do not comply with United States Fish and Wildlife Service (USFWS) requirements; 2) there is no evidence that the project is necessary and the project would exacerbate coastal hazards including erosion and bluff instability; and 3) the project would impact the surrounding hydrology including by dewatering wetlands and drying of adjacent lands. Please see **Exhibit 3** for the full appeal document.

After reviewing the local record, staff believes that the appeal does not raise a substantial LCP conformance issue because the City-approved project is at its core an allowable flood control project in these drainages, and the City's action includes significant mitigations to avoid significant adverse resource impacts, including to sensitive species and wetlands, to the maximum extent feasible. In addition, the record indicates that the project will not exacerbate flooding or erosion to surrounding areas, or dewater wetlands. As a result, staff recommends that the Commission determine that the appeal does not raise a substantial LCP conformance issue, and thus that the Commission decline to take jurisdiction over the CDP for this project. The single motion necessary to implement this recommendation is found on page 4 below.

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EXHIBITS

Exhibit 1 – Project Location Maps

Exhibit 2 – City's Final Local Action Notice

Exhibit 3 – Appeal of Half Moon Bay's CDP Decision

Exhibit 4 – LCP Policies Cited in Appeal

Exhibit 5 – Dr. John Dixon's Review Memo

Exhibit 6 – Correspondence

I. MOTION AND RESOLUTION

Staff recommends that the Commission determines that **no substantial issue** exists with respect to the grounds on which the appeal was filed. A finding of no substantial issue would mean that the Commission will not hear the application de novo and that the local action will become final and effective. To implement this recommendation, staff recommends a **YES** vote on the following motion. Passage of this motion will result in a finding of No Substantial Issue and the local action will become final and effective. The motion passes only by affirmative vote of a majority of the Commissioners present.

Motion: I move that the Commission determines that Appeal Number A-2-HMB-14-0004 raises **no substantial issue** with respect to the grounds on which the appeal has been filed under Section 30603. I recommend a **yes** vote.

Resolution: The Commission finds that Appeal Number A-2-HMB-14-0004 does not present a substantial issue with respect to the grounds on which the appeal has been filed under Section 30603 of the Coastal Act regarding consistency with the Certified Local Coastal Plan and/or the public access and recreation policies of the Coastal Act.

II. FINDINGS AND DECLARATIONS

The Commission finds and declares as follows:

A. PROJECT LOCATION AND DESCRIPTION

On January 21, 2014, the City of Half Moon Bay City Council approved a coastal development permit (CDP) for flood control maintenance of thirteen existing drainages located throughout the City. The thirteen drainages are generally narrow, linear, man-made or man-altered drainage features characterized by high volume, short duration flows immediately following rain events with very low base flow (see pages 47-50 and 54-57 of **Exhibit 2** for a more detailed description of each drainage). Project locations are often hydrologically isolated from adjacent floodplains due to past side casting of the original drainage spoils along the edge of the drainages. All of the thirteen drainages were originally constructed for flood control purposes: nine were constructed to drain agricultural or other developed lands prior to 1965;¹ three (the Miramontes Drainage, Central Drainage and the Myrtle Street Bubble-up) were constructed to convey storm water from along a series of streets when the streets were constructed² sometime after 1983 as a part of the Alsace Lorraine et al. Assessment District (per Half Moon Bay CDP 3-81-89); and the Seymour Drainage drains storm water from Seymour Avenue and was likely constructed in the early 2000's, when the houses along the street were constructed³ (see **Exhibit 1** for the specific locations of the thirteen drainages). Most recently, the drainages were maintained by the City

¹ Prior to 1972's Proposition 20 (The Coastal Initiative) and the 1976 Coastal Act.

² Email communication from Carol Hamilton, Senior Planner, City of Half Moon Bay, March 11, 2013.

³ Id (March 11, 2013 email).

pursuant to a 2004 California Department of Fish and Wildlife (CDFW) 5-year term Streambed Alteration Agreement, but that agreement has since expired.

Land use near all the project locations was predominantly agricultural until residential development began in the 1960s through 1980, with most areas resembling their present-day conditions by the late 1990s. Several years without flood control maintenance, as well as runoff from adjacent agricultural and urbanized land uses has contributed to the thirteen project locations being subject to sediment deposition, overgrown vegetation, and the accumulation of litter and debris deposits causing general deterioration of their structural and functioning flood control integrity. This general deterioration has in part resulted in the drainage features and adjacent areas being subjected to flooding, erosion events, infrastructure deterioration, and potential public safety hazards.

The project's wetland delineation (and associated biological opinion) classifies various resource types associated with the thirteen drainages. Some represent riparian corridors (specifically the Myrtle Street Bubble-up, Seymour Drainage, a small portion of the Western Redondo Beach Drainage, Poplar Street Drainage, the western portion of Magnolia Street Drainage, Wavecrest Road Drainage, and located in the vicinity of Kelly Drainage, Miramontes Drainage, and the Eastern Redondo Beach Drainage); some also delineate as wetlands (specifically at the Myrtle Street Bubble-up, the Western Redondo Beach Drainage, Poplar Street Drainage, South Railroad Avenue Drainage, Wavecrest Road Drainage and the Eastern Redondo Beach Drainage); and finally some also have been identified as locations potentially containing San Francisco garter snake, a federally and state designated endangered species (at Miramontes, Central, Myrtle Street Bubble-up, Seymour, Western Redondo Beach, Poplar Street, Magnolia Street, Wavecrest Road and Eastern Redondo Beach, all per the City; and at Railroad Avenue per CDFW).

The purpose of the City-approved project as stated in the City's action is to maintain the project locations' historic and current flood control drainage function because the lack of flood control maintenance over the last five years (since expiration of the 2004 Streambed Alteration Agreement) has led to sediment deposition, overgrown vegetation and accumulation of litter and debris in the drainages. The City-approved flood control activities are defined generally as "periodic activities necessary to maintain water transport capacity; maintain the integrity of existing flood control and sediment detention structures; minimize potentially hazardous situations such as flooding, bank, culvert and roadway erosion; and improve visibility of drainage features" (which the City refers to as a "public safety issue"). The work proposed to carry out the flood control maintenance will typically involve activities such as sediment removal to clear channel obstructions and maintain pre-existing flow conditions, vegetation management, repair of existing banks, in-kind culvert replacement, and removal of litter, debris and non-native vegetation. The equipment required will consist of backhoe, loader, dump truck, hand mover, articulating mower, and powered and manual hand tools (e.g., weed eater, chainsaw, etc.). The City's CDP authorization is tied to the same time period as the CDFW Streambed Alteration Agreement, which is until December 31, 2018. Please see pages 135-139 of Exhibit 2 for the location-specific maintenance activities proposed for each drainage.

On January 21, 2014, the City of Half Moon Bay City Council approved CDP PDP-019-13 authorizing the proposed project. The City's notice of final local action on the CDP application

was received in the Coastal Commission's North Central Coast District office on January 23, 2014 (**Exhibit 2**). The Coastal Commission's ten-working day appeal period for this action began on January 24, 2014 and concluded at 5 pm on February 6, 2014. One appellant filed a timely appeal of the City Council's CDP decision on February 6, 2014 (see below and see **Exhibit 3**).

B. APPEAL PROCEDURES

Coastal Act Section 30603 provides for the appeal to the Coastal Commission of certain CDP decisions in jurisdictions with certified LCPs. The following categories of local CDP decisions are appealable: (a) approval of CDPs for development that is located (1) between the sea and the first public road paralleling the sea or within 300 feet of the inland extent of any beach or of the mean high tide line of the sea where there is no beach, whichever is the greater distance, (2) on tidelands, submerged lands, public trust lands, within 100 feet of any wetland, estuary, or stream, or within 300 feet of the top of the seaward face of any coastal bluff, and (3) in a sensitive coastal resource area if the allegation on appeal is that the development is not in conformity with the implementing actions of the certified LCP; or (b) for counties, approval of CDPs for development that is not designated as the principal permitted use under the LCP. In addition, any local action (approval or denial) on a CDP for a major public works project (including a publicly financed recreational facility and/or a special district development) or an energy facility is appealable to the Commission. This project is appealable pursuant to 30603 (a) (1), (2) and (3) because some approved project locations are in areas between the first public road and the sea, some are within 100 feet of wetlands and streams, and since some project locations are in sensitive coastal resource areas and an allegation on appeal is that the development is not in conformity with the implementing actions of the certified LCP.

The grounds for appeal under Section 30603 are limited to allegations that the development does not conform to the certified LCP or to the public access policies of the Coastal Act. Section 30625(b) of the Coastal Act requires the Commission to conduct a de novo CDP hearing on an appealed project unless a majority of the Commission finds that "no substantial issue" is raised by such allegations.⁴ Under Section 30604(b), if the Commission conducts a de novo hearing and ultimately approves a CDP for a project, the Commission must find that the approved development is in conformity with the certified LCP. If a CDP is approved for a project that is located between the nearest public road and the sea or the shoreline of any body of water located within the coastal zone, Section 30604(c) also requires an additional specific finding that the

⁴ The term "substantial issue" is not defined in the Coastal Act or in its implementing regulations. In previous decisions on appeals, the Commission has generally been guided by the following factors in making substantial issue determinations: the degree of factual and legal support for the local government's decision; the extent and scope of the development as approved or denied by the local government; the significance of the coastal resources affected by the decision; the precedential value of the local government's decision for future interpretations of its LCP; and, whether the appeal raises only local issues as opposed to those of regional or statewide significance. Even when the Commission chooses not to hear an appeal, appellants nevertheless may obtain judicial review of a local government's CDP decision by filing a petition for a writ of mandate pursuant to the Code of Civil Procedure, Section 1094.5. In this case, for the reasons discussed further below, the Commission exercises its discretion and determines that the development approved by the City does not raise a substantial issue with regard to the Appellant's contentions.

development is in conformity with the public access and recreation policies of Chapter 3 of the Coastal Act. Some project locations are between the nearest public road and the sea, and thus the additional public access and recreation finding is needed if the Commission were to approve the project following a de novo hearing.

The only persons qualified to testify before the Commission on the substantial issue question are the Applicant, persons who made their views known before the local government (or their representatives), and the local government. Testimony from other persons regarding substantial issue must be submitted in writing. Any person may testify during the de novo CDP determination stage of an appeal, if there is one.

C. SUMMARY OF APPEAL CONTENTIONS

The Appellant contends that the City-approved project is inconsistent with the Half Moon Bay LCP, including because: 1) the project activities and construction staging areas would occur within sensitive habitats including raptor habitat, habitat for rare, endangered and unique species, and wetland and riparian areas and do not comply with USFWS requirements; 2) there is no evidence that the project is necessary and the project would exacerbate coastal hazards including erosion and bluff instability; and 3) the project would impact the surrounding hydrology including dewatering of wetlands and drying of adjacent lands. In addition to these main issues, the Appellant makes a variety of other contentions regarding the adequacy of the City's Initial Study and Mitigated Negative Declaration (IS/MND) and CEQA process.⁵ Issues of CEQA compliance are not relevant to the Commission's substantial issue determination and therefore are not addressed in this report.

Please see Exhibit 4 for the full appeal document.

D. SUBSTANTIAL ISSUE DETERMINATION

1. Habitat Resources

The Appellant generally contends that the City-approved project is not consistent with the LCP's habitat protection policies (again, see **Exhibit 3** for the full appeal document). The subject LCP and IP policies raised by the Appellant and/or which relate to development proposed in habitat areas can be found in full in **Exhibit 4**.

It is important to note that all of the cited LCP policies, as well as all that are included within the City of Half Moon Bay's LCP, derive from the authority of the Coastal Act, and Policy 1-1 of the LCP expressly states that it adopts the Coastal Act policies as the guiding policies of the LUP. The Coastal Act includes a flood control policy, namely Section 30236:

⁵ These appeal contentions include claims that the project approval is inconsistent with CEQA. However, contentions regarding the City's compliance with CEQA are not valid appeal contentions because appeal contentions, per the Coastal Act, are limited to questions of LCP consistency and Coastal Act access and recreation consistency.

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Section 30236. Water supply and flood control.

Channelizations, dams, or other substantial alterations of rivers and streams shall incorporate the best mitigation measures feasible, and be limited to (1) necessary water supply projects, (2) flood control projects where no other method for protecting existing structures in the flood plain is feasible and where such protection is necessary for public safety or to protect existing development, or (3) developments where the primary function is the improvement of fish and wildlife habitat.

Where the application of Coastal Act/LUP policies overlap such as the application of Sections 30240, 30233 and 30236 and their parallel LUP provisions, the more specific policy, here 30236 and its LUP parallel, controls over the other more generally applicable Coastal Act policies, here 30233 and 30240 and their LUP parallels. Thus, when a flood control project would occur in a riparian corridor that is also an environmentally sensitive habitat area, Section 30236 and LUP Policy 3-9 allow for such flood control projects in the riparian corridor subject to certain criteria, importantly including that such projects incorporate the best mitigation measures feasible.⁶

Therefore, the evaluation of a flood control project in an area that is wetland, riparian and ESHA is necessarily different from the evaluation of other types of non-flood control projects that affect habitat areas. The evaluation is not one of identifying whether it is one of the enumerated allowable uses in wetland or ESHA (e.g., the seven types of allowed uses identified in Section 30233 or a resource dependent use allowed in ESHA); rather it is whether it is a necessary flood control project that employs the best possible mitigation measures to address coastal resource issues. Thus, at its core, the LCP question under this appeal is exactly that, and not whether the project meets each and every one of the Appellant-identified policies because Section 30236 and LUP 3-9 specify that flood control is allowed subject to certain criteria.⁷

As described earlier, the purpose of the City-approved project is to maintain the project locations' historic and current flood control drainage functions. The City record indicates that such flood control measures are necessary to avoid significant flooding, including in terms of

⁶ As stated by the Court in *Bolsa Chica Land Trust v. Coastal Commission* (1999) 71 Cal.App4th 493: "In particular, we do not believe the policies embodied in <u>sections 30240</u> and <u>30233</u> are in direct conflict necessitating resort to the power provided by section 30007.5. Rather, in this instance we agree with Commission's guidelines that the ESHA protections provided by <u>section 30240</u> are more general provisions and the wetland protections provided by <u>section 30233</u> are more specific and controlling when a wetland area is also an ESHA. The guidelines state: "The Commission generally considers wetlands, estuaries, streams, riparian habitats, lakes and portions of open coastal waters to be environmentally sensitive habitat areas because of the especially valuable role of these habitat areas in maintaining the natural ecological functioning of many coastal habitat areas and because these areas are easily degraded by human developments. In acting on an application for development [of] one of these areas; <u>Sections 30230</u>; 30231; 30233; and 30236. <u>Section 30240</u>, a more general policy, also applies, but the more specific language in the former sections is controlling where conflicts exist with general provisions of <u>Section 30240</u> (e.g., port facilities may be permitted in wetlands under <u>Section 30233</u> even though they may not be resource dependent)."

⁷ The LCP derives its statutory authority from the Coastal Act, and all of its provisions, including the policies above, must be read consistent with and understood to conform to the Coastal Act as a matter of law (*McAllister v. California Coastal Commission*, (2009) 169 Cal.App.4th 912, 931).

damage to surrounding properties. Thus, the project is at its core a flood control project that is designed to clear the drainages in order to restore them to their original flood control function. The project also includes significant mitigation measures to address potential coastal resource impacts, including:⁸

- Requiring consultations with USFWS and CDFW, including to implement mitigation measures as directed by these two agencies.
- Requiring conformance with CDFW's Streambed Alteration Agreement (SAA; see draft SAA on pages 318-361 in **Exhibit 2**).
- Requiring that all mitigation measures identified in the Final Mitigated Draft Negative Declaration and the final Mitigation and Monitoring Program (see pages 508-517 of Exhibit 2) be implemented.
- Requiring that a qualified biologist approved by CDFW be present to survey and monitor for sensitive species and to halt work if such species are found. At that point additional consultations with USFWS and CDFW will be required to develop and implement additional mitigation measures as appropriate.
- Requiring that work be done in channels only when water is not flowing and outside of the rainy season.
- Requiring avoidance measures for sensitive species, including limiting project activities to the times of year when such species are less likely to be present, and providing for phased activities within drainages to assist in identifying any species (e.g., first cutting vegetation to a level that will make the ground visible, followed by biologist survey, and only allowing mowing where species are not present).
- Requiring that if project activities are conducted during migratory bird nesting season, the areas will first be surveyed for nests by a qualified biologist, any active nests found will be documented, and biologist will monitor project activities to assure that they do not impact nesting birds.
- Requiring that all onsite workers be trained regarding sensitive species, sensitive habitats, and conservation measures.
- Requiring disturbance to vegetation and riparian areas to be the minimum necessary to complete the project activities.
- Requiring non-native and invasive removal and replanting with natives.
- Requiring the amount of land exposure, erosion, sedimentation and runoff to be minimized through incorporating best management practices (BMPs), including as identified as appropriate by the Regional Water Quality Control Board (RWQCB).
- Requiring that any exposed soils be stabilized to minimize erosion through the use of silt fences, straw hay bales or other such erosion control BMPs.

⁸ For a full list of mitigation measures please refer to pages 508-517 of Exhibit 2.

• Requiring that all spoils from project activities be placed where they will not enter the drainage features, and that such spoils be removed from areas and disposed of appropriately.

The Commission's senior ecologist, Dr. John Dixon, has reviewed the project and its mitigation measures and has concluded that the project should not result in significant impacts to habitat resources because the project incorporates appropriate provisions in the Mitigation and Monitoring Plan that reduce and mitigate for the potential risks to habitats and sensitive species .⁹ This suite of measures is the best set of mitigation measures feasible in this case. Thus, in conclusion, the project is a necessary flood control project that incorporate the best mitigation measures feasible, and should not result in significant coastal resource impacts as approved and conditioned by the City. As a result, the Appellant's project need and habitat related contentions do not raise a substantial LCP conformance issue.

2. Hydrologic Impacts

The Appellant contends that the City-approved project would impact the surrounding hydrology, including dewatering of wetlands and drying of adjacent land. The LCP policies that relate to the protection of wetlands can be found in full in **Exhibit 4**.

The City has stated that the affected drainages are hydrologically isolated from subsurface flows and there is no evidence in the record that speaks to the Appellant's contentions that there will be adverse impacts to subsurface flows. Dr. Dixon has evaluated the project materials and concurs that there is no basis for saying that nearby wetlands will be dewatered as a result of the project, and indicates that nearby seasonal wetlands are generally within depressions and would not be expected to be affected by a swale some distance away, concluding that subsurface flow to the drainages is unlikely unless there is a shallow, perched water table and there is no evidence of such here.¹⁰ Thus, the Appellant's hydrologic contentions do not raise a substantial LCP conformance issue.

3. Coastal Hazards

The Appellant contends that the City-approved project would exacerbate coastal hazards including erosion and bluff instability, including contending that the City did not identify baseline conditions for measuring water flow and erosion. The LCP policies cited by the Appellant require that no new development be permitted in areas of flooding due to tsunamis or dam failure unless it can be demonstrated that the hazard no longer exists or can be mitigated through improvements, that new development not contribute to flood hazards, and that new development be constructed so as to prevent increases in runoff that would erode natural drainage courses. The LCP policies that relate to coastal hazards can be found in full in **Exhibit 4**.

These LCP provisions address development in areas of flood hazards, prohibit development that may contribute to flood hazards, and outline geologic reporting requirements for projects involving substantial alteration of waterways (LCP Policy 4-7, 4-8, 4-9 and IP Section 18.38.030

⁹ See Dr. Dixon's memo in Exhibit 5.

¹⁰ Id (Dr. Dixon's memo, Exhibit 5).

and 18.38.045). In general, these policies apply to new development proposed in hazardous flood areas that may not be allowed unless it can be demonstrated that the threat of flooding no longer exists and that the new development will not contribute to flood hazards or increased runoff and erosion. These types of policies are important because they protect new development from adverse impacts of flooding that may exist on site and they prevent existing development from being further threatened by flooding and erosion that can result from allowing development in flood-prone areas that may exacerbate flooding in areas adjacent. The City of Half Moon Bay has flood and tsunami run-up zones that require such coastal hazard policies. However, the policies are not directly on point regarding the proposed project which involves no structural development and is designed instead to only restore flood control capacity in existing flood control and sediment detention structures, and minimize potentially hazardous situations such as flooding, bank, culvert and roadway erosion. Thus, in many ways, the project does exactly the opposite of what the Appellant contends.

The Appellant also contends that the City should have prepared a geologic report to establish baseline conditions of water flow and erosion in order to assure that the project activities would not contribute to the erosion and/or geologic instability of the cliffs. LCP Section 18.38.045 requires that a geologic report be prepared for projects that involve substantial alteration of waterways in order to assess the project's threats from hazards or impacts to hazards on areas adjacent to the project. In addition, if impacts to coastal hazards are identified, the LCP requires that the report recommend mitigation measures to ensure the elimination or reduction of identified hazards.

This project is for flood control activities in thirteen existing drainages located throughout the City. The activities proposed as a part of the project include debris removal, sediment removal to clear channel obstructions and maintain pre-existing flow conditions, vegetation management, repair of existing bank protection, in-kind culvert replacement, and removal of non-native vegetation to restore and maintain flood control. As such, these types of activities in this case would not constitute "substantial alteration" of the drainages. As a part of the City-approved project, the drainages will only be cleared of obstructions and overgrown vegetation in order to restore flows. The project does not propose to lower the flow lines of the drainages, re-route the drainages in any way or alter the drainages beyond restoring their function. Therefore, no geologic report would be required for the City-approved project per the requirements of LCP Section 18.38.045.

Further, the Commission's senior coastal engineer, Lesley Ewing, reviewed project materials and suggests that the activities of clearing vegetation, excess sediment build-up, and establishing positive flows in the drainages are not the type of activities that would exacerbate erosion to the surrounding areas. Likewise, the Commission's senior geologist, Dr. Mark Johnsson states that while the proposed removal of vegetation, trash, and minor sediment accumulations in these features will likely increase velocity and "flashiness" of flows that could lead to some minor incision, the low gradient of these features limits the amount of incision that is likely and the impacts would be minimal. Therefore, it is unlikely that the City-approved flood control activities would contribute to geologic instability and erosion at the coastal bluff, especially since no project activities are proposed in coastal bluff areas themselves. The City-approved project

also contains significant mitigation in order to assure that erosion and sedimentation will be minimized, including storm water pollution BMPs, limiting work to the dry season in order to minimize erosion/siltation, and through the use of sediment controls such as straw mulch and silt fences.

In short, the City-approved project should not result in exacerbating coastal hazards as approved and conditioned by the City. As a result, the coastal hazard contentions do not raise a substantial LCP conformance issue.

E. CONCLUSION

When considering a project that has been appealed to it, the Commission must first determine whether the appeal of the approved development raises a substantial issue of LCP conformity, such that the Commission should assert jurisdiction over a de novo CDP for such development. As described above, the Commission has been guided in its decision of whether the issues raised in a given case are "substantial" by the following five factors: the degree of factual and legal support for the local government's decision; the extent and scope of the development as approved or denied by the local government; the significance of the coastal resources affected by the decision; the precedential value of the local government's decision for future interpretations of its LCP; and, whether the appeal raises only local issues as opposed to those of regional or statewide significance. In this case, these five factors, considered together, support a conclusion that this project does not raise a substantial LCP conformance issue.

First, the City had a high degree of legal and factual support for its decision. The City-approved project consists of flood control maintenance activities that do not propose to alter the project locations' current function as drainages. The City prepared a Biological Assessment as well as an Initial Study and Mitigation Negative Declaration that assessed the impacts of the approved work and identified mitigation measures in order to avoid and reduce potential adverse impacts to the maximum extent feasible. Further, the City has approved as a part of the project a Mitigation and Monitoring Program to lessen and continually assess the project's impacts. The City's approval has appropriately considered the LCP's habitat and hazards requirements, including providing for significant mitigations to address potential impacts. Thus, there is adequate factual and legal support for the City's decision.

Second, the extent and scope of the approved development is no larger than what is required for the City to address the flooding concerns and the project's stated objectives. The project consists of flood control activities related to already existing drainage facilities that will clear the drainages of obstructions and that aims to restore flows in order to maintain the drainages for their historic and current flood control use. In addition, the City has pared down the project and worked to streamline the activities at each drainage, making the scope of the project and the extent of the work proposed the minimum amount necessary to address the project's flood control objectives, specific for each drainage.

Third, in terms of the significance of the coastal resources affected by the project, the project avoids significant impacts to coastal resources to the maximum extent feasible because the project incorporates appropriately protective measures to lessen the potential impacts to coastal resources such as sensitive species.¹¹ The project incorporates the best mitigation measures feasible, and should not result in significant coastal resource impacts as approved and conditioned by the City. Thus, the affected coastal resources will not be significantly impacted in any case.

Fourth, the approved project does not present an adverse precedent for future interpretations of its LCP. Specifically, the project is limited to flood control activities for already-existing drainages and the project activities are tailored specifically to the project objectives of flood control maintenance and include mitigation measures to address impacts to coastal resources. Further, the flood control activities approved and the mitigation measures required at each drainage have been tailored to allow the minimum work required to restore the drainage's function and to avoid and mitigate impacts specific to the areas. Finally, because the project appropriately addresses LCP policies in a flood control context, including in terms of incorporating the best possible mitigation measures feasible, the project is not expected to set an adverse precedent for future interpretation of the LCP.

Finally, the City's approved project raises only local issues as opposed to those of regional or statewide significance. Based on the scale and nature of the project, and the absence of any significant legal issue of interpretation or LCP application, the appeal filed for this development presents essentially a local issue.

Based on the foregoing, including when all five substantial factors are weighed together, the appeal contentions do not raise a substantial LCP conformance issue and thus the Commission declines to take jurisdiction over the CDP application for this project.

¹¹ Id (Dr. Dixon's memo, Exhibit 5).





P:\26000-26999\26185 HMB Drainage Maintenance Biological Services\GIS\MXD\Figures\Figure 1 - Project Locations Map Revised CEQA Update.mxd

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BUSINESS OF THE COUNCIL OF THE CITY OF HALF MOON BAY

For meeting o	January 21, 2014		
то:	Ionorable Mayor and City Council		
VIA:	Laura Snideman, City Manager		
FROM:	Carol Hamilton, Senior Planner		
TITLE:	APPEAL BY JAMES BENJAMIN OF THE PLANNING COMMISSION'S DECISION TO APPROVE A COASTAL DEVELOPMENT PERMIT (PDP-019-13) AND ADOPT A MITIGATED NEGATIVE DECLARATION FOR ROUTINE MAINTENANCE OF 15 DRAINAGE FEATURES IN HALF MOON BAY		

AGENDA REPORT

RECOMMENDATION

Deny the appeal and affirm the Planning Commission's decision, modified to eliminate Kehoe ditch and the Roosevelt drainage, approve a Coastal Development Permit and adopt a Mitigated Negative Declaration to allow routine maintenance of specified drainage features in the City of Half Moon Bay, subject to the Findings (Exhibit A) and Conditions (Exhibit B) contained in Attachment 1.

FISCAL IMPACT

The maintenance activities authorized by this Coastal Development Permit would be accommodated within the current maintenance budget; no additional funding is required. If the proposed maintenance activities are not implemented, continued deterioration of the facilities could increase future maintenance costs.

BACKGROUND

Appeal Procedure

The City of Half Moon Bay Zoning Code, which is part of the City's Local Coastal Program (LCP), provides that Planning Commission decisions are appealable to the City Council. Zoning Code Section 18.38.115 specifies that appeals to the findings of any required report (such as a Mitigated Negative Declaration/Initial Study) shall be made as part of the Coastal Development Permit process.

On November 26, 2013, the Planning Commission approved a Coastal Development Permit (CDP) application requested by the City of Half Moon Bay Public Works Department for routine maintenance of 15 drainage features located citywide and adopted a Mitigated Negative Declaration (MND) for the project. The current appeal was submitted on December 6, 2013, within the 10-day appeal period, asserting the appellant's concerns about the subject project's compliance with the City's certified Local Coastal Program (LCP), the California Environmental Quality Act (CEQA), and with a settlement agreement resulting from a lawsuit filed by appellant

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James Benjamin in 2010 regarding maintenance of the Kehoe Ditch conducted by the City in 2009 (hereinafter, the "Kehoe Ditch Settlement Agreement"). On December 17, 2013, Mr. Benjamin submitted a revised appeal providing various corrections and minor word changes (see Attachment 2). In his appeal, Mr. Benjamin specifically demands, among other things, "additional reductions in project area (i.e., removing the Roosevelt and Kehoe watercourses from the project area)."

To prevail on this appeal of the CDP, the appellant must demonstrate that the proposed routine maintenance activities do not conform to the standards set forth in the City's LCP or the coastal access policies of the Coastal Act. The appeal cites several LCP policies and Zoning Code provisions with which the appellant claims the proposed maintenance activities are not consistent. To prevail in the appeal of the MND, the appellant must demonstrate substantial evidence in the record that supports a fair argument that significant environmental effects may occur as result of the proposed maintenance activities. The appeal asserts that the project will result in one or more significant environmental impacts and that an Environmental Impact Report is required. As demonstrated in this report and the documents attached hereto, staff believes the project is consistent with the City's LCP and the coastal access policies of the Coastal Act and that there is not substantial evidence in the record that supports a fair argument that significant environmental effects may occur as a result of the proposed maintenance activities. To reduce the likelihood that the entire City-wide project will be held up indefinitely by an appeal to the Coastal Commission staff recommends, after consultation with Coastal Commission, staff that the Kehoe and Roosevelt drainages be removed from the project. Unfortunately, this will mean that even minimal maintenance of the Kehoe and Roosevelt drainages will be delayed for, at a minimum, the 2014 calendar year. It may be possible, however, to address those drainages, either together or separately, by processing a separate Coastal Development Permit at some point in the future.

Project Background

City maintenance of drainage features in Half Moon Bay has not occurred since 2009. A fiveyear Lake and Streambed Alteration Agreement (SAA) approved by the California Department of Fish and Wildlife (CDFW) in 2004 for routine maintenance of a limited number of drainages expired in 2009. Several years without regular maintenance, as well as runoff from adjacent agricultural and urbanized land uses, has contributed to sedimentation in the project locations, overgrown vegetation, and the accumulation of litter and debris deposits that has furthered the general deterioration of their structural and functioning integrity. The City is pursuing a new Lake and Streambed Alteration Agreement concurrently with this Coastal Development Permit to allow resumption of routine maintenance at the proposed drainage locations citywide.

The Draft Lake and Streambed Alteration Agreement, prepared by CDFW, is provided in Appendix B of the Final Draft Mitigated Negative Declaration/Initial Study (see Attachment 3).

The original SAA application proposed routine maintenance at 17 project locations and emergency clearing and cleaning at an additional 5 project locations. Prior to the Planning

Appeal of Coastal Development Permit and Mitigated Negative Declaration for Routine Maintenance of 15 Drainage Features in Half Moon Bay (File No. PDP-019-13) January 21, 2014 Page 3 of 7

Commission hearing on the CDP, staff revised the project to eliminate routine maintenance at two project locations (B-7, Magnolia Drainage and B-8, Seymour Detention Basin) and all of the "A" project locations where emergency clearing and cleaning was proposed. Any future maintenance activities at these locations will be addressed through a separate permit process. Emergency activities may still be required, but will be completed separately from this project, in full compliance with Section 18.20.040 of the Zoning Code and all other applicable regulations. The revisions to the SAA are included in Appendix B of the Final Draft MND/IS (Attachment 3). The CDP, as approved by the Planning Commission, included the 15 project drainages identified in Table 1.

Project Location	Location Description	Drainage Feature	
		Description	
B-1 Roosevelt Drainage Alameda Ave. to Coastside Trail		Natural perennial creek	
B-2 Kehoe Ditch	Hwy. 1 to Coastside Trail	Natural/modified	
Drainage		intermittent drainage	
B-3 Kelly Drainage	S/S Kelly Ave., Railroad Ave. ROW to	Man-made ephemeral swale	
	Coastside Trail		
B-4 Miramontes	Railroad Avenue to Coastside Trail	Man-made ephemeral ditch	
Drainage			
B-5 Central Drainage Railroad Avenue to Coastside Trail		Man-made ephemeral ditch	
B-6 Myrtle St. Bubble-	Railroad Avenue to Coastside Trail	Man-made ephemeral ditch	
Up			
B-9 Seymour Drainage	S/S Seymour, Hwy. 1 to Coastside Trail	Man-made ephemeral	
		ditch/swale	
B-10 Redondo Beach	Both/S Redondo Beach Rd., Railroad Ave.	Series of man-made	
Rd.	ROW to Coastside Trail	ephemeral	
		ditches/swales/depressions	
C-1 Railroad Ave.	W/S Railroad Ave., Spruce to Poplar Sts.	Man-made ephemeral swale	
C-2 Poplar St. Both/S Poplar St., Railroad Ave. to		Man-made intermittent ditch	
	Coastside Trail		
C-3 Railroad Ave.	W/S Railroad Ave, Metzger to Grove Sts.	Man-made ephemeral swale	
C-4 Grove St.	S/S Grove St., west of First St. to Railroad	Man-made ephemeral swale	
	Ave.		
C-5 Magnolia Street	Hwy. 1 to First Ave.	Man-made ephemeral	
		ditch/swale	
C-6 Wavecrest Rd.	N/S Wavecrest Rd., Hwy. 1 to Smith Field	Man-made intermittent ditch	
C-7 Redondo Beach Rd.	Both/S Redondo Beach Rd., Hwy 1 to the	Series of man-made	
	Railroad Ave. ROW	ephemeral	
		ditches/swales/depressions	

Table 1 Dwa	ia at La cationa ag A	mmarrad h	the Dlanning	Commission
Table 1. Pro	Ject Locations as A	pproved b	y the Planning	Commission

As described more fully in the Draft SAA, the maintenance activities proposed include removal of trash and debris; control of weeds, grasses and ruderal vegetation on channel banks and access roads using an articulated mower, hand tools or goat grazing; removal of herbaceous and emergent wetland plants from the channel that restrict capacity and cause erosion or flooding; removal of accumulated debris and sediment in man-made drainage features down to the

Appeal of Coastal Development Permit and Mitigated Negative Declaration for Routine Maintenance of 15 Drainage Features in Half Moon Bay (File No. PDP-019-13) January 21, 2014 Page 4 of 7

originally constructed flow line; removal of trees and shrubs less than 4 inches in diameter (measured at 48 inches above grade) below the ordinary high water mark that are restricting flow capacity and causing erosion or flooding; in-kind replacement of culverts and other storm water management structures that are no longer functional; bank stabilization and repair of locations that are no longer functional and create the potential for flooding or erosion; and trimming and removal of the minimum amount of vegetation necessary to allow suitable access to perform activities required to restore normal flow levels.

Environmental Review

On November 8, 2013, staff circulated a Draft Mitigated Negative Declaration (MND) and Initial Study (IS) to the State Clearinghouse for public review. The Initial Study included a Biological Resource Evaluation prepared in conformance with the requirements of Title 18 of the Half Moon Bay Municipal Code. The Initial Study concluded that, based on mitigation incorporated into the project, the project would not result in any significant environmental impact. On November 14, 2013, staff provided responses to eight comment letters received on the Draft MND/IS from individuals and organizations and made associated revisions to the Draft MND/IS. On November 26, 2013, the Planning Commission adopted the MND as complete and in conformance with the California Environmental Quality Act (CEQA). The Final Draft MND/IS is included as Attachment 3. The Responses to Comments on the MND are provided as Attachment 4.

Record of the Planning Commission Hearing

On November 26, 2013, the Planning Commission held a public hearing on the subject CDP and Final Draft MND. The Planning Commission Staff Report is included as Attachment 5. Several citizens provided the Planning Commission written comments (see Attachment 6) and/or oral testimony. The Planning Commission asked clarifying questions regarding the proposed project and asked that staff respond to Mr. Benjamin's assertion that the project is not consistent with the Kehoe Ditch Settlement Agreement. Staff affirmed that the project is consistent with of Zoning Code Section 18.38.085 as specified in the settlement agreement. The Planning Commission approved the CDP and adopted the MND on a 3-0 vote.

Agency Coordination/Project Revision

On December 3, 2013, following approval of the CDP by the Planning Commission, City staff hosted a meeting with representatives of the Coastal Commission, California Department of Fish and Wildlife, U.S. Army Corps of Engineers, National Marine Fisheries Service, and U.S. Fish Wildlife Service to discuss the proposed maintenance project. The agencies provided input regarding the permitting options available to the City in carrying out the maintenance project. Representatives of the Coastal Commission expressed concern regarding the proposed maintenance work at two specific drainages, Roosevelt (B-1) and Kehoe (B-2). At that time, Coastal Commission staff indicated that inclusion of the Roosevelt and Kehoe Drainages may slow down its review of the project if an appeal to the Coastal Commission is filed. It was therefore suggested that the City remove these drainages from the maintenance project.

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Stephanie Rexing of the Coastal Commission reiterated this comment in a letter to Bruce Ambo, Planning Manager dated December 9, 2013, indicating that removing the two drainages from the project may facilitate the Coastal Commission's review of the project (if it were appealed to that body) and allow the City to proceed with maintenance of the other ditches (see Attachment 7).

In the interest of moving forward some portion of the maintenance project, staff is recommending that the City Council eliminate the Kehoe and Roosevelt Drainages from the current CDP consistent with recommendations of the Coastal Commission staff. This will not preclude the City from pursuing maintenance of these drainages through a separate CDP, but may facilitate resolution of any appeal of the City Council's decision on the current CDP and allow maintenance of the remaining drainage facilities to proceed. The 13 drainages that staff recommends be included in the current CDP are shown in Figure 1. If the City Council chooses to approve the project with the recommended revisions, staff will work with the California Department of Fish and Wildlife (CDFW) to revise the SAA. The Draft Resolution (Attachment 1) has been revised to eliminate the Kehoe and Roosevelt Drainages from the project description.

Appeal of Coastal Development Permit and Mitigated Negative Declaration for Routine Maintenance of 15 Drainage Features in Half Moon Bay (File No. PDP-019-13) January 21, 2014 Page 6 of 7



P:\26000-26999\26185 HMB Drainage Maintenance Biological Services\GIS\MXD\Figures\Figure 1 - Project Locations Map Revised CEQA Update.mxd

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Appellant's Contentions

Mr. Benjamin's appeal raises a number of claims regarding the City's compliance with LCP policies and Zoning Code standards in approving the CDP for the maintenance activities, and specifically demands removal of the Kehoe and Roosevelt drainages from the project. These arguments can be organized into three basic categories: (1) permissibility of the proposed use in the project area; (2) adequacy of the biological report/environmental review; and (3) failure to condition approval of the CDP on an amended Habitat Areas and Water Resources Overlay map. Additionally, the appeal asserts that the project is not consistent with the Kehoe Ditch Settlement Agreement in that the project is not consistent with Section 18.38.085 of the Zoning Code.

In considering an appeal challenging the Planning Commission's approval of the CDP, the City Council shall only consider as grounds for appeal allegations that the development does not conform to the policies and standards set forth in the City's certified LCP. In considering the appeal of the Planning Commission adoption of a MND for the project, the City Council shall consider whether the Planning Commission properly adopted an MND for the project or whether an EIR is required. Pursuant to CEQA, an EIR is required only if there is substantial evidence in the record that supports a fair argument that one or more significant environmental effects may occur as result of the proposed maintenance activities. If the City Council were to determine that an EIR is required, it could not approve the CDP until the EIR process is complete.

Staff has addressed each of appellant's concerns regarding the CDP and compliance with CEQA. The attached Response to Appeal (Attachment 8) provides responses to each of 15 numbered comments included in the appeal. As discussed in the Response to Appeal, the City is confident, based on evidence provided in the Biological Resource Assessment, MND/IS, Draft SAA, Response to Comments on the MND (Attachment 3), and Planning Commission Staff Report, that the proposed project, as conditioned, is consistent with the standards set forth in the City's Local Coastal Program and Zoning Code, the coastal access policies of the Coastal Act, and requirements of CEQA.

Based upon the findings made by the Planning Commission and as conditioned, the application for a CDP and associated MND/IS for maintenance of the specified drainage facilities are consistent with all applicable LCP policies and development standards and with the requirements of CEQA. Staff recommends that the City Council uphold the Planning Commission decision to approve CDP File No. PDP-019-13 and adopt the MND for the project.

ATTACHMENTS

- 1. Resolution of Approval with Findings (Exhibit A) and Conditions (Exhibit B)
- 2. Appeal
- 3. Final Draft Mitigated Negative Declaration, Initial Study, and Biological Resource Evaluation (Appendix A)
- 4. Responses to Comments on the Draft Mitigated Negative Declaration/Initial Study
- 5. Planning Commission Staff Report for November 26, 2013
- 6. Public Correspondence
- 7. Letter from Stephanie Rexing of the Coastal Commission, dated December 9, 2013
- 8. Response to Appeal

ATTACHMENT 1 CITY COUNCIL RESOLUTION _____ RESOLUTION FOR APPROVAL PDP-019-13

Coastal Development Permit for a City-Wide Drainage Ditch Maintenance Project to provide routine maintenance at thirteen drainage locations in Half Moon Bay.

WHEREAS, an application was submitted requesting approval of a Coastal Development Permit for a City-Wide Drainage Ditch Maintenance Project to provide routine maintenance at fifteen drainage locations in Half Moon Bay; and

WHEREAS, the procedures for processing the application have been followed as required by law; and

WHEREAS, the Planning Commission conducted a duly noticed public hearing on November 26, 2013, at which time all those desiring to be heard on the matter were given an opportunity to be heard; and

WHEREAS, the Planning Commission after considering all written and oral testimony presented for its consideration adopted the Mitigated Negative Declaration and Mitigation Monitoring Program and approved the Coastal Development Permit; and

WHEREAS, an appeal of the Planning Commission decision was filed within the appeal period; and

WHEREAS, the City Council conducted a duly noticed public hearing on the appeal on January 21, 2014, at which time all those desiring to be heard on the matter were given an opportunity to be heard; and

WHEREAS, the City Council considered all written and oral testimony presented for its consideration; and

WHEREAS, the City Council has determined that the proposed Mitigated Negative Declaration and Initial Study are complete and in conformance with the California Environmental Quality Act; and

WHEREAS, the City Council has made the required findings for approval of the project, set forth in Exhibit A to this resolution;

NOW, THEREFORE, BE IT RESOLVED that, based upon the Findings in Exhibit A and subject to the Conditions of Approval contained in Exhibit B, the City Council adopts the Mitigated Negative Declaration and Mitigation Monitoring Program for application PDP-019-13;

BE IT FURTHER RESOLVED that, based upon the Findings in Exhibit A and subject to the Conditions of Approval contained in Exhibit B, the City Council rejects the appeal approves application PDP-019-13, as modified to remove the Kehoe and Roosevelt drainages from the project.

PASSED AND ADOPTED by the City of Half Moon Bay City Council at a duly noticed public hearing held on January 21, 2014 by the following vote:

AYES, NOES, ABSENT, ABSTAIN,

APPROVED:

ATTEST:

John Muller, Mayor

Siobhan Smith, City Clerk

EXHIBIT A FINDINGS AND EVIDENCE PDP-019-13 Coastal Development Permit for a City-Wide Drainage Ditch Maintenance Project to provide routine maintenance at thirteen drainage locations in Half Moon Bay.

The required Coastal Development Permit for this project may be approved or conditionally approved only after the approving authority has made the following findings.

1. Local Coastal Program – The development as proposed or as modified by conditions, conforms to the Local Coastal Program.

City Council Evidence: A Biological Resource Evaluation was prepared for the project by SWCA Environmental Consultants. That report, Appendix A of the Initial Study, was circulated for a 45-day review to the applicable resources agencies, including the California Department of Fish and Wildlife, the U.S. Fish and Wildlife Service, the U.S. Army Corps of Engineers, and the California Coastal Commission. An Initial Study was prepared for the project which evaluated the potential impacts of the project on coastal resource areas and sensitive habitat, identified mitigation to avoid significant impacts on coastal resource areas and sensitive habitats, and determined that the proposed maintenance program conforms to the Local Coastal Program.

The Local Coastal Program (LCP) (Chapter 3) provides permitted uses and performance standards for new uses and development in riparian corridors, wetlands and sensitive habitats, including habitats of rare and endangered species. The project proposes maintenance of existing storm water drainage facilities; as such, it does not introduce new uses that require a use conformance or alternatives analysis. The proposed maintenance project does meet the definition of "development;" however, unlike most development, the proposed activities seek to maintain the current and historic function of existing public facilities and thereby mitigate potential flooding impacts.

The proposed maintenance project has been carefully designed to conform to the performance standards for development in riparian corridors, riparian buffer zones, wetlands and sensitive habitats. Extensive mitigation identified in the Mitigated Negative Declaration (MND) and Initial Study (IS) and Avoidance and Minimization Measures specified in the Draft Lake and Streambed Alteration Agreement (SAA) provide for minimization of vegetation removal and maintenance of natural vegetation buffer areas; minimization of erosion or sedimentation during and after construction; inclusion of Best Management Practices to avoid water quality impacts; re-vegetation with native species where appropriate; avoidance of significant impacts on sensitive habitat areas or areas

adjacent to sensitive habitat areas; avoidance of impacts on unique or endangered species; and avoidance of impacts on native and anadromous fish, all in conformance with the LCP.

The proposed maintenance of drainages along Kelly Avenue and Redondo Beach Road, which are designated Scenic Beach Access Routes, is required to prevent safety hazards associated with flooding and erosion of these roadways. Maintenance activities at most of the project locations that extend to the Highway 1 Corridor or which abut Scenic Beach Access Routes do not involve tree removal, but are generally limited to mowing, removal of sediments, and trimming of adjacent trees or shrubs where growth extends into the drainage. The visual effects of this type of routine maintenance is localized and temporary, similar to the visual effect of mowing and trimming that occurs on a regular basis along the Coastside Trail and elsewhere in the City. The proposed trimming and removal of vegetation will not block ocean views.

Riparian vegetation that is trimmed or removed (flush cut at existing grade) from within or adjacent to the channel will not be replanted; such vegetation will grow back and require additional maintenance at regular intervals. The Initial Study concludes that this vegetation management will not result in significant adverse impacts. The proposed project includes mitigation that provides for mulching and re-vegetation of areas that have been significantly disturbed due to foot traffic or other maintenance to avoid significant adverse impacts.

Coastal Act 30244: Where development would adversely impact archaeological or paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required.

Compliance: The project involves only minor excavation of sediment deposits and debris and is not expected to result in impacts on archaeological or paleontological resources. Mitigation has been included in the project to ensure that if subsurface cultural resources are unexpectedly encountered, that work will cease until the resource has been evaluated by a qualified archaeologist and additional mitigation identified as necessary to reduce potentially significant impacts to a less than significant level.

Coastal Act 30250: New residential, commercial or industrial development except as otherwise provided in this division, shall be located within, contiguous with, or in close proximity to, existing developed areas able to accommodate it, in other areas with adequate public services and where it will not have significant adverse effects, either individually or cumulatively, on coastal resources.

Compliance: The project consists of a city-wide drainage ditch maintenance project and does not involve new residential, commercial or industrial development or require new services.

Policy 7-4: Utilities shall continue to be placed underground in all new developments.

Compliance: The project consists of a city-wide drainage ditch maintenance project and does not require new utilities and communication facilities.

2. Growth Management System – *The development is consistent with the annual population limitation system established in the Land Use Plan and Zoning Ordinance.*

City Council Evidence: The project does not propose new residential development.

3. Zoning Provisions – The development is consistent with the use limitations and property development standards of the PUD (Planned Unit Development) District as well as the other requirements of the Zoning Ordinance.

City Council Evidence: Chapter 18.38 of the Zoning Code provides direction for the preparation of biology reports and Initial Studies. A Biological Resource Evaluation was prepared for the project by SWCA Environmental Consultants in conformance with the requirements of Zoning Code Section 18.38.035. That report, Appendix A of the Initial Study, was circulated for a 45-day review to the applicable resources agencies, including the California Department of Fish and Wildlife, the U.S. Fish and Wildlife Service, the U.S. Army Corps of Engineers, and the California Coastal Commission. An Initial Study was prepared for the project which evaluated the potential impacts of the project on coastal resource areas and sensitive habitat, identified mitigation to avoid significant impacts on coastal resource areas and sensitive habitats, and determined that the proposed maintenance program conforms to the Local Coastal Program and the requirements of Zoning Code Chapter 18.38.

Zoning Code Chapter 18.38 provides permitted uses and performance standards for new uses and development in riparian corridors, wetlands and sensitive habitats, including habitats of rare and endangered species. The project proposes maintenance of existing storm water drainage facilities; as such, it does not introduce new uses that require a use conformance or alternatives analysis. The proposed maintenance project does meet the broad definition of "development" contained in the Zoning Code; however, the proposed activities seek to maintain the current and historic function of existing public facilities and thereby mitigate potential flooding impacts. The proposed activities do not involve changes to existing land uses or property development in the "traditional" sense.

The proposed maintenance project has been carefully designed to conform to the performance standards in Section 18.38.070 of the Zoning Code for development in riparian corridors, riparian buffer zones, wetlands and sensitive habitats, which standards mirror those of LCP. Extensive mitigation identified in the Mitigated Negative Declaration (MND) and Initial Study (IS) and Avoidance and Minimization Measures specified in the Draft Lake and Streambed Alteration Agreement (SAA) provide for minimization of vegetation removal and maintenance of natural vegetation buffer areas; minimization of erosion or sedimentation during and after construction; inclusion of Best Management Practices to

avoid water quality impacts; re-vegetation with native species where appropriate; avoidance of significant impacts on sensitive habitat areas or areas adjacent to sensitive habitat areas; avoidance of impacts on unique or endangered species; and avoidance of impacts on native and anadromous fish, all in conformance with the Zoning Code.

The Scenic Corridor Standards of Zoning Code Section 18.37.030 specify that removal of vegetation from existing beach access road rights-of-way is prohibited except as required for reasons of safety and that new development may not significantly obscure, detract from, or negatively affect the quality of broad ocean views. The proposed maintenance of drainages along Kelly Avenue and Redondo Beach Road, which are designated Scenic Beach Access Routes, is required to prevent safety hazards associated with flooding and erosion of these roadways. Maintenance activities at most of the project locations that extend to the Highway One Corridor or which abut Scenic Beach Access Routes do not involve tree removal, but are generally limited to mowing, removal of sediments, and trimming of adjacent trees or shrubs where growth extends into the drainage. The visual effect of this type of routine maintenance is localized and temporary, similar to the visual effect of mowing and trimming that occurs on a regular basis along the Coastside Trail and elsewhere in the City.

The guidelines of Zoning Code Chapter 18.37 indicate that development should be sited so as not to disturb or intrude upon riparian vegetation unless there is no feasible alternative, and that replacement vegetation should be required to mitigate any adverse effects of removal of riparian vegetation. Riparian vegetation that is trimmed or removed (flush cut at existing grade) from within or adjacent to the channel will not be replanted; such vegetation will grow back and require additional maintenance at regular intervals. The Initial Study concludes that this vegetation management will not result in significant adverse impacts. The proposed project includes mitigation that provides for mulching and revegetation of areas that have been significantly disturbed due to foot traffic or other maintenance to avoid significant adverse impacts.

4. Adequate Services – Evidence has been submitted with the permit application that the proposed development will be provided with adequate services and infrastructure at the time of occupancy in a manner that is consistent with the Local Coastal Program.

City Council Evidence: The project consists of a city-wide drainage ditch maintenance project and does not involve new development that will require new services or infrastructure.

5. California Coastal Act – Any development to be located between the sea and the first public road parallel to the sea conforms with the public access and public recreation policies of Chapter 3 of the California Coastal Act.

City Council Evidence: The proposed project is located between the sea and the first public road parallel to the sea. The proposed project will not restrict or otherwise adversely affect

public coastal access or public coastal recreational opportunities because it involves the routine maintenance of existing drainage facilities.

6. Environmental Review Findings – The project is consistent with CEQA guidelines and will not have a significant effect on the environment.

City Council Evidence: A Biological Resource Evaluation and a Mitigated Negative Declaration(MND) and Initial Study (IS) have been prepared for the project that identify mitigation to reduce all potentially significant environmental Impacts of the project to a less than significant level in conformance with the requirements of the Environmental Quality Act. This mitigation has been included in the project and a Mitigation Monitoring Program has been prepared for the project to verify implementation of all project mitigation. The Biological Resource evaluation was circulated to the resource agencies for a 45-day review period. The Initial Study (IS) and Draft Mitigated Negative Declaration (MND) were circulated to the State Clearinghouse and to the U.S Fish and Wildlife Service and the U.S. Army Corps of Engineers for a 30-day public review. Staff independently reviewed the proposed Mitigated Negative Declaration and Initial Study and exercised control and direction over the CEQA process. Staff considered and responded to comments received on the Draft MND/IS and made those responses available, along with the MND/IS on the City's website.

EXHIBIT B CONDITIONS OF APPROVAL PDP-019-13

Coastal Development Permit for a City-Wide Drainage Ditch Maintenance Project to provide routine maintenance at thirteen drainage locations in Half Moon Bay.

Authorization: Approval of this permit authorizes a Coastal Development Permit for a City-Wide Drainage Ditch Maintenance Project to provide routine maintenance at the following drainage locations in Half Moon Bay in conformance with the Final Lake and Streambed Alteration Agreement issued by the California Department of Fish and Wildlife and the conditions of approval of this permit: Kelly Drainage (B-3); Miramontes Drainage (B-4); Central Drainage (B-5); Myrtle Street Bubble-Up (B-6); Seymour Drainage (B-9); Redondo Beach Road (B-10 and C-7); Railroad Avenue (C-1 and C-3); Poplar Street (C-2); Grove Street (C-4); Magnolia Street (C-5); and Wavecrest Road (C-6).

A. Requirements Prior to Project Implementation

- 1. <u>CONFORMANCE WITH REGULATORY REQUIREMENTS</u>. The proposed maintenance activities shall be implemented in full conformance with the Final Lake and Streambed Alteration Agreement (SAA) issued by the California Department of Fish and Wildlife and with the requirements of all applicable resource agencies to the satisfaction of the Director of Planning. (Planning)
- 2. <u>IMPLEMENTATION OF MITIGATION.</u> The proposed maintenance activities shall be implemented in full conformance with each and every mitigation measure identified in the Final Mitigated Draft Negative Declaration and the project shall be implemented in conformance with the Mitigation Monitoring Program. (Planning)

B. Validity and Expiration of Permits

- 1. <u>EFFECTIVE DATE</u>. The Coastal Development Permit and Use Permit shall take effect after final local action and 10 working days after receipt of the Notice of Final Action by the Coastal Commission, if no appeal is filed during that time. If such an appeal is filed, the Permit shall take effect 10 business days after approval by the Coastal Commission. The applicant shall submit a signed copy of these conditions of approval to the Planning Department prior to implementation of the project. (Planning)
- 2. <u>ACCURACY OF APPLICATION MATERIALS</u>. The applicant shall be responsible for the completeness and accuracy of all forms and material submitted for this application. Any errors or discrepancies found therein may be grounds for the revocation or modification of this permit and/or any other City approvals. (Planning)
- 3. <u>EXPIRATION</u>. The Coastal Development Permit shall expire one year from its date of final approval if implementation of the maintenance program has not begun during that time.

4. <u>PERMIT RUNS WITH THE LAND</u>. The Coastal Development Permit runs with the land and the rights and obligations hereunder, including the responsibility to comply with conditions of approval, shall be binding upon successors in interest in the real property unless or until such permits are expressly abandoned.

OWNER'S/PERMITTEE'S CERTIFICATION:

I have read and understand and hereby accept and agree to implement the foregoing conditions of approval of the Coastal Development Permit.

OWNER(S) / APPLICANT(S):

(Signature)

(Date)

Attachment 2

CITY OF HALF MOON BAY

DEC 6 2013

RECEIVED



City of Half Moon Bay

Planning Department 501 Main Street Half Moon Bay CA 94019 Phone: 650.726.8250 / Fax: 650.726.8261

APPEAL FORM

Planning Commission approval of a Coastal Development ACTION OF CITY BEING APPEALED: Permit (CDP) and Mitigated Negative Declaration (MND) PROJECT OR REFERENCE NUMBER: PDP-019-13 Citywide Drainage Ditch Maintenance Project 15 separate drainage facilities in Half Moon Bay at locations shown on Figure 1 of the LOCATION: Final Mitigated Negative Declaration dated 10/29/2013

DATE OF ACTION: 11/26/2013

12/6/2013 (CEQA MND in isolation); DATE APPEAL PERIOD ENDS <u>12/10/2013 (CDP, including MND as part of CDP)</u> (If Applicable)

NAME OF APPELLANT: James Benjamin (Please Print)

ADDRESS: 400 Pilarcitos Avenue, Half Moon Bay, CA 94019-1475

PHONE NUMBER AND EMAIL: 650 713 0186 jamben@pacbell.net

SIGNATURE OF APPELLANT: Juli Seyren

STAFF USE ONLY

 Action Appealable to Coastal Commission
 _____Yes
 ____No

 Subject to City Appeal Fee Per Master Fee Schedule
 ____Yes
 ____No

 City Fee Collected:
 _____No

Received by:_____

-0

Date:___

Please Attach a Separate Statement of Appeal That Describes in Detail the Grounds for the Appeal and the Relief Being Sought

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Conditional Appeal of PDP-019-13 to Half Moon Bay City Council 17 2013

On November 26, 2013 the Planning Commission of the City of Half Moon Bay approved an application by the City Attorney for the City of Half Moon Bay for a Coastal Development Permit (CPD) and mitigated negative declaration (MND) for project PDP-019-13 based on the evidence and findings in a staff report with attachments dated November 26, 2013. Revisions in the City's Master Fee Schedule (MFS) adopted November 29, 2013 reflect that no fee is payable for appealing this CDP and MND because the City is the applicant. The appellant welcomes the opportunity for timely local resolution of the concerns raised in this appeal, but not at the risk of incurring any fee for local consideration. Thus, this appeal is conditioned on no fee being charged for the filing and processing of this appeal, regardless of the appeal outcome. Please process this appeal only if the City will not charge a fee. Otherwise, please promptly notify appellant so that an appeal may be timely filed with the California Coastal Commission.

Under Municipal Code 1.25.020, most decisions are appealable within 10 calendar days. However CDPs approved by the Planning Commission are appealable on or before the tenth working day following approval (Municipal Code 18.20.075(B)). Since the approval of the CDP requires findings that prepared CEQA documents are consistent with the LCP and implementing ordinance (Municipal Code 18.38.050), these approvals are appealable on or before December 10, 2013.

Summary of appeal

This appeal concerns PDP-019-13, the City's proposed coastal development permit in perpetuity to maintain fifteen watercourses¹ within the city limits. All of these watercourses meet the criteria for environmentally sensitive habitat areas / sensitive coastal resources. To avoid extensive restatement, the concerns raised in appellant's letters of Sept. 9, 2013 and Nov. 26, 2013 are incorporated by reference (excepting with thanks the removal of emergency activities and some watercourses from the project). In addition to those previously raised concerns, the appellant respectfully requests that the project scope and impact analysis and mitigation and monitoring reporting be further revised to address the following concerns:

1. The remaining requests made in the Sept. 14, 2013 BRE comment letter from the California Coastal Commission should be honored, including additional reductions in project area (i.e., removing the Roosevelt and Kehoe watercourses from the project area) and scope (i.e., avoiding not only permanent habitat loss but other significant impacts). Information justifying the inclusion of remaining project locations (after the above-referenced removals), and scope of activities after such reductions, requests for additional mapping, avoidance of habitat degradation in sensitive habitat areas, and clarification that criteria for revegetation of disturbed areas will be approved by the Coastal Commission staff. Approved revegetation should be incorporated as enforceable CDP conditions.

¹ The term "watercourse" is used to avoid confusion with the term "drainage" as defined on page 25 of the proposed Streambed Alteration Agreement (appendix B of the 11/14/2013 materials), which would not be applicable on some of the watercourses included in the project, including the Kehoe and Roosevelt watercourses.

As an illustration of the potentially significant impact, absent the use of chainsaw and the adding complete briefings by watchful biologists, the City's 2009 "Kehoe Ditch Cleaning Project" undertaken by the City would likely be within the scope of PDP-019-13 as approved. The impacts of the 2009 project are described in a pending appeal of PDP-050-12 (incorporated by reference)², in which the City-as-applicant's interpretation of facts and regulation is at odds with those of other regulatory agencies. In fact, PDP-019-13 would permit even more destructive bed and bank modification without further analysis unless challenges are mounted that place the burden of proof of significant adverse impact on the challenger, instead of the City's present responsibility to provide evidence to show its actions will not violate the LCP and environmental protection laws, and will have no individual or cumulatively significant adverse impact on the environment. The current project's glad-handing of environmental and geomorphologic analysis of so many of the City's watercourses is an insufficient analysis to justify shifting the burden of proof for protecting some of the City's most important habitats, and the safety of citizens who live and work near them.

In addition to LCP and CEQA conformance issues, inclusion of the Kehoe watercourse in the project would breach paragraph D.5 of the 2012 settlement agreed by applicant and appellant. Appellant is mystified by the applicant's claim during Planning Commission deliberations that this project is somehow expressly permitted pursuant to Half Moon Bay Municipal Code section 18.38.085.

- 2. Comments C.5 and E.85 express concern over habitat impact, but the response to these comments is not substantive. Regardless of intent of project, the project's consequence could be potentially significant and unmitigated adverse impacts. Project areas include habitat for listed species, and habitat dispersal, upland, aquatic, estivation, sunning and other habitat are all protected. Ground disturbances are not the only impact; loss of emergent and streamside native vegetation, creation of trails, propagation of invasive exotics, and loss of varied in-stream habitat all fly in the face of applicant claim that "project is not expected to significantly degrade existing habitat values."
- 3. The response to comments C.6, C.7, and C.8 is not substantive. The remapping requested by CCC staff has not been provided. Wetland delineation requested by CCC staff has not been provided. Also, riparian areas other than riparian corridors, including drainages without riparian vegetation, and upland (foraging, sunning, aestivation, dispersal) habitat are not mapped. These are relevant because routine maintenance activities at some project areas may involve location of heavy equipment in ESHA above the drainage and cause impacts in unmapped areas. In addition, downstream ESHAs outside of the project areas may be impacted by the project due to erosion, flooding, and sedimentation. These areas remain inadequately identified and addressed in project documentation.

² Appellant appreciates that the City did not seek a CEQA exemption as was sought with PDP-050-12.

Conditional Appeal of PDP-019-13 to Half Moon Bay City Council

- 4. The preparation of conservation plans and issuance of a limited incidental take permit by the US Fish and Wildlife Service³ is needed to insure the project is implemented without violating a variety of federal and state regulations including but not limited to the US Endangered Species Act and the California Endangered Species Act. In addition to policy and ordinance sections discussed in appellant's Sept. 9, 2013 letter, Municipal Code section 18.38.050(A)(4) requires projects to comply with US Fish and Wildlife Service and Department of Fish and Game [now Department of Fish and Wildlife] regulations. In light of comment letters received from the agencies, consultations to reach agreement on sensitive habitat area and coastal resource protection conditions should have occurred prior to Planning Commission consideration of the project, and conditions and revisions to address regulatory agencies' concerns should be a prerequisite for approval.
- 5. The project as revised in the November 14, 2013 documents blur the critically important distinction between the CEQA project objective that is under the applicant's control, and the LCP's definition of development that is not. The project's just-revised (CEQA) objective "maintenance of project locations' historic and current uses for drainage purposes" does not diminish the fact that this project is a catch-all for unspecified storm water runoff and flood control projects, and the proposed development under the City's certified LCP is the removal of vegetation and other materials, and/or the temporary or permanent placement of new materials in several types of sensitive habitats and areas adjacent. Such projects (especially in habitats containing or supporting protected species) are restricted by several LCP and Coastal Act policies and related ordinance sections as detailed in appellant's comments dated September 9, 2013. The claim that development skirts those restrictions because it is a continuing use is fabricated from whole cloth and is illogical: Since all watercourses and wetlands could be viewed as "existing flood control or storm water runoff' uses, why would any wet area be protected from projects that "maintain" such uses? Yet such protections exist in the LCP, and the City has acknowledged such protections by removing a few of the watercourses from the project area. The fallacy in the justification presented in the response to comments is reflected in this contradiction.

Additionally, protection of habitats for listed species is required by federal and state law, which preempts any argument that the local law might permit a continuing use that might result in direct or indirect take.

The project objective is contorted in an effort to avoid having to consider under CEQA the best way to "maintain" riparian areas and wetlands, which is to restore or enhance their robust biologic productivity so that they may be almost entirely self-maintaining,

³ E. Tattersall, "Comments on Biological Resource Evaluations of the Citywide Drainage Ditch Maintenance Project, Half Moon Bay, San Mateo County, California" reference 08ESMF00-2013-TA-0642, Oct. 24, 2013.

require much less expensive intervention, and pose lower risks of flooding and erosion. It is a regrettable choice of project objective.

6. Project descriptions are not sufficiently detailed to allow adequate assessment of project impacts for CEQA and LCP purposes. The Planning Commission approved potentially destructive actions at any location within the project area with the abstract condition that the impacts would be limited to the minimum necessary to achieve project goals. However, baseline conditions prior to project activities are not sufficiently documented to identify any post-project habitat degradation, erosion, sedimentation, channel incision, or other significant adverse impacts, both within and adjacent to the project area and in other habitats hydrologically or biologically connected to the project area; the appellant concurs with Mr. Muteff's comment during the Planning Commission's public hearing for PDP-019-13 that the project as approved would permit heavy equipment to implement potentially destructive projects adjacent to Redondo Beach Road without further environmental review.

The project effectively ignores Coastal Act and Local Coastal Program policies and implementing ordinance sections that requires maintaining biological productivity in and adjacent to sensitive habitat areas, and limitations of projects in the habitat of listed species, as detailed in the Sept. 9, 2013 comment. In addition, Municipal Code 18.38.050(A)(6) requires compliance with zoning ordinance restrictions listed for each coastal resource area, and with all other applicable sections of the city's Local Coastal Program.

- 7. "Ground disturbance" is not the only adverse impact on the health of watercourses, and habitat of protected species, that the proposed work can have. For example:
 - Removing 4" dbh trees in the stream bed or bank threatens the long-term survival of the willow riparian forest. They are the forest's adaptation to changes in waterflow. Removing them from bottom as part of a program to maintain channelization will facilitate channel incision and drying of up-bank areas, and threaten larger bank trees with erosion and eventual topping into the drainage.⁴
 - Removing vegetation to a height of 6' to permit crews to walk along the drainage crushes the soil structure, creates pathways for predator animals, facilitates avian predation from upper branches and eliminates habitat for species that use lower branches. Elimination of emergent vegetation, hoeing of pools, and removal of large wood debris that facilitates creation of new pools hampers the formation of foragingrich riffles and prevents aquatic species and amphibians from using pools to flee from predators. Reductions of blackberry and other herbaceous streamside vegetation also degrades the ability of species to avoid predation by fleeing into thickets. It also

⁴ Riley, A. L. A Primer on Stream and River Protection for the Regulator and Program Manager, page 30.
allows the exotic invasives, including but not limited to Cape ivy, to displace the native herbaceous species. The microfauna accompanying Cape ivy is less valuable to California Red-legged frog (CRLF) than the microfauna that survives in native herbaceous habitat, and Cape ivy gradually suffocates the riparian willow forest. In habitats containing or supporting the CRLF, these habitat degradations are significant. These actions are also significant impacts on the San Francisco garter snake (SFGS) since CRLF are critical to the survival of SFGS.⁵

- 8. The response to comments assures us that disturbed ground will be stabilized pursuant to mitigations conditions MM BIO-8, MM BIO-20 and SAA condition 3.5. Any condition in the SAA should appear as a condition in the CDP to be enforceable under the LCP and the Coastal Act, but in this case the mitigations permit control of erosion using gravel or rock-lined drainages; MM BIO-20 does not require native vegetation supporting the optimum biologic productivity of the habitat or any other criterion other than the vague and subjective term "appropriate." To comply with LCP Policy 3-3 and (adopted) Coastal Act policy 30231, complete remediation of biologic productivity, particularly of impacts in the habitat of listed species, should be required and monitored, and be enforceable as a CDP condition.
- 9. The Coastal Act and the Local Coastal Program place on the applicant the burden of producing evidence to support findings of compliance with these policies and implementing ordinance. The sweeping authority provided by the project to harden banks, remove saplings, emergent and bankside vegetation, leave rooted or cut invasive exotic species in the habitat, degrade the habitat of protected species (whether or not observed by a biologist), increase the flow of water into natural drainages, transfer flood risk between parcels, and a variety of other adverse impacts are not controlled. The comment that maintenance of watercourses can adversely affect channel morphology (according to testimony of expert geomorphologist Trso, the clearing activities can impact watercourses for more than a decade) is not disputed by the response to comments.

The applicant's burden to provide evidence that such draconian measures will conform to the LCP and implementing ordinances is not met by abstract commitments to do the minimum necessary and to have a biologist watch the project activities.

10. Mitigations are not adequately defined. For example, the applicants makes the circular commitment in mitigation MM BIO-1 to use honor the requirement to "minimize removal of vegetation" by limiting vegetation removal to the minimum necessary.⁶ The only way to convert this tautology into a meaningful standard for avoiding adverse

⁵ Jennings, M., deposition by the City of Half Moon Bay, August 1, 2011.

⁶ Response to comments E.27, E.46,

impacts is through additional study. The absence of observable, measurable mitigation renders them unusable as support for findings of consistency with Coastal Act and LCP policy and implementing ordinance. In addition to policy and ordinance sections discussed in the Sept. 9, 2013 letter, Municipal Code 18.38.050(B)(4,5 and 6) require avoidance or minimization of plant community destruction, protection of riparian corridors, and conformance with restrictions on protections of riparian areas (including those without riparian vegetation), and of other coastal resources and sensitive habitat areas. The deferral of study to adequately define mitigation to demonstrate support for these policies also violates CEQA under the holdings of *Sundstrom v. County of Mendocino* (1998) 202 Cal. App. 3d 296.

- 11. Even in sensitive habitat areas where a flood control project might be permitted, baseline conditions and the approved mitigation and monitoring reporting is not sufficient to insure that adverse impacts such as channel incision, head-cutting and other forms of erosion that could be caused by the project (both within or away from the project area) are detected and adequately mitigated. Cumulative impact assessment is nowhere to be found. In addition to policy and ordinance sections discussed in the Sept. 9, 2013 letter, Municipal Code 18.38.050(A)(5) requires development and land use to assure stability and structural integrity, and to not contribute significantly to erosion. The applicant has not satisfied this important evidentiary burden.
- 12. Projects in the habitat of rare or endangered species are required by LCP and implementing ordinance section 18.38.020 to provide a map of the species habitat requirements. The comment confirms the need to document habitat requirements, which should include upland, sunning and foraging habitat; however, these habitats are not shown on the maps in Appendix F. In response to comment E.39, the applicant has confused the protection of breeding habitat with the protection of listed species' other habitats. Regulation, policy and ordinance protections are not limited to breeding habitat. Similarly, the distinction in the response to comment E.42 ignores the fact that habitat, not just "critical" habitat, is protected under the Endangered Species Act.
- 13. In response to the comment that the photographic evidence presented in the draft report does not support the claim that watercourses in the project area require implementation of flood control project, the response to comments states "Waiting until flooding occurs at each project location to initiate maintenance activities would not achieve the City's objective of preventing flooding." ⁷ If evidence of flooding is not required to establish the necessity of the project, than the City's plan is pre-emptive, and scientific justification for the specific location of specific project activities can and should be part of the project description. There is no evidence in the project record of such analysis, however.

⁷ Response To Comments, Master Response Three, page 4.

- 14. In some instances, such as the references to side-casting as a basis for claiming drainages may be isolated from surrounding habitat, there is no evidence in the record that these conditions exist throughout the project area, making the response an unsupported opinion. If the applicant has specific evidence in specific locations on specific drainages of such isolation, it should be provided.
- 15. The final paragraph of Master Response Two reflects a disturbing interpretation of CEQA, because it does not acknowledge the "fair argument" test (*Laurel Heights Improvement Assoc. v. U.C. Regents* (1993) 47 Cal. 4th 376), which holds that if a fair argument can be raised on the basis of "substantial evidence" in the record that the project may have a significant adverse environmental impact even if evidence also exists to the contrary then an EIR is required. The record for this project contains undisputed expert testimony (in the City's deposition and trial records that are incorporated by reference) from an expert biologist and geomorphologist discussing significant impacts in one of the project area's watercourses that was caused by maintenance work that would be well within the scope of proposed activities, if performed with a biologist and without chainsaws. Experts from other regulatory agencies have also concluded this project may have significant adverse impacts; the "fair argument" therefore requires an EIR instead of a negative declaration or a mitigated negative declaration, unless the project is revised to eliminate the activities that can lead to those significant adverse impacts.

Comment E.80 recounts opinions from recognized experts based on first hand evidence that activities within the scope of this project can indeed have significant adverse impacts on protected species. Those concerns are echoed by correspondence from the Coastal Commission and the US Fish and Wildlife Service. The existence of such evidence-based expert opinion, even in the presence of conflicting opinions, precludes the use of a MND for this project.

The appellant appreciates the City's desire to mitigate flood risk, but the applicant simply has not discharged its responsibility to design and condition a project with so many activities over so many watercourses that conforms to the Coastal Act and the LCP, including its requirements for adherence to CEQA. If unchallenged, this could result in a series of ill-considered stream activities that could endanger nearby residents and put the City on a financially dangerous collision course with state and federal regulatory authorities. This large and perpetual project requires significant additional analysis and revision before it can be found consistent with the policies of the Local Coastal Program and its implementing ordinances. If the applicant is unwilling to revise the project to conform, appellant respectfully requests that the City Council deny the project.

The appellant thanks the City Council for consideration of this appeal, and looks forward to its deliberations.

page 7

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Final DRAFT

Initial Study and Mitigated Negative Declaration Citywide Drainage Ditch Maintenance Project

City of Half Moon Bay, San Mateo County, California

City File No. PDP-19-13

State Clearinghouse No. 2013-08-2031

Prepared by:



City of Half Moon Bay Planning Department 501 Main Street Half Moon Bay, CA 94019

Contact: Carol Hamilton, Senior Planner

August 8November 14, 2013



CITY OF HALF MOON BAY

City Hall • 501 Main Street • Half Moon Bay • CA • 94019

FINAL DRAFT MITIGATE NEGATIVE DECLARATION

The Planning Director has reviewed the proposed project described below to determine whether it could have a significant effect on the environment. Significant effect on the environment means a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance.

NAME OF PROJECT: Citywide Drainage Ditch Maintenance Project

PROJECT FILE NUMBER: PDP-19-13

PROJECT DESCRIPTION: Coastal Development Permit and Stream Alteration Agreement (Notification No. 1600-2012-0173-R3, Routine Ditch Maintenance, Half Moon Bay) to allow: 1) Routine maintenance activities at seventeen <u>fifteen</u> "B" and "C" drainages, including trimming of vegetation; removal of vegetation, debris and sediment; bank stabilization; and in-kind replacement of culverts and other storm water facilities <u>maintain the project locations' historic and</u> <u>current uses for drainage purposes</u> to restore drainage features to their originally constructed conditions to prevent flooding; and 2) Emergency clearing and clean up to prevent flooding atfive "A" drainages, including removal of trash and debris, removal of vegetation and fallen trees or limbs resulting in non-emergency steam flow restrictions, and removal of fallen trees thatwould cause flooding, bank erosion or other public safety hazards.

PROJECT LOCATION: The project area consists of <u>22-15</u> separate drainage facilities in Half Moon Bay at locations shown on Figure 1.

APPLICANT: City of Half Moon Bay Public Works Department

FINDING: The Planning Director finds the project described above will not have a significant effect on the environment, in that the attached Initial Study identifies one or more potentially significant effects on the environment, and the project applicant, before public release of this draft Mitigated Negative Declaration, has agreed to include mitigation in the project that clearly reduces the effects of the project to a less than significant level.

MITIGATION MEASURES INCLUDED IN THE POJECT:

1. Aesthetics, Light and Glare. The project will not have a significant impact; no mitigation required.

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- **2.** Agricultural Resources. The project will not have a significant impact; no mitigation required.
- **3.** Air Quality and Greenhouse Gases. The project will not have a significant impact and mitigation is not required; however, standard construction mitigation is included in the project to further reduce the project's less than significant impact

MM AQ-1

- a) All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day or as necessary to prevent visible airborne dust.
- b) All haul trucks transporting soil, sand, or other loose material off-site shall be covered. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- c) All vehicle speeds on unpaved roads shall be limited to 15 mph.
- d) Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]).
- e) All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications.
- f) Post a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours.
- 4. **Biological Resources.** The following mitigation has been included in the project to reduce potentially significant impacts to a less than significant level.

MM BIO-1 Disturbance to vegetation and CRAs should be the minimum necessary to complete the Project activities, provided there is no feasible alternative. The minimum amount of disturbance to vegetation is defined as the least amount required to access the Project locations, to restore or maintain normal stream flow, to prevent potential flooding, and for control of weeds and grasses on channel banks and access roads. Prior to all Project activities, a qualified biologist shall designate the work area and any staging areas as well as delineate areas that should be avoided. Areas that would be identified to avoid include wild strawberry populations, special-status plant species, and CCC wetlands adjacent to the Project locations.

A qualified biologist is herein defined as an individual who has a minimum of 5-years of academic training and professional experience in biological sciences or a related field as it pertains to the Project. The biologist must be able to recognize species that may be present within the work area including the special status species which have the potential to occur, be familiar with the habits, habitats, and behaviours of those species

A-2-HMB-14-0004 Exhibit 2 Page 28 of 523 and be able to differentiate between these species and similar allies. In order to conduct pre-construction surveys the qualified biologist should have a minimum of two years of experience conducting surveys for each species. Within a minimum of 30-days prior to surveys or monitoring the selected biologist(s) should be approved by CDFW.

Access to Project locations shall be via existing access roads to the maximum extent practicable. Heavy equipment (anything larger than a pickup truck) should be positioned on existing access roads above the top of bank. If access to Project locations is required where there is no existing access route, prior to Project activities a qualified biologist shall delineate an approved route which minimizes impacts to vegetation as well as identifies and avoids CRAs. If CRAs are identified along the access route a qualified biologist shall monitor all Project activities to ensure CRAs are avoided and impacts to vegetation are minimized.

MM BIO-2 If any wildlife is encountered during Project activities, said wildlife should be allowed to leave the work area unharmed. If any special-status wildlife species are observed, construction personnel should contact a qualified biologist immediately. The biologist will identify the species and determine the best course of action. Animals will be allowed to leave the work area of their own accord and without harassment. Animals should not be picked up or moved in any way.

MM BIO-3 Several CCC wetlands were identified adjacent to the Project locations at B-6, B-7, B-10, C-2, C-3, C-6, and C-7. Activities proposed in these locations that could result in dredge or fill of waters of the United States could be subject to regulation under the Clean Water Act. Activities proposed in these areas must be reviewed to determine if they would be regulated by the USACE, and a wetland delineation could be required to determine the extent of USACE jurisdiction.

MM BIO-4 No Project activities shall be conducted in a channel with water flowing or present in it to the maximum extent practicable, with the exception of emergency activities. Similarly no equipment should be operated in a flowing drainage feature unless it is necessary for emergency purposes and there is no feasible alternative, or it is necessary to construct a dewatering system to divert water flow around a work area. Additional requirements and restrictions may be required for work in an active channel or if a dam or dewatering system is required, and should be reviewed independently prior to construction.

MM BIO-5 Any and all spoils generated during Project activities shall be placed where they cannot enter drainage features, riparian areas or corridors, or wetlands. Spoils shall be removed from the work area and disposed of at an appropriate facility.

MM BIO-6 During construction, to avoid erosion and downstream sedimentation, no work in or immediately adjacent to the drainage ditches should occur during the rainy season (October <u>1531</u> through April 15).

MM BIO-7 During construction, the 72-hour weather forecast shall be monitored. If there is a more than 40% chance of rain, or at the onset of unanticipated precipitation

of 0.25 inch or more, all equipment should be removed or staged to avoid potential impacts, soil erosion and sediment control measures should be implemented, and Project activities should cease until after a 24 hour dry-out period if there has been more than 0.25 inch of rain.

MM BIO-8 All exposed soils in the work area (resulting from Project activities) shall be stabilized immediately following the completion of work to prevent erosion. Erosion control BMPs, such as silt fences, straw hay bales, gravel or rock lined drainages, water check bars, and broadcast straw can be used. Erosion control fabrics should be biodegradable. BMPs shall be monitored during and after storm events. At no time shall silt-laden runoff be allowed to enter drainages or wetlands.

MM BIO-9 If Project activities result in disturbance exceeding one acre; a Stormwater Pollution Prevention Plan (SWPPP) will be required. If required prior to the start of work a notice of intent (NOI) and SWPPP should be prepared and submitted to the appropriate Regional Water Quality Control Board (RWQCB). A copy of the SWPPP should be submitted to the County for approval to show that sedimentation and erosion control measures are installed prior to any other ground-disturbing work.

MM BIO-10 Work area activities at A-1, A-3, A-4, A-5, B-2, B-4, B-5, B-7, B-8, B-9, B-10, C-2, C-6, and C-7 should be limited to June 15 to October 31. Work at B-1, B-3, B-6, C-4, and C-5 should be limited to April 15 to October 31.

MM BIO-11 Before any construction activities begin on the Project, a qualified biologist should conduct a training session for all construction personnel. At a minimum, the training should include a description of the California red-legged frog and its habitat, the importance of the California red-legged frog and its habitat, the general measures that are being implemented to conserve the California red-legged frog as they relate to the Project, and the boundaries within which the Project may be accomplished. Brochures, books, and briefings may be used in the training session, provided that a qualified person is on hand to answer any questions.

MM BIO-12 A qualified biologist should survey work areas at <u>A-1, A-3, A-4, A-5</u>, B-2, B-4, B-5, B-6, <u>B-7, B-8</u>, B-9, B-10, C-2,C-5, C-6, and C-7 within 48 hours of the planned start of activities. If California red-legged frogs, tadpoles, or eggs are found, the approved biologist should inform the City to initiate formal ESA consultation with the USFWS if work is to go forward.

MM BIO-13 A qualified biologist should be present at A 1, A 3, A 4, A 5, B-2, B-4, B-5, B-6, B-7, B-8, B-9, B-10, C-2, C-5, C-6, and C-7 during all Project activities. The biologist should have the authority to halt any action that might result in impacts. If California red-legged frogs are found at any time, work actives shall stop and the approved biologist should inform the City to initiate formal ESA consultation with the USFWS. If the biologist is permitted by the USFWS and approved by the CDFW for this Project to handle California red-legged frogs, only then can the species be handle and relocated. Under no circumstances should a California red-legged frog be handled, relocated, or otherwise harmed or harassed at any time without coordination and approval from the

USFWS if work is to go forward .

MM BIO-14 For control of weeds and grasses on channel banks and access roads at B-2, B-4, B-5, B-6, B-7, B-8, B-9, B-10, C-2,C-5, C-6, and C-7, vegetation shall be cut to no less than 6 inches by an articulating mower or hand tools for locations adjacent to an existing access route, and by hand tools for locations with no existing access routes. Once the ground is visible, a visual survey for California red-legged frog shall be conducted by a qualified biologist. If no individuals are found in the area, vegetation removal may continue with the qualified biologist walking in front of equipment to observe.

MM BIO-15 No stockpiling of vegetation shall occur at the worksite. Vegetation to the maximum extent practicable based on the equipment used should be placed directly or as quickly as feasible into a disposal container and removed from the site. Vegetation shall not be piled on the ground unless it is later disposed of under the supervision of a qualified biologist.

MM BIO-16 To protect potential burrows, no soil shall be stockpiled on the ground unless it is a paved surface or the area has been surveyed by a qualified biologist.

MM BIO-17 During Project activities, all trash that may attract predators should be properly contained, removed, and disposed of regularly. Following construction, trash/construction debris should be removed from work areas.

MM BIO-18 To assist in excluding California red-legged frog from the work area during sediment removal or bank stabilization with large equipment, an exclusion fence should be installed around the work area prior to the commencement of construction activities. Exclusion fencing should be silt-fence type fencing or equivalent, and should not include poly mesh fencing or other similar fencing that could entrap or snag reptiles, amphibians, or other small animals. Exclusion fencing should be installed with the fence stakes placed on the side opposite of the Project location to prevent frogs from using the stakes to maneuver over the fence. Fencing should be keyed-in appropriately (at least 6-inches deep) with 10-foot long turn-arounds facing away from the Project location located at either end in order to redirect animals away from openings. Once fencing is in place and once daily, a qualified biologist should check the work area to confirm that sensitive species are not present before Project activities commence. The fencing should be maintained until all work has been completed. The fencing should be inspected on a daily basis by a qualified biologist, and any damaged areas should be repaired immediately upon discovery.

MM BIO-19 A qualified biologist should ensure that the spread or introduction of invasive exotic plant species should be avoided to the maximum extent possible. When practicable, invasive exotic plants in work areas should be removed. Any removed exotic plants should be immediately bagged and appropriately disposed of at a permitted facility.

MM BIO-20 If there is significant ground disturbance, Project locations should be A-2-HMB-14-0004 Exhibit 2 Page 31 of 523 revegetated with an appropriate assemblage of vegetation suitable for the area. Such a plan must include but not be limited to location of the restoration, species to be used, restoration techniques, time of year the work will be done, identifiable success criteria for completion, and remedial actions if the success criteria are not achieved.

MM BIO-21 The number of access routes, number and size of staging areas, and the total area of the activity should be limited to the minimum necessary to complete the Project. Routes and boundaries should be clearly demarcated, and these areas should be outside of wetland areas, as feasible. Where impacts occur in these staging areas and access routes, restoration should occur as identified in measure MM BIO-20 above.

MM BIO-22 To control erosion during and after Project implementation, the City should implement BMPs, as identified by the appropriate RWQCB.

MM BIO-23 All fueling and maintenance of vehicles and other equipment and staging areas should occur at least 50 feet from any riparian area, riparian corridor, wetland, or other drainage feature or water body. The City should ensure that contamination of habitat does not occur during such operations. Prior to the onset of work, the City should ensure that there is a plan to allow a prompt and effective response to any accidental spills. All workers should be informed of the importance of preventing spills, and of the appropriate measures to take should a spill occur. Because the San Francisco garter snake is a California fully protected species, no incidental take is allowed; take must be fully avoided. In addition to the above mitigation measures, of which many if not all are also transferable to San Francisco garter snake, the following mitigation measures would specifically avoid take of San Francisco garter snake during Project activities and reduce potentially significant impacts on the species to a less than significant level.

MM BIO-24 Avoidance measures for San Francisco garter snake should be employed in all areas where construction could result in the direct take of this species. Full-time monitoring is recommended during construction at A-1, A-3, A-4, A-5, B-2, B-4, B-5, B-6, B-7, B-8, B-9, B-10, C-2, C-5, C-6, and C-7 to ensure that no unanticipated take of San Francisco garter snake occurs. The qualified biologist should be on call as needed to monitor construction activities in potential habitat and inspect exclusion fencing to ensure it remains intact throughout the duration of construction. The qualified biologist may stop work if necessary to protect San Francisco garter snake, and should notify the City as to how to proceed accordingly.

MM BIO-25 A qualified biologist should conduct pre-construction surveys before any Project activities take place in potential San Francisco garter snake habitat at A 3, A 4, B-7, B-8, B-9, B-10, C-6, and C-7. Surveys should consist of walking transects while conducting visual encounter surveys in areas that will be subject to vegetation clearing, sediment removal, grading, cut and fill, or other ground-disturbing activities. If a San Francisco garter snake is observed during a survey, the USFWS, and CDFW will be notified and the San Francisco garter snake should be monitored until it leaves the area on its own, undisturbed and without harassment.

A-2-HMB-14-0004 Exhibit 2 Page 32 of 523 **MM BIO-26** Before any construction activities begin on a Project, a qualified biologist should conduct a training session for all construction personnel. At a minimum, the training should include a description of the San Francisco garter snake and its habitat, the importance of the San Francisco garter snake and its habitat, the general measures that are being implemented to conserve the San Francisco garter snake as they relate to the Project, and the boundaries within which the Project may be accomplished. Brochures, books, and briefings may be used in the training session provided that a qualified person is on hand to answer any questions.

MM BIO-27 To assist in excluding San Francisco garter snakes from the work area during sediment removal or bank stabilization with large equipment, an exclusion fence should be installed around the work area prior to the commencement of construction activities. Exclusion fencing should be silt-fence type fencing or equivalent, and should not include poly mesh fencing or other similar fencing that could entrap or snag reptiles, amphibians, or other small animals. Exclusion fencing should be installed with the fence stakes placed on the side opposite of the Project location to prevent snakes from using the stakes to maneuver over the fence. Fencing should be keyed-in appropriately (at least 6 inches deep) with 10-foot-long turnarounds facing away from the Project location at each end to redirect animals away from openings. Once fencing is in place, a qualified biologist should check the work area once daily to confirm that sensitive species are not present before Project activities commence. The fencing should be maintained until all work has been completed. The fencing should be inspected on a daily basis by a qualified biologist, and any damaged areas should be repaired immediately upon discovery.

MM BIO-28 Under no circumstances should a San Francisco garter snake be handled, relocated, or otherwise harmed or harassed at any time without coordination and approval from USFWS and CDFW.

MM BIO-29 If feasible, immediately prior to completion of emergency clearing activities, a qualified biologist should survey the work area at A 1 and A 3. If central-California coast steelhead or eggs are found, the approved biologist should inform the-City and the USFWS, and complete the necessary emergency consultation requirements-described in the ESA.

MM BIO-30 If feasible, a qualified biologist should be present at A 1 and A 3 during all emergency activities.

MM BIO-31 If Project activities are conducted during the typical nesting bird season (February 15 through September 15), pre-construction nest surveys should be conducted in and near the Project area (within 500 feet for large raptors such as buteos, 250 feet for small raptor such as accipiters, and 100 feet for all other birds) by a qualified biologist. If nesting is identified during the pre-construction survey, the following measures should be implemented:

1. If active nest sites of bird species protected under the MBTA and/or California Fish and Wildlife Code Section 3503 are observed in the survey area, then the Project should be modified and/or delayed as necessary to avoid direct take of the identified nests, eggs, and/or young. Potential Project modifications may include the establishment of protective buffer zones (500 feet for large raptors such as buteos, 250 feet for small raptor such as accipiters, and 100 feet for all other birds) in which a qualified biologist shall monitor all Project-related activities to ensure that they do not impact nesting birds. Monitoring shall continue through work activities until the biologist has determined that the nesting activity has ceased.

- 2. Active nests should be documented by a qualified biologist, and a letter report should be submitted to the USFWS and CDFW documenting Project compliance with the MBTA and applicable Project mitigation measures.
- **5. Cultural Resources.** The following mitigation has been included in the project to reduce potentially significant impacts to a less than significant level.

MM CUL-1 If subsurface archaeological resources are encountered during maintenance activities, all work shall cease within 50 feet of the discovery and an archaeologist shall evaluate the resources to determine their significance and recommend any additional mitigation necessary to reduce potential impacts to a less than significant level, to the satisfaction of the Planning Director.

MM CUL-2 If human remains are encountered during earth-disturbing activities, in conformance with Section 7050.5 of the Health and Safety Code and Section 5097.94 of the Public Resources Code, all in the adjacent area shall stop immediately and the San Mateo County Coroner's office shall be notified. If the remains are determined to be Native American in origin, both the Native

American Heritage Commission and any identified descendants shall be notified by the coroner and recommendations for treatment solicited (CEQA Guidelines Section 15064.5; Health and Safety Code 7050.5; Public Resources Code Sections 5097.94 and 5097.98).

6. **Geology, Soils, and Seismicity.** The following mitigation has been included in the project to reduce potentially significant impacts to a less than significant level.

MM HYD-1 (as listed below under Hydrology and Water Quality)

- 7. **Hazards and Hazardous Materials.** The project will not have a significant impact; no mitigation is required.
- 8. **Hydrology and Water Quality.** The following mitigation has been included in the project to reduce potentially significant impacts to a less than significant level.

MM BIO-4 through 9, 10, 15, 17, and 20 through 23 (see above under Biological

Resources).

MM HYD-1 During construction, the following San Mateo County Storm Water Pollution Best Management Practices (BMPs) shall be employed to ensure that water quality of affected drainages is maintained and no siltation of downstream waterways would occur:

- All maintenance activities in B and C Project location drainages shall take place in the dry season between April 1 and October 31 to minimize immediate erosion/siltation effects. Exceptions to this requirement may be provided if compelling circumstances exist (e.g., favorable weather conditions).
- Construction materials and waste shall be handled and disposed of properly in compliance with applicable law to prevent their contact with stormwater.
- Discharge of all potential pollutants, including pavement cutting wastes, paints, concrete, petroleum products, chemicals, wash water or sediments, and non-stormwater discharges to storm drains and watercourses shall be controlled and prevented.
- Sediment controls such as straw mulch, silt fences, sediment basins or traps and/or other measures shall be employed during construction.
- Tracking dirt or other materials offsite shall be avoided and offsite paved areas and sidewalks shall be cleaned regularly using dry sweeping methods.
- The contractor shall train and provide instruction to all employees and subcontractors regarding construction BMPs.
- 9. Land Use. The project will not have a significant impact; no mitigation is required.
- 10. **Mineral Resources.** The project will not have a significant impact; no mitigation is required.
- 11. **Noise.** The following mitigation has been included in the project to reduce potentially significant impacts to a less than significant level.

MM NOI-1 Maintenance activities shall conform to the following:

- Construction activities shall be limited to between the hours of 8 a.m. and 6 p.m. weekdays, excluding holidays.
- All construction equipment shall use noise-reduction features (e.g., mufflers and engine shrouds) that are no less effective than those originally installed by the manufacturer.
- 12. **Populations and Housing.** The project will not have a significant impact; no mitigation is required.
- 13. Public Services. The project will not have a significant impact; no mitigation is required.

- 14. Recreation. The project will not have a significant impact; no mitigation is required.
- 15. Transportation. The project will not have a significant impact; no mitigation is required.
- 16. Utilities and Service Systems. The project will not have a significant impact; no mitigation is required.
- 17. Mandatory Findings of Significance. Based on mitigation identified above, the project will not substantially reduce the habitat for fish or wildlife species, result in a cumulatively considerable impact or have a substantial adverse effect on human beings.

PUBLIC REVIEW PERIOD

Before 5:00 p.m. on September 9, 2013, any person may:

- 1) Review the Mitigated Negative Declaration (MND); and
- Submit written comments regarding the information, analysis and mitigation. Planning staff will prepare written responses to any comments, and revise the MND, as necessary, before the MND is adopted. All comments will be included in the Final MND.

Circulation period: August 9, 2013 to September 9, 2013

Carol Hamilton, Senior Planner

11-14-13

Date

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FINAL DRAFT Initial Study Citywide Drainage Ditch Maintenance Project

City of Half Moon Bay, San Mateo County, California

City File No. PDP-19-13

State Clearinghouse No. 2013-08-2031

Prepared by:



City of Half Moon Bay Planning Department 501 Main Street Half Moon Bay, CA 94019

Contact: Carol Hamilton, Senior Planner

August 8November 14, 2013

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SECTION 1: INTRODUCTION

1.1 - Purpose

The purpose of this Initial Study/Mitigated Negative Declaration (IS/MND) is to identify any potential environmental impacts from implementation of the Citywide Drainage Ditch Maintenance Project in Half Moon Bay, California as described in the Draft Lake or Streambed Alteration Agreement (Notification No. 1600-2012-0173-R3, Routine Ditch Maintenance, Half Moon Bay) in Appendix B. Pursuant to California Environmental Quality Act (CEQA) Guidelines Section 15367, the City of Half Moon Bay is the Lead Agency in the preparation of this IS/MND and any additional environmental documentation required for the project. The City has discretionary authority over issuance of a Coastal Development Permit for the project. The intended use of this document is to determine the level of environmental analysis required to adequately prepare the project IS/MND and to provide the basis for input from public agencies, organizations, and interested members of the public.

The remainder of this section provides a brief description of the project location and the characteristics of the project. Section 2 includes an environmental checklist giving an overview of the potential impacts that may result from project implementation. Section 3 elaborates on the information contained in the environmental checklist and includes justification for the responses provided in the environmental checklist.

1.2 - Project Location

The project site is located in the City of Half Moon Bay, San Mateo County, California. The project consists of the performance of routine maintenance activities at <u>17-15</u> drainage features (Zones B and C) and as needed emergency clearing and cleanup activities at an additional <u>5</u> drainages (Zones A), the locations of which are shown in Figure 1 and further described in Table 1.

1.3 - Project Description

1.3.1 Project Objectives

The City of Half Moon Bay is proposing to conduct routine maintenance activities and as-needed emergency clearing and cleanup activities-within the Project locations. Due to sSeveral years without regular maintenance, as well as and runoff from adjacent agricultural and urbanized land uses, has contributed to the Project locations have beenbeing subject to sediment deposition, overgrown vegetation, and the accumulation of litter and debris deposits causing and furthered the general deterioration of -their structural and functioning integrity. As a result, the This lack of maintenance and general deterioration has in part resulted in -drainage features and adjacent areas have beenbeing subjected to flooding, major erosion events, infrastructure deterioration, and potential public safety



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Table 1 Project Leastions	Location Decominition
Table 1. Project Locations A Zones	Location Description
A 1 Franchman's Craak	East City limit to the Coasteide Trail

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Table 1. Project Locations	Location Description	Drainage Feature Description
A Zones		
A-1 Frenchman's Creek	East City limit to the Coastside Trail	Natural perennial creek
Cabrillo Property Drainage	100 feet north of the western end of Terrace Avenue extending 200 feet southwest	Natural intermittent drainage
A-3 Pilarcitos Creek	East City limit to the Coastside Trail	Natural perennial creek
A-4 Arroyo Leon Creek	Miramontes Street Bridge	Natural perennial creek
A-5 Seymour Drainage	Railroad Avenue right of way (ROW) to the Coastside Trail	Natural intermittent drainage
B and C Zones		
B-1 Roosevelt Drainage	Alameda Avenue to the CoastsideTrail	Natural perennial drainage
B-2 Kehoe Ditch Drainage	Highway 1 to the Coastside Trail	Natural/modified intermittent drainage
B-3 Kelly Drainage	South Side of Kelly Avenue, Railroad Avenue ROW to the Coastside Trail	Man-made ephemeral swale
B-4 Miramontes Drainage	Railroad Avenue to the Coastside Trail	Man-made ephemeral ditch
B-5 Central Drainage	Railroad Avenue to the Coastside Trail	Man-made ephemeral swale
B-6 Myrtle Street Bubble-Up	Railroad Avenue to the Coastside Trail	Man-made intermittent ditch
B-7 Magnolia Drainage	First Avenue to the Railroad Avenue ROW	Man-made intermittent diteh
B-8 Seymour Detention Basin	Basin near the southern end of Seymour Street	Man-made detention basin
B-9 Seymour Drainage	South Side of Seymour Avenue, Highway 1 to the Coastside Trail	Man-made ephemeral ditch/swale
B-10 Redondo Beach Road	Both Sides of Redondo Beach Rd., Railroad Ave. ROW to Coastside Trail	Series of man-made ephemeral ditches, swales, and roadside depressions
C-1 Railroad Avenue	West side of Railroad Avenue, Spruce Street to Poplar Street	Man-made ephemeral swale
C-2 Poplar Street	Both sides of Poplar Street, Railroad Avenue to the Coastside Trail	Man-made intermittent ditch/swale
C-3 Railroad Avenue	West side of Railroad Avenue, Metzger Street to Grove Street	Man-made ephemeral swale
C-4 Grove Street	South side of Grove Street, west of First Street to Railroad Avenue	Man-made ephemeral swale

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C-5 Magnolia Street	Highway 1 to First Avenue	Man-made ephemeral <u>ditch/</u> swale	
C-6 Wavecrest Road	North side of Wavecrest Road, Highway 1 to Smith Field	Man-made intermittent ditch	
C-7 Redondo Beach Road	Both Sides of Redondo Beach Road, Railroad Avenue ROW to the Coastside Trail Series of man-made ephemeral ditches, swales, and roadside depression		

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hazards. Photographs depicting flooding and infrastructure deterioration are provided in the Biological Resource Evaluation for the Citywide Drainage Ditch Maintenance Project (Appendix A).

Routine maintenance activities at "B" and "C" drainages will be performed to-restore drainage features to maintain the project locations' historic and current uses for drainage purposes. The routine maintenance activities are generally defined as periodic activities necessary to their originally constructed conditions to maintain water transport capacity; maintain the integrity of existing flood control and sediment detention structures; minimize potentially hazardous situations such as flooding, bank, culvert and roadway erosion; and improve visibility of drainage features (a public safety issue). Routine maintenance activities will typically include sediment removal to clear channel obstructions and maintain pre-existing flow conditions, vegetation management, repair of existing bank protection, in-kind culvert replacement, and removal of nonnative vegetation. The equipment required for routine maintenance activities will typically consist of either one or a combination of the following: backhoe, loader, dump truck, hand mower, articulating mower, and powered and manual hand tools (weedeater, chainsaw).

1.3.2 Project Maintenance Activities

Specific routine maintenance activities to be performed at the Project locations will include but are not limited to the following:

- <u>a)</u> Removal of trash and debris (not including silt or sediment) from the drainage features as well as from around pilings, culverts, and structure footings (i.e., bridges, walkways, other structural crossings). Removal of trash and vegetation from pilings piers and culverts will be limited to material that has flowed down the drainage feature and piled up or been trapped in front of the structure and would impede flow leading to potential flooding upstream. All trash and debris removal activities will be completed by hand or with hand tools.
- b) Control of weeds, grasses, and ruderal vegetation on channel banks and access roads. Where the Project locations are adjacent to an existing road, vegetation will be mowed using an articulating mower. Project locations not adjacent to existing roads vegetation control will be performed using hand tools. Mowing will be limited to the channel, channel banks and levees, and the area between the channel and adjacent roadway at B-3, B-9, B-10, C-1, C-2, C-3, C-4, C-5, C-6 and C-7. Small tree seedling/saplings may be cut incidental to these vegetation control activities. Goat grazing may be used in suitable locations for control of weeds, grasses and ruderal vegetation in place of hand tools or mowing.
- <u>c)</u> Removal of herbaceous and emergent wetland plants from the channel that are restricting capacity and causing erosion or flooding.
 <u>Removal of accumulated debris and sediment in man-made drainage features down to the</u> originally constructed flow line. The flow line will be determined by a straight line elevation A-2-HMB-14-0004

between the bottoms of the nearest upstream and downstream culverts. Where the original flow line is unclear, removal will be limited to sediment that can be clearly identified as accumulated. Where the Project locations are adjacent to an existing road, debris and sediment will be removed using and backhoe, loader, or excavator. For Project locations not adjacent to existing roads, debris and sediment removal will be performed using hand tools to the maximum extent practicable. Removal of woody or herbaceous plants, fallen trees, or trunks and limbs lodged into the bed or bank resulting in non-emergency stream flow restrictions. Removal will be completed Specific routine maintenance activities to be performed at the Project locations will include but are not limited to the following:

Control of weeds, grasses, and ruderal vegetation on channel banks and access roads. Where the Project locations are adjacent to an existing road, vegetation will be mowed using an articulating mower. Project locations not adjacent to existing roads vegetation control will be performed using hand tools.

- a) Removal of herbaceous and emergent wetland plants from the channel that are restricting capacity and causing erosion or flooding.
- b) Removal of accumulated debris and sediment in man-made drainage features down to the originally constructed flow line. The flow line will be determined by a straight line elevation between the bottoms of the nearest upstream and downstream culverts. Where the original flow line is unclear, removal will be limited to sediment that can be clearly identified as accumulated. Where the Project locations are adjacent to an existing road, debris and sediment will be removed using and backhoe, loader, or excavator. For Project locations not adjacent to existing roads, debris and sediment removal will be performed using hand tools to the maximum extent practicable.
- e)<u>d</u>)Removal of woody or herbaceous plants, fallen trees, or trunks and limbs lodged into the bed or bank resulting in non-emergency streamflow restrictions. Removal will be completed with equipment staged landward of the top of bank typically using a winch and cable.
- (d)e)Removal of trees and shrubs less than 4 inches diameter at breast height (dbh) below the ordinary high water mark (OHWM) that are restricting flow capacity and causing erosion or flooding. For purposes of this project, tree removal is defined as cutting the tree flush with surrounding grade and removing the above-grade portion of the tree, leaving below-ground roots in place.
- e)<u>f)</u>In-kind replacement of culverts and other <u>stormwaterstorm water</u> management structures that are no longer functional. Replacement will be limited to the same material and footprint as the existing structure.
- f)g) Bank stabilization/bank repair of locations that are no longer functional and create the potential for flooding or erosion. Bank stabilization/repair shall be completed in-kind with the same material and same footprint as the existing bank. Exceptions to in-kind replacement will be where proposed stabilization/repair would enhance the quality of the habitat while providing the same level of erosion and flood protection.

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- g)—Trimming and removal of the minimum amount of vegetation necessary to allow suitable access to perform activities required to restore normal flow levels.
- h) Not all of the above activities will be performed at each Project location. Vegetation
 management and debris and sediment removal activities will be completed routinely at the
 Project locations typically yearly or throughout the year. In kind culvert replacement and
 bank stabilization/repair activities will be completed at each location on an as needed basis,
 and are not included in the table for this reason.
- If any species subject to the Endangered Species Act is identified within a Project location during pre-work surveys or during maintenance activities, work within that Project location will be postponed/cease until such time as a program is developed to operate within the requirements of the Endangered Species Act.

Not all of the above activities will be performed at each Project location. Table 2 and detailed below generally identifies the anticipated routine maintenance activities likely to be performed at each location. Vegetation management and debris and sediment removal activities will be completed routinely at the Project locations typically yearly or throughout the year. In-kind culvert replacement and bank stabilization/repair activities will be completed at each location on an as-needed basis, and are not included in the table and the descriptions below for this reason.

<u>B-1 Roosevelt Drainage</u>

Maintenance activities within the project location will be limited to the portion within the City easement located on the north side of the drainage feature just west of Alameda Ave and the culvert located under Alameda Ave. Proposed activities will consist of trimming and removal of trees (up to 4 inches DBH), shrubs and other vegetation within the channel that are restricting flow. Trees (up to 4 inches DBH) and shrubs adjacent to the channel will be trimmed/removed only to the extent needed to provide foot access to the channel for maintenance purposes. Trees and shrubs overhanging the channel will be trimmed to provide a clear space approximately six feet in height measured from the bottom of the channel. Clearing of accumulated trash or debris blocking the culvert will be performed by hand. All work will be done with hand-held tools.

<u>B-2 Kehoe Ditch Drainage</u>

Maintenance activities within the project location will generally be limited to the portion beginning at Frontage Road westward to the point along the feature parallel with the end of Bev Cunha's County road. Proposed activities will consist of trimming and removal of trees (up to 4 inches DBH), shrubs and other vegetation within the channel that are restricting flow. Trees (up to 4 inches DBH) and shrubs adjacent to the channel will be trimmed/removed only to the extent needed to provide foot access to the channel for maintenance purposes. Trees and shrubs overhanging the channel will be trimmed to provide a clear space approximately six feet in height measured from the bottom of the channel. All work will be done with hand-held tools.

<u>B-3 Kelly Drainage</u>

Maintenance activities within the project location will consist of mowing with an articulating mower, sediment removal, mowing with a weed eater, and clearing or other maintenance of culverts. Mowing with the use of an articulating mower and sediment removal will be limited to the portion of A-2-HMB-14-0004 the swale located on the south side of Kelly Road between 132 Kelly Avenue and 18 Kelly Avenue. Mowing with the use of a weed eater will be performed between 18 Kelly Avenue and the western end of the project location, approximately 150 linear feet to the west. No tree removal is proposed at this location.

<u>B-4 Miramontes Drainage</u>

Maintenance activities within the project location will consist of mowing the ditch with a weed eater, removal of sediments sufficient to restore positive drainage, trimming of shrubs within the ditch, and clearing and maintenance of culverts. All work will be done with hand-held tools. No tree removal is proposed at this location.

B-5 Central Drainage

Maintenance activities within the project location will consist of mowing the swale with a weed eater, removal of sediments sufficient to restore positive drainage, and clearing and maintenance of culverts. All work will be done with hand-held tools. No tree removal is proposed at this location.

<u>B-6 Myrtle Street Bubble-Up</u>

Maintenance activities within the project location will consist of mowing the ditch with a weed eater, removal of sediments sufficient to restore positive drainage, and clearing and maintenance of culverts and catch basins. All work will be done with hand-held tools. No tree removal is proposed at this location.

<u>B-9 Seymour Drainage</u>

Maintenance activities within the project location will consist of mowing with an articulating mower or weed eater, sediment removal, tree and shrub trimming, and clearing or other maintenance of culverts. Mowing with the use of an articulating mower will be limited to the portion of the swale/ditch from the eastern terminus westward to the cul-de-sac at the western end of Seymour Street. Mowing with the use of weed eater will be performed between the cul-de-sac and the western end of the project location at Seymour Detention Basin, approximately 80 feet to the west. Sediment removal will be performed to restore positive drainage in the swale/ditch and will be completed from the street using a backhoe or with the use of hand-held tools (typically in the portion west of the culde-sac where there is no backhoe access). Trimming of trees and shrubs will be performed using hand-held tools and limited to those less than 4-inches DBH where growth extends into the swale/ditch. No tree removal is proposed at this location.

<u>B-10 Redondo Beach Road</u>

Maintenance activities within the project location will consist of mowing with an articulating mower or weed eater, sediment removal, tree and shrub trimming, and clearing or other maintenance of culverts. Mowing with the use of an articulating mower or weed eater will be performed along the portion of the swale/ditch adjacent to the north and south sides of Redondo Beach Rd. Sediment removal in the swale/ditch will be performed to restore positive drainage to the portion of the feature on the south side of the road beginning approximately 400 feet east of the western end of the project locations at the horse trailer parking lot to a point approximately 1200 feet east of the parking lot. Removal will be completed from the street using a backhoe or with the use of hand-held tools. Trimming of trees and shrubs will be performed using hand-held tools and limited to those less than 4-inches DBH where growth extends into the swale/ditch on both sides of the road. No tree removal is proposed at this location.

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<u>C-1 Railroad Avenue</u>

Maintenance activities within the project location will consist of mowing with an articulating mower or weed eater and sediment removal. Mowing with the use of an articulating mower or weed eater will be performed along the approximately 160 linear foot portion of the swale on the west side of Railroad Avenue between Polar and Spruce Streets. Sediment removal will be performed to restore positive drainage to the swale, and will be completed from the street using a backhoe or with the use of hand-held tools. No tree removal is proposed at this location.

C-2 Poplar Street

Maintenance activities within the project location will consist of mowing with an articulating mower or weed eater, sediment removal, and clearing or other maintenance of culverts. Mowing with an articulating mower or weed eater will be performed along the portion of the ditch on the north side of Poplar Street, specifically between the edge of the pavement and the split rail fence, from Railroad Avenue to the Coastside Trail (approximately 1000 linear feet) and on the south side of Poplar Street between the gate at the northwest corner of 152 Poplar Street and the parking lot (approximately 570 linear feet to the west). Sediment removal will be performed to restore positive drainage to the north side of the ditch, and will be completed from the street using a backhoe or with the use of hand-held tools. The headwalls of the culverts located at the northwest and southwest corner of Poplar Street and Railroad Avenue will be replaced. The replacement will be in-kind within the same footprint of the existing headwall and will not result in a change of function or capacity. No tree removal is proposed at this location.

C-3 Railroad Avenue

Maintenance activities within the project location will consist of mowing with an articulating mower or weed eater and sediment removal. Mowing with the use of an articulating mower or weed eater will be performed along the approximately 270 linear foot portion of the swale on the west side of Railroad Avenue between Metzgar and Grove Streets. Sediment removal will be performed to restore positive drainage to the swale, and will be completed from the street using a backhoe or with the use of hand-held tools. No tree removal is proposed at this location.

<u>C-4 Grove Street Drainage</u>

Maintenance activities within the project location will consist of mowing with an articulating mower or weed eater, sediment removal, and clearing or other maintenance of culverts. Mowing with the use of an articulating mower or weed eater will be performed along the portion of the swale on the south side of Grove Street between Railroad Avenue and approximately 80 feet to the east. Sediment removal will be performed to restore positive drainage to the swale, and will be completed from the street using a backhoe or with the use of hand-held tools. No tree removal is proposed at this location.

<u>C-5 Magnolia Street</u>

Maintenance activities within the project location will consist of mowing with an articulating mower or weed eater, sediment removal, tree and shrub trimming, and clearing or other maintenance of culverts. Mowing with the use of an articulating mower or weed eater will be performed in the portion of the ditch/swale on the south side of Magnolia Street between Cabrillo Highway and First Street. Sediment removal will be performed to restore positive drainage to the portion of the ditch/swale between 437 and 429 Magnolia Street (approximately 150 linear feet). Sediment removal will also be completed at the Second Avenue culvert. Sediment removal will be completed from the street using a backhoe or with the use of hand-held tools. Trimming of trees and shrubs will be performed using hand-held tools and limited to those less than 4-inches DBH where growth extends into the swale/ditch. No tree removal is proposed at this location.

<u>C-6 Wavecrest Road</u>

Maintenance activities within the project location will consist of mowing with an articulating mower or weed eater, sediment removal, tree and shrub trimming, and clearing or other maintenance of culverts. Sediment removal will be performed to restore positive drainage to the portion of the ditch from the western end covered by the Project (see Section 1.1.1 above) approximately 950 linear feet to the east. Sediment removal will be completed from the street using a backhoe or with the use of hand-held tools. Trimming of trees and shrubs will be performed using hand-held tools and limited to those less than 4-inches DBH where growth extends into the swale/ditch. No tree removal is proposed at this location.

<u>C-7 Redondo Beach Road</u>

Maintenance activities within the project location will consist of mowing with an articulating mower or weed eater, tree and shrub trimming, addressing vehicular damage, and clearing or other maintenance of culverts. Mowing with the use of an articulating mower or weed eater will be performed in the portion of the swale/ditch adjacent to the north and south sides of Redondo Beach Rd. Trimming of trees and shrubs will be performed using hand-held tools and limited to vegetation less than 4-inches DBH where growth extends into the swale/ditch on both sides of the road. A portion of the swale/ditch on the north side of the road, approximately 650 feet west of Cabrillo Highway, has become rutted by truck tires. Gravel will be applied to this portion of the ditch in order to maintain drainage functions. No tree removal is proposed at this location.

1.3.3 Project Emergency ActivitiesProject Staging

Staging of equipment will occur on paved roadways for most maintenance activity at the project locations. Project locations not adjacent to paved roadways will be accessed on foot with work completed with hand tools. Project activities that would require equipment to be staged outside of existing paved roads would be limited to culvert replacement and bank stabilization/repair activities. These activities will occur on an as-needed basis, typically in response to failures or dangerous situations and cannot be planned. As included in the mitigation measures, access to, and staging for, such activities will be reviewed prior to work to ensure that impacts are reduced to a less than significant level.

In addition to the routine maintenance activities, emergency clearing and cleanup activities will be performed as needed at all Project locations. Emergency clearing activities will be performed during emergency situations when there is an imminent threat to life or property demanding immediate action to prevent or mitigate loss, of or damage to life, health, property, or essential public services, and are not considered to occur routinely making them a small component of the Project. Emergency clearing and cleanup activities will typically include the following:

a) Routine removal of trash and debris (not including silt or sediment) from the drainage features as well as from around pilings, culverts, and structure footings (i.e., bridges, walkways, other structural crossings).

b) Removal of woody or herbaceous plants, fallen trees, or trunks and limbs lodged into the bed or bank resulting in non-emergency streamflow restrictions at A-1, A-3, A-4. Removal will be completed with equipment staged landward of the top of bank using winch and cable. Emergency removal of fallen trees in the flow-line that would cause flooding or bank erosion or other public safety hazards.

Removal of trash and vegetation from pilings piers and culverts will be limited to material that has flowed down the drainage feature and piled up or been trapped in front of the structure and would impede flow leading to potential flooding upstream. All trash and debris removal activities will be completed by hand or with hand tools to the maximum extent practicable, and will only implement the use of heavy equipment (excavators or winches) if there is no other alternative. Emergency removal activities will be performed with winch and cable or other equipment operated from the top of bank, adjacent streets, or other disturbed access points to the maximum extent possible. No heavy equipment will be operated in active drainage features unless there is an immediate need and no alternative.

1.3.4 Project Implementation

Implementation of the project maintenance and emergency clearing and clean up activities will occur as needed over a 5-year period, beginning in 2014. The work will be implemented by staff of the City of Half Moon Bay Public Works Department.

1.3.5 Lake or Streambed Alteration Agreement

The project is further described in the Draft Lake or Streambed Alteration Agreement included in Appendix B. The project will implement all of the requirements of the Final Lake or Stream Alteration Agreement as approved by the California Department of Fish and Wildlife.

1.4 - Existing Setting

1.4.1 - Regional Setting

The City of Half Moon Bay is located approximately 25 miles south of San Francisco between the California Coastal Range and the Pacific Ocean. To the north of the City are the unicorporated communities of El Granada, Princeton, Moss Beach, Montara, and the City of Pacifica. On the south, the city is separated from Santa Cruz by 50 miles of rural coastline. Half Moon Bay has a population of approximately 11,000 and an area of 6.4 square miles. It is a popular visitor destination; public access to the beach and coastal bluffs is available from Highway via City streets and the downtown offers dining and retail amenities. The City is the location of housing for workers on the Peninsula and the Greater Bay Area. Highways 92 and 1 connect Half Moon Bay to the Peninsula and coastal cities to the north and south.

1.4.2 - Site Setting

A summary of the current condition of each Project location, adjacent land use, and basic hydrologic characteristics is provided below. The type of flow described—perennial, intermittent, or ephemeral—is meant to coincide with features that typically flow for most of the year, features that flow or are wetted relatively consistently for a portion of the year, or features that typically only flow or are wetted for a short period of time immediately following rains. The terms *drainage, ditch,* and *swale* coincide with features that have natural bed and bank characteristics and are not manmade; man-made features not vegetated throughout that have a defined bed and bank; and manmade features generally lacking a defined bed and bank that are often vegetated throughout. Representative photographs of the Project locations are provided in the Biological Resource Evaluation prepared by SWCA Environmental Consultants (see Appendix A). Aerial imagery depicting the extent of each Project location is also included in the report. The drainage facilities are grouped into two categories based on the proposed activities:

<u>B and C Zones</u> – Work that includes routine maintenance activities (including emergency clearing and cleanup).

<u>A Zones</u> – Work activities limited to as-needed emergency clearing and cleanup only.

Based on a review of historic aerials and topographic maps, with the exception of Project locations B-1 and B-2 (Roosevelt Drainage and Kehoe Ditch Drainage), the **B** and **C** Project locations consist of man-made ditches originally constructed to drain agricultural or other developed lands. B-1 and B-2 appear as blue line streams on 1940 USGS topographic mapping, and seem to have been modified by agricultural and other development activities to be confined to their present locations. Land use near all the Project locations was predominantly agricultural until residential development began in the 1960s through 1980, with most areas resembling their present-day conditions by the late 1990s. Most of the man-made B and C Project locations appear to have been created either prior to 1948 or by the mid-1950s as roadside or agricultural drainage features. **B**-8 (Seymour Detention Basin) appears to have been constructed between 1991 and 2005 (Historic Aerials 2013).

B-1 – Roosevelt Drainage

Roosevelt Drainage is a perennial drainage that begins approximately 1,700 feet northeast of the Nurseryman's Exchange greenhouse complex at a water retention pond where it flows southwest through the greenhouse complex and discharges into the Pacific Ocean just north of Dunes State Beach. The portion of Roosevelt Drainage covered by this report is from the culvert under Alameda Avenue west to the Coastside Trail. The areas immediately adjacent to the creek typically consist of a dense riparian corridor dominated by various willow species surrounded by residential development. The portion of the drainage west of the Coastside Trail is surrounded by willow riparian forest and coastal dunes.

B-2 – Kehoe Ditch Drainage

Kehoe Ditch Drainage is an intermittent drainage beginning approximately 150 feet south of the intersection of Kehoe Avenue and Frontage Road. It receives discharge from several ephemeral drainage features located to the west side of Highway 1 between Grandview Boulevard and Terrace Avenue. The drainage extends west through willow riparian forest for approximately 1,500 feet before bending around the northern side of the Sewer Authority Mid-Coastside treatment plant and draining into the mouth of Pilarcitos Creek at Francis State Beach. The portion of Kehoe Ditch Drainage covered by this report begins at the eastern nexus with Frontage Road westward to the intersection with the Coastside Trail. The drainage is bound by a developed residential neighborhood to the north, Highway 1 to the east, ruderal and coastal scrub habitat to the south, and the Pacific Ocean to the west.

B-3 – Kelly Drainage

Kelly Drainage is an ephemeral man-made compacted earthen and gravel swale feature that begins at 146 Kelly Avenue and extends west approximately 480 feet. The swale runs adjacent to a preschool and undeveloped lots dominated by non-native annual grasses and ruderal vegetation. The swale is conveyed through several culverts that are almost entirely filled with accumulated sediment before being conveyed under Balboa Boulevard to a vegetated swale, which eventually flows into the Pacific Ocean 350 feet west of the drainage at Francis State Beach. The portion of Kelly Drainage covered by this report is from the western nexus with the Coastside Trail approximately 480 feet to the east.

B-4 – Miramontes Drainage

Miramontes Drainage is an ephemeral man-made drainage ditch that begins approximately 60 feet west of the eastern end of Miramontes Avenue. The drainage extends west for approximately 550 feet through non-native annual grassland habitat. The Coastside Trail and an equestrian trail bisect the drainage channel at the western end before it empties into the Pacific Ocean at Francis State Beach. The portion of Miramontes Drainage covered by this report is from the eastern end to the nexus with the Coastside Trail.

B-5 – Central Drainage

Central Drainage is an ephemeral vegetated swale feature located approximately 1,500 feet south of Miramontes Ditch in non-native grassland habitat. The feature begins approximately 175 feet west of the eastern end of Central Avenue and extends west for approximately 580 feet. The feature crosses the Coastside Trail and an equestrian trail before entering the Pacific Ocean between Francis and Poplar State Beaches. The portion of Central Drainage covered by this report is from the eastern end to the nexus with the Coastside Trail.

B-6 – Myrtle Street Bubble-Up

Myrtle Street Bubble-Up is an intermittent man-made drainage ditch located 600 feet south of Central Ditch in non-native grassland habitat with adjacent wetland features. The ditch begins at a drain inlet at the western end of Myrtle Street and extends west 760 feet. At the western end, the channel flows into a culvert that empties into the Pacific Ocean at Poplar State Beach. The portion of Myrtle Street Bubble-Up covered by this report is from the eastern end to the nexus with the Coastside Trail.

B-7 – Magnolia Drainage

Magnolia Drainage is an intermittent man-made drainage ditch located south of the intersection of Magnolia Street and 1st-Avenue. The ditch begins at the pedestrian bridge just west of 328 Magnolia Street, and flows west for 160 feet, making a 90 degree turn south, where it extends 125 feet, then makes another 90 degree turn west and extends 375 feet before emptying into Seymour Drainage (A-5). The ditch is surrounded by a highly developed residential community and ruderal habitat to the north and east, and seasonal wetland and open space to the south and west. Several man-made A-2-HMB-14-0004 Exhibit 8

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drainage ditches located to the east, including Project locations Seymour Detention Basin (B-8), Seymour Drainage (B-9), and Magnolia Street (C-5), discharge into the drainage. The portion of Magnolia Drainage covered by this report is from the eastern nexus with Magnolia Street (C-5) and Seymour Detention Basin (B-8) west to the nexus with Seymour Drainage (A-5).

B-8 – Seymour Detention Basin

Seymour Detention Basin is located approximately 70 feet northwest of the western end of Seymour Street. The basin is fed by Seymour Drainage (B-9) and serves as a detention/siltation pond for stormwater runoff with a storage capacity of approximately 9,250 cubic feet (Gallegos 2010). The basin discharges to Magnolia Drainage. A highly developed residential community is located approximately 125 feet north and immediately east of the basin, and open space protected by the Coastside Land Trust borders the basin to the south and west.

B-9 – Seymour Drainage

Seymour Drainage is an ephemeral man-made drainage ditch/swale that begins approximately 240 feet west of the intersection of Highway 1 and Seymour Street, and flows west for 1,500 feet along the southern edge of Seymour Street. At the western end, the ditch bends northwest and flows for approximately 120 feet before entering the Seymour Detention Basin. The ditch is bounded by a highly developed residential community to the north, Highway 1 to the east, and open space protected by the Coastside Land Trust to the south and west. The portion of Magnolia Drainage covered by this report is from the eastern end to the nexus with Seymour Detention Basin (B-8).

B-10 – Redondo Beach Road

Redondo Beach Road is separated into two separate Project locations, B-10 and C-7. Redondo Beach Road (B-10) consists of a series of ephemeral drainage ditches, swales, and roadside depressions along the north and south sides of Redondo Beach Road from the Railroad Avenue right-of-way (approximately 850 feet west of the intersection with Occidental Avenue) extending 2,200 feet westward before flowing into the Pacific Ocean. The features are generally bound by coastal scrub and non-native grassland habitat with seasonal wetland features to the north and south; a dirt parking lot and the Pacific Ocean to the west; and development, a eucalyptus forest, and non-native grassland habitat to the east. The portion of Redondo Beach Road (B-10) covered by this report is from the eastern nexus with Redondo Beach Road (C-7) west to the Coastside Trail.

C-1 – Railroad Avenue

Railroad Avenue is separated into two Project locations, C-1 and C-3. The portion of Railroad Avenue (C-1) covered by this report is located on the west side of Railroad Avenue from the intersection with Spruce Street draining southward to the intersection with Poplar Street. Railroad Avenue (C-1) consists of an isolated vegetated swale. Railroad Avenue C-1 is bound by a highly A-2-HMB-14-0004 Exhibit 2 Page 55 of 523 developed residential community to the east and undeveloped non-native annual grassland habitat to the west.

C-2 – Poplar Street

Poplar Street consists of ephemeral man-made drainage ditches located on the north and south sides of Poplar Street extending from Railroad Avenue west to the Pacific Ocean. The portion of the Poplar Street ditches covered by this report is from the eastern ends west to the Coastside Trail. Approximately 1,000 feet in length, the ditches parallel the roadway with a mosaic of ruderal vegetation, non-native grasslands, and seasonal wetland features to the north and south. The ditches are bound by a highly developed residential community to the east and the Pacific Ocean to the west.

C-3 – Railroad Avenue

Railroad Avenue (C-3) consists of an ephemeral man-made vegetated swale along the west side of Railroad Avenue. The portion of Railroad Avenue (C-3) covered by this report begins at 1030 Railroad Avenue and extends south on the west side of Railroad Avenue for approximately 250 feet, where it dissipates into a ruderal-vegetation-overgrown and sediment-filled depression near the intersection with Grove Street. Railroad Avenue (C-3) is bound by a highly developed residential community to the east and undeveloped coastal scrub and non-native annual grassland habitat to the west.

C-4 – Grove Street

Grove Street consists of an ephemeral man-made vegetated swale along the south side of Grove Street that, via several culverts, drains eastward into a man-made drainage that eventually flows toward the Pacific Ocean. The portion of the Grove Street swale covered by this report begins approximately 210 feet west of the intersection with Magnolia Street and extends west to the intersection with Railroad Avenue. A highly developed residential community bounds the drainage to the north, east, and south, while the Pacific Ocean as well as open space managed by the Coastside Land Trust borders the drainage to the west.

-C-5 - Magnolia Street

Magnolia Street consists of a series of ephemeral man-made drainage ditches and swales that, via several culverts, parallel the south side of Magnolia Street. The portion of the Magnolia Street ditches/swales covered by this report extends from Highway 1 approximately 1,700 feet west<u>.</u> to the nexus with Magnolia Drainage (B-7). The ditches/swales are bound by a highly developed residential community to the north, Highway 1 to the east, agricultural fields and a residential community to the south, and open space managed by the Coastside Land Trust to the west.

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C-6 – Wavecrest Road

Wavecrest Road (C-6) consists of an intermittent man-made drainage ditch located on the northern side of Wavecrest Road that eventually drains toward the Pacific Ocean. The ditch receives drainage from agricultural and undeveloped grass and scrubland to the west via a culvert under Highway 1. The portion of the Wavecrest Road ditch covered by this report extends from Highway 1 approximately 1,300 feet to the west. The drainage is located adjacent to a moderately trafficked roadway that leads to Smith Field Little League Park on the western end. Open space composed of non-native grassland and seasonal wetland features lies to the north of the drainage, and lightly developed commercial facilities occupy the land to the south.

C-7 – Redondo Beach Road

Redondo Beach Road (C-7) consists of a series of ephemeral swales and roadside depressions along the north and south sides of Redondo Beach Road from the intersection with Highway 1 extending 2,240 feet westward to the nexus with Redondo Beach Road (B-10). The features are generally bound coastal scrub, non-native grassland habitat, and light residential development to the north; a moderately developed residential community and Half Moon Bay Golf Links to the south; Highway 1 to the east; and undeveloped non-native grassland habitat and the Pacific Ocean to the west. The portion of Redondo Beach Road (C-7) covered by this report is from Highway 1 west to the nexus with Redondo Beach Road (B-10).

A Zones Emergency Work and Cleanup

The A Zones consist of perennial or intermittent streams, creeks, and drainages with primarily natural or unaltered channels. Based on a review of historic aerials and topographic maps, all the locations appear as blue line streams or other drainage features on 1940 USGS topographic mapping and appear to not have or only been slightly modified by agricultural and other development activities to their present locations (Historic Aerials 2013).

A-1 - Frenchman's Creek

Frenchman's Creek is a perennial drainage that runs from unincorporated areas of San Mateo County west through the incorporated City of Half Moon Bay, and empties into the Pacific Ocean at Venice State Beach. The portion of Frenchman's Creek covered by this report extends from the eastern intersection with the city limit of Half Moon Bay west to the intersection with the Half Moon Bay Coastal Trail (Coastside Trail). The creek is bounded by a residential community, agricultural land, non-native grasslands, and coastal scrub habitat to the north, and agricultural land, an equestrian center, and coastal scrub habitat to the south. The areas immediately adjacent to the creek typically consist of a dense riparian corridor dominated by alder (*Alnus* sp.) and various willow species (*Salix* spp.), with invasive eucalyptus (*Eucalyptus* sp.) along the lower reaches of the creek.

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A-2 - Cabrillo Property Ditch

Cabrillo Property Ditch is an intermittent drainage; the portion of Cabrillo Property Ditch covered by this report is located approximately 100 feet north of the eastern end of Terrace Avenue, and extends southwest approximately 200 feet through invasive eucalyptus forest. The feature flows southwest toward a series of wetland areas that eventually drain to Kehoe Ditch Drainage (B-2). The drainage is surrounded by grazed and natural grasslands as well as wetland features to the east, grasslands and eucalyptus forests north and west, and ruderal vegetation and a residential community south.

A-3 – Pilarcitos Creek

Pilarcitos Creek is a perennial drainage located in the central portion of San Mateo County that empties into the Pacific Ocean at Francis State Beach. The portion of Pilarcitos Creek covered by this report extends from the eastern intersection with the Half Moon Bay city limit to the western intersection with the Coastside Trail. The areas immediately adjacent to the creek typically consist of a dense riparian corridor dominated by alder and various willow species. Residential and commercial developments of downtown Half Moon Bay surround the creek on the east side of Highway 1, while a mosaic of agricultural fields and coastal scrub habitat surround the lower reaches of the creek.

A-4 - Arroyo Leon Creek

Arroyo Leon Creek is a perennial drainage located in the central portion of San Mateo County that drains into Pilarcitos Creek near the eastern end of Mill Street in downtown Half Moon Bay. The portion of Arroyo Leon Creek covered by this report is limited to the area immediately along the Miramontes Street Bridge and the areas approximately 100 feet up and downstream. The areas immediately adjacent to the creek typically consist of a dense riparian corridor dominated by various willow species and invasive eucalyptus. Residential and commercial developments of downtown Half Moon Bay surround the creek to the west. Residential and agricultural land uses are located to the east.

A-5 - Seymour Drainage

Seymour Drainage is an intermittent drainage beginning approximately 500 feet west of the western end of Seymour Street. The drainage flows westward through a narrow corridor of planted Monterey pine (*Pinus radiata*) and invasive eucalyptus forest for approximately 1,500 feet, where it discharges into the Pacific Ocean just south of Poplar Beach. The portion of Seymour Drainage covered by this report is from the eastern nexus with Magnolia Drainage (B-7) to the Coastside Trail. Several manmade drainage ditches located to the east, including Project locations Magnolia Drainage (B-7), Seymour Detention Basin (B-8), Seymour Drainage (B-9), Magnolia Street (C-5), and Wavecrest Road (C-6) discharge into the drainage.

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1.5 - Required Discretionary Approvals

The proposed project would require the following discretionary approvals:

- Coastal Development Permit by the City of Half Moon Bay pursuant to Chapters 18.20 and 18.38 of the Half Moon Bay Zoning Code ; appealable to California Coastal Commission
- Issuance of a Stream Alteration Agreement by the California Department of Fish and Wildlife. (See Draft Streambed Alteration Agreement in Appendix B.)

1.6 - Intended Uses of this Document

This IS/MND has been prepared to determine the appropriate scope and level of detail required in completing the environmental analysis for the proposed project. This document will also serve as a basis for soliciting comments and input from members of the public and public agencies regarding the proposed project. The Draft IS/MND will be circulated for a minimum of 30 days, during which period comments concerning the analysis contained in the IS/MND should be sent to:

Carol Hamilton, Senior Planner City of Half Moon Bay Planning Department 501 Main Street Half Moon Bay, CA 94044 Phone: 650.712-5836 Fax: 650.726.8261 Email: chamilton@hmbcity.com

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SECTION 2: ENVIRONMENTAL CHECKLIST

	Environmental Issues	Potentially Significant	Less Than Significant Impact With Mitigation	Less Than Significant	No		
1.	Aesthetics, Light, and Glare	impaor	mitigation	impuot	impuot		
	Would the project:						
	a) Have a substantial adverse effect on a scenic vista?			\boxtimes			
	b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic building within a state scenic highway?						
	c) Substantially degrade the existing visual character or quality of the site and its surroundings?						
	d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			\boxtimes			
	In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:						
	a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non- agricultural use?						
	b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				\boxtimes		
	c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)) or timberland (as defined in Public Resources Code section 4526)?						
	d) Result in the loss of forest land or conversion of forest land to non-forest use?						
	e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?						

	Environmental Issues	Potentially Significant	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact		
3.	3. Air Quality and Greenhouse Gases Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:						
	a) Conflict with or obstruct implementation of the applicable air quality plan?						
	b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?						
	c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions, which exceed quantitative thresholds for ozone precursors)?						
	d) Expose sensitive receptors to substantial pollutant concentrations?			\boxtimes			
	e) Create objectionable odors affecting a substantial number of people?				\boxtimes		
	 f) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? 			\boxtimes			
	g) Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?			\boxtimes			
4.	4. Biological Resources						
	 a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service? 						
	b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?						
	c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?						

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	Environmental Issues	Potentially Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
	 d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of wildlife nursery sites? 				
	e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				
	f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				
5.	Cultural Resources Would the project:				
	a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?				
	b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?				
	c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				
	d) Disturb any human remains, including those interred outside of formal cemeteries?				
6.	Geology, Soils, and Seismicity Would the project:		1		
	 a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving: 				
	 Rupture of a known earthquake fault, as delineated on the most recent Alquist- Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. 				
	ii) Strong seismic ground shaking?				
	iii) Seismic-related ground failure, including liquefaction?				\boxtimes
	iv) Landslides?				
	b) Result in substantial soil erosion or the loss of topsoil?				

	Environmental Issues	Potentially Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
c)	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?				
d)	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?				
e)	Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				
7. Ha	azards and Hazardous Materials				
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				
b)	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment?				
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				
d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working the project area?				
f)	For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				
g)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				\boxtimes

	Environmental Issues	Potentially Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
	 h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? 				
8.	Hydrology and Water Quality <i>Would the project:</i>				
	a) Violate any water quality standards or waste discharge requirements?				
	 b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted? 				
	c) Substantially alter the existing drainage pattern of area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?				\boxtimes
	d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner, which would result in flooding on- or off-site?				
	e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?				
	f) Otherwise substantially degrade water quality?				
	g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				
	h) Place within a 100-year flood hazard area structures, which would impede or redirect flood flows?				
	i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				
	j) Inundation by seiche, tsunami, or mudflow?				\boxtimes

	Environmental Issues	Potentially Significant	Less Than Significant Impact With Mitigation	Less Than Significant	No
9.	Land Use	Impact	intigation	inpuor	impact
	 a) Drugicelly divide on established community? 				
	a) Physically divide an established community?				
	b) Connect with any applicable faild use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?				
	c) Conflict with any applicable habitat conservation plan or natural communities conservation plan?				
10.	Mineral Resources				
	Would the project:				
	a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				
	 b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan? 				
11. Noise Would the project result in:					
	a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?				
	b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?			\boxtimes	
	c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?				
	d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?				
	e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				
	f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				

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	Environmental Issues	Potentially Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
12.	Population and Housing	.		•	
	Would the project:		1		
	a) Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?				
	b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				
	c) Displace substantial numbers of people necessitating the construction of replacement housing elsewhere?				\boxtimes
13.	13. Public Services Would the project result in substantial adverse physical impacts associated with the provision of new of physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public service				
	a) Fire Protection?				\square
	b) Police Protection?				\square
	c) Schools?				\square
	d) Parks?				\square
	e) Other public facilities?				\square
14.	Recreation				
	a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				
	b) Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?				
15.	Transportation				
	Would the project:				
	a) Exceed the capacity of the existing circulation system, based on an applicable measure of effectiveness (as designated in a general plan policy, ordinance, etc.), taking into account all relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?				

	Environmental Issues	Potentially Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
b)	Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?				
c)	Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				
d)	Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				\boxtimes
e)	Result in inadequate emergency access?				\square
f)	Conflict with adopted policies, plans or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?				
16. U	tilities and Service Systems				
W	<i>Could the project:</i>				
a)	Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				
b)	Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				
c)	Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				
d)	Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?				
e)	Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				
f)	Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?				
g)	Comply with federal, state, and local statutes and regulations related to solid waste?				\boxtimes

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17 1	Environmental Issues	Potentially Significant Impact	Less Than Significant Impact With Mitigation	Less Than Significant Impact	No Impact
a	 Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory? 				
t	Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)				
С	c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?				

Environmental Factors Potentially Affected							
The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.							
	Aesthetics, Light, and Glare		Agriculture Resources		Air Quality		
\square	Biological Resources	\square	Cultural Resources	\square	Geology, Soils, and Seismicity		
	Hazards and Hazardous Materials	\square	Hydrology and Water Quality		Land Use		
	Mineral Resources	\boxtimes	Noise		Population and Housing		
	Public Services		Recreation		Transportation		
	Utilities and Services Systems		Mandatory Findings of Significance				

Environmental Determination

On the basis of this initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measure based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signed

Carol Hamilton, Senior Planner

Date 11-14-13

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SECTION 3: DISCUSSION OF ENVIRONMENTAL EVALUATION

1. Aesthetics, Light, and Glare

Would the project:

a) Have a substantial adverse effect on a scenic vista?

Less Than Significant Impact. The proposed routine maintenance and emergency elearing and clean-up-of drainages within Half Moon Bay may result in periodic changes in the appearance of these facilities. Vegetation removal will be limited to the minimum necessary and is not expected to result in significant changes to scenic views. The proposed work would also remove trash and debris and avoid potentially greater changes in the appearance of drainages due to flooding. Impacts would be less than significant.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

Less Than Significant Impact. Highway 92 is a designated California Scenic Highway. Highway 1 is designated as a California Scenic Highway from the southern limit of the City of Half Moon Bay to the Santa Cruz County line; however, the portion of Highway 1 within Half Moon Bay city limits is not so designated. The proposed regular maintenance and emergency clearing and clean-up of drainage facilities within Half Moon Bay may result in periodic temporary changes in the appearance of drainages due to vegetation trimming and/or removal, but is not expected to adversely impact the visual character of scenic resources in the vicinity of the Highway 92 corridor. Impacts would be less than significant.

c) Substantially degrade the existing visual character or quality of the site and its surroundings?

Less Than Significant Impact. The proposed regular maintenance and emergency elearing and clean up of drainage facilities within Half Moon Bay may result in periodic changes in the appearance of drainages due to vegetation trimming and/or removal, but is not expected to degrade the visual character of the site and surrounding area. Impacts would be less than significant.

d) Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?

Less Than Significant Impact. The proposed maintenance and emergency elearing and clean up activities at existing drainages in Half Moon Bay would occur primarily during daylight hours and would not involve substantial light or glare. -<u>Any emergency nighttime work requiring lighting is expected to be rare and of short duration.</u> Impacts would be less than significant.

2. Agricultural Resources

Would the project:

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

No Impact. The project involves work within the confines of specific drainage facilities and would not affect active agricultural uses or result in the conversion of Important Farmland to non-agricultural use. No impacts would occur.

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

No Impact. The project involves work within the confines of specific drainage facilities and would not conflict with any agricultural zoning or Williamson Act contract. No impacts would occur.

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)) or timberland (as defined in Public Resources Code section 4526)?

No Impact. The project involves maintenance and emergency work within the confines of specific drainage facilities and would not conflict with zoning for forest or timberland as defined by the Public Resources Code.

d) Result in the loss of forest land or conversion of forest land to non-forest use?

No Impact. The project involves maintenance and emergency work within the confines of specific drainage facilities and would not result in the loss or conversion of forest land. No impacts would occur.

e) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?

A-2-HMB-14-0004 Exhibiể∮ Page 72 of 523 **No Impact.** The project involves maintenance and emergency work within the confines of specific drainage facilities and would not result in the conversion of farmland to non-agricultural use. No impacts would occur.

3. Air Quality and Greenhouse Gases

Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

a) Conflict with or obstruct implementation of the applicable air quality plan?

Less Than Significant Impact. The Bay Area Air Quality Management District (BAAQMD) Clean Air Plan is the regional air quality management plan for the San Francisco Bay Area. The Clean Air Plan accounts for projections of population growth provided by the Association of Bay Area Governments and vehicle miles traveled provided by the Metropolitan Transportation Commission, and it identifies strategies to bring regional emissions into compliance with federal and state air quality standards.

The proposed project involves the periodic maintenance of B and C Project location drainage facilities in Half Moon Bay-and emergency clearing and clean up of A Project location drainage facilities. Maintenance work on each B and C Project location drainage facility is expected to occur on an annual basis and would be of short duration (typically one to two days). Emergency work will be as needed, generally during storm events. The work would be accomplished by a single work crew (up to three persons) using one dump truck, a back hoe, an articulated mower, and hand operated equipment and tools including chain saws and weedeaters. The project is consistent with, and would not obstruct the BAAQMD Clean Air Plan. Impacts would be less than significant. The project will implement the Bay Area Air Quality Management District's Standard Construction Mitigation to further reduce this less than significant impact.

MM AQ-1

- 1) All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day or as necessary to prevent visible airborne dust.
- 2) All haul trucks transporting soil, sand, or other loose material off-site shall be covered. All visible mud or dirt track-out onto adjacent public roads shall be removed using power vacuum street sweepers at least once per day.
- 3) All vehicle speeds on unpaved roads shall be limited to 15 mph.
- Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California A-2-HMB-14-0004 Exhibit 2 Page 73 of 523

airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]).

- 5) All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications.
- 6) Post a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours.
- *b*)

Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Less Than Significant Impact. The Air Basin is currently designated as a nonattainment area for state and national ozone standards and national particulate matter ambient air quality standards. The Air Basin's nonattainment status is attributed to the region's development history. Past, present and future development projects contribute to the region's adverse air quality impacts on a cumulative basis. By its nature, air pollution is largely a cumulative impact. No single project is sufficient in size, by itself, to result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's contribution to the cumulative impact is considerable, then the project's impact on air quality would be considered significant.

The proposed project involves the periodic maintenance of B and C Project location drainage facilities in Half Moon-Bay and emergency clearing and clean up of A Project location drainage facilities. Maintenance work on each drainage facility is expected to occur on an annual basis and would be of short duration (typically one to two days up to a total of 25 days per year). Emergency work will be as needed, generally during storm events. The work would be accomplished by a single work crew (up to three persons) using one dump truck, a back hoe, an articulated mower, and hand operated equipment and tools. The Project's individual emissions will contribute a negligible amount to the region's existing significant adverse cumulative air quality impacts and would not cause or contribute to an air quality violation. The impact would be less than significant. The project will implement the Bay Area Air Quality Management District's Standard Construction Mitigation (**MM AQ-1**) to further reduce this less than significant impact.

c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

Less Than Significant Impact. The proposed Project emissions would be negligible and would not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard. Impacts would be less than significant. The project would implement the Bay Area Air Quality Management District's Standard Construction Mitigation (**MM AQ-1**) to further reduce this less than significant impact.

d) Expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact. Many of the <u>22-15</u> drainages where maintenance or emergency clearing and clean up work will occur are located in close proximity to residential uses. B-3 (Kelly Drainage) is located adjacent to a pre-school. The Project is not expected to expose sensitive receptors in proximate residential areas and schools to substantial concentrations of pollutants due to the limited equipment employed, and the short duration of work in any one drainage (typically one to two days). Impacts would be less than significant. The project would implement the Bay Area Air Quality Management District's Standard Construction Mitigation (**MM AQ-1**) to further reduce this less than significant impact.

e) Create objectionable odors affecting a substantial number of people?

No Impact. Odor impacts are addressed qualitatively, since the significance of odor impacts subjectively varies from individual to individual. The BAAQMD CEQA Guidelines state that determining the significance of potential odor impacts involves a two-step process. The first step is to determine whether the project would result in an odor source and receptors being located within distances indicated in the BAAQMD CEQA Guidelines. The second step requires that a more detailed analysis be conducted, if the proposed project would result in an odor source and receptors are located closer than the screening level distances indicated.

The proposed project consists of maintenance and emergency clearing and clean up of drainage facilities. The proposed project operations would not create any additional sources of odor. No impacts would occur.

f) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Less Than Significant Impact. Constituent gases of the Earth's atmosphere, called atmospheric greenhouse gases, play a critical role in the Earth's radiation budget by trapping infrared radiation emitted from the Earth's surface, which would otherwise have escaped into space. This phenomenon, known as the "greenhouse effect," is responsible

for maintaining a habitable climate. Anthropogenic emissions of these greenhouse gases in excess of natural ambient concentrations are responsible for the enhancement of the greenhouse effect and have led to a trend of unnatural warming of the Earth's natural climate, known as global warming or climate change. Prominent greenhouse gases contributing to this process include carbon dioxide and methane, among others. Climate change is a planet-wide effect, and greenhouse gases are global pollutants, unlike criteria air pollutants, which are pollutants of regional and local concern.

The BAAQMD does not have a construction-related greenhouse gas threshold. The project would require periodic use (up to 25 days per year) of one gas-powered truck, a small tractor (with back hoe, and articulatinged mower) and hand operated equipment (chain saws and weedeaters) to conduct routine maintenance of drainage facilities. The proposed activity would emit greenhouse gas emissions at very low levels for short periods of time. Although there are no screening levels that specifically address a maintenance project, the limited equipment use is clearly below BAAQMD's operational screening criteria for greenhouse gases, which specify that operation of up to 56 single family houses (each of which would generate an average of 9.5 one-way vehicle trips per day) or a community park of up to 600 acres, would not exceed the greenhouse gas significance threshold of 1,100 metric tons per year. Construction-related greenhouse gas impacts would be less than significant. The project would implement the Bay Area Air Quality Management District's Standard Construction Mitigation (**MM AQ-1**) to further reduce this less than significant impact.

g) Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?

Less Than Significant Impact. The proposed project would result in very low levels of greenhouse gas emissions and would not conflict with the BAAQMD's proposed plan for reducing greenhouse gas emissions. Impacts would be less than significant. The project would implement the Bay Area Air Quality Management District's Standard Construction Mitigation (**MM AQ-1**) to further reduce this less than significant impact.

4. Biological Resources

This section is based on the conclusions contained in the Biological Resource Evaluation for the Citywide Drainage Ditch Maintenance Project, prepared by SWCA Environmental Consultants, dated July 3, 2013. The complete report is provided in Appendix A.

Would the project:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Less Than Significant Impact With Mitigation. At the request of the City of Half Moon Bay, SWCA Environmental Consultants evaluated the project area, consisting of 22 drainage facilities in Half Moon Bay and a 200-buffer around each of these facilities. The evaluation included an assessment of special-status plant and animal species that may be adversely affected by project activities.

Potential impacts are discussed by species and mitigation is identified to reduce all potentially significant impacts to a less than significant level. If any species subject to the Endangered Species Act is identified within a Project location during pre-work surveys or during maintenance activities, work within that Project location will be postponed/cease until such time as a program is developed to operate within the requirements of the Endangered Species Act.

California Red-legged Frog and San Francisco Garter Snake

California red-legged frog, a federally threatened and state species of special concern, occurs in various habitats during its life cycle. Breeding areas include aquatic habitats such as lagoons, streams, and natural and human-made ponds. The species prefers aquatic habitats with little or no flow, the presence of surface water to at least early June, surface water depths to at least 2.3 feet, and the presence of emergent vegetation (e.g., cattails and bulrush). The largest densities of California red-legged frog are typically associated with dense stands of overhanging willows and an intermixed fringe of sturdy emergent vegetation (e.g., cattails, bulrush). During periods of wet weather, some individuals may make overland dispersals through adjacent upland habitats of distances up to 1 mile (USFWS 2002). Upland habitats including small mammal burrows and woody debris can also be used as refuge during the summer if water is scarce or unavailable (Jennings and Hayes 1994). California red-legged frogs typically travel between sites and are unaffected by topography and vegetation types during migration. Dispersal habitat makes it possible for California red-legged frogs to locate new breeding and non-breeding sites, and is crucial for conservation of the species.

The federally and state endangered San Francisco garter snake's historical range is entirely within San Mateo County. The two main components of San Francisco garter snake habitat are 1) wetlands supporting its prey species (e.g., California red-legged frog and Pacific chorus frog); and, 2) surrounding uplands that support small mammal burrows used by the snakes for escape cover (USFWS 2006). San Francisco garter snakes inhabit various aquatic habitats, including reservoirs, freshwater marshes, creeks, drainage ditches, ponds, and lakes. Less ideal habitats can also be used by San Francisco garter snake, such as ditches and other waterways, or floating algal or rush mats. Suitable breeding habitat includes shallow marsh lands with an abundance of emergent vegetation. Grasslands are also an important upland habitat for this species, as they provide areas for thermoregulation and cover. Prey items for this species include California red-legged frog, Pacific chorus frogs, and earthworms. San Francisco garter snakes are not known to be efficient at catching their prey in water deeper than 5 cm (2 inches); therefore, shallow water is important for catching prey and metamorphosis development (i.e., tadpoles of red-legged frogs and chorus frogs).

There is moderate to high potential for California red-legged frog to be present at A-1, A-3, A 4, A 5, B-2, B-4, B-5, B-6, B-7, B-8, B-9, B-10, C-2, and C-6; and a low potential for this species to be present at C-5 and C-7. In addition, B-8 provides low-quality, but suitable breeding habitat for California red-legged frog. There is a moderate potential for San Francisco garter snake to be present at A-3 and A-4 as well as a low potential of occurrence at B-7, B-8, B-9, B-10, C-6, and C-7. There is also a very limited potential that California red-legged frog and San Francisco garter snake may occupy other grassland or ruderal areas throughout the BSA for upland habitat; however, it is not anticipated that there would be impacts to these species in these areas.

The proposed Project activities have the potential for adverse effects in the form of take of California red-legged frog and/or San Francisco garter snake if they enter work areas during construction. Although unlikely, forms of take could include California red-legged frogs and/or San Francisco garter snakes being crushed, entombed in burrows, killed or injured by construction equipment or worker foot-traffic, or harassed by noise or vibration associated with construction activities. Use of inappropriate erosion control or exclusion fencing/netting could trap small frogs or snakes, which could injure or kill animals via predation, desiccation, or starvation. With implementation of recommended avoidance and minimization measures, it is anticipated that the Project may affect but is not likely to adversely affect California red-legged frog and San Francisco garter snake.

It should be noted that no take (including handling and relocation) will be allowed by the USFWS if a California red-legged frog is found in the work area during construction. In this event, formal consultation under the ESA would be required. The following avoidance and minimization measures for California red-legged frog would reduce the potentially significant impact to a less than significant level.

MM BIO-10 Work area activities at A-1, A-3, A-4, A-5, B-2, B-4, B-5, B-7, B-8, B-9, B-10, C-2, C-6, and C-7 should be limited to June 15 to October 31. Work at B-1, B-3, B-6, C-4, and C-5 should be limited to April 15 to October 31.

A-2-HMB-14-0004 Exhibit⁴2 Page 78 of 523 **MM BIO-11** Before any construction activities begin on the Project, a qualified biologist should conduct a training session for all construction personnel. At a minimum, the training should include a description of the California red-legged frog and its habitat, the importance of the California red-legged frog and its habitat, the general measures that are being implemented to conserve the California red-legged frog as they relate to the Project, and the boundaries within which the Project may be accomplished. Brochures, books, and briefings may be used in the training session, provided that a qualified person is on hand to answer any questions.

MM BIO-12 A qualified biologist should survey work areas at <u>A 1, A 3, A 4, A 5, B-</u>2, B-4, B-5, B-6, <u>B 7, B 8, B-9, B-10, C-2, C-5, C-6, and C-7 within 48 hours of the planned start of activities. If California red-legged frogs, tadpoles, or eggs are found, the approved biologist should inform the City to initiate formal ESA consultation with the USFWS if work is to go forward.</u>

MM BIO-13 A qualified biologist should be present at A-1, A-3, A-4, A-5, B-2, B-4, B-5, B-6, B-7, B-8, B-9, B-10, C-2, C-5, C-6, and C-7 during all Project activities. The biologist should have the authority to halt any action that might result in impacts. If California red-legged frogs are found at any time, work actives shall stop and the approved biologist should inform the City to initiate formal ESA consultation with the USFWS. If the biologist is permitted by the USFWS and approved by the CDFW for this Project to handle California red-legged frogs, only then can the species be handle and relocated. Under no circumstances should a California red-legged frog be handled, relocated, or otherwise harmed or harassed at any time without coordination and approval from the USFWS if work is to go forward .

MM BIO-14 For control of weeds and grasses on channel banks and access roads at B-2, B-4, B-5, B-6, B-7, B-8, B-9, B-10, C-2, C-5, C-6, and C-7, vegetation shall be cut to no less than 6 inches by an articulating mower or hand tools for locations adjacent to an existing access route, and by hand tools for locations with no existing access routes. Once the ground is visible, a visual survey for California red-legged frog shall be conducted by a qualified biologist. If no individuals are found in the area, vegetation removal may continue with the qualified biologist walking in front of equipment to observe.

A-2-HMB-14-0004 Exhibit⁴2 Page 79 of 523 **MM BIO-15** No stockpiling of vegetation shall occur at the worksite. Vegetation to the maximum extent practicable based on the equipment used should be placed directly or as quickly as feasible into a disposal container and removed from the site. Vegetation shall not be piled on the ground unless it is later disposed of under the supervision of a qualified biologist.

MM BIO-16 To protect potential burrows, no soil shall be stockpiled on the ground unless it is a paved surface or the area has been surveyed by a qualified biologist.

MM BIO-17 During Project activities, all trash that may attract predators should be properly contained, removed, and disposed of regularly. Following construction, trash/construction debris should be removed from work areas.

MM BIO-18 To assist in excluding California red-legged frog from the work area during sediment removal or bank stabilization with large equipment, an exclusion fence should be installed around the work area prior to the commencement of construction activities. Exclusion fencing should be silt-fence type fencing or equivalent, and should not include poly mesh fencing or other similar fencing that could entrap or snag reptiles, amphibians, or other small animals. Exclusion fencing should be installed with the fence stakes placed on the side opposite of the Project location to prevent frogs from using the stakes to maneuver over the fence. Fencing should be keyed-in appropriately (at least 6inches deep) with 10-foot long turn-arounds facing away from the Project location located at either end in order to redirect animals away from openings. Once fencing is in place and once daily, a qualified biologist should check the work area to confirm that sensitive species are not present before Project activities commence. The fencing should be maintained until all work has been completed. The fencing should be inspected on a daily basis by a qualified biologist, and any damaged areas should be repaired immediately upon discovery.

MM BIO-19 A qualified biologist should ensure that the spread or introduction of invasive exotic plant species should be avoided to the maximum extent possible. When practicable, invasive exotic plants in work areas should be removed. Any removed exotic plants should be immediately bagged and appropriately disposed of at a permitted facility.

MM BIO-20 If there is significant ground disturbance, Project locations should be revegetated with an appropriate assemblage of vegetation suitable for the area. Such a plan must include but not be limited to location of the restoration, species to be used, restoration techniques, time of year the work will be done, identifiable success criteria for completion, and remedial actions if the success criteria are not achieved.

MM BIO-21 The number of access routes, number and size of staging areas, and the total area of the activity should be limited to the minimum necessary to complete the

A-2-HMB-14-0004 Exhibit⁴2 Page 80 of 523 Project. Routes and boundaries should be clearly demarcated, and these areas should be outside of wetland areas, as feasible. Where impacts occur in these staging areas and access routes, restoration should occur as identified in measure **MM BIO-20** above.

MM BIO-22 To control erosion during and after Project implementation, the City should implement BMPs, as identified by the appropriate RWQCB.

MM BIO-23 All fueling and maintenance of vehicles and other equipment and staging areas should occur at least 50 feet from any riparian area, riparian corridor, wetland, or other drainage feature or water body. The City should ensure that contamination of habitat does not occur during such operations. Prior to the onset of work, the City should ensure that there is a plan to allow a prompt and effective response to any accidental spills. All workers should be informed of the importance of preventing spills, and of the appropriate measures to take should a spill occur.

Because the San Francisco garter snake is a California fully protected species, no incidental take is allowed; take must be fully avoided. In addition to the above mitigation measures, of which many if not all are also transferable to San Francisco garter snake, the following mitigation measures would specifically avoid take of San Francisco garter snake during Project activities and reduce potentially significant impacts on the species to a less than significant level.

MM BIO-24 Avoidance measures for San Francisco garter snake should be employed in all areas where construction could result in the direct take of this species. Full-time monitoring is recommended during construction at A-1, A-3, A-4, A-5, B-2, B-4, B-5, B-6, B-7, B-8, B-9, B-10, C-2, C-5, C-6, and C-7 to ensure that no unanticipated take of San Francisco garter snake occurs. The qualified biologist should be on call as needed to monitor construction activities in potential habitat and inspect exclusion fencing to ensure it remains intact throughout the duration of construction. The qualified biologist may stop work if necessary to protect San Francisco garter snake, and should notify the City as to how to proceed accordingly.

MM BIO-25 A qualified biologist should conduct pre-construction surveys before any Project activities take place in potential San Francisco garter snake habitat at A-3, A-4, B-7, B-8, B-9, B-10, C-6, and C-7. Surveys should consist of walking transects while conducting visual encounter surveys in areas that will be subject to vegetation clearing, sediment removal, grading, cut and fill, or other ground-disturbing activities. If a San Francisco garter snake is observed during a survey, the USFWS, and CDFW will be notified and the San Francisco garter snake should be monitored until it leaves the area on its own, undisturbed and without harassment.

MM BIO-26 Before any construction activities begin on a Project, a qualified biologist should conduct a training session for all construction personnel. At a minimum,

the training should include a description of the San Francisco garter snake and its habitat, the importance of the San Francisco garter snake and its habitat, the general measures that are being implemented to conserve the San Francisco garter snake as they relate to the Project, and the boundaries within which the Project may be accomplished. Brochures, books, and briefings may be used in the training session provided that a qualified person is on hand to answer any questions.

MM BIO-27 To assist in excluding San Francisco garter snakes from the work area during sediment removal or bank stabilization with large equipment, an exclusion fence should be installed around the work area prior to the commencement of construction activities. Exclusion fencing should be silt-fence type fencing or equivalent, and should not include poly mesh fencing or other similar fencing that could entrap or snag reptiles, amphibians, or other small animals. Exclusion fencing should be installed with the fence stakes placed on the side opposite of the Project location to prevent snakes from using the stakes to maneuver over the fence. Fencing should be keyed-in appropriately (at least 6 inches deep) with 10-foot-long turnarounds facing away from the Project location at each end to redirect animals away from openings. Once fencing is in place, a qualified biologist should check the work area once daily to confirm that sensitive species are not present before Project activities commence. The fencing should be maintained until all work has been completed. The fencing should be inspected on a daily basis by a qualified biologist, and any damaged areas should be repaired immediately upon discovery.

MM BIO-28 Under no circumstances should a San Francisco garter snake be handled, relocated, or otherwise harmed or harassed at any time without coordination and approval from USFWS and CDFW.

Central California Coast Steelhead DPS (Oncorhynchus mykiss irideus)

Central California coast steelhead, a federally threatened and state species of special concern, are steelhead, a federally-threatened and state species of special concern, is anadromous fish that extend along the entire California coast and inland to the Sacramento–San Joaquin River system. Steelhead spend a portion of their life cycle in the Pacific Ocean before returning upstream to spawn; however, upstream migration is often limited due to upstream barriers such as dams, waterfalls, and cataracts. Steelhead feed on aquatic and terrestrial insects, frogs, and small fish.

There is no potential for central California coast steelhead to be adversely impacted by the proposed routine maintenance activities at the B and C Zones.

; however, there is a low potential for the species to be impacted during emergency elearing activities at A-1 and A-3. Due to the skittish nature of the fish, it is unlikely that mortality or injury will occur as a result of emergency clearing activities at these locations; however, there is the limited potential these activities could result in impacts to

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egg or spawning habitats. The following mitigation would reduce the potential impact to a less than significant level.

MM BIO 29 If feasible, immediately prior to completion of emergency clearing activities, a qualified biologist should survey the work area at A-1 and A-3. If central California coast steelhead or eggs are found, the approved biologist should inform the City and the USFWS, and complete the necessary emergency consultation requirements described in the ESA.

MM BIO 30 If feasible, a qualified biologist should be present at A-1 and A-3 during all emergency activities.

Nesting Migratory Birds

Project activities could have the potential to directly and/or indirectly impact a variety of nesting migratory bird species, including white-tailed kite and saltmarsh common yellowthroat. Project activities, including vegetation removal, equipment use, and associated noise could impact nesting migratory birds and/or special-status bird species adjacent to the BSA. No active nests were noted during the field surveys; however, the following mitigation measures would reduce potentially significant impacts on migratory birds to a less than significant level.

MM BIO-31 If Project activities are conducted during the typical nesting bird season (February 15 through September 15), pre-construction nest surveys should be conducted in and near the Project area (within 500 feet for large raptors such as buteos, 250 feet for small raptor such as accipiters, and 100 feet for all other birds) by a qualified biologist. If nesting is identified during the pre-construction survey, the following measures should be implemented:

- If active nest sites of bird species protected under the MBTA and/or California Fish and Wildlife Code Section 3503 are observed in the survey area, then the Project should be modified and/or delayed as necessary to avoid direct take of the identified nests, eggs, and/or young. Potential Project modifications may include the establishment of protective buffer zones (500 feet for large raptors such as buteos, 250 feet for small raptor such as accipiters, and 100 feet for all other birds) in which a qualified biologist shall monitor all Project-related activities to ensure that they do not impact nesting birds. Monitoring shall continue through work activities until the biologist has determined that the nesting activity has ceased.
- 2. Active nests should be documented by a qualified biologist, and a letter report should be submitted to the USFWS and CDFW documenting Project compliance with the MBTA and applicable Project mitigation measures.

Special Status Plant Species

Field surveys were conducted during the appropriate blooming period for the majority of special-status plants with potential to occur in the BSA. Surveys were not conducted during the appropriate blooming period for western leatherwood and fragrant fritillary; however, impacts to these species are not expected because no Project-related impacts are proposed in suitable habitat for these species. Of the 40 plant species with the potential to be present, one—Choris's popcorn flower—was observed in the BSA at B-5 located outside of the proposed work area approximately 100 feet north of the western end of the Project location and at B-10 at two specific areas approximately 100 feet north of the Project location (Appendix F of the SWCA Biological Resource Evaluation - see Appendix A of this Initial Study). The observances consisted of several small populations in vernally wet depressional areas integrated within the ruderal and coastal scrub vegetation. The Project has the potential to result in minimal impacts to this species if vehicular or heavy equipment is required at Project locations where there are no existing access roads. The following mitigation would be implemented to mitigate potential impacts to special-status plant species to a less than significant level.

MM BIO-1 Disturbance to vegetation and CRAs should be the minimum necessary to complete the Project activities, provided there is no feasible alternative. The minimum amount of disturbance to vegetation is defined as the least amount required to access the Project locations, to restore or maintain normal stream flow, to prevent potential flooding, and for control of weeds and grasses on channel banks and access roads.

Prior to all Project activities, a qualified biologist shall designate the work area and any staging areas as well as delineate areas that should be avoided. Areas that would be identified to avoid include wild strawberry populations, special-status plant species, and CCC wetlands adjacent to the Project locations.

A qualified biologist is herein defined as an individual who has a minimum of 5-years of academic training and professional experience in biological sciences or a related field as it pertains to the Project. The biologist must be able to recognize species that may be present within the work area including the special status species which have the potential to occur, be familiar with the habits, habitats, and behaviors of those species and be able to differentiate between these species and similar allies. In order to conduct preconstruction surveys the qualified biologist should have a minimum of 30-days prior to surveys or monitoring the selected biologist(s) should be approved by CDFW.

Access to Project locations shall be via existing access roads to the maximum extent practicable. Heavy equipment (anything larger than a pickup truck or other track equipment such as a bobcat) should be positioned on existing access roads above the top of bank.

If access to Project locations is required where there is no existing access route, prior to Project activities a qualified biologist shall delineate an approved route which minimizes impacts to vegetation as well as identifies and avoids CRAs. If CRAs are identified along the access route a qualified biologist shall monitor all Project activities to ensure CRAs are avoided and impacts to vegetation are minimized.

 b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or US Fish and Wildlife Service?

Less Than Significant Impact With Mitigation. Coastal Resource Areas (CRAs) were observed at several locations throughout the BSA. These include sensitive habitat areas, riparian areas and corridors, bluffs and cliffs, wild strawberry habitat, wetlands, and archaeological resource areas. The Project has the potential to impact sensitive habitat areas (specifically habitats containing or supporting unique species or any rare and endangered species), riparian areas and corridors, wild strawberry habitat, and wetlands. Project-associated impacts to these resources are discussed below.

<u>The</u> Project construction includes the emergency clearing of debris/vegetation; vegetation management; debris and sediment removal; in-kind culvert replacement; and in-kind banks stabilization at drainage features necessary to maintain or restore water transport capacity; maintain the integrity of existing flood control and sediment detention structures; minimize potentially hazardous situations such as flooding, bank, culvert, and roadway erosion; and improve visibility. Project activities are typically limited to the area immediately in or adjacent to the drainage features. The activities do not include any permanent impacts to CRAs or other sensitive biological resources, changes in current land use, or modifications of the drainage features from their current natural or (if manmade) originally constructed conditions.

Vegetation management and sediment removal activities will result in impacts to vegetation in the drainage features and any adjacent areas where vegetation is required to be trimmed or removed for access. In-kind culvert replacement and bank stabilization activities will result in impacts to vegetation, soils, and the area necessary to perform the required work. Access to the Project locations will typically be along existing paved access routes, or, if no existing access routes are present, by foot. Occasionally Project locations without existing access roads may need to be accessed by trucks and other construction equipment such as for emergency clearing, in-kind culvert replacement, and bank stabilization. This will result in potential impacts to vegetation, soils, and any sensitive areas necessary for access, as well as at the work location.

A-2-HMB-14-0004 Exhibi∯2 Page 85 of 523 Certain construction activities, namely bank stabilization and culvert replacement, may require grading operations that could require the removal of vegetation, disturbance of soil layers, and the creation of soil stockpiles. This could expose soils to erosion by rainfall and runoff as stormwater leaves the work location. The adverse effects of erosion and sediment transport include deposition of sediment within the drainage features and associated habitats. This sediment transport could affect water quality due to the potential for pollutants to be discharged to adjacent soils and surface water bodies. Construction of the proposed Project could also involve the use, fueling, and storage of heavy equipment onsite. Soil and associated building materials, including asphalt and road base, has the potential to enter the drainage features, cause an increase in suspended sediments, result in sedimentation of aquatic habitat, and introduce compounds that could potentially be toxic to aquatic organisms. Implementation of the following measures would reduce potentially significant impacts on CRAs to a less than significant level.

MM BIO-1 Disturbance to vegetation and CRAs should be the minimum necessary to complete the Project activities, provided there is no feasible alternative. The minimum amount of disturbance to vegetation is defined as the least amount required to access the Project locations, to restore or maintain normal stream flow, to prevent potential flooding, and for control of weeds and grasses on channel banks and access roads. To minimize impacts to vegetation and CRAs to a less than significant level, the following measures would be implemented:

Prior to all Project activities, a qualified biologist shall designate the work area and any staging areas as well as delineate areas that should be avoided. Areas that would be identified to avoid include wild strawberry populations, special-status plant species, and CCC wetlands adjacent to the Project locations.

A qualified biologist is herein defined as an individual who has a minimum of 5-years of academic training and professional experience in biological sciences or a related field as it pertains to the Project. The biologist must be able to recognize species that may be present within the work area including the special status species which have the potential to occur, be familiar with the habits, habitats, and behaviors of those species and be able to differentiate between these species and similar allies. In order to conduct preconstruction surveys the qualified biologist should have a minimum of 30-days prior to surveys or monitoring the selected biologist(s) should be approved by CDFW.

Access to Project locations shall be via existing access roads to the maximum extent practicable. Heavy equipment (anything larger than a pickup truck<u>or other track</u>

<u>equipment such as a bobcat</u>) should be positioned on existing access roads above the top of bank.

If access to Project locations is required where there is no existing access route, prior to Project activities a qualified biologist shall delineate an approved route which minimizes impacts to vegetation as well as identifies and avoids CRAs. If CRAs are identified along the access route a qualified biologist shall monitor all Project activities to ensure CRAs are avoided and impacts to vegetation are minimized.

MM BIO-2 If any wildlife is encountered during Project activities, said wildlife should be allowed to leave the work area unharmed. If any special-status wildlife species are observed, construction personnel should contact a qualified biologist immediately. The biologist will identify the species and determine the best course of action. Animals will be allowed to leave the work area of their own accord and without harassment. Animals should not be picked up or moved in any way.

MM BIO-3 Several CCC wetlands were identified adjacent to the Project locations at B-6, B-7, B-10, C-2, C-3, C-6, and C-7. Activities proposed in these locations that could result in dredge or fill of waters of the United States could be subject to regulation under the Clean Water Act. Activities proposed in these areas must be reviewed to determine if they would be regulated by the USACE, and a wetland delineation could be required to determine the extent of USACE jurisdiction.

MM BIO-4 No Project activities shall be conducted in a channel with water flowing or present in it to the maximum extent practicable, with the exception of emergency activities. Similarly no equipment should be operated in a flowing drainage feature unless it is necessary for emergency purposes and there is no feasible alternative, or it is necessary to construct a dewatering system to divert water flow around a work area. Additional requirements and restrictions may be required for work in an active channel or if a dam or dewatering system is required; and should be reviewed independently prior to construction.

MM BIO-5 Any and all spoils generated during Project activities shall be placed where they cannot enter drainage features, riparian areas or corridors, or wetlands. Spoils shall be removed from the work area and disposed of at an appropriate facility.

MM BIO-6 During construction, to avoid erosion and downstream sedimentation, no work in or immediately adjacent to the drainage ditches should occur during the rainy season (October <u>1531</u> through April 15).

A-2-HMB-14-0004 Exhibi∮⊉ Page 87 of 523 **MM BIO-7** During construction, the 72-hour weather forecast shall be monitored. If there is a more than 40% chance of rain, or at the onset of unanticipated precipitation of 0.25 inch or more, all equipment should be removed or staged to avoid potential impacts, soil erosion and sediment control measures should be implemented, and Project activities should cease until after a 24 hour dry-out period if there has been more than 0.25 inch of rain.

MM BIO-8 All exposed soils in the work area (resulting from Project activities) shall be stabilized immediately following the completion of work to prevent erosion. Erosion control BMPs, such as silt fences, straw hay bales, gravel or rock lined drainages, water check bars, and broadcast straw can be used. Erosion control fabrics should be biodegradable. BMPs shall be monitored during and after storm events. At no time shall silt-laden runoff be allowed to enter drainages or wetlands.

MM BIO-9 If Project activities result in disturbance exceeding one acre; a Stormwater Pollution Prevention Plan (SWPPP) will be required. If required prior to the start of work a notice of intent (NOI) and SWPPP should be prepared and submitted to the appropriate Regional Water Quality Control Board (RWQCB). A copy of the SWPPP should be submitted to the County for approval to show that sedimentation and erosion control measures are installed prior to any other ground-disturbing work.

c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Less Than Significant Impact With Mitigation. As described in Section 2.2.5, the City Code and CCC use the USFWS wetlands "one parameter" definition. CCC wetlands were identified within the drainage features at B-1, B-2, B-6, B-7, B-9, B-10, C-2, C-3 and C-6. CCC wetlands were also identified in the BSA adjacent to B-6, B-7, B-10, C-2, C-3, C-6, and C-7. Although the A Zone locations were not surveyed in the field, due to the presence of an OHWM and adjacent riparian vegetation, CCC wetlands would also be present in all A Zones. Per Section 18.38.080(D) of the City Code, a 100-foot wetland buffer zone is located adjacent to the high water point of wetlands. The extent of CCC wetlands and wetland buffer zones in the BSA are depicted in Appendix F of the SWCA Biological Resource Evaluation (see Appendix A of this Initial Study).

Wetland areas were typically delineated based on the presence of a dominance of hydrophytic vegetation and/or hydrologic indictors. Wetland plant species are those included on the *National Wetland Plant List, Arid West Region* (USDA NRCS 2013), and are typically adapted for life in permanently or periodically saturated soils. Each species

A-2-HMB-14-0004 Exhibi∮2 Page 88 of 523 on the list is rated according to a wetland indicator category. To be considered hydrophytic, the species must have wetland indicator status (i.e., be rated as obligate [OBL], facultative wetland [FACW], or facultative [FAC]). Wetland indicator species observed in the drainage features and adjacent wetland areas include brown-headed rush, spreading rush, dense sedge, velvet grass, tall flat-sedge, common spikerush, blue-eyed grass, horsetail, curly dock, bristly ox-tongue, poison hemlock, and arroyo willow (*Salix lasiolepis*). Areas were considered wetlands if the assemblage of plants present was dominated by hydrophytic species. Dominance was determined visually based on the FAC Neutral test (USACE 2008).

Field indicators of wetland hydrology were also used to determine the presence of wetlands, hydrologic indicators observed included water marks, sediment deposits, algal mats or crusts, drainage patterns, and/or the presence of an OHWM. Soils were generally not used as an indicator for the presence of wetlands due to obvious signs of hydrology or hydrophytic vegetation. Several soil samples were taken at the upland wetland border of the wetlands adjacent to B-6, B-10, C-2, and C-6 and characterized according to the soil color (Munsell 2000) and if they meet the Natural Resources Conservation Service (NRCS) hydric soil requirements (NRCS 2003). No hydric soils were observed in the samples obtained. The NRCS soil survey for San Mateo County (USDA NRCS 2012) maps 19 soil units in the BSA. Of these units, only the coastal beaches unit is considered to be hydric under normal conditions. This unit is only mapped at the far western end of B-2.

Uses permitted in wetland and wetland buffer zones are the same as those permitted in riparian corridors and riparian buffer zones. The proposed Project activities are necessary to maintain existing stormwater runoff and flood control facilities to protect existing infrastructure and eliminate potentially hazardous situations. There is no feasible alternative to the proposed maintenance Project, which consists of the maintenance of existing stormwater runoff and flood control facilities and does not involve or introduce any new uses; and as such the Project is consistent with the permitted uses in riparian corridors and riparian buffer zones as well as wetlands and wetland buffer zones. The Project will not result in any permanent impacts to wetlands or wetland buffer zones. The Project does have the potential to result in minimal impacts to wetland vegetation, channel morphology, and hydrology. Implementation of the biological mitigation (MM BIO_1 through 28 and MM BIO_31) would mitigate these impacts to a less than significant level.

With the implementation of mitigation, impacts would be reduced to a level of less than significant.

A-2-HMB-14-0004 Exhibi∮2 Page 89 of 523 *d)* Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

No Impact. Due to the fragmentation, development, and high level of disturbance and human activity, it is not anticipated that the Project will adversely affect a wildlife movement corridor. Undeveloped lands extending from the southern end of the BSA at Redondo Beach Road north to Frenchman's Creek may provide suitable habitat for migration of amphibians, reptiles, and mammals; however, the Project will not have any permanent impacts or habitat loss, and the proposed routine maintenance activities are not expected to have an effect on potential migrations. In addition, it is likely that emergency clearing and cleanup activities at A Zone locations may improve migration corridors for fish species such as the steelhead trout.

e) Conflict with any local applicable policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Less Than Significant Impact With Mitigation. This impact will discuss Sections 18.37 and 18.38 and Chapter 7.4 of the Half Moon Bay Municipal Code.

Section 18.38 requires any proposed project within 100 feet of a "sensitive habitat area" to prepare a biological report. Sensitive habitat is defined as sand dunes, marine habitats, sea cliffs, riparian areas, wetlands, rocky intertidal zones, coastal scrub, and habitats supporting rare and endangered species defined by the State Fish and Game Commission. The proposed project would involve work within 100 feet of a sensitive habitat area and SWCA Environmental Consultants had prepared a Biological Resource Evaluation (Appendix A) to assess potential project impacts and identify feasible mitigation as identified in **MM BIO 1** through 28 and MM BIO-31. The biology report prepared for the project is consistent with the requirements of the Municipal Code.

Section 18.37 requires that "significant plant communities" be preserved wherever feasible. Such communities are defined as riparian vegetation along stream banks and water bodies, notable tree stands, and unique species (e.g., California wild strawberry located on bluffs). The proposed Project activities are necessary to maintain existing stormwater runoff and flood control facilities to protect existing infrastructure and eliminate potentially hazardous situations. There is no feasible alternative to the proposed Project, which consists of the maintenance of existing stormwater runoff and flood control facilities and does not involve the introduction of any new uses:, and as such, the Project is consistent with Municipal Code provisions regarding disturbance of riparian vegetation and with the permitted uses in riparian corridors and riparian buffer zones as

A-2-HMB-14-0004 Exhibi∳⋬ Page 90 of 523 well as wetlands and wetland buffer zones. The Project will not result in any permanent impacts to wetlands or wetland buffer zones. The Project does have the potential to result in minimal impacts to wetland vegetation, channel morphology, and hydrology. Implementation of mitigations **MM BIO 1** <u>through 28 and MM BIO-31</u> would mitigate these impacts and ensure that the Project is consistent with development standards for riparian corridors and riparian buffer zones (and therefore wetlands) identified in the Municipal Code. The impact would be less than significant with mitigation.

Chapter 7.4, the Heritage Tree Ordinance, requires a permit for removal of a Heritage Tree (i.e. any tree with a trunk diameter of 12 inches or greater at breast height) and sets forth findings for approval of such permit. The ordinance specifies that the City Manager or his/her designee may authorize removal of a Heritage Tree without a permit in an emergency situation. The proposed Project maintenance is limited to removal of woody vegetation with a trunk diameter of no greater than four inches; this activity would not be subject to the ordinance. Both rRoutine maintenance of "B" and "C" drainages and emergency clearing and clean up of in "A" drainages-would involve removal of fallen trees obstructing the channel. Fallen trees would not be subject to the Heritage Tree Ordinance.

Based on the above analysis, the Project is consistent with all local ordinances protecting biological resources. Mitigations **MM-BIO** <u>1</u> <u>through</u> <u>-28 and MM BIO-</u><u>31</u> have been identified to reduce potential impacts on biological resources in the Project area to a less than significant level.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

No Impact. The proposed project site is not within the boundaries of a habitat conservation plan or natural community conservation plan. This condition precludes the possibility of these project components conflicting with the provisions of such a plan. No impacts would occur.

5. Cultural Resources

Would the project:

a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5? **No Impact.** The City of Half Moon Bay Historical Resources Inventory identifies <u>no</u> historical structures that are located within 200 feet of drainage facilities proposed for maintenance. The proposed maintenance work will occur within the B and C drainage facilities and will not result in impacts on adjacent structures. <u>Work within A Project location drainage facilities, including Pilarcitos Creek (A 3), would be limited to emergency clearing and clean up of vegetation, trash and debris to prevent flooding and would result in no impacts on the Main Street Bridge or other bridge structures. No impact would occur.</u>

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Less Than Significant Impact with Mitigation. Areas containing potential archeological resources in the vicinity of Half Moon Bay include 1) the coastal strip where exploitable resources occurred; 2) all major creek shores, such as Pilarcitos, Arroyo Leon, and Frenchman's Creek; 3) all minor inland water courses, including historic or prehistoric springs, streams, or marshes; 4) the foothill strip above the over 200-foot elevation; 5) areas of prehistoric site evidence and pertinent historic places such as cemeteries, houses, and buildings; and 6) isolated hills and knolls (City of Half Moon Bay, 2009).

The Project involves work within potential archaeological resource areas; however the work will involve minimal subsurface disturbance. Excavation, which will occur only in B and C Project location drainage facilities, will be limited to removal of accumulated silt and sediment down only to the original constructed flow line. The Project is not expected to impact potential archaeological resources; however, if archaeological resources are encountered, the following mitigation would reduce the potential impact to a less than significant level.

MM CUL-1 If subsurface archaeological resources are encountered during maintenance activities, all work shall cease within 50 feet of the discovery and an archaeologist shall evaluate the resources to determine their significance and recommend any additional mitigation necessary to reduce potential impacts to a less than significant level, to the satisfaction of the Planning Director.

c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

No Impact.

There are no known paleontological resources in the project area. Excavation in B and C Project location drainage facilities will be limited to removal of accumulated sediment only and will not affect geologic features or paleontological resources. No impact will occur.

d) Disturb any human remains, including those interred outside of formal cemeteries?

Less Than Significant Impact With Mitigation. The Project involves work within potentially sensitive archaeological resource areas; however the work will involve minimal subsurface disturbance. Excavation, which will occur only-in B and C drainage facilities, will be limited to removal of accumulated silt and sediment down only to the original constructed flow line and is not expected to encounter human remains. If previously undiscovered human remains or burial sites are uncovered, implementation of standard human remains construction mitigation (Mitigation Measure CUL-2) would ensure that this impact is less than significant.

MM CUL-2 If human remains are encountered during earth-disturbing activities, in conformance with Section 7050.5 of the Health and Safety Code and Section 5097.94 of the Public Resources Code, all in the adjacent area shall stop immediately and the San Mateo County Coroner's office shall be notified. If the remains are determined to be Native American in origin, both the Native American Heritage Commission and any identified descendants shall be notified by the coroner and recommendations for treatment solicited (CEQA Guidelines Section 15064.5; Health and Safety Code 7050.5; Public Resources Code Sections 5097.94 and_5097.98).

6. Geology, Soils, and Seismicity

Would the project:

- a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
 - Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

No Impact. The nearest faults to the project area are the San Gregorio Fault Zone and the San Andreas Fault Zone, approximately 2 miles west and 6 miles
east of Half Moon Bay. There are no active faults within the Project area. No impacts would occur.

ii) Strong seismic ground shaking?

No Impact. The proposed project consists of maintenance and emergency clearing and clean-up of drainage facilities and will not result in any impacts relative to seismic ground shaking. No impacts would occur.

iii) Seismic-related ground failure, including liquefaction?

No Impact. The proposed project consists of maintenance and emergency clearing and clean-up of drainage facilities and will not result in any impacts relative to seismic ground shaking. No impacts would occur.

iv) Landslides?

No Impact. The Project area includes maintenance of B and C drainages and is limited to emergency clearing and clean_up of A drainages and will not expose people or structures to landslides. Maintenance work on B and C drainages will include stabilization/bank repair at locations that are no longer functional and create the potential for flooding or erosion. No impacts would occur.

b) Result in substantial soil erosion or the loss of topsoil?

Less Than Significant Impact With Mitigation. The proposed maintenance activities in B and C Project locations may include sediment removal down to the original flow line and bank stabilization activities that have the potential to result in soil erosion. Implementation of standard stormwater pollution prevention measures (**MM HYD-1**) would reduce the potential impact to a less than significant level.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

No Impact. The Project area includes maintenance and emergency clearing and clean-up of drainages and will not expose people or structures to landslides, lateral spreading, subsidence, liquefaction or collapse. Maintenance work on B and C drainages will include stabilization/bank repair at locations that are no longer functional to prevent flooding or erosion. No impacts would occur.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

No Impact. The Project area includes maintenance of and emergency clearing and cleanup of drainages in Half Moon Bay. The proposed Project will not create a risk to life or property relative to expansive soils within these drainage facilities. No impact will occur.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

No Impact. The Project area includes maintenance of and emergency clearing and cleanup of drainages in Half Moon Bay. It does not involve structures or wastewater disposal systems. No impact will occur.

f) Otherwise substantially degrade water quality?

Less Than Significant Impact With Mitigation. The proposed maintenance activities in B and C Project locations may include sediment removal down to the original flow line and bank stabilization activities that have the potential to result in soil erosion affecting water quality. Implementation of standard stormwater pollution prevention measures (**MM HYD-1**) would reduce the potential impact to a less than significant level.

g) Place housing with a 100 year floor hazard area.

No Impact. The project does not involve housing.

h) Place within a 100-yer flood hazard area structures which would impede or redirect flood flows.

No Impact. The project does not involve structures.

i) Expose people or structures to significant risk of loss, injury or death involving flooding, including flooding as result of the failure of a levee or dam.

No Impact. The project includes maintenance and emergency activities designed to prevent flooding and will not expose people or structures to flooding.

j) Inundation by seiche, tsunami, or mudflow?

No Impact. The project includes maintenance and emergency activities designed to prevent flooding and would not expose people or structures to flooding.

7. Hazards and Hazardous Materials

Would the project:

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

No Impact. The Project area includes maintenance and emergency clearing and clean-up of drainages in Half Moon Bay. The proposed project would not require the use, storage, transport, or disposal of significant amounts of hazardous materials. No impact would occur.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

No Impact. The Project area includes maintenance and emergency clearing and clean up of drainages in Half Moon Bay. The proposed project would not involve the use of significant amounts of hazardous materials such that a significant hazard to the public or environment would be created. No impact would occur.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

No Impact. The Project includes drainages located within one-quarter mile of a school. The proposed project would not involve the use of significant quantities of hazardous materials and, therefore, would not have the potential to expose the school to such substances. No impact would occur.

d) Be located on a site which is included on a list of hazardous materials lists compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

No Impact. The Project area is not included on a list of hazardous materials lists compiled pursuant to Government Code Section 65962.5. The proposed maintenance and emergency clearing and clean-up of drainages in Half Moon Bay would not create a significant hazard to the public or the environment. No impact would occur.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area? **No Impact.** The Project is located within 2 miles of the Half Moon Bay Airport; however, the proposed maintenance and emergency clearing and clean up of drainages would not have the potential to create a safety hazard for people residing or working in the project area. No impacts would occur.

f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working the project area?

No Impact. There are no private airstrips in the vicinity of the project area. No impacts would occur.

g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

No Impact. The proposed maintenance and emergency clearing and clean up of drainages would not interfere with an adopted emergency response or evacuation plan. No impact would occur.

h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

No Impact. The proposed maintenance and emergency clearing and clean-up of drainages would not expose people or structures to risk of wildland fires. No impacts would occur.

8. Hydrology and Water Quality

Would the project:

a) Violate any water quality standards or waste discharge requirements?

Less Than Significant Impact With Mitigation. The Project consists of periodic maintenance of B and C Project location drainages. and emergency clearing and clean up of A Project location drainages. Removal of vegetation, removal of silt and sediments (not extending below the constructed flow line) and bank stabilization and repair and replacement of culverts and other storm water structures in B and C Project location drainages could result in temporary water quality impacts due to disturbance within the drainage facility. Emergency clearing and clean up of A Project location drainages would consist of removal of trash, debris and vegetation as necessary to prevent flooding and would likely have minimal impacts on water quality. Impacts would be less than

A-2-HMB-14-0004 Exhibi∲⊉ Page 97 of 523 significant based on implementation of biological mitigation **MM BIO-4 through 9, 10, 15, 17, and 20 through 23** and the following best management practices (BMPs):

MM HYD-1: During construction, the following San Mateo County Storm Water Pollution Best Management Practices (BMPs) shall be employed to ensure that water quality of affected drainages is maintained and no siltation of downstream waterways would occur:

- All maintenance activities in B and C Project location drainages shall take place in the dry season between April 1 and October 31 to minimize immediate erosion/siltation effects. Exceptions to this requirement may be provided if compelling circumstances exist (e.g., favorable weather conditions).
- Construction materials and waste shall be handled and disposed of properly in compliance with applicable law to prevent their contact with stormwater.
- Discharge of all potential pollutants, including pavement cutting wastes, paints, concrete, petroleum products, chemicals, wash water or sediments, and non-stormwater discharges to storm drains and watercourses shall be controlled and prevented.
- Sediment controls such as straw mulch, silt fences, sediment basins or traps and/or other measures shall be employed during construction.
- Tracking dirt or other materials offsite shall be avoided and offsite paved areas and sidewalks shall be cleaned regularly using dry sweeping methods.
- The contractor shall train and provide instruction to all employees and subcontractors regarding construction BMPs.
- b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?

No Impact. The Project consists of periodic maintenance of B and C Project location drainages and emergency clearing and clean up of A Project location drainages. These activities would not require groundwater or interfere with groundwater recharge. Removal of silt and sediments in B and C Project location drainages would not extend below the constructed flow line and would not have the potential to adversely impact groundwater supplies. No impacts would occur.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?

A-2-HMB-14-0004 Exhibi∲2 Page 98 of 523 **No Impact.** The Project consists of periodic maintenance of B and C Project location drainages and emergency clearing and clean-up of A Project location drainages. Removal of vegetation and silt and sediments in B and C Project location drainages (not extending below the constructed flow line) is mitigation to prevent flooding and to maintain the current course of the drainage facility and would not alter the existing drainage pattern. Bank stabilization and repair and replacement of culverts and other storm water structures in B and C Project location drainages is also intended to prevent erosion and flooding and will be completed in-kind with the same material and footprint. Emergency activities in A Project location drainages are limited to the removal of trash, debris, vegetation, and fallen trees as necessary to prevent flooding and erosion. These activities would not substantially increase erosion or siltation and would not alter the course of the drainage facility.

d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

No Impact. The Project consists of periodic maintenance of B and C Project location drainages and emergency clearing and clean up of A Project location drainages. Removal of vegetation and silt and sediments in B and C Project location drainages (not extending below the constructed flow line) is mitigation to prevent flooding and to maintain the current course of the drainage facility and would not substantially alter the existing drainage pattern. Bank stabilization and repair and replacement of culverts and other storm water structures in B and C Project location drainages is also intended to prevent erosion and flooding and will be completed in-kind with the same material and footprint. - Emergency clearing and clean up of A Project location drainages would Impacts would be less than significant. Emergency activities in "A" drainages are limited to the removal of trash, debris, vegetation, and fallen trees as necessary to prevent flooding and erosion. These- maintenance and emergency-activities would not alter the course of a drainage facility, alter the drainage pattern of the surrounding area, or cause flooding. No impact would occur.

e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

No Impact. The Project consists of periodic maintenance of B and C Project location drainages-and emergency clearing and clean-up of A Project location drainages. Removal of vegetation and silt and sediments in B and C Project location drainages (not extending below the constructed flow line) is mitigation to prevent flooding and to

A-2-HMB-14-0004 Exhibi62 Page 99 of 523 maintain the current course of the drainage facility. Bank stabilization and repair and replacement of culverts and other storm water structures in B and C Project location drainages is also intended to prevent erosion and flooding and will be completed in-kind with the same material and footprint. Emergency activities in A Project location drainages are limited to the removal of trash, debris, vegetation, and fallen trees as necessary to prevent flooding and erosion. These maintenance and emergency activities would not alter the existing drainage pattern or provide additional sources of polluted runoff. No impact would occur.

f) Otherwise substantially degrade water quality?

Less Than Significant Impact With Mitigation The Project would implement biological mitigation (**MM BIO 1 <u>through -28 and MM BIO-31</u>**) and best management practices (BMPs) (**MM HYD-1**) to reduce impacts to a less than significant level.

g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

No Impact. The Project consists of maintenance and emergency activities in drainage facilities to prevent flooding. No housing is proposed. No impacts would occur.

h) Place within a 100-year flood hazard area structures, which would impede or redirect flood flows?

No Impact. The Project consists of maintenance and emergency activities in drainage facilities to prevent flooding. No structures are proposed. No impacts would occur.

i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

No Impact. The Project consists of maintenance_activities and emergency activities in drainage facilities to prevent flooding. No impacts would occur.

j) Inundation by seiche, tsunami, or mudflow?

No Impact. The Project consists of maintenance and emergency activities in drainage facilities to prevent flooding. These activities would <u>have</u> no adverse impact relative to inundation by seiche, tsunami, or mudflow. No impact would occur.

9. Land Use

Would the project:

a) Physically divide an established community?

No Impact. The proposed maintenance and emergency clearing and clean up activities would occur within the existing drainages and would in no way physically divide an established community. No impacts would occur.

b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

No Impact. The proposed maintenance and emergency clearing and clean up of drainages is a mitigation targeted at preventing flooding, consistent with goals of the General Plan. The proposed work has been designed and assessed in conformance with requirements of the Local Coastal Progam intended to avoid environmental impacts, and will be implemented in conformance with the requirements of all applicable regulatory agencies. No impacts would occur.

c) Conflict with any applicable habitat conservation plan or natural community conservation plan?

No Impact. The Project area is not located within an existing habitat conservation plan or natural community conservation plan and will not conflict with the provisions of such a plan. No impacts would occur.

10. Mineral Resources

Would the project:

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

No Impact. The proposed maintenance and emergency clearing and clean up of drainages in Half Moon Bay would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State. No impacts would occur.

b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

No Impact. The proposed maintenance and emergency clearing and clean-up of drainages in Half Moon Bay would not result in the loss of any resource recovery site designated on the General Plan or other land use plan. No impacts would occur.

11. Noise

Would the project result in:

a) Exposure of persons to or generation of noise levels in excess of standards established in any applicable plan or noise ordinance, or applicable standards of other agencies?

Less That Significant Impact With Mitigation. The City of Half Moon Bay Noise Element specifies that construction noise is addressed through the City's Noise Ordinance. The Noise Ordinance specifies that no person shall between the hours of ten p.m. and eight a.m. make, cause, suffer or permit to be made any offensive noise (1) which is made within one hundred feet of any building or place regularly used for sleeping purposes, or (2) which disturbs, or would tend to disturb, any person within hearing distance of such noise. This provision does not apply to emergency work authorized by the City Manager.

The Project includes maintenance and emergency clearing and clean up of drainages, many of which are located within 100 feet of residential uses. The proposed maintenance includes the use of a truck, mower, back-hoe, and hand-held mechanical equipment that will increase noise levels in the local area on a temporary basis while the work is occurring. This work will be limited to between the hours of 8:00 a.m. and 6:00 p.m, Monday through Friday (excluding holidays) and will generally last no more than two days in any one area in conformance with **MM NOI-1**. Emergency clearing and clean up work authorized by the City Manager may occur outside these hours as needed to prevent flooding. Such work would generally be of very short duration. The proposed project would not expose persons to noise in excess of that established in the Half Moon Bay Noise Ordinance. Less than significant impact with mitigation.

b) Exposure of persons to, or generation of, excessive ground borne vibration or ground borne noise levels?

Less Than Significant Impact. Groundborne vibrations consist of rapidly fluctuating motions within the ground that have an average motion of zero. The effects of groundborne vibrations typically cause a nuisance only to people, but at extreme vibration levels, damage to buildings may occur. The short-term and long-term groundborne vibration impacts associated with project construction and operation are discussed separately.

The proposed maintenance and emergency clearing and clean up of drainages in the B and C Project locations would not require the use of equipment such as jackhammers and pile drivers, which are known to generate substantial construction vibration levels. The primary source of vibration during construction would be from a loaded truck, which, according to the Caltrans Transportation and Construction-Induced Vibration Guidance Manual, would produce a vibration level of 0.076 inches per second peak particle velocity (PPV) at 25 feet. For the purposes of this analysis, construction-related vibration impacts would be considered significant if they involve any construction activities that would create a vibration in excess of 0.2 PPV at the nearby sensitive receptors. The nearest residences, which are located approximately 25 feet from areas where a loaded truck would maneuver, would be subject to ground vibration levels of 0.076 PPV, which is below the 0.2-PPV vibration threshold. Based on this analysis, construction-related vibration vibration would be a less than significant impact.

c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

No Impact. The proposed periodic maintenance and emergency clearing and clean up of drainages would be periodic and would not result in permanent increases in noise levels.

d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Less Than Significant Impact With Mitigation. The project involves periodic maintenance of <u>17-15</u> drainages (B and C Project locations) and emergency clearing and elean-up of 5 drainages (A Project locations). The Project would result in minor increases in ambient noise levels in the immediate vicinity of a given drainage facility while work is occurring; however the work will be short in duration (one to two days) and will occur between the hours of 8:00 am and 6:00 p.m., Monday through Friday (excluding holidays), to prevent disturbance of adjacent residents during sensitive evening hours in conformance with the City's noise ordinance. With implementation of the following mitigation, the impact would be less than significant.

MM NOI-1 Maintenance activities shall conform to the following noise attenuation requirements:

- Construction activities shall be limited to between the hours of 8 a.m. and 6 p.m. weekdays, excluding holidays.
- All construction equipment shall use noise-reduction features (e.g., mufflers and engine shrouds) that are no less effective than those originally installed by the manufacturer.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

No Impact. The project consists of periodic maintenance and emergency clearing and clean-up of maintenance of drainages throughout Half Moon Bay and would not expose people residing or working in the project area to excessive aviation noise levels. No impacts would occur.

f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

No Impact. There are no private airstrips in the project vicinity. No impacts would occur.

12. Population and Housing

Would the project:

a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

No Impact. The project consists of periodic maintenance and emergency clearing and elean-up of drainages in Half Moon Bay and would not induce substantial population growth or remove barriers to such growth. No impacts would occur.

b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

No Impact. The project consists of periodic maintenance and emergency clearing and clean up of drainages in Half Moon Bay. There are no dwelling units within the drainages and the project would not displacement existing housing. No impacts would occur.

c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

No Impact. The project consists of periodic maintenance and emergency clearing and clean-up of drainages in Half Moon Bay. There are no dwelling units within the drainages and the project would not displace any persons. No impacts would occur.

13. Public Services

Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

a) Fire Protection?

No Impact. The project consists of periodic maintenance and emergency clearing and clean-up of drainages in Half Moon Bay. The project would not have the potential to increase demands on the Coastside Fire Protection District such that new or expanded fire protection facilities would be required. No impacts would occur.

b) Police Protection?

No Impact. The project consists of periodic maintenance and emergency clearing and clean-up of drainages in Half Moon Bay. The project would not increase demands on the Half Moon Bay Police Department such that new or expanded police protection facilities would be required. No impacts would occur.

c) Schools?

No Impact. The project consists of periodic maintenance and emergency clearing and clean up of drainages in Half Moon Bay. The project would not increase demands on the Cabrillo Unified School District such that new or expanded school facilities would be required. No impacts would occur.

d) Parks?

No Impact. The project consists of periodic maintenance and emergency clearing and elean up of drainages in Half Moon Bay. The project would not increase demands on parks such that new or expanded park facilities would be required. No impacts would occur.

e) Other public facilities?

No Impact. The project consists of periodic maintenance and emergency clearing and elean up of drainages in Half Moon Bay. The project would not increase demands on any public facilities such that new or expanded public facilities would be required. No impacts would occur.

14. Recreation

a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

No Impact. The project consists of periodic maintenance and emergency clearing and clean-up of drainages in Half Moon Bay. The project would not increase demands on neighborhood or regional parks such that new or expanded park facilities would be required. No impacts would occur.

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

No Impact. The project consists of periodic maintenance and emergency clearing and clean-up of drainages in Half Moon Bay. The project would not result in a need for any other new or expanded recreational facilities. No impacts would occur.

15. Transportation

Would the project:

a) Exceed the capacity of the existing circulation system, based on an applicable measure of effectiveness (as designated in a general plan policy, ordinance, etc.), taking into account all relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

No Impact. The project consists of the deployment of an existing three-person City crew and a single truck to conduct periodic maintenance and emergency clearing and clean-up at drainage facilities within Half Moon Bay. The project will add negligible traffic to the existing circulation system. No impact would occur.

b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

No Impact. The project consists of the deployment of an existing three-person City crew and a single truck to conduct periodic maintenance and emergency clearing and clean up at drainage facilities within Half Moon Bay. The project will add negligible traffic to the existing circulation system and will not conflict with the City's level of service standards or with standards set by the County congestion management agency. No impact would occur.

c) Result in change in air traffic patterns, including either an increase in air traffic levels or a change in location that results in substantial safety risks?

No Impact. The project consists of periodic maintenance and emergency clearing and clean-up-at drainage facilities within Half Moon Bay and would not have the potential to alter air traffic patterns or increase air traffic. No impacts would occur.

d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

No Impact. The project consists of periodic maintenance and emergency clearing and elean-up at drainage facilities within Half Moon Bay and does not involve roadway design or introduction of incompatible uses on existing transportation facilities. No impacts would occur.

e) Result in inadequate emergency access?

No Impact. The project consists of periodic maintenance and emergency clearing and elean up of drainage facilities within Half Moon Bay. The project would have no negative effect on emergency access and would facilitate emergency such access by preventing localized flooding. No impacts would occur.

f) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?

No Impact. The project consists of periodic maintenance and emergency clearing and elean up at drainage facilities within Half Moon Bay and would not conflict with policies, plans or programs supporting alternative modes of transportation. No impacts would occur.

16. Utilities and Service Systems

Would the project:

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

No Impact. The project consists of periodic maintenance and emergency clearing and clean-up-at drainage facilities within Half Moon Bay and would not generate wastewater

that would require treatment at the Sewer Authority Mid-Coastside Treatment Plant. No impacts would occur.

b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

No Impact. The project consists of periodic maintenance and emergency clearing and elean-up at drainage facilities within Half Moon Bay. The project would not require potable water service or wastewater treatment and would not require the expansion or construction of new water or wastewater facilities. No impacts would occur.

c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental impacts?

No Impact. The project consists of periodic maintenance and emergency clearing and clean-up at existing drainage facilities within Half Moon Bay and would not generate a need for any new drainage facilities. No impact would occur.

d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

No Impact. The project consists of periodic maintenance and emergency clearing and clean-up of drainage facilities within Half Moon Bay and would not require additional water supplies, resources or new or expanded entitlements. No impact would occur.

e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve?

No Impact. The project consists of periodic maintenance and emergency clearing and clean up at drainage facilities within Half Moon Bay and would not generate wastewater that would require treatment at the Sewer Authority Mid-Coastside Treatment Plant. No impacts would occur.

f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

No Impact. The project consists of periodic maintenance and emergency clearing and clean-up at drainage facilities within Half Moon Bay. Maintenance activities would involve removal <u>of</u> silt and sediments from "B" and "C" drainage facilities. This material

would be spread as top dressing in the landscaped areas of Smith Field. The Project would not affect landfill capacity. No impacts would occur.

g) Comply with applicable federal, state, and local statutes and regulations related to solid waste?

No Impact. The project consists of periodic maintenance and emergency clearing and elean-up-at drainage facilities within Half Moon Bay and would not result in additional solid waste. The Project would not affect landfill capacity. No impacts would occur.

17. Mandatory Findings of Significance

a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

Less Than Significant Impact With Mitigation. The proposed project may result in several impacts associated with Biological Resources, Cultural Resources, Geology and Soils, Hydrology and Water Quality, and Noise that would be significant if left unmitigated. Mitigation Measures identified for these impacts would fully mitigate all potential impacts to levels of less than significant. With the implementation of these mitigation measures, the proposed project would have less than significant impacts.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

Less Than Significant Impact With Mitigation. All cumulative impacts related to air quality, noise, and traffic are either less than significant after mitigation or less than significant and do not require mitigation. Given the size of the project and its impacts and mitigation measures, the incremental effects of this subdivision-maintenance project are not considerable when considered in connection with the effects of past, current, and probable future projects. Therefore, the proposed project would not result in a cumulatively considerable impact on these areas. Impacts are less than significant.

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Less Than Significant Impact With Mitigation. All impacts identified in this IS/MND are either less than significant after mitigation or less than significant and do not require mitigation. Therefore, the proposed project would not result in environmental effects that cause substantial adverse effects on human beings either directly or indirectly. Impacts are less than significant.

SECTION 4: REFERENCES

- 1. Bay Area Air Quality Management District. Bay Area 2005 Ozone Strategy.
- 2. Bay Area Air Quality Management District. CEQA Guidelines, May 2012.
- <u>3.</u> Bay Area Air Quality Management District Standard Construction Mitigation, 2013.
- 4. City of Half Moon Bay. 1993. Local Coastal Program Land Use Plan.
- 5. City of Half Moon Bay. 2013. Municipal Code.
- 6. City of Half Moon Bay Historical Resources Inventory
- 7. California Department of Transportation. 2004. Transportation and Construction-Induced Vibration Guidance Manual. August 2, 2013.
- 8. California Department of Transportation. 2012. "Scenic Highway System." Website: http://www.dot.ca.gov/hq/LandArch/scenic/cahisys.htm. Accessed August 2, 2013.
- 9. California Public Resources Code Section 12220 (g).
- 10. Caltrans List of Eligible and Officially Designated Scenic Highways, August 2013
- 11. Caltrans Transportation and Construction-Induced Vibration Guidance Manual, June, 2004.
- 12. SCWA Environmental Consultants. Biological Resource Evaluation for the Citywide Drainage Ditch Maintenance Project, Half Moon Bay, San Mateo County, California. July, 2013.

13. City Engineer, City of Half Moon Bay

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Appendix A: Biological Resource Evaluation

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Biological Resource Evaluation for the Citywide Drainage Ditch Maintenance Project Half Moon Bay, San Mateo County, California

Prepared for

City of Half Moon Bay

Prepared by

SWCA Environmental Consultants

July <u>3November 14</u>, 2013

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BIOLOGICAL RESOURCE EVALUATION FOR THE CITYWIDE DRAINAGE DITCH MAINTENANCE PROJECT HALF MOON BAY, SAN MATEO COUNTY, CALIFORNIA

Prepared for

City of Half Moon Bay

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Contact: Jason Wiener, Project Manager

July 3November 14, 2013

SWCA Project No. 26185.00

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SUMMARY

SWCA Environmental Consultants (SWCA) prepared this biological resource evaluation (BRE) of the citywide drainage ditch maintenance Project (Project) for the City of Half Moon Bay (City). The Project includes the performance of routine maintenance activities at <u>17-15</u> drainage features (B and C Zones; see Appendix B) as well as as need emergency clearing and cleanup activities at an additional five drainage features (A Zones; see Appendix B) located throughout the City's jurisdiction (Project locations). The term of the activities reviewed is to be for a period of 5 years beginning calendar year 2014.

The purpose of this BRE is to describe and analyze the potential impacts to biological resources in the proposed work areas. The intent of this report is to provide the necessary information to support the issuance of a Local Costal Development Permit in accordance with the requirements of the City of Half Moon Bay's *Zoning Code* (City Code) and *Land Use Plan* (LUP), and to provide background information to support California Environmental Quality Act (CEQA) review. Per these requirements, this BRE includes the following: 1) identification and review of the Project's potential to affect sensitive biological resources, including coastal resource areas (CRAs) as defined at Chapter 18.38.020 of the City Code; 2) a description of options for avoidance and mitigation of any negative effect to those resources; and, 3) a review of the Project's consistency with the City Code.

For the purposes of this report, the biological study area (BSA) consists of a 200-foot buffer extending from all sides of the B and C Zones and the bed and any adjacent bank of the A Zones. SWCA conducted a literature review of existing sources of information regarding occurrences of special-status species and sensitive resources near each of the Project locations. Field surveys were conducted at all sites within the B and C Zones to document biological resources in these areas, including CRAs. Due to the variable temporal and spatial nature of the activities (emergency work and minor trash and debris removal) proposed at the A Zones (work not included in this prjoct), only a desktop review of those locations was conducted. SWCA biologists conducted a field survey to identify and map sensitive biological resources, including CRAs in the BSA.

Based on the results of the literature review and field survey, the BSA contains

- suitable habitat for several nesting migratory birds covered under the Migratory Bird Treaty Act (MBTA);
- one California Department of Fish and Wildlife (CDFW) fully protected species (white-tailed kite [*Elanus leucurus*]);
- two CDFW species of special concern (saltmarsh common yellowthroat [*Geothylpis trichas sinuosa*] and San Francisco dusky-footed woodrat [*Neotoma fuscipes annectens*]);
- four federally or state-listed wildlife species (central California coast steelhead [*Oncorhynchus mykiss irideus*] distinct population segment [DPS], California red-legged frog [*Rana aurora draytonii*], San Francisco garter snake [*Thamnophis sirtalis tetrataenia*], and western snowy plover [*Charadrius alexandrinus nivosus*]);
- and 21 federally, state, or California Native Plant Society (CNPS)-listed plant species.

With the exception of a foraging white-tailed kite and Choris's popcorn flower (*Plagiobothrys chorisianus* var. *chorisianus*) (CNPS 1B.2), no other special-status species were observed during the field survey. Several CRAs were identified within the BSA.

i.

The City's Local Coastal Program has been developed in compliance with the California Coastal Act of 1976 (CCA) and is guided by the City's *Local Coastal Program Land Use Plan* (City of Half Moon Bay 1993). In accordance with the City of Half Moon Bay's Zoning Code Section 18.38, *Coastal Resource Conservation Standards* (City of Half Moon Bay 2009), and the *Land Use Plan* (City of Half Moon Bay 1993), SWCA conducted the biological resource survey and prepared this BRE to assess the Project's consistency with these requirements. It is anticipated that with the implementation of best management practices (BMPs) and avoidance and minimization measures (AMMs) described in Section 4 of this report, Project activities will not result in significant impacts to sensitive biological resources, including CRAs, and are consistent with the development standards for CRAs. As described in Section 3, the Project is consistent with the permitted uses within CRAs. As such, the Project should be approved for a Coastal Development Permit in accordance with the CRAs.

A Section 1602 Draft Lake and Streambed Alteration Agreement (Notification No. 1600-2012-0173-R3) was issued for the Project by California Department of Fish and Wildlife (CDFW, and is currently pending final approval (Attachment A). Furthermore, several additional permits were identified as possibly required based on site-specific activities or biological conditions being present at the Project locations. The City of Half Moon Bay is anticipated to be the lead agency for California Environmental Quality Act (CEQA) compliance. An Initial Study/Mitigated Negative Declaration is anticipated to be completed for the Project. The Project should not commence until the CEQA process is complete and all necessary permits have been obtained.

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- Appendix B. Project Location Maps
- Appendix C. Special-Status Species and Habitats Considered for Potential Occurrence in the Biological Study Area
- Appendix D. Species Observed During the Field Survey
- Appendix E. Vegetation Communities Maps
- Appendix F. Jurisdictional and Coastal Resource Areas Maps
- Appendix G. Special-Status Species Records

ATTACHMENTS

Attachment A. Section 1602 Draft Lake and Streambed Alteration Agreement (Notification No. 1600-2012-0173-R3) Attachment B. Wetland Data Forms

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1. INTRODUCTION

This biological resource evaluation (BRE) has been prepared by SWCA Environmental Consultants (SWCA) at the request of the City of Half Moon Bay (City) in support of the citywide drainage ditch maintenance Project (Project). This report describes and analyzes the potential impacts to biological resources in the Project area. The intent of this report is to provide the necessary information to support the issuance of a Local Costal Development Permit in accordance with the requirements of the City of Half Moon Bay's *Zoning Code* (City Code) and *Land Use Plan* (LUP), and to provide background information to support California Environmental Quality Act (CEQA) review. This report also identifies recommendations to avoid and minimize any potential affects to sensitive biological resources.

1.1. Project Location and Description

The Project includes the performance routine maintenance activities at <u>47-15</u> drainage features (B and C Zones) as well as as need emergency clearing and cleanup activities at an additional five drainage features (A Zones) located in public rights-of-way within the jurisdictional limits of the City of Half Moon Bay, San Mateo County, California (Figure 1). The Project locations described in this report encompass the same areas and generally follow the same nomenclature as identified in the draft Section 1602 Draft Lake and Streambed Alteration Agreement (Notification No. 1600-2012-0173-R3) issued by California Department of Fish and Wildlife (CDFW) (Attachment A). The nomenclature is separated into two categories based on proposed activities:

- B and C Zones Work that includes routine maintenance activities (including emergency clearing and cleanup).
- A Zones Work activities limited to as-needed emergency clearing and cleanup only completed outside the scope of this prject.

A summary of the current condition of each Project location, adjacent land use, and basic hydrologic characteristics is provided below. The type of flow described—perennial, intermittent, or ephemeral—is meant to coincide with features that typically flow for most of the year, features that flow or are wetted relatively consistently for a portion of the year, or feature that typically only flow or are wetted for a short period of time immediately following rains. The terms *drainage*, *ditch*, and *swale* coincide with features that have natural bed and bank characteristic and are not man-made; man-made features not vegetated throughout that have a defined bed and bank; and man-made features generally lacking a defined bed and bank that are often vegetated throughout. Representative photographs of the Project locations are provided in Appendix B.

1.1.1.B and C Zones – Routine Maintenance

Based on a review of historic aerials and topographic maps, with the exception of Project locations B-1 and B-2 (Roosevelt Drainage and Kehoe Ditch Drainage), the B and C Project locations consist of manmade ditches originally constructed to drain agricultural or other developed lands. B-1 and B-2 appear as blue line streams on 1940 USGS topographic mapping, and seem to have been modified by agricultural and other development activities to be confined to their present locations. Land use near all the Project locations was predominantly agricultural until residential development began in the 1960s through 1980, with most areas resembling their present-day conditions by the late 1990s. Most of the man-made B and C Project locations appear to have been created either prior to 1948 or by the mid-1950s as roadside or

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1/26000-26999/26185 HMB Drainage Maintenance Biological Services/GIS/MXD/Figures/Figure 1 - Project Locations Map.mxd

Figure 1. Project locations map.

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Table 1. Project Locations

Project Location		Location Description	Drainage Feature Description
A Zone	s		
A-1	Frenchman's Creek	East City limit to the Coastside Trail	Natural perennial creek<u>drainge</u>
A-2	Cabrillo Property Drainage	100 feet north of the western end of Terrace Avenue extending 200 feet southwest	Natural intermittent drainage
A-3	Pilarcitos Creek	East City limit to the Coastside Trail	Natural perennial creek<u>drainage</u>
A-4	Arroyo Leon Creek	Miramontes Street Bridge	Natural perennial creek<u>drainage</u>
A-5	Seymour Drainage	Railroad Avenue right-of-way (ROW) to the Coastside Trail	Natural intermittent drainage
B and (C Zones		
B-1	Roosevelt Drainage	Alameda Avenue to the CoastsideTrail	Natural perennial drainage
B-2	Kehoe Ditch Drainage	Highway 1 to the Coastside Trail	Natural/modified intermittent drainage
B-3	Kelly Drainage	South Side of Kelly Avenue, Railroad Avenue ROW to the Coastside Trail	Man-made ephemeral swale
B-4	Miramontes Drainage	Railroad Avenue to the Coastside Trail	Man-made ephemeral ditch
B-5	Central Drainage	Railroad Avenue to the Coastside Trail	Man-made ephemeral swale
B-6	Myrtle Street Bubble-Up	Railroad Avenue to the Coastside Trail	Man-made intermittent ditch
B-7	Magnolia Drainage	First Avenue to the Railroad Avenue ROW	Man-made intermittent ditch
B-8	Seymour Detention Basin	Basin near the southern end of Seymour Street	Man-made detention basin
B-9	Seymour Drainage	South Side of Seymour Avenue, Highway 1 to the Coastside Trail	Man-made ephemeral ditch/swale
B-10	Redondo Beach Road	Both Sides of Redondo Beach Road, Railroad Avenue ROW to the Coastside Trail	Series of man-made ephemeral ditches, s
C-1	Railroad Avenue	West side of Railroad Avenue, Spruce Street to Poplar Street	Man-made ephemeral swale
C-2	Poplar Street	Both sides of Poplar Street, Railroad Avenue to the Coastside Trail	Man-made intermittent ditch/ swale
C-3	Railroad Avenue	West side of Railroad Avenue, Metzger Street to Grove Street	Man-made ephemeral swale
C-4	Grove Street	South side of Grove Street, west of First Street to Railroad Avenue	Man-made ephemeral swale
C-5	Magnolia Street	Highway 1 to First Avenue	Man-made ephemeral ditch/swale
C-6	Wavecrest Road	North side of Wavecrest Road, Highway 1 to Smith Field	Man-made intermittent ditch
C-7	Redondo Beach Road	Both Sides of Redondo Beach Road, Railroad Avenue ROW to the Coastside Trail	Series of man-made ephemeral ditches, s

swales, and roadside depressions

swales, and roadside depressions

A-2-HMB-14-0004 Exhibit 2 Page 127 of 523 This page intentionally blank

A-2-HMB-14-0004 Exhibit 2 Page 128 of 523 agricultural drainage features. B-8 (Seymour Detention Basin) appears to have been constructed between 1991 and 2005 (Historic Aerials 2013).

B-1 – Roosevelt Drainage

Roosevelt Drainage is a perennial drainage that begins approximately 1,700 feet northeast of the Nurseryman's Exchange greenhouse complex at a water retention pond where it flows southwest through the greenhouse complex and discharges into the Pacific Ocean just north of Dunes State Beach. The portion of Roosevelt Drainage covered by this report is from the culvert under Alameda Avenue west to the Coastside Trail. The areas immediately adjacent to the creek typically consist of a dense riparian corridor dominated by various willow species surrounded by residential development. The portion of the drainage west of the Coastside Trail is surrounded by willow riparian forest and coastal dunes.

B-2 – Kehoe Ditch Drainage

Kehoe Ditch Drainage is an intermittent drainage beginning approximately 150 feet south of the intersection of Kehoe Avenue and Frontage Road. It receives discharge from several ephemeral drainage features located to the west side of Highway 1 between Grandview Boulevard and Terrace Avenue. The drainage extends west through willow riparian forest for approximately 1,500 feet before bending around the northern side of the Sewer Authority Mid-Coastside treatment plant and draining into the mouth of Pilarcitos Creek at Francis State Beach. The portion of Kehoe Ditch Drainage covered by this report begins at the eastern nexus with Frontage Road westward to the intersection with the Coastside Trail. The drainage is bound by a developed residential neighborhood to the north, Highway 1 to the east, ruderal and coastal scrub habitat to the south, and the Pacific Ocean to the west.

B-3 – Kelly Drainage

Kelly Drainage is an ephemeral man-made compacted earthen and gravel swale feature that begins at 146 Kelly Avenue and extends west approximately 480 feet. The swale runs adjacent to a preschool and undeveloped lots dominated by non-native annual grasses and ruderal vegetation. The swale is conveyed through several culverts that are almost entirely filled with accumulated sediment before being conveyed under Balboa Boulevard to a vegetated swale, which eventually flows into the Pacific Ocean 350 feet west of the drainage at Francis State Beach. The portion of Kelly Drainage covered by this report is from the western nexus with the Coastside Trail approximately 480 feet to the east.

B-4 – Miramontes Drainage

Miramontes Drainage is an ephemeral man-made drainage ditch that begins approximately 60 feet west of the eastern end of Miramontes Avenue. The drainage extends west for approximately 550 feet through non-native annual grassland habitat. The Coastside Trail and an equestrian trail bisect the drainage channel at the western end before it empties into the Pacific Ocean at Francis State Beach. The portion of Miramontes Drainage covered by this report is from the eastern end to the nexus with the Coastside Trail.

B-5 – Central Drainage

Central Drainage is an ephemeral vegetated swale feature located approximately 1,500 feet south of Miramontes Ditch in non-native grassland habitat. The feature begins approximately 175 feet west of the eastern end of Central Avenue and extends west for approximately 580 feet. The feature crosses the Coastside Trail and an equestrian trail before entering the Pacific Ocean between Francis and Poplar State Beaches. The portion of Central Drainage covered by this report is from the eastern end to the nexus with the Coastside Trail.
B-6 – Myrtle Street Bubble-Up

Myrtle Street Bubble-Up is an intermittent man-made drainage ditch located 600 feet south of Central Ditch in non-native grassland habitat with adjacent wetland features. The ditch begins at a drain inlet at the western end of Myrtle Street and extends west 760 feet. At the western end, the channel flows into a culvert that empties into the Pacific Ocean at Poplar State Beach. The portion of Myrtle Street Bubble-Up covered by this report is from the eastern end to the nexus with the Coastside Trail.

B-7 – Magnolia Drainage

Magnolia Drainage is an intermittent man-made drainage ditch located south of the intersection of Magnolia Street and 1st Avenue. The ditch begins at the pedestrian bridge just west of 328 Magnolia Street, and flows west for 160 feet, making a 90-degree turn south, where it extends 125 feet, then makes another 90-degree turn west and extends 375 feet before emptying into Seymour Drainage (A-5). The ditch is surrounded by a highly developed residential community and ruderal habitat to the north and east, and seasonal wetland and open space to the south and west. Several man-made drainage ditches located to the east, including Project locations Seymour Detention Basin (B-8), Seymour Drainage (B-9), and Magnolia Street (C-5), discharge into the drainage. The portion of Magnolia Drainage covered by this report is from the eastern nexus with Magnolia Street (C-5) and Seymour Detention Basin (B-8) west to the nexus with Seymour Drainage (A-5).

B-8 – Seymour Detention Basin

Seymour Detention Basin is located approximately 70 feet northwest of the western end of Seymour Street. The basin is fed by Seymour Drainage (B-9) and serves as a detention/siltation pond for stormwater runoff with a storage capacity of approximately 9,250 cubic feet (Gallegos 2010). The basin discharges to Magnolia Drainage. A highly developed residential community is located approximately 125 feet north and immediately east of the basin, and open space protected by the Coastside Land Trust borders the basin to the south and west.

B-9 – Seymour Drainage

Seymour Drainage is an ephemeral man-made drainage ditch/swale that begins approximately 240 feet west of the intersection of Highway 1 and Seymour Street, and flows west for 1,500 feet along the southern edge of Seymour Street. At the western end, the ditch bends northwest and flows for approximately 120 feet before entering the Seymour Detention Basin. The ditch is bounded by a highly developed residential community to the north, Highway 1 to the east, and open space protected by the Coastside Land Trust to the south and west. The portion of Magnolia Drainage covered by this report is from the eastern end to the nexus with Seymour Detention Basin (B-8).

B-10 – Redondo Beach Road

Redondo Beach Road is separated into two separate Project locations, B-10 and C-7. Redondo Beach Road (B-10) consists of a series of ephemeral drainage ditches, swales, and roadside depressions along the north and south sides of Redondo Beach Road from the Railroad Avenue right-of-way (approximately 850 feet west of the intersection with Occidental Avenue) extending 2,200 feet westward before flowing into the Pacific Ocean. The features are generally bound by coastal scrub and non-native grassland habitat with seasonal wetland features to the north and south; a dirt parking lot and the Pacific Ocean to the west; and development, a eucalyptus forest, and non-native grassland habitat to the east. The portion of Redondo Beach Road (B-10) covered by this report is from the eastern nexus with Redondo Beach Road (C-7) west to the Coastside Trail.

C-1 – Railroad Avenue

Railroad Avenue is separated into two Project locations, C-1 and C-3. The portion of Railroad Avenue (C-1) covered by this report is located on the west side of Railroad Avenue from the intersection with Spruce Street draining southward to the intersection with Poplar Street. Railroad Avenue (C-1) consists of an isolated vegetated swale. Railroad Avenue C-1 is bound by a highly developed residential community to the east and undeveloped non-native annual grassland habitat to the west.

C-2 – Poplar Street

Poplar Street consists of ephemeral man-made drainage ditches located on the north and south sides of Poplar Street extending from Railroad Avenue west to the Pacific Ocean. The portion of the Poplar Street ditches covered by this report is from the eastern ends west to the Coastside Trail. Approximately 1,000 feet in length, the ditches parallel the roadway with a mosaic of ruderal vegetation, non-native grasslands, and seasonal wetland features to the north and south. The ditches are bound by a highly developed residential community to the east and the Pacific Ocean to the west.

C-3 – Railroad Avenue

Railroad Avenue (C-3) consists of an ephemeral man-made vegetated swale along the west side of Railroad Avenue. The portion of Railroad Avenue (C-3) covered by this report begins at 1030 Railroad Avenue and extends south on the west side of Railroad Avenue for approximately 250 feet, where it dissipates into a ruderal-vegetation-overgrown and sediment-filled depression near the intersection with Grove Street. Railroad Avenue (C-3) is bound by a highly developed residential community to the east and undeveloped coastal scrub and non-native annual grassland habitat to the west.

C-4 – Grove Street

Grove Street consists of an ephemeral man-made vegetated swale along the south side of Grove Street that, via several culverts, drains eastward into a man-made drainage that eventually flows toward the Pacific Ocean. The portion of the Grove Street swale covered by this report begins approximately 210 feet west of the intersection with Magnolia Street and extends west to the intersection with Railroad Avenue. A highly developed residential community bounds the drainage to the north, east, and south, while the Pacific Ocean as well as open space managed by the Coastside Land Trust borders the drainage to the west.

C-5 – Magnolia Street

Magnolia Street consists of a series of ephemeral man-made drainage ditches and swales that, via several culverts, parallel the south side of Magnolia Street. The portion of the Magnolia Street ditches/swales covered by this report extends from Highway 1 approximately 1,700 feet west to the nexus with Magnolia Drainage (B-7). The ditches/swales are bound by a highly developed residential community to the north, Highway 1 to the east, agricultural fields and a residential community to the south, and open space managed by the Coastside Land Trust to the west.

C-6 – Wavecrest Road

Wavecrest Road (C-6) consists of an intermittent man-made drainage ditch located on the northern side of Wavecrest Road that eventually drains toward the Pacific Ocean. The ditch receives drainage from agricultural and undeveloped grass and scrubland to the west via a culvert under Highway 1. The portion of the Wavecrest Road ditch covered by this report extends from Highway 1 approximately 1,300 feet to the west. The drainage is located adjacent to a moderately trafficked roadway that leads to Smith Field

Little League Park on the western end. Open space composed of non-native grassland and seasonal wetland features lies to the north of the drainage, and lightly developed commercial facilities occupy the land to the south.

C-7 – Redondo Beach Road

Redondo Beach Road (C-7) consists of a series of ephemeral swales and roadside depressions along the north and south sides of Redondo Beach Road from the intersection with Highway 1 extending 2,240 feet westward to the nexus with Redondo Beach Road (B-10). The features are generally bound coastal scrub, non-native grassland habitat, and light residential development to the north; a moderately developed residential community and Half Moon Bay Golf Links to the south; Highway 1 to the east; and undeveloped non-native grassland habitat and the Pacific Ocean to the west. The portion of Redondo Beach Road (C-7) covered by this report is from Highway 1 west to the nexus with Redondo Beach Road (B-10).

1.1.2.A Zones – Emergency Work and Cleanup

The A Zones consist of perennial or intermittent streams, creeks, and drainages with primarily natural or unaltered channels. Based on a review of historic aerials and topographic maps, all the locations appear as blue line streams or other drainage features on 1940 USGS topographic mapping and appear to not have or only been slightly modified by agricultural and other development activities to their present locations (Historic Aerials 2013).

A-1 – Frenchman's Creek

Frenchman's Creek is a perennial drainage that runs from unincorporated areas of San Mateo County west through the incorporated City of Half Moon Bay, and empties into the Pacific Ocean at Venice State Beach. The portion of Frenchman's Creek covered by this report extends from the eastern intersection with the city limit of Half Moon Bay west to the intersection with the Half Moon Bay Coastal Trail (Coastside Trail). The creek is bounded by a residential community, agricultural land, non-native grasslands, and coastal scrub habitat to the north, and agricultural land, an equestrian center, and coastal scrub habitat to the south. The areas immediately adjacent to the creek typically consist of a dense riparian corridor dominated by alder (*Alnus* sp.) and various willow species (*Salix* spp.), with invasive eucalyptus (*Eucalyptus* sp.) along the lower reaches of the creek.

A-2 – Cabrillo Property Ditch

Cabrillo Property Ditch is an intermittent drainage; the portion of Cabrillo Property Ditch covered by this report is located approximately 100 feet north of the eastern end of Terrace Avenue, and extends southwest approximately 200 feet through invasive eucalyptus forest. The feature flows southwest toward a series of wetland areas that eventually drain to Kehoe Ditch Drainage (B-2). The drainage is surrounded by grazed and natural grasslands as well as wetland features to the east, grasslands and eucalyptus forests north and west, and ruderal vegetation and a residential community south.

A-3 – Pilarcitos Creek

Pilarcitos Creek is a perennial drainage located in the central portion of San Mateo County that empties into the Pacific Ocean at Francis State Beach. The portion of Pilarcitos Creek covered by this report extends from the eastern intersection with the Half Moon Bay city limit to the western intersection with the Coastside Trail. The areas immediately adjacent to the creek typically consist of a dense riparian corridor dominated by alder and various willow species. Residential and commercial developments of

downtown Half Moon Bay surround the creek on the east side of Highway 1, while a mosaic of agricultural fields and coastal scrub habitat surround the lower reaches of the creek.

A-4 – Arroyo Leon Creek

Arroyo Leon Creek is a perennial drainage located in the central portion of San Mateo County that drains into Pilarcitos Creek near the eastern end of Mill Street in downtown Half Moon Bay. The portion of Arroyo Leon Creek covered by this report is limited to the area immediately along the Miramontes Street Bridge and the areas approximately 100 feet up and downstream. The areas immediately adjacent to the creek typically consist of a dense riparian corridor dominated by various willow species and invasive eucalyptus. Residential and commercial developments of downtown Half Moon Bay surround the creek to the west. Residential and agricultural land uses are located to the east.

A-5 – Seymour Drainage

Seymour Drainage is an intermittent drainage beginning approximately 500 feet west of the western end of Seymour Street. The drainage flows westward through a narrow corridor of planted Monterey <u>pine</u> <u>cypress (*Cupressus macrocarpaPinus radiata*) and invasive eucalyptus forest for approximately 1,500 feet, where it discharges into the Pacific Ocean just south of Poplar Beach. The portion of Seymour Drainage covered by this report is from the eastern nexus with Magnolia Drainage (B-7) to the Coastside Trail. Several man-made drainage ditches located to the east, including Project locations Magnolia Drainage (B-7), Seymour Detention Basin (B-8), Seymour Drainage (B-9), Magnolia Street (C-5), and Wavecrest Road (C-6) discharge into the drainage.</u>

1.1.3. Biological Study Area

This report contains a review of all Project locations, including an adjacent biological study area (BSA) that comprises a 200-foot buffer extending from all sides of the B and Zones as well as the bed and any adjacent bank of the A Zones. SWCA conducted a literature review of existing sources of information regarding occurrences of special-status species and sensitive resources near each of the Project locations. Field surveys were conducted at all sites within the B and C Zones to document biological resources in these areas, including CRAs. Due to the variable temporal and spatial nature of the activities (emergency work and minor trash and debris removal) proposed at the A Zones, only a desktop review of those locations was conducted.

1.2. Project Description and Need

The City of Half Moon Bay is proposing to conduct routine maintenance activities and as needed emergency clearing and cleanup activities within the Project locations. Due to <u>s</u>everal years without regular maintenance <u>and as well as</u> runoff from adjacent agricultural and urbanized land uses <u>has</u> <u>contributed to</u>, the Project locations <u>have beenbeing</u> subject to sediment deposition, overgrown vegetation, and the accumulation of litter and debris deposits <u>causing and furthered the</u> general deterioration of their structural and functioning integrity. <u>As a result This lack of maintenance and general</u> <u>deterioration has in part resulted in</u>, the drainage features and adjacent areas <u>have beenbeing</u> subject<u>ed</u> to flooding, major erosion events, infrastructure deterioration, and potential public safety hazards. Photographs depicting <u>examples of</u> flooding and infrastructure deterioration are provided in Appendix A.

Routine maintenance activities at B and C Zones will be performed to restore drainage features to their originally constructed conditions tomaintain the project locations' historic and current uses for drainage purposes. The routine maintenance activities are generally defined as periodic activities necessary to maintain water transport capacity; maintain the integrity of existing flood control and sediment detention

structures; minimize potentially hazardous situations such as flooding, bank, culvert and roadway erosion; and improve visibility of drainage features (a public safety issue). Routine maintenance activities will typically include sediment removal to clear channel obstructions and maintain pre-existing flow conditions, vegetation management, repair of existing bank protection, in-kind culvert replacement, and removal of non-native vegetation. The equipment required for routine maintenance activities will typically consist of either one or a combination of the following: backhoe, loader, dump truck, hand mover, articulating mower, and powered and manual hand tools (weedeater, chainsaw).

Specific routine maintenance activities to be performed at the Project locations will include but are not limited to the following:

- Removal of trash and debris (not including silt or sediment) from the drainage features as well as from around pilings, culverts, and structure footings (i.e., bridges, walkways, other structural crossings). Removal of trash and vegetation from pilings piers and culverts will be limited to material that has flowed down the drainage feature and piled up or been trapped in front of the structure and would impede flow leading to potential flooding upstream. All trash and debris removal activities will be completed by hand or with hand tools.
- Control of weeds, grasses, and ruderal vegetation on channel banks and access roads. Where the Project locations are adjacent to an existing road, vegetation will be mowed using an articulating mower. Project locations not adjacent to existing roads vegetation control will be performed using hand tools. <u>Mowing will be limited to the channel, channel banks and levees, and the area</u> between the channel and adjacent roadway at B-3, B-9, B-10, C-1, C-2, C-3, C-4, C-5, C-6 and C-7. Small tree seedling/saplings may be cut incidental to these vegetation control activities. Goat grazing may be used in suitable locations for control of weeks, grasses and ruderal vegetation in place of hand tools or mowing.
- Removal of herbaceous and emergent wetland plants from the channel that are restricting capacity and causing erosion or flooding.
- Removal of accumulated debris and sediment in man-made drainage features down to the originally constructed flow line. The flow line will be determined by a straight line elevation between the bottoms of the nearest upstream and downstream culverts. Where the original flow line is unclear, removal will be limited to sediment that can be clearly identified as accumulated. Where the Project locations are adjacent to an existing road, debris and sediment will be removed using and backhoe, loader, or excavator. For Project locations not adjacent to existing roads, debris and sediment removal will be performed using hand tools to the maximum extent practicable.
- Removal of woody or herbaceous plants, fallen trees, or trunks and limbs lodged into the bed or bank resulting in non-emergency streamflow restrictions. Removal will be completed with equipment staged landward of the top of bank typically using a winch and cable.
- Removal of trees and shrubs less than 4 inches diameter at breast height (dbh) below the ordinary high water mark (OHWM) that are restricting flow capacity and causing erosion or flooding. For purposes of this project, tree removal is defined as cutting the tree flush with surrounding grade and removing the above-grade portion of the tree, leaving below-ground roots in place.
- In-kind replacement of culverts and other stormwater management structures that are no longer functional. Replacement will be limited to the same material and footprint as the existing structure.
- Bank stabilization/bank repair of locations that are no longer functional and create the potential for flooding or erosion. Bank stabilization/repair shall be completed in-kind with the same material and same footprint as the existing bank. Exceptions to in-kind replacement will be where

proposed stabilization/repair would enhance the quality of the habitat while providing the same level of erosion and flood protection.

• Trimming and removal of the minimum amount of vegetation necessary to allow suitable access to perform activities required to restore normal flow levels.

Not all of the above activities will be performed at each Project location. Table 2<u>and detailed below</u> generally identifies the <u>anticipated proposed-routine</u> maintenance activities likely to be performed at each location. Vegetation management and debris and sediment removal activities will be completed routinely at the Project locations typically yearly or throughout the year. In-kind culvert replacement and bank stabilization/repair activities will be completed at each location on an as-needed basis, and are not included in the table <u>and the descriptions below</u> for this reason.

<u>B-1 Roosevelt Drainage</u>

Maintenance activities within the project location will be limited to the portion within the City easement located on the north side of the drainage feature just west of Alameda Ave and the culvert located under Alameda Ave. Proposed activities will consist of trimming and removal of trees (up to 4 inches DBH), shrubs and other vegetation within the channel that are restricting flow. Trees (up to 4 inches DBH) and shrubs adjacent to the channel will be trimmed/removed only to the extent needed to provide foot access to the channel for maintenance purposes. Trees and shrubs overhanging the channel will be trimmed to provide a clear space approximately six feet in height measured from the bottom of the channel. Clearing of accumulated trash or debris blocking the culvert will be performed by hand. All work will be done with hand-held tools.

<u>B-2 Kehoe Ditch Drainage</u>

Maintenance activities within the project location will generally be limited to the portion beginning at Frontage Road westward to the point along the feature parallel with the end of Bev Cunha's County road. Proposed activities will consist of trimming and removal of trees (up to 4 inches DBH), shrubs and other vegetation within the channel that are restricting flow. Trees (up to 4 inches DBH) and shrubs adjacent to the channel will be trimmed/removed only to the extent needed to provide foot access to the channel for maintenance purposes. Trees and shrubs overhanging the channel will be trimmed to provide a clear space approximately six feet in height measured from the bottom of the channel. All work will be done with hand-held tools.

<u>B-3 Kelly Drainage</u>

Maintenance activities within the project location will consist of mowing with an articulating mower, sediment removal, mowing with a weed eater, and clearing or other maintenance of culverts. Mowing with the use of an articulating mower and sediment removal will be limited to the portion of the swale located on the south side of Kelly Road between 132 Kelly Avenue and 18 Kelly Avenue. Mowing with the use of a weed eater will be performed between 18 Kelly Avenue and the western end of the project location, approximately 150 linear feet to the west. No tree removal is proposed at this location.

<u>B-4 Miramontes Drainage</u>

Maintenance activities within the project location will consist of mowing the ditch with a weed eater, removal of sediments sufficient to restore positive drainage, trimming of shrubs within the ditch, and clearing and maintenance of culverts. All work will be done with hand-held tools. No tree removal is proposed at this location.

<u>B-5 Central Drainage</u>

Maintenance activities within the project location will consist of mowing the swale with a weed eater, removal of sediments sufficient to restore positive drainage, and clearing and maintenance of culverts. All work will be done with hand-held tools. No tree removal is proposed at this location.

<u>B-6 Myrtle Street Bubble-Up</u>

Maintenance activities within the project location will consist of mowing the ditch with a weed eater, removal of sediments sufficient to restore positive drainage, and clearing and maintenance of culverts and catch basins. All work will be done with hand-held tools. No tree removal is proposed at this location.

<u>B-7 Magnolia Drainage</u>

No maintenance activities are proposed at this location.

B-8 Seymour Detention Basin

No maintenance is activities are proposed at this location.

<u>B-9 Seymour Drainage</u>

Maintenance activities within the project location will consist of mowing with an articulating mower or weed eater, sediment removal, tree and shrub trimming, and clearing or other maintenance of culverts. Mowing with the use of an articulating mower will be limited to the portion of the swale/ditch from the eastern terminus westward to the cul-de-sac at the western end of Seymour Street. Mowing with the use of weed eater will be performed between the cul-de-sac and the western end of the project location at Seymour Detention Basin, approximately 80 feet to the west. Sediment removal will be performed to restore positive drainage in the swale/ditch and will be completed from the street using a backhoe or with the use of hand-held tools (typically in the portion west of the cul-de-sac where there is no backhoe access). Trimming of trees and shrubs will be performed using hand-held tools and limited to those less than 4-inches DBH where growth extends into the swale/ditch. No tree removal is proposed at this location.

B-10 Redondo Beach Road

Maintenance activities within the project location will consist of mowing with an articulating mower or weed eater, sediment removal, tree and shrub trimming, and clearing or other maintenance of culverts. Mowing with the use of an articulating mower or weed eater will be performed along the portion of the swale/ditch adjacent to the north and south sides of Redondo Beach Rd. Sediment removal in the swale/ditch will be performed to restore positive drainage to the portion of the feature on the south side of the road beginning approximately 400 feet east of the western end of the project locations at the horse trailer parking lot to a point approximately 1200 feet east of the parking lot. Removal will be completed from the street using a backhoe or with the use of hand-held tools. Trimming of trees and shrubs will be performed using hand-held tools and limited to those less than 4-inches DBH where growth extends into the swale/ditch on both sides of the road. No tree removal is proposed at this location.

C-1 Railroad Avenue

Maintenance activities within the project location will consist of mowing with an articulating mower or weed eater and sediment removal. Mowing with the use of an articulating mower or weed eater will be performed along the approximately 160 linear foot portion of the swale on the west side of Railroad

Avenue between Polar and Spruce Streets. Sediment removal will be performed to restore positive drainage to the swale, and will be completed from the street using a backhoe or with the use of hand-held tools. No tree removal is proposed at this location.

C-2 Poplar Street

Maintenance activities within the project location will consist of mowing with an articulating mower or weed eater, sediment removal, and clearing or other maintenance of culverts. Mowing with an articulating mower or weed eater will be performed along the portion of the ditch on the north side of Poplar Street, specifically between the edge of the pavement and the split rail fence, from Railroad Avenue to the Coastside Trail (approximately 1000 linear feet) and on the south side of Poplar Street between the gate at the northwest corner of 152 Poplar Street and the parking lot (approximately 570 linear feet to the west). Sediment removal will be performed to restore positive drainage to the north side of the ditch, and will be completed from the street using a backhoe or with the use of hand-held tools. The headwalls of the culverts located at the northwest and southwest corner of Poplar Street and Railroad Avenue will be replaced. The replacement will be in-kind within the same footprint of the existing headwall and will not result in a change of function or capacity. No tree removal is proposed at this location.

C-3 Railroad Avenue

Maintenance activities within the project location will consist of mowing with an articulating mower or weed eater and sediment removal. Mowing with the use of an articulating mower or weed eater will be performed along the approximately 270 linear foot portion of the swale on the west side of Railroad Avenue between Metzgar and Grove Streets. Sediment removal will be performed to restore positive drainage to the swale, and will be completed from the street using a backhoe or with the use of hand-held tools. No tree removal is proposed at this location.

<u>C-4 Grove Street Drainage</u>

Maintenance activities within the project location will consist of mowing with an articulating mower or weed eater, sediment removal, and clearing or other maintenance of culverts. Mowing with the use of an articulating mower or weed eater will be performed along the portion of the swale on the south side of Grove Street between Railroad Avenue and approximately 80 feet to the east. Sediment removal will be performed to restore positive drainage to the swale, and will be completed from the street using a backhoe or with the use of hand-held tools. No tree removal is proposed at this location. No tree removal is proposed at this location.

<u>C-5 Magnolia Street</u>

Maintenance activities within the project location will consist of mowing with an articulating mower or weed eater, sediment removal, tree and shrub trimming, and clearing or other maintenance of culverts. Mowing with the use of an articulating mower or weed eater will be performed in the portion of the ditch/swale on the south side of Magnolia Street between Cabrillo Highway and First Street. Sediment removal will be performed to restore positive drainage to the portion of the ditch/swale between 437 and 429 Magnolia Street (approximately 150 linear feet). Sediment removal will also be completed at the Second Avenue culvert. Sediment removal will be completed from the street using a backhoe or with the use of hand-held tools. Trimming of trees and shrubs will be performed using hand-held tools and limited to those less than 4-inches DBH where growth extends into the swale/ditch. No tree removal is proposed at this location.

C-6 Wavecrest Road

Maintenance activities within the project location will consist of mowing with an articulating mower or weed eater, sediment removal, tree and shrub trimming, and clearing or other maintenance of culverts. Sediment removal will be performed to restore positive drainage to the portion of the ditch from the western end covered by the Project (see Section 1.1.1 above) approximately 950 linear feet to the east. Sediment removal will be completed from the street using a backhoe or with the use of hand-held tools. Trimming of trees and shrubs will be performed using hand-held tools and limited to those less than 4-inches DBH where growth extends into the swale/ditch. No tree removal is proposed at this location.

<u>C-7 Redondo Beach Road</u>

Maintenance activities within the project location will consist of mowing with an articulating mower or weed eater, tree and shrub trimming, addressing vehicular damage, and clearing or other maintenance of culverts. Mowing with the use of an articulating mower or weed eater will be performed in the portion of the swale/ditch adjacent to the north and south sides of Redondo Beach Rd. Trimming of trees and shrubs will be performed using hand-held tools and limited to vegetation less than 4-inches DBH where growth extends into the swale/ditch on both sides of the road. A portion of the swale/ditch on the north side of the road, approximately 650 feet west of Cabrillo Highway, has become rutted by truck tires. Gravel will be applied to this portion of the ditch in order to maintain drainage functions. No tree removal is proposed at this location.

In addition to the routine maintenance activities emergency clearing and cleanup activities will be performed as needed at all Project locations. Emergency clearing activies will on be performed during emergency situations when there is an imminent threat to life or property demanding immediate action to prevent or mitigate loss, of or damage to life, health, property, or essential public services, and are not considered to occur routinely making them a small component of the Project. Emergency clearing and cleanup activities will typically include the following:

- Routine removal of trash and debris (not including silt or sediment) from the drainage features as well as from around pilings, culverts, and structure footings (i.e., bridges, walkways, other structural crossings).
- Removal of woody or herbaceous plants, fallen trees, or trunks and limbs lodged into the bed or bank resulting in non-emergency streamflow restrictions at A-1, A-3, A-4. Removal will be completed with equipment staged landward of the top of bank using winch and cable.
- Emergency removal of fallen trees in the flow-line that would cause flooding or bank erosion or other public safety hazards.

Removal of trash and vegetation from pilings piers and culverts will be limited to material that has flowed down the drainage feature and piled up or been trapped in front of the structure and would impede flow leading to potential flooding upstream. All trash and debris removal activities will be completed by hand or with hand tools to the maximum extent practicable, and will only implement the use of heavy equipment (excavators or winches) if there is no other alternative. Emergency removal activities will be performed with winch and cable or other equipment operated from the top of bank, adjacent streets, or other disturbed access points to the maximum extent possible. No heavy equipment will be operated in active drainage features unless there is an immediate need and no alternative.

Staging of equipment will occur on paved roadways for most maintenance activity at the project locations. Project locations not adjacent to paved roadways will be accessed on foot with work completed with hand tools. Project activities that would require equipment to be staged outside of existing paved roads would be limited to culvert replacement and bank stabilization/repair activities. These activities

will occur on an as-needed basis, typically in response to failures or dangerous situations and cannot be planned. As included in the mitigation measures, access to, and staging for, such activities will be reviewed prior to work to ensure that impacts are reduced to a less than significant level.

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Table 2. Typical Routine Maintenance Activities

Location Inform	ation			Proposed Activities								
Drainage ID No. Location		Work Area – Linear Feet ⁵ Work Area - Square Feet ⁵		Emergency Clearing and Cleanup	Mowing Vegetation between Location and Adjacent Roadway or Other Developed Area (herbaceous vegetation only) ¹	Mowing Vegetation Adjacent to Location Not Adjacent to Road (i.e., undeveloped areas) (herbaceous vegetation only) ²	Removal of Sediment to the Historic "Flow Line" ^{3, 4}	Trimming or Removal of Herbaceous and Emergent Wetland Plants in or Adjacent to the Channel ⁴	Removal of Non-Native Trees and Shrubs in or Adjacent to the Channel ⁴	Removal of Native Trees and Shrubs (less and 4" diameter) in the Channel That Are Restricting Flow ⁴		
A Zone												
A-1	Frenchman's Creek	<u>5,030</u>	<u>N/A</u>	X								
A-2	Cabrillo Property Drainage	<u>488</u>	<u>N/A</u>	Х								
A-3	Pilarcitos Creek	<u>1,031</u>	<u>N/A</u>	Х								
A-4	Arroyo Leon Creek	222	<u>N/A</u>	Х								
A-5	Seymour Drainage	<u>1,384</u>	<u>N/A</u>	Х								
B and C Zones	5		·	·	·			·	·			
B-1	Roosevelt Drainage	<u>371</u>	780	Х		X			X	Х		
B-2	Kehoe Ditch Drainage	<u>2,342</u>	35,130	Х					X	Х		
B-3	Kelly Drainage	<u>461</u>	3,030	Х	Х	Х	Х	Х				
B-4	Miramontes Drainage	<u>670</u>	<u>5,360</u>	Х		Х	Х	Х	X			
B-5	Central Drainage	<u>571</u>	4,700	Х		Х	Х	Х	X			
B-6	Myrtle Street Bubble-Up	<u>762</u>	<u>15,240</u>	Х		Х	Х	Х	X	×		
B-7	Magnolia Drainage	<u>N/A</u>	<u>N/A</u>	×		×	×	×	×	X -		
B-8	Seymour Detention Basin	<u>N/A</u>	<u>N/A</u>	×		×	×	×	×			
B-9	Seymour Drainage	<u>1,720</u>	<u>13,760</u>	Х	X	X	Х	Х	X	×-		
B-10	Redondo Beach Road	<u>4,222</u>	<u>25,340</u>	Х	X		Х	Х	X	X		
C-1	Railroad Avenue	<u>172</u>	<u>1,380</u>	Х	X		X	Х	Х			
C-2	Poplar Street	<u>1,543</u>	<u>18,520</u>	Х	X		Х	Х	X			
C-3	Railroad Avenue	<u>256</u>	<u>2,048</u>	Х	X		Х	Х	X	×		
C-4	Grove Street	<u>73</u>	<u>580</u>	Х	X		Х	Х				
C-5	Magnolia Street	<u>1,845</u>	<u>18,450</u>	X	Х		Х	X	X	×		
C-6	Wavecrest Road	<u>1,304</u>	<u>15,650</u>	X	Х		X	Х	X	×		
C-7	Redondo Beach Road	<u>4,433</u>	26,600	X	Х		Х	Х	X	×		

¹ Mowing will be completed using an articulating mower operated from the road. Mowing of vegetation opposite from the road will be performed either using hand tools (i.e., weed eater) or the articulating mower.

 2 Mowing will be completed using hand tools (i.e., weed eater).

³ Sediment removal will be completed using an excavator operated from the adjacent roadway where feasible. For locations that do not have road access, removal will either be completed by hand or will require additional review and potential restoration. <u>Sediment removal will be limited to the quantities identified in the Lake and Streambed</u> <u>Alteration Agreement issued for the Project by CDFW.</u>

⁴ Activities will be limited to the minimum disturbance necessary to restore normal flow. Stumps or other embedded or anchored objects shall not be removed unless they obstruct streamflow resulting in flooding.

⁵ These measurements do not indicate impacts. The measurements provided identify the linear and square footage at each project location covered by the 5-year Project where work may occur. The square footage typically represents the maximum area where vegetation will be mowed with the exception of B1 and B2; no mowing will occur at these locations. The work area provided for B1 and B2 indicates the total area where vegetation removal will be substantially less than the total area provided.

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2. METHODOLOGY

2.1. Desktop Review and Literature Research

SWCA performed an extensive literature review to gain familiarity with the Project locations and to identify potential sensitive biological features including CRAs and target flora and fauna species that have the potential to occur at the Project locations. The review consisted of a records search of current versions of the California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB 2013); U.S. Fish and Wildlife Service (USFWS) species lists; and the CNPS's online Inventory of Rare and Endangered Plants (CNPS 2013) within the Half Moon Bay, Woodside, and Montara Mountain U.S. Geological Survey (USGS) topographic quadrangles. The USFWS Critical Habitat Mapper was queried to identify critical habitat for terrestrial and aquatic species near the Project area. SWCA biologists also reviewed Calflora maps of listed species (Calfora 2013) and compared them against the results of the CNDDB and CNPS searches. All of the listed species and habitats found in the literature review are compiled into a table for use during the field survey as described in Section 2.2 below (see also Appendix C).

The Natural Resources Conservation Service (NRCS) Soil Survey for San Mateo County (NRCS 2013), National Wetlands Inventory (NWI) Database (USFWS 2013), USGS National Hydrography Dataset (USGS 2012), USGS topographic quadrangles, and aerial imagery were also reviewed to provide additional information for soils and potential wetlands known to occur in the BSAs. Literature pertaining to potential sensitive natural resources and pertinent zoning and land use documents was studied to determine the classification of CRAs as well as the compliance requirements for the Project (City of Half Moon Bay 1993; City of Half Moon Bay 2009; Gallagos 2009).

2.2. Field Survey

Field surveys were conducted on May 8, 10, 13, and 23 in 2013 by SWCA biologists Kristen Outten and Jason Wiener. The surveys included walking transects that covered all proposed B and C Zones as well as the adjacent BSA. As described in Section 1.1.3, field surveys were not completed at A Zones-due to the nature of the proposed activities.

2.2.1. Vegetation and Habitat Mapping

The surveyors mapped special-status botanical resources observed with a handheld Trimble GeoXT global positioning system (GPS) unit capable of sub-meter accuracy. When necessary, the surveyors referred to The *Jepson Manual* (Baldwin et al. 2012) to identify plant species. A complete list of species observed during the field survey within the BSA is included in Appendix D. In addition, the surveyors identified and mapped habitat types using *Preliminary Descriptions of the Terrestrial Natural Communities of California* (Holland 1986). Appendix E shows the locations of habitat types in the BSA, and their relation to the Project locations.

2.2.2. Special-Status Species Assessment

For the purposes of this report, special-status species were defined as follows:

• Plants and animals listed, proposed, or candidates for listing as threatened or endangered (including delisted species) under the federal Endangered Species Act of 1973 (ESA)

- Plants and animals listed or proposed for listing by the State of California as threatened or endangered under the California Endangered Species Act (CESA)
- Plants listed as rare under the California Native Plant Protection Act
- Plants included in CNPS Ranks 1 and 2
- Animal species that are fully protected in California
- Species of special concern to the CDFW

Following the database searches and initial field surveys, the surveyors assessed the potential for occurrence of special-status species in the BSA. The assessment consisted of comparing the biological conditions in the area with the known occurrences of special-status species in the general Project locations vicinity and their known habitat associations. During the assessment, each species was assigned to one of the following three categories:

- **Present:** The species was observed in the BSA during the field surveys.
- **Potential:** The species is known to occur near the BSA (based on CNDDB or other records, or based on professional expertise specific to the BSA or species), and there is suitable habitat in the BSA. Or alternatively, if there is suitable habitat in the BSA, and the BSA is within the known range of the species.
- Absent: There is no suitable habitat for the species in the BSA, or the BSA is outside the known range of the species. Alternatively, a species was surveyed for during the appropriate season with unequivocal negative results for species occurrence.

2.2.3. Wildlife Habitats

The surveyors assessed the BSA and surrounding habitat and land use to determine whether the Project would result in negative impacts to wildlife habitats, including wildlife movement corridors and breeding habitats. A summary of potential wildlife movement corridors and breeding habitats is discussed in Section 3.2.3.

2.2.4. Coastal Resource Areas

In accordance with the City of Half Moon Bay Zoning Code Section 18.38, Coastal Resource Conservation Standards (City of Half Moon Bay 2009), SWCA conducted the field survey to assess whether the Project would impact a CRA. A CRA is defined as follows:

- Sensitive habitat areas (sand dunes; marine habitats; sea cliffs; riparian areas; wetlands, coastal tidelands and marshes, lakes and ponds and adjacent shore habitats; coastal and offshore areas containing breeding and/or nesting sites or used by migratory and resident water-associated birds for resting and feeding; areas used for scientific study and research concerning fish and wildlife, and existing game or wildlife refuges and reserves; habitats containing or supporting unique or any rare and endangered species defined by the State Fish and Game Commission; rocky intertidal zones; and coastal scrub community associated with coastal bluffs and gullies)
- Riparian areas and corridors
- Bluffs, cliffs, and sea-cliffs
- Wild strawberry habitat
- Wetlands

• Archaeological resource areas

Project footprints and construction methods were considered to determine whether they could impact a CRA, and surveyors mapped observed CRAs with a handheld Trimble GeoXT GPS unit capable of submeter accuracy. Maps generally showing the location of CRAs in the BSA are included in Appendix F.

2.2.5. Wetlands

The City Code and California Coastal Commission (CCC) uses the USFWS wetlands definition, which defines wetlands using a "one parameter definition" (California Coastal Commission 2011). The "one parameter definition" requires only a single parameter (soils, vegetation, and/or, hydrology) to establish wetland conditions. Determination and delineation of wetland areas in the BSA were based on review of pertinent literature and a thorough on-site investigation conducted during May 2013 by SWCA. The investigators generally utilized the routine wetland determination methodology as described in the 1987 U.S. Army Corps of Engineers (USACE) *Wetlands Delineation Manual* (Environmental Laboratory 1987) and *Arid West Supplement* (Environmental Laboratory 2008) to determine areas that met the one parameter wetland definition. In addition to City Code and CCC defined wetlands, the field surveys identified the extent of California Department of Fish and Wildlife (CDFW) jurisdiction, as determined by the top of bank of drainage features or the limit of riparian vegetation, as well as the ordinary high water mark (OHWM), which generally defines the extent of USACE jurisdiction in the drainage features (USACE 2008). Jurisdictional features were mapped using a Trimble Pathfinder GPS Data Collector capable of sub-meter accuracy.

3. RESULTS

3.1. Desktop Review and Literature Research

There is critical habitat designated for three species in the BSA: California red-legged frog (*Rana draytonii*) habitat is found adjacent to the upper reaches of A-1 and A-3; western snowy plover (*Charadrius alexandrinus*) habitat is located at the lower reach of A-1; and steelhead (*Oncorhynchus mykiss*) habitat is located along A-1, A-3, and A-4, and at the western end of the BSA in B-2 (Figure 2).

Desktop research returned records for six plant species with federal or state listing status, and 34 additional plants with CNPS California Rare Plant Rank 1B or 2 near the BSAs (Appendix G). Records were returned for 10 wildlife species with federal or state listing status, and five additional species with CDFW designated status. The results of the desktop research were then used during field surveys to compare records to existing habitat types to determine the potential for special-status species to occur in the BSA (see Section 3.2.2). Tables G.1 and G.2 in Appendix G describe each of these species' habitat requirements, their listing status, and their potential to occur in the BSA.

The NWI indicates that freshwater emergent wetlands and ponds as well as estuarine and marine deepwater are located at the western end of the BSA at B-2, and freshwater forested/shrub wetlands along locations A-1 and A-3. Additional freshwater emergent wetlands and ponds are mapped within a 2-mile radius of all A, B, and C Zones.

3.2. Field Survey

3.2.1. Vegetation and Habitat Types

The BSA consists of drainages<u>drainage features</u>, asphalted roadways, residential communities, and undeveloped land with various vegetation communities. In total,12 habitat types were mapped in the BSA, and were defined according to *Preliminary Descriptions of the Terrestrial Natural Communities of California* (Holland 1986). Table 3 and Appendix E show the location of habitat types in the BSA, and their relation along the Project area.

3.2.1.1. MONTEREY CYPRESS FOREST (URBAN)

Monterey cypress forest is dominated by Monterey cypress (*Cupressus macrocarpa*), with a relatively open understory of scattered dwarf shrubs and perennial herbs. Cypress stands generally form a closed canopy structure, with heights ranging from 10 to 20 meters (32 to 66 feet). Two natural stands occur in California, both of which are located in Monterey County (Holland 1986).

Monterey cypress forest occurs in the BSA at B-2, B-3, B-4, B-7, B-10, C-6, and C-7. All observed stands in the BSA are non-natural, planted during urbanization of the area. Monterey cypress stands in the BSA have the potential to support nesting birds protected under the Migratory Bird Treaty Act (MBTA).



Figure 2. Critical habitat map.

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Table 3. Vegetation Communities Table.

Location Information		Vegetation Communities in BSA											
Drainage ID No	Location	Monterey Cypress Forest (Urban) Forest (Urban)	Eucalyptus Forest	Non-Native Grassland	Central Dune Scrub	Northern Coastal Bluff Scrub	Northern Coastal Scrub	Vernal Marsh	Coastal and Valley Freshwater Marsh	Central Coast Riparian Scrub	Ruderal/ Disturbed	Urban	
B and C Z	ones							•					
B-1	Roosevelt Drainage	x			x		x			x	x	x	
B-2	Kehoe Ditch Drainage	x					x			x	x	x	
B-3	Kelly Drainage	x		x							x	x	
B-4	Miramontes Drainage	x		x							x	x	
B-5	Central Drainage			x			x	x			x	x	
B-6	Myrtle Street Bubble-Up	x		x			x	x	x		x	x	
B-7	Magnolia Drainage	x	x	x			x	x	x		x	x	
B-8	Seymour Detention Basin			x					x		x	x	
B-9	Seymour Drainage		x	x					x		x	x	
B-10	Redondo Beach Road	x	x	x		x	x	x	x		x	x	
C-1	Railroad Avenue			x							x	x	
C-2	Poplar Street			x			x	x			x	x	
C-3	Railroad Avenue						x		x	x	x	x	
C-4	Grove Street										x	x	
C-5	Magnolia Street		x						x		x	x	
C-6	Wavecrest Road	X	x	x			x	X	x		x	x	
C-7	Redondo Beach Road	x	x	x			x	x	x		x	x	

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3.2.1.2. MONTEREY PINE FOREST (URBAN)

Monterey pine forest is dominated by Monterey pine, with coast live oak (Quercus agrifolia) contributing to the canopy structure. The understory of the community is variable in both composition and density. Monterey pine has been classified as a unique species by the City (City of Half Moon Bay 2009). Three natural stands occur in California, the largest near the Monterey Peninsula. Monterey pine has been planted widely as an ornamental and commercial species (Holland 1986).

Monterey pine forest is found in the BSA at B-1 and C-6. Other occurrences were observed throughout the BSA; however, these were limited to individual trees that did not form a closed canopy structure. All Monterey pines observed in the BSA are non-natural stands that were originally planted during urbanization of the area. Monterey pine trees in the BSA have the potential to support nesting birds protected under the MBTA.

3.2.1.3. EUCALYPTUS FOREST

Eucalyptus forests consist of dense stands of non-native, invasive eucalyptus trees, and are usually devoid of an understory with the exception of a few hardy grasses. Stands generally range from 30 to 55 m (98 to 180 feet) heigh.

Eucalyptus forests are found in the BSA at B-7, B-9, B-10, C-5, C-6, and C-7. The dominant species occurring in the BSA is blue-gum eucalyptus (*Eucalyptus globulus*). The stands observed in the BSA have the potential to support nesting birds protected under the MBTA.

3.2.1.4. NON-NATIVE GRASSLAND

Non-native grassland may include a composition of both exotic and native grasses in association with native annual forbs (wildflowers). Germination occurs with the onset of late fall rains, with growth, flowering, and seed-set occurring from winter through spring. With a few exceptions, the plants are dead through the summer-fall dry season, persisting only as seeds (Holland 1986). Native perennial grasses such as needlegrass (*Stipa* spp.) occur in some areas but are usually not dominant. Common elements include wild oats (*Avena barbata* and *A. fatua*), red brome (*Bromus madritensis* ssp. *rubens*), ripgut brome (*B. diandrus*), rescue grass (*B. catharticus* var. *catharticus*), storksbill (*Erodium botrys*), Califonia poppy (*Eschscholtzia californica*), goldfields (*Lasthenia californica*), and rye grass (*Festuca perennis*).

Non-native grassland occurs throughout the BSA at B-3, B-4, B-5, B-6, B-7, B-8, B-9, B-10, C-1, C-2, C-6, and C-7. The grasslands at B-4, B-5, B-6, B-7, B-8, B-9, B-10, C-1, C-2, C-6, and C-7 have the potential to serve as upland habitat for California red-legged frog (*Rana aurora draytonii*), and similarly for San Francisco garter snake (*Thamnophis sirtalis tetrataenia*) at B-7, B-8, B-9, B-10, C-6, and C-7. Common species observed within the non-native grassland habitat type include ripgut brome, rattail six week grass (*F. myuros*), wild oats, bristly ox-tongue (*Helminthotheca echioides*), and wild radish (*Raphanus sativus*).

3.2.1.5. CENTRAL DUNE SCRUB

Central dune scrub occurs along California's central coast in areas of sand accumulation, generally forming a dense coastal scrub community of shrubs, subshrubs, and herbs. Characteristic species of this community include coastal sagewort (*Artemisia pynocephala*), dune lupine (*Lupinus chamissonis*), common sandaster (*Corethrogyne filaginifolia*), dune ragwort (*Senecio blochmaniae*), and California goldenbrush (*Ericameria ericoides*) (Holland 1986).

Coastal dune scrub occurs at the western end of the BSA at B-1. Recent restoration efforts by California State Parks have restored this dune system from a non-native habitat dominated by ice plant (*Carpobrotus edulis*) and European beachgrass (*Ammophila arenaria*) to a predominantly native habitat. This dune system has the potential to support western snowy plover.

3.2.1.6. NORTHERN COASTAL BLUFF SCRUB

Northern coastal bluff scrub is composed of low, often prostrate scrub ranging from 5 to 50 centimeters (cm) (2 to 20 inches) tall and often growing in continuous mats. Dwarf shrubs, herbaceous perennials, and annuals in this habitat are exposed to constant winds, salty air, and generally rocky or poorly developed soils. Common species include seaside fiddleneck (*Amsinckia spectabilis*), thrift seapink (*Armeria maritima*), seaside paintbrush (*Castilleja latifolia*), sea lettuce (*Dudleya farinose*), seaside daisy (*Erigeron glaucus*), lizard tail (*Eriophyllum staechadifolium*), gumweed (*Grindelia stricta*), and cat's ear (*Hypochaeris radicata*) (Holland 1986).

Northern coastal bluff scrub occurs in the BSA at B-10, and supports several populations of wild strawberry.

3.2.1.7. NORTHERN COASTAL SCRUB

Northern coastal scrub is composed of shrubs 0.5 to 2 meters (1.5 to 6 feet) tall, and is usually quite dense with openings for herbaceous species. This community occurs on windy, exposed sites often with shallow, rocky soils. Shrub composition consists of coyotebrush (*Baccharis pilularis*), coastal mugwort (*Artemisia suksdorfii*), seaside daisy, lizard tail, iris (*Iris douglasiana*), sticky monkey flower (*Mimulus aurantiacus*), and poison oak (*Toxicodendron diversilobum*). The herbaceous component consists primarily of various non-native grasses (Holland 1986).

Northern coastal scrub is found in the BSA at B-1, B-2, B-5, B-6, B-7, B-10, C-2, C-3, C-6, and C-7. This habitat has the potential to support nesting birds protected under the MBTA.

3.2.1.8. VERNAL MARSH

Vernal marshes are composed of mostly low-growing annual herbs and taller perennials. Areas become flooded following winter rains but are either completely or nearly dry summer (Holland 1986). This community is typically dominated by rushes (*Juncus* spp.), sedges (*Carex* ssp.), and bulrush (*scripus* spp.).

Vernal marsh is located adjacent to B-5, B-6, B-7, B-10, C-2, C-6, and C-7. Hydrophytic plant species typically observed in vernal marsh habitat within the BSA include brown-headed rush (*J. phaeocephalus*), spreading rush (*J. patens*), dense sedge (*C. densa*), velvet grass (*Holcus lanatus*), tall flat-sedge (*Cyperus eragrostis*), common spikerush (*Eleocharis macrostachya*), blue-eyed grass (*Sisyrinchium bellum*), and curly dock (*Rumex crispus*). Vernal marsh is a CRA and provides wetland characteristics under the CCC's single parameter definition. B-6, B-7, B-8, B-10, C-2, and C-6 have the potential to support nesting birds and California red-legged frog. B-7, B-8, B-10, and C-6 have the potential to support San Francisco garter snake.

3.2.1.9. COASTAL AND VALLEY FRESHWATER MARSH

Coastal and valley freshwater marshes are flooded by fresh water that lacks significant currents, and this prolonged saturation permits the accumulation of deep, peaty soils (Holland 1986). This community is typically dominated by cattail (*Typha* spp.) and bulrush (*Schoenoplectus* spp.) that form closed canopies.

Coastal and valley freshwater marsh occurs sporadically throughout many of the Project locations where conditions, sedimentation, and regular flow regime has resulted in the growth of hydrophytic vegetation. Small portions of this community are found at B-6, B-7, B-8, B-9, B-10, C-3, C-5, C-6, and C-7, and include brown-headed rush, common spikerush, tall flat-sedge, curly dock, and cattail. This community is also found at B-8, which consists of dense cattails and bulrush, as well as in the western portion of B-2, which consists of small fruited rush (*Scirpus microcarpus*). Coastal and valley freshwater marsh is a CRA as this habitat is considered "sensitive" by the California Department of Fish and Game, and provides wetland characteristics under the California Coastal Commission single parameter definition. B-2, B-6, B-7, B-8, B-9, B-10, C-2, C-3, and C-6 have the potential to support nesting birds and California red-legged frog. B-7, B-8, B-9, B-10, and C-6 have the potential to support San Francisco garter snake.

3.2.1.10. CENTRAL COAST RIPARIAN SCRUB

Central coast riparian scrub is a scrubby streamside thicket varying from open to impenetrable, dominated by willows. This early seral community may succeed to any of several riparian woodland or forest types in the absence of severe flooding disturbance. The community occurs in relatively fine-grained sand and gravel bars that are close to river channels, and therefore close to groundwater (Holland 1986).

Central coast riparian scrub is found in the BSA at B-1, B-2, and C-3, with willow and coyotebrush contributing to structure and composition of the community. Central coast riparian scrub is a CRA as this habitat is considered "sensitive" by the CDFW and provides wetland characteristics under the CCC single parameter definition. This community has the potential to support nesting birds and breeding habitat for potential California red-legged frog.

3.2.1.11. RUDERAL/DISTURBED

Ruderal and disturbed habitats are characterized by a lack of vegetation or are dominated by non-native plant species that are hardy and able to out-compete native species in highly disturbed areas. Ruderal and disturbed habitats often occur along roadsides and fence lines, near developments, and in other areas experiencing severe surface disturbance.

Ruderal vegetation is found adjacent to roadways and drainages drainage features at each of the 17 Project locations. The ruderal habit type at B-2, B-4, B-5, B-6, B-7, B-8, B-9, B-10, C-2, C-5, C-6, and C-7 provides suitable upland habitat for potential California red-legged frog, and for potential San Francisco garter snake at B-7, B-8, B-9, B-10, C-6, and C-7. Vegetation species observed in these areas include ripgut brome, bur clover (*Mediacago polymorpha*), wild radish, bristly ox-tongue, field mustard (*Brassica rapa*), California blackberry (*Rubus californica*), and poison hemlock (*Conium maculatum*).

3.2.1.12. URBAN

Urban habitats are those that have been developed and often entail landscaping that may contain but are not limited to trees, shrubs, ornamental plants, and lawns. Vegetation density, canopy cover, and species composition will vary based on purpose and/or design. Vegetation may include native or exotic species, or a combination of the both.

Urban areas are found at each of the 17 Project locations, and include business and residential communities and recreational areas. Vegetation in these areas includes but is not limited to manicured lawns, edible landscaping, and ornamental trees and shrubs. These areas are not likely to support special-status species due to the high level of disturbance and human activity; however, they may support nesting birds covered under the MBTA.

3.2.2. Special-Status Species Assessment

Based on the existing biological conditions in and adjacent to the BSA, the known occurrences of specialstatus species in the region, and SWCA biologists' local knowledge of the region, the potential for occurrence of 59 special-status species and habitats (40 plants, 15 wildlife, and four habitats) in the BSA was assessed. Of the 40 plant species, one, Choris's popcorn flower (*Plagiobothrys chorisianus* var. *chorisianus*) is present in the BSA at B-5 and B-10, while 20 have the potential to occur in the BSA, and the remaining 19 were determined to be absent from the BSA due to their association with specific vegetation communities, habitat elements, and/or elevation ranges that are not found in or near the BSA. None of the sensitive habitats were determined to have potential to occur in the BSA.

One of the identified wildlife species, white-tailed kite (*Elanus leucurus*), was observed during the field survey, and six additional special-status species were assessed as having potential to occur in the BSA. The remaining eight wildlife species were determined to be absent from the BSA due to their association with specific vegetation communities, habitat elements, and/or elevation ranges that are not found in or near the BSA.

3.2.2.1. SPECIAL-STATUS SPECIES PRESENT

Choris's Popcorn Flower (I)

Choris's popcorn flower (CNPS 1B.2) was observed in the BSA at B-5 located outside of the proposed work area, approximately 100 feet north of the western end of the Project location and at B-10 at two specific areas located approximately 100 feet north of the Project location (Appendix F). The observances consisted of several small populations located in vernally wet depressional areas integrated within the ruderal and coastal scrub vegetation. Impacts to this species are not expected to occur as a result of routine maintenance activities.

White-Tailed Kite (Elanus leucurus)

The white-tailed kite, a CDFW fully protected species, is a yearlong resident in coastal and valley lowlands. The species inhabits herbaceous and open stages of most habitats mostly in cismontane California. The white-tailed kite forages in undisturbed, open grasslands, meadows, farmlands, and emergent wetlands on small mammals, birds, lizards, or insects. Individual nests are placed near the top of dense tree stands, usually 20–100 feet aboveground and near foraging habitat.

The Monterey pine, Monterey cypress, and eucalyptus forests and non-native grassland habitat types in the BSA may provide suitable nesting and foraging habitat for this species. One white-tailed kite was observed foraging over grassland habitat adjacent to C-6.

3.2.2.2. SPECIAL-STATUS SPECIES THAT HAVE POTENTIAL TO OCCUR

In all, 20 special-status plant species and six special-status wildlife species have potential to occur in the BSA. A list of special-status plant species and summary descriptions for the wildlife are provided below, with more detailed descriptions of plants and wildlife provided in Appendix C. Although these species were not observed during field surveys of the BSA, either 1) suitable habitat for them is present, 2) the survey was conducted outside of the plant species' blooming period, or 3) there are recorded occurrences of these species within or near the BSA.

The following plant species were considered to have potential to occur in the BSA:

• White-rayed pentachaeta (*Pentachaeta bellidiflora*): federally endangered, state endangered

- Hickman's cinquefoil (Potentilla hickmanii): federally endangered, state endangered
- Bent-flowered fiddleneck (Amsinckia lunaris): CNPS 1B.2
- Coastal marsh milk-vetch (Astragalus pycnostachyus var. pycnostachyus): CNPS 1B.2
- Pappose tarplant (*Centromadia parryi* ssp. *parryi*): CNPS 1B.2
- Fanciscan thistle (*Cirsium andrewsii*): CNPS 1B.2
- San Francisco collinsia (*Collinsia multicolor*): CNPS 1B.2
- Western leatherwood (*Dirca occidentalis*): CNPS 1B.2
- Marin checker lily (Fritillaria lanceolata var. tristulis): CNPS 1B.1
- Fragrant fritillary (*Fritillaria liliacea*): CNPS 1B.2
- Short-leaved evax (*Hesperevax sparsiflora* var. *brevifolia*): CNPS 1B.2
- Kellogg's horkelia (Horkelia cuneata ssp. sericea): CNPS 1B.1
- Coast yellow leptosiphon (Leptosiphon croceus): CNPS 1B.1
- Rose leptosiphon (*Leptosiphon rosaceus*): CNPS 1B.1
- Coast lily (*Lilium maritimum*): CNPS 1B.1
- Oregon polemonium (*Polemonium carneum*): CNPS 2.2
- San Franciscan campion (*Silene verecunda* ssp. *Iverecunda*): CNPS 1B.2
- Saline clover (*Trifolium hydrophilumi*): CNPS 1B.2
- San Francisco owl's-clover (*Triphysaria floribunda*): CNPS 1B.2
- Coastal triquetrella (*Triquetrella californica*): CNPS 1B.2

It should be noted that the field survey was conducted outside the blooming period for two of the 20 listed species: western leatherwood and fragrant fritillary.

The following wildlife species were considered to have potential to occur in the BSA as described below:

Central California Coast Steelhead DPS (Oncorhynchus mykiss irideus)

Central California coast steelhead, a federally threatened and state species of special concern, are anadromous fish that extend along the entire California coast and inland to the Sacramento–San Joaquin River system. Steelhead spend a portion of their life cycle in the Pacific Ocean before returning upstream to spawn; however, upstream migration is often limited due to upstream barriers such as dams, waterfalls, and cataracts. Steelhead feed on aquatic and terrestrial insects, frogs, and small fish.

Based on findings from the literature review, there is moderate potential for central California coast steelhead to occur at A-1 and A-3. CNDDB records returned results for steelhead in tributaries to Pilarcitos Creek (A-3) in 1999 and 2000. Although field surveys were not conducted at A Zone locations, restoration efforts have reopened fish passages along Frenchman's Creek (A-1) and Pilarcitos Creek riparian corridors providing the potential for the anadromous steelhead to migrate upstream for spawning.

California Red-Legged Frog (Rana aurora draytonii)

California red-legged frog, a federally threatened and state species of special concern, occurs in various habitats during its life cycle. Breeding areas include aquatic habitats such as lagoons, streams, and natural and human-made ponds. The species prefers aquatic habitats with little or no flow, the presence of surface water to at least early June, surface water depths to at least 2.3 feet, and the presence of emergent vegetation (e.g., cattails and bulrush). The largest densities of California red-legged frog are typically associated with dense stands of overhanging willows and an intermixed fringe of sturdy emergent vegetation (e.g., cattails, bulrush). During periods of wet weather, some individuals may make overland dispersals through adjacent upland habitats of distances up to 1 mile (USFWS 2002). Upland habitats including small mammal burrows and woody debris can also be used as refuge during the summer if water is scarce or unavailable (Jennings and Hayes 1994). California red-legged frogs typically travel between sites and are unaffected by topography and vegetation types during migration. Dispersal habitat makes it possible for California red-legged frogs to locate new breeding and non-breeding sites, and is crucial for conservation of the species

California red-legged frog could occur in the vernal marsh, coastal or valley freshwater marsh, drainage ditches, non-native grasslands, or ruderal habitats in the BSA. SWCA biologists determined a moderate to high potential for their occurrence in the BSA at B-2, B-4, B-5, B-6, B-7, B-8, B-9, B-10, C-1, C-2, C-3, C-5, C-6, and C-7. Based on findings from the literature review, there is also a high potential for this species to occur at A-1, A-3, A-4 and A-5. CNDDB records indicate California red-legged frog were observed along Pilarcitos Creek (A-3) as recently as 2006 and 2011, along Frenchman's Creek (A-1) in 2007, and in an agricultural trough near the Seymour Ditch (B-9) in 2004 (Appendix G; CNDDB 2013).

San Francisco Gartner Snake (*Thamnophis sirtalis tetrataenia*)

The federally and state endangered San Francisco garter snake's historical range is entirely within San Mateo County. The two main components of San Francisco garter snake habitat are 1) wetlands supporting its prey species (e.g., California red-legged frog and Pacific chorus frog); and, 2) surrounding uplands that support small mammal burrows used by the snakes for escape cover (USFWS 2006). San Francisco garter snakes inhabit various aquatic habitats, including reservoirs, freshwater marshes, creeks, drainage ditches, ponds, and lakes. Less ideal habitats can also be used by San Francisco garter snake, such as ditches and other waterways, or floating algal or rush mats. Suitable breeding habitat includes shallow marsh lands with an abundance of emergent vegetation. Grasslands are also an important upland habitat for this species, as they provide areas for thermoregulation and cover. Prey items for this species include California red-legged frog, Pacific chorus frogs, and earthworms. San Francisco garter snakes are not known to be efficient at catching their prey in water deeper than 5 cm (2 inches); therefore, shallow water is important for catching prey and metamorphosis development (i.e., tadpoles of red-legged frogs and chorus frogs).

Riparian corridors and freshwater emergent wetlands and ponds associated with San Francisco garter snake habitat are located throughout the BSA. Small mammal burrows, similar to those observed in the non-native grassland and ruderal habitat types in the BSA, are used by San Francisco garter snake during hibernation. During the warm days of summer, most activity occurs during the morning and afternoon. During cooler weather of spring and fall, and at higher elevations, snakes restrict their activity to the warm afternoons. On warm days of winter, they can be observed basking in the sun at the entrance of their hibernating burrow. Preferred nocturnal retreats are thought to be holes, especially mammal burrows, crevices, and surface objects (USFWS 2007).

San Francisco garter snake has been recorded within the vicinity of Pilarcitos Creek (A-3) as recently as 2004 (CNDDB 2013). Based on findings from the literature review and field survey, SWCA biologists

determined that there is a moderate potential for this species to occur at A-3, A-4, B-7, B-8, B-9, B-10, C-6, and C-7 due to suitable aquatic and upland habitat.

Western Snowy Plover (Charadrius alexandrinus nivosus)

The western snowy plover, a federally threatened and state species of special concern, is a small shorebird found along the Pacific Coast. During March through September, the plovers can be found nesting above the high tide line on coastal beaches, sand spits, dune-backed beaches, sparsely vegetated dunes, and beaches at creek and river mouths.

Critical habitat for the western snowy plover has been designated along the beach at the western end of the BSA adjacent to A-1. CNDDB did not return any records indicating snowy plover presence within 5 miles of the BSA; however, SWCA biologist Kristen Outten has observed three snowy plovers at Francis State Beach between 2009 and 2012. Based on findings from the literature review, field survey, and local knowledge of the area, it was determined that there is moderate potential for western snowy plover to occur within the BSA at the western end of B-1. The central dune scrub habitat at the western end of the drainage <u>feature</u> may provide suitable nesting or foraging habitat for the species. The Project activities, however, do not extend into the dune system, and therefore are not expected to result in any impacts to the western snowy plover.

Saltmarsh Common Yellowthroat (Geothylpis trichas sinuosa)

The saltmarsh common yellowthroat, a state species of special concern, inhabits coastal riparian and wetland areas in San Mateo County as well as three areas along the Pacific Coast. In early spring, yellowthroats build open-cup nests typically low to the ground in grasses, herbaceous vegetation, cattails, tules, and some shrubs (e.g., coyotebrush). Surrounding marshes, coastal swales, riparian thickets, and edges of disturbed weed fields that border soggy habitats are used for refuge and foraging for the species (Shuford and Gardali 2008).

The most recent CNDDB records reveal saltmarsh common yellowthroat at the lower reaches of Frenchman's Creek (A-1) and Pilarcitos Creek (A-3) in 1990. Based on findings from the literature review and field survey, it was determined that there is low potential for saltmarsh common yellowthroat to occur at the western end of A-1, A-3, B-1, and B-2.

San Francisco dusky-footed woodrat (Neotoma fuscipes annectens)

The San Francisco dusky-footed woodrat is a state species of special concern that lives in a variety of brushy and forested habitats in California and the Arid West. Woodrats build complex mounded stick houses ranging from 4 to 8 feet in diameter and up to 6 feet in height, with multiple chambers inside. Evergreen and other thick-leaved trees and shrubs are important habitat components for this species (CSUS 2006).

There is potential for San Francisco dusky-footed woodrat to occur in forested areas and riparian corridors at the A Zones as well as in the BSA at B-2, B-10, C-5, C-6, and C-7. No CNDDB records were returned for San Francisco dusky-footed wood rat within 5 miles of the Project site, nor were any woodrats observed during the field survey. Due to the nature of the woodrats' preferred nesting areas as well as the proposed routine maintenance and emergency clearing activities, it is not anticipated that Project activities will impact San Francisco dusky-footed woodrat nests.

The Project does not include any permanent habitat loss and is not expected to have significant impacts to special status species. The AMMs described in Section 4 are recommended to avoid potential impacts to

special-status plant species, central California coast steelhead, California red-legged frog, and San Francisco garter snake.

3.2.2.3. NESTING MIGRATORY PASSERINE BIRDS AND RAPTORS

The BSA contains suitable nesting and foraging habitat for avian species protected under the MBTA and California Fish and Game Code §3511 and §3513. Avian species protected by the MBTA and Fish and Game Code observed in the BSA during the field survey include white-tailed kite, American kestrel (*Falco sparverius*), red-tailed hawk (*Buteo jamaicensis*), red-shouldered hawk (*Buteo lineatus*), turkey vulture (*Cathartes aura*), great blue heron (*Ardea herodias*), American crow (*Corvus brachyrhynchos*), American robin (*Turdus migratorius*), American goldfinch (*Spinus tristis*), chestnut-backed chickadee (*Poecile rufescens*), black phoebe (*Sayornis nigricans*), song sparrow (*Melospiza melodia*), white-crowned sparrow (*Zonotrichia leucophrys*), red-winged black bird (*Agelaius phoeniceus*), Brewer's blackbird (*Euphagus cyanocephalus*), spotted towhee (*Pipilo maculatus*), Anna's hummingbird (*Calypte anna*), and mourning dove (*Zenaida macroura*).

The Project has the potential to impact potential eggs or young covered under the MBTA Fish and Game Code. To avoid and minimize potential impacts, if work activities occur during the nesting season (February 15–September 15), it is recommended that the AMMs described in Section 4 be implemented.

3.2.3. Wildlife Movement Corridors

Due to the fragmentation, development, and high level of disturbance and human activity, it is not anticipated that the Project will adversely affect a wildlife movement corridor. Undeveloped lands extending from the southern end of the BSA at Redondo Beach Road north to Frenchman's Creek may provide suitable habitat for migration of amphibians, reptiles, and mammals; however, the Project will not have any permanent impacts or habitat loss, and the proposed routine maintenance activities are not expected to have an effect on potential migrations. In addition, it is likely that emergency clearing and eleanup activities at A Zone locations may improve migration corridors for fish species such as the steelhead trout.

3.2.4. Coastal Resource Areas

Based on the literature review and field survey observations, CRAs were observed at several locations throughout the BSA. Observed CRAs include sensitive habitat areas, riparian areas and corridors, bluffs and cliffs, wild strawberry habitat, wetlands, and archaeological resource areas. Provided below is a description of the CRAs as defined in Section 18.38.020 of the City Code, locations observed within the BSA, the potential for impacts, and (where applicable) a discussion of the proposed Project activities' consistency with the permitted uses within of each CRA. Appendix F generally depicts the locations of CRAs observed in the BSA.

3.2.4.1. SENSITIVE HABITAT AREAS

The City prohibits "any land use and/or development which would have significant adverse impacts on sensitive habitat areas" (City of Half Moon Bay 1993). The proposed Project activities are necessary to maintain existing stormwater runoff and flood control facilities to protect existing infrastructure and eliminate potentially hazardous situations. The Project does not include any permanent habitat loss, and is not expected to have significant impacts to sensitive habitat areas. All Project activities shall be consistent with other applicable federal, state, and local regulations. The AMMs described in Section 4 are recommended to avoid and minimize the potential for impacts.

The sections below are a discussion of sensitive habitat areas located at A, B, and C Zones. Only those sensitive habitat areas that were observed in the BSA are described below. Sensitive habitat areas not observed in the BSA but defined in Section 2.2.4 and in Section 18.38.020 in the City Code are not discussed further in this report.

3.2.4.1.1.Sand Dunes

As defined in Section 18.38.060 of the City Code, a sand dune is a mound, ridge, or hill of loose sands heaped up by the wind. The City Code limits land use activities on sand dunes, and has established a minimum 50-foot buffer zone extending landward of the most seaward stabilized zone. Sand dunes were observed in the BSA at the westernmost end of B-1; however, the proposed work area is not within the dune system and is located more than 50 feet away from the most seaward stabilized dune.

3.2.4.1.2.Sea Cliffs

As defined in Section 18.38.060 of the City Code, a sea cliff is a cliff whose toe is subject to marine erosion. Sea cliffs may provide nesting habitat for nesting birds such as the common murre and pigeon guillemot as well as other burrowing animals. Sea cliffs are present in the BSA at the westernmost end of B-3, B-4, B-5, B-6, B-10, and C-2; however, they are not located within the proposed work areas, and no direct effects are expected to occur as a result of the Project. There is potential that Project activities will modify hydrologic flow conditions through or near sea cliffs; however, as the Project includes maintenance of existing drainage features, flows will be consistent with historic regimes.

3.2.4.1.3.Riparian Areas

Riparian areas are defined as any area of land bordering a stream or lake, including its banks. This includes all bodies of water intermittent or perennial, man-made or natural. Vernal pools or vernally wet areas are excluded except when accompanied by riparian vegetation (City of Half Moon Bay 1993). Riparian areas are present at B-1, B-2, B-6, B-7, B-9, a small portion of B-10, C-2, the western portion of C-5, C-6, as well as at each of the A Zones based on the presence of an obvious channel evidenced by the presence of an OHWM. Riparian areas are also located in the vicinity of B-3, B-4, and C-7 in the BSA. The extent of riparian areas in the BSA is included in Appendix F. See Section 3.2.4.2 for a discussion of Project impacts and consistency within riparian areas.

3.2.4.1.4.Wetlands; Coastal Tidelands; and Marshes, Lakes, and Ponds and Adjacent Shore Habitats

Discussion of the location of wetlands, coastal tideland and marshes, lakes and ponds and adjacent shore habitats and the Projects consistency with the permitted uses in these areas is provided in Section 3.2.4.5.

3.2.4.1.5.Habitats Containing or Supporting Unique Species or Any Rare and Endangered Species

Various habitats in the BSA have the potential to support unique species and/or special-status species. The distribution of special-status species with potential to exist in the BSA is discussed in Section 3.2.2 and Appendix C. Unique species, including raptors, California red-legged frog, sea mammals, California wild strawberry, and Monterey pine have been identified by the City as having "scientific or historic value, few indigenous habitats, or some characteristics that draw attention or are locally uncommon" (City of Half Moon Bay 2009).

As described in Section 3.2.1.2, all Monterey pines observed in the BSA are non-natural stands that were originally planted during urbanization of the area. Furthermore the Project proposes only potential minor trimming to woody vegetation, and will not result in any impacts to Monterey pine. The extent of California wild strawberry habitat is discussed in Section 3.2.4.4.

Monterey cypress forest, Monterey pine forest, eucalyptus forest, non-native grassland, and ruderal areas provide habitat for special-status plant species as well as suitable nesting and foraging habitat for white-tailed kite, other raptors, and San Francisco dusky-footed woodrat. Non-native grassland, ruderal areas, vernal marsh, and coastal and freshwater marsh have the potential to support special-status plant species, California red-legged frog, and San Francisco garter snake. Riparian areas in the BSA have the potential to support saltmarsh common yellowthroat, and central dune scrub has the potential to support western snowy plover. In addition, A-1 and A-3 have the potential to support central California coast steelhead.

The Project does not include any permanent habitat loss and is not expected to have significant impacts to unique, rare or endangered species, or their habitats. The AMMs described in Section 4 are recommended to avoid potential impacts to unique, rare, or endangered species and their habitats.

3.2.4.1.6. Coastal Scrub Community Associated with Coastal Bluffs and Gullies

Coastal scrub associated with coastal bluffs and gullies was observed in the BSA at B-1 and B-2; however, they are not located in the proposed work areas, and no direct effects are expected to occur as a result of the Project.

3.2.4.2. RIPARIAN AREAS AND CORRIDORS

As described in Section 3.2.4.1.3, riparian areas are present at B-1, B-2, B-6, B-7, B-9, a small portion of B-10, C-2, the western portion of C-5, C-6, at each of the A Zones, and located in the vicinity of B-3, B-4, and C-7 in the BSA. Section 18.38.020 of the City Code defines riparian corridors as follows:

Riparian corridors are the areas between the limits of riparian vegetation, where limits are determined by vegetative coverage, at least fifty percent of which is comprised of a combination of the following plant species: red alder, jaumea, pickleweed, big leaf maple, narrow-leaf cattail, arroyo willow, broadleaf cattail, horsetail, creek dogwood, black cottonwood, and box elder.

Riparian corridors were observed in the BSA at B-1, B-2, and a small portion of B-7. In addition, riparian corridors are present at each of the A locations. Per Section 18.38.075(D) of the City Code, riparian buffer zones are located adjacent to riparian areas and corridors, as follows:

- 1. Land on both sides of riparian corridors which extends from the "limit of riparian vegetation" fifty feet outward for perennial streams and thirty feet outward for intermittent streams; or
- 2. Land along both sides of riparian corridors which extends fifty feet from the bank edge of perennial streams and thirty feet from the midpoint of intermittent streams where no riparian vegetation exists.

The extent of riparian areas, riparian corridors, and riparian buffer zones in the BSA is included in Appendix F. The proposed Project activities are necessary to restore and-maintain existing stormwater runoff and flood control facilities to their originally constructed conditions-in order to maintain their hydrologic condition, protect existing infrastructure, and eliminate potentially hazardous situations. There is no feasible alternative to the proposed Project; this is particularly demonstrated by flooding events and public safety issues that occurred while the Project locations were not being maintained. The Project includes maintenance of existing uses and does not include any new development or change in existing use As-as such, the Project is consistent with the permitted uses of Section 18.38.075 of the City Code. The Project will not result in any permanent impacts to riparian corridors or riparian buffer zones. The

Project does have the potential to result in minimal impacts to vegetation, channel morphology, and hydrology. The AMMs described in Section 4 should be implemented to avoid, minimize, and mitigate these impacts, and ensure the Project is consistent with the development standards for riparian corridors and riparian buffer zones identified in the City Code.

3.2.4.3. BLUFFS, CLIFFS, AND SEA CLIFFS

Bluffs, cliffs, and sea cliffs are a steep face of rock, decomposed rock, sediment, or soil resulting from erosion, faulting, or folding of the land mass with a vertical relief of 10 feet or more, or a cliff whose toe is subject to marine erosion (City of Half Moon Bay 2009). None of the proposed work areas are located in bluffs, cliffs, or seacliffs; however, B-3, B-4, B-5, B-6, B-10, and C-2 have these features located at the western-most end of the BSA. Direct impacts to bluffs, cliffs, or sea cliffs are not expected to occur as a result of the Project.

3.2.4.4. WILD STRAWBERRY HABITAT

Wild strawberry habitat is defined as any undeveloped areas within 0.5 mile of the coast (City of Half Moon Bay 2009). California wild strawberry has been designated a unique species by the City due to its vulnerability to crossbreeding as a result of the State's strawberry industry. This plant naturally occurs along the coast in sandy soils on coastal bluffs, cliffs, and road cuts (City of Half Moon Bay 1993).

Wild strawberry habitat per the definition of the City Code is present in the BSA at B-1, B-2, B-3, B-4, B-5, B-6, B-7, B-9, B-10, C-1, C-2, C-3, C-4, C-5, C-6, and C-7. Wild strawberry was observed in the drainage channel of B-3, B-10, and C-5 as well as in the BSA of B-10. The Project will not result in the conversion of any existing land use or permanent impact to habitat. Impacts to wild strawberry are anticipated to be negligible as a result of routine maintenance activities. The AMMs described in Section 4 are recommended to avoid potential impacts, including trampling or other destructive activities that would destroy the plant.

3.2.4.5. WETLANDS

As described in Section 2.2.5, the City Code and CCC use the USFWS wetlands "one parameter" definition. CCC wetlands were identified within the drainage features at B-1, B-2, B-6, B-7, B-9, B-10, C-2, C-3 and C-6. CCC wetlands were also identified in the BSA adjacent to B-6, B-7, B-10, C-2, C-3, C-6, and C-7. Although the A Zone locations were not surveyed in the field, due to the presence of an OHWM and adjacent riparian vegetation, CCC wetlands would also be present in all A Zones. Per Section 18.38.080(D) of the City Code, a 100-foot wetland buffer zone is located adjacent to the high water point of wetlands. The extent of CCC wetlands and wetland buffer zones in the BSA are depicted in Appendix F.

Wetland areas were typically delineated based on the presence of a dominance of hydrophytic vegetation and/or hydrologic indictors. Wetland plant species are those included on the *National Wetland Plant List*, *Arid West Region* (USDA NRCS 2013), and are typically adapted for life in permanently or periodically saturated soils. Each species on the list is rated according to a wetland indicator category. To be considered hydrophytic, the species must have wetland indicator status (i.e., be rated as obligate [OBL], facultative wetland [FACW], or facultative [FAC]). Wetland indicator species observed in the drainage features and adjacent wetland areas include brown-headed rush, spreading rush, dense sedge, velvet grass, tall flat-sedge, common spikerush, blue-eyed grass, horsetail, curly dock, bristly ox-tongue, poison hemlock, and arroyo willow (*Salix lasiolepis*). Areas were considered wetlands if the assemblage of plants present was dominated by hydrophytic species. Dominance was determined visually based on the FAC Neutral test (USACE 2008).

Field indicators of wetland hydrology were also used to determine the presence of wetlands, hydrologic indicators observed included water marks, sediment deposits, algal mats or crusts, drainage patterns, and/or the presence of an OHWM. Soils were generally not used as an indicator for the presence of wetlands due to obvious signs of hydrology or hydrophytic vegetation. Several soil samples were taken at the upland wetland border of the wetlands adjacent to B-6, B-10, C-2, and C-6 and charachterized according to the soil color (Munsell 2000) and if they meet the Natural Resources Conservation Service (NRCS) hydric soil requirments (NRCS 2003). No hydric soils were observed in the samples obtained. The NRCS soil survey for San Mateo County (USDA NRCS 2012) maps 19 soil units in the BSA. Of these units, only the coastal beaches unit is considered to be hydric under normal conditions. This unit is only mapped at the far western end of B-2.

Uses permitted in wetland and wetland buffer zones are the same as those permitted in riparian corridors and riparian buffer zones. As described earlier, the proposed Project activities are necessary to maintain existing stormwater runoff and flood control facilities to protect existing infrastructure and eliminate potentially hazardous situations. The Project includes maintenance of existing uses and does not include any new development or change in existing use. Additionally, There there is no feasible alternative to the proposed Project, and as such the Project is consistent with the permitted uses in riparian corridors and riparian buffer zones as well as wetlands and wetland buffer zones. The Project will not result in any permanent impacts to wetlands or wetland buffer zones. The Project does have the potential to result in minimal impacts to wetland vegetation, channel morphology, and hydrology. The AMMs described in Section 4 should be implemented to mitigate these impacts and ensure that the Project is consistent with the development standards for riparian corridors and riparian buffer zones (and therefore wetlands) identified in the City Code.

3.2.4.6. ARCHAEOLOGICAL RESOURCE AREAS

Areas containing potential archeological resources in the vicinity of Half Moon Bay include 1) the coastal strip where exploitable resources occurred; 2) all major creek shores, such as Pilarcitos, Arroyo Leon, and Frenchman's Creek; 3) all minor inland water courses, including historic or prehistoric springs, streams, or marshes; 4) the foothill strip above the over 200-foot elevation; 5) areas of prehistoric site evidence and pertinent historic places such as cemeteries, houses, and buildings; and 6) isolated hills and knolls (City of Half Moon Bay 2009).

Due to the close proximity of the coastal strip and perennial and intermittent streams, the BSA as well as the A Zones are located in archaeological resource areas. The Project will not result in any subsurface disturbance. Excavation will be limited to accumulated sediment only. It is anticipated that the Project will not impact potential archeological resources.

4. POTENTIAL IMPACTS AND MITIGATION MEASURES

The following impact assessment focuses on identifying potential adverse impacts to sensitive biological resources associated with implementation of the proposed Project. Adverse impacts are expected to occur when proposed activities or future uses resulting from the activities would temporarily or permanently modify sensitive habitats, disrupt habitats occupied by special-status species, or result in take of particular special-status species. Where potential Project-related impacts to sensitive biological resources have been identified, measures for avoiding, minimizing, or mitigating the impacts are recommended.

In addition to the measures recommended in this section, the City must comply with the conditions of the finalized Section 1602 *Draft Lake and Streambed Alteration Agreement* issued for the Project by the CDFW as well as any other additional permits that may be required for the Project.

4.1. Coastal Resource Areas

CRAs were observed at several locations throughout the BSA. These include sensitive habitat areas, riparian areas and corridors, bluffs and cliffs, wild strawberry habitat, wetlands, and archaeological resource areas. As generally described in Section 3.2.4, the Project has the potential to impact sensitive habitat areas (specifically habitats containing or supporting unique species or any rare and endangered species), riparian areas and corridors, wild strawberry habitat, and wetlands. Project-associated impacts to these resources are discussed below.

4.1.1. Construction-Related Disturbance

Project construction includes the emergency clearing of debris/vegetation; vegetation management; debris and sediment removal; in-kind culvert replacement; and in-kind banks stabilization at drainage features necessary to maintain or restore water transport capacity; maintain the integrity of existing flood control and sediment detention structures; minimize potentially hazardous situations such as flooding, bank, culvert, and roadway erosion; and improve visibility. Project activities are typically limited to the area immediately in or adjacent to the drainage features. The activities do not include any permanent impacts to CRAs or other sensitive biological resources, changes in current land use, or modifications of the drainage features from their current natural or (if man-made) originally constructed conditions.

Vegetation management and sediment removal activities will result in impacts to vegetation in the drainage features and any adjacent areas where vegetation is required to be trimmed or removed for access. In-kind culvert replacement and bank stabilization activities will result in impacts to vegetation, soils, and the area necessary to perform the required work. Access to the Project locations will typically be along existing paved access routes, or, if no existing access routes are present, by foot. Occasionally Project locations without existing access roads may need to be accessed by trucks and other construction equipment such as for emergency clearing, in-kind culvert replacement, and bank stabilization. This will result in potential impacts to vegetation, soils, and any sensitive areas necessary for access, as well as at the work location.

Certain construction activities, namely bank stabilization and culvert replacement, may require grading operations that could require the removal of vegetation, disturbance of soil layers, and the creation of soil stockpiles. This could expose soils to erosion by rainfall and runoff as stormwater leaves the work location. The adverse effects of erosion and sediment transport include deposition of sediment within the drainage features and associated habitats. This sediment transport could affect water quality due to the potential for pollutants to be discharged to adjacent soils and surface waterbodies. Construction of the

proposed Project could also involve the use, fueling, and storage of heavy equipment onsite. Soil and associated building materials, including asphalt and road base, has the potential to enter the drainage features, cause an increase in suspended sediments, result in sedimentation of aquatic habitat, and introduce compounds that could potentially be toxic to aquatic organisms. The following measures are recommended to mitigate potential construction impacts to CRAs.

- **BIO/mm-1** Disturbance to vegetation and CRAs should be the minimum necessary to complete the Project activities, provided there is no feasible alternative. The minimum amount of disturbance to vegetation is defined as the least amount required to access the Project locations, to restore or maintain normal streamflow, to prevent potential flooding, and for control of weeds and grasses on channel banks and access roads. To minimize impacts to vegetation and CRAs, the following measures should be implemented:
 - 1. Prior to all Project activities, a qualified biologist shall designate the work area and any staging areas as well as delineate areas that should be avoided. Areas that would be identified to avoid include wild strawberry populations, special-status plant species, and CCC wetlands adjacent to the Project locations.
 - i. A qualified biologist is herein defined as an individual who has a minimum of 5-years of academic trainaing and professional experience in biological sciences or a related field as it pertains to the Project. The biologist must be able to recognize species that may be present within the work area including the special status species which have the potential to occur, be familiar with the habits, habitats, and behaviours of those species and be able to differentiate between these speices and similar allies. In order to conduct pre-construction surveys the qualified biologist should have a minimum of two years of experience conducting surveys for each species. Within a minimum of 30-days prior to surveys or monitoring the selected biologist(s) should be approved by CDFW.
 - 2. Access to Project locations shall be via existing access roads to the maximum extent practicable. Heavy equipment (anything larger than a pickup truck or other track equipment such as a bobcat) should be positioned on existing access roads above the top of bank.
 - 3. If access to Project locations is required where there is no existing access route, prior to Project activities a qualified biologist shall delineate an approved route which minimizes impacts to vegetation as well as identifies and avoids CRAs. If CRAs are identified along the access route a qualified biologist shall monitor all Project activities to ensure CRAs are avoided and impacts to vegetation are minimized.
- **BIO/mm-2** If any wildlife is encountered during Project activities, said wildlife should be allowed to leave the work area unharmed. If any special-status wildlife species are observed, construction personnel should contact a qualified biologist immediately. The biologist will identify the species and determine the best course of action. Animals will be allowed to leave the work area of their own accord and without harassment. Animals should not be picked up or moved in any way.
- **BIO/mm-3** Several CCC wetlands were identified adjacent to the Project locations at B-6, B-7, B-10, C-2, C-3, C-6, and C-7. Activities proposed in these locations that could result in dredge or fill of waters of the United States could be subject to regulation under the Clean Water Act. Activities proposed in these areas must be reviewed to determine if they would be

regulated by the USACE, and a wetland delineation could be required to determine the extent of USACE jurisdiction.

- **BIO/mm-4** No Project activities shall be conducted in a channel with water flowing or present in it to the maximum extent practicable, with the exception of emergency activities. Similarly no equipment should be operated in a flowing drainage feature unless it is necessary for emergency purposes and there is no feasible alternative, or it is necessary to construct a dewatering system to divert water flow around a work area. Additional requirements and restrictions may be required for work in an active channel or if a dam or dewatering system is required, and should be reviewed independently prior to construction.
- **BIO/mm-5** Any and all spoils generated during Project activities shall be placed where they cannot enter drainage features, riparian areas or corridors, or wetlands. Spoils shall be removed from the work area and disposed of at an appropriate facility.
- **BIO/mm-6** During construction, to avoid erosion and downstream sedimentation, no work in or immediately adjacent to the drainage <u>ditches_features</u> should occur during the rainy season (October <u>15-31</u> through April 15).
- **BIO/mm-7** During construction, the 72-hour weather forecast shall be monitored. If there is a more than 40% chance of rain, or at the onset of unanticipated precipitation of 0.25 inch or more, all equipment should be removed or staged to avoid potential impacts, soil erosion and sediment control measures should be implemented, and Project activities should cease until after a 24 hour dry-out period if there has been more than 0.25 inch of rain.
- **BIO/mm-8** All exposed soils in the work area (resulting from Project activities) shall be stabilized immediately following the completion of work to prevent erosion. Erosion control BMPs, such as silt fences, straw hay bales, gravel or rock lined drainages, water check bars, and broadcast straw can be used. Erosion control fabrics should be biodegradable. BMPs shall be monitored during and after storm events. At no time shall silt-laden runoff be allowed to enter drainages drainage features or wetlands.
- **BIO/mm-9** If Project activities result in disturbance exceeding one acre; a Stormwater Pollution Prevention Plan (SWPPP) will be required. If required prior to the start of work a notice of intent (NOI) and SWPPP should be prepared and submitted to the appropriate Regional Water Quality Control Board (RWQCB). A copy of the SWPPP should be submitted to the County for approval to show that sedimentation and erosion control measures are installed prior to any other ground-disturbing work.

4.2. Impacts to Special-Status Plant Species

Field surveys were conducted during the appropriate blooming period for the majority of special-status plants with potential to occur in the BSA. Surveys were not conducted during the appropriate blooming period for western leatherwood and fragrant fritillary; however, impacts to these species are not expected because no Project-related impacts are proposed in suitable habitat for these species. Of the 40 plant species with the potential to be present, one—Choris's popcorn flower—was observed in the BSA at B-5 located outside of the proposed work area approximately 100 feet north of the western end of the Project location (Appendix F). The observances consisted of several small populations in vernally wet depressional areas integrated within the ruderal and coastal scrub vegetation. The Project has the potential to result in minimal impacts to this species if vehicular or heavy equipment is required at Project locations where there are no existing access roads. BIO/mm-1 above is recommended to mitigate potential impacts to special-status plant species.
4.3. Impacts to Special-Status Wildlife Species

Based on the existing conditions and documented special-status species occurrences, the BSA provides suitable dispersal habitat for California red-legged frog and San Francisco garter snake. These species have the potential for dispersal/movement from adjacent creeks and ponds into uplands and/or drainage features within the BSA.

4.3.1. California Red-Legged Frog and San Francisco Garter Snake

There is moderate to high potential for California red-legged frog to be present at A-1, A-3, A-4, A-5, B-2, B-4, B-5, B-6, B-7, B-8, B-9, B-10, C-2, and C-6; and a low potential for this species to be present at C-5 and C-7. In addition, B-8 provides low-quality but suitable breeding habitat for California red-legged frog. There is a moderate potential for San Francisco garter snake to be present at A-3 and A-4 as well as a low potential of occurrence at B-7, B-8, B-9, B-10, C-6, and C-7. There is also a very limited potential that California red-legged frog and San Francisco garter snake may occupy other grassland or ruderal areas throughout the BSA for upland habitat; however, it is not anticipated that there would be impacts to these species in these areas.

The proposed Project activities have the potential for adverse effects in the form of take of California redlegged frog and/or San Francisco garter snake if they enter work areas during construction. Although unlikely, forms of take could include California red-legged frogs and/or San Francisco garter snakes being crushed, entombed in burrows, killed or injured by construction equipment or worker foot-traffic, or harassed by noise or vibration associated with construction activities. Use of inappropriate erosion control or exclusion fencing/netting could trap small frogs or snakes, which could injure or kill animals via predation, desiccation, or starvation. With implementation of recommended avoidance and minimization measures, it is anticipated that the Project may affect but is not likely to adversely affect California red-legged frog and San Francisco garter snake.

It should be noted that no take (including handling and relocation) will be allowed by the USFWS if a California red-legged frog is found in the work area during construction. In this event, formal consultation under the ESA would be required. The following avoidance and minimization measures for California red-legged frog are recommended, with the qualifier that additional avoidance and minimization measures or modifications of these measures may be required by regulatory agencies upon CEQA review specific to the proposed Project.

BIO/mm-10	Work area activities at A-1, A-3, A-4, A-5, B -2, B-4, B-5, B-7, B-8, B-9, B-10, C-2, C-6,
	and C-7 should be limited to June 15 to October 31. Work at B-1, B-3, B-6, C-4, and C-5
	should be limited to April 15 to October 31.

- **BIO/mm-11** Before any construction activities begin on the Project, a qualified biologist should conduct a training session for all construction personnel. At a minimum, the training should include a description of the California red-legged frog and its habitat, the importance of the California red-legged frog and its habitat, the general measures that are being implemented to conserve the California red-legged frog as they relate to the Project, and the boundaries within which the Project may be accomplished. Brochures, books, and briefings may be used in the training session, provided that a qualified person is on hand to answer any questions.
- **BIO/mm-12** A qualified biologist should survey work areas at <u>A-1, A-3, A-4, A-5, B-2, B-4, B-5, B-6, B-7, B-8, B-9, B-10, C-2, C-5, C-6, and C-7 within 48 hours of the planned start of activities. If California red-legged frogs, tadpoles, or eggs are found, the approved biologist should inform the City to initiate formal ESA consultation with the USFWS.</u>

BIO/mm-13 A qualified biologist should be present at <u>A 1, A 3, A 4, A 5,</u> B-2, B-4, B-5, B-6, <u>B 7, B 8,</u> B-9, B-10, C-2,C-5, C-6, and C-7 during all Project activities. The biologist should have the authority to halt any action that might result in impacts. If California red-legged frogs are found at any time, work actives shall stop and the approved biologist should inform the City to initiate formal ESA consultation with the USFWS. If the biologist is permitted by the USFWS and approved by the CDFW for this Project to handle California redlegged frogs, only then can the species be handle and relocated. Under no circumstances should a California red-legged frog be handled, relocated, or otherwise harmed or harassed at any time without coordination and approval from the USFWS.

BIO/mm-14 For control of weeds and grasses on channel banks and access roads at B-2, B-4, B-5, B-6, B-7, B-8, B-9, B-10, C-2, C-5, C-6, and C-7, vegetation shall be cut to no less than 6 inches by an articulating mower or hand tools for locations adjacent to an existing access route, and by hand tools for locations with no existing access routes. Once the ground is visible, a visual survey for California red-legged frog shall be conducted by a qualified biologist. If no individuals are found in the area, vegetation removal may continue with the qualified biologist walking in front of equipment to observe.

- **BIO/mm-15** No stockpiling of vegetation shall occur at the worksite. Vegetation to the maximum extent practicable based on the equipment used should be placed directly or as quickly as feasible into a disposal container and removed from the site. Vegetation shall not be piled on the ground unless it is later disposed of under the supervision of a qualified biologist.
- **BIO/mm-16** To protect potential burrows, no soil shall be stockpiled on the ground unless it is a paved surface or the area has been surveyed by a qualified biologist.
- **BIO/mm-17** During Project activities, all trash that may attract predators should be properly contained, removed, and disposed of regularly. Following construction, trash/construction debris should be removed from work areas.
- **BIO/mm-18** To assist in excluding California red-legged frog from the work area during sediment removal or bank stabilization with large equipment, an exclusion fence should be installed around the work area prior to the commencement of construction activities. Exclusion fencing should be silt-fence type fencing or equivalent, and should not include poly mesh fencing or other similar fencing that could entrap or snag reptiles, amphibians, or other small animals. Exclusion fencing should be installed with the fence stakes placed on the side opposite of the Project location to prevent frogs from using the stakes to maneuver over the fence. Fencing should be keyed-in appropriately (at least 6-inches deep) with 10foot long turn-arounds facing away from the Project location located at either end in order to redirect animals away from openings. Once fencing is in place and once daily, a qualified biologist should check the work area to confirm that sensitive species are not present before Project activities commence. The fencing should be maintained until all work has been completed. The fencing should be inspected on a daily basis by a qualified biologist, and any damaged areas should be repaired immediately upon discovery.
- **BIO/mm-19** A qualified biologist should ensure that the spread or introduction of invasive exotic plant species should be avoided to the maximum extent possible. When practicable, invasive exotic plants in work areas should be removed. Any removed exotic plants should be immediately bagged and appropriately disposed of at a permitted facility.
- **BIO/mm-20** If there is significant ground disturbance, Project locations should be revegetated with an appropriate assemblage of vegetation suitable for the area. Such a plan must include but not be limited to location of the restoration, species to be used, restoration techniques,

time of year the work will be done, identifiable success criteria for completion, and remedial actions if the success criteria are not achieved.

- **BIO/mm-21** The number of access routes, number and size of staging areas, and the total area of the activity should be limited to the minimum necessary to complete the Project. Routes and boundaries should be clearly demarcated, and these areas should be outside of wetland areas, as feasible. Where impacts occur in these staging areas and access routes, restoration should occur as identified in measure BIO/mm-20 above.
- **BIO/mm-22** To control erosion during and after Project implementation, the City should implement BMPs, as identified by the appropriate RWQCB.
- **BIO/mm-23** All fueling and maintenance of vehicles and other equipment and staging areas should occur at least 50 feet from any riparian area, riparian corridor, wetland, or other drainage feature or waterbody. The City should ensure that contamination of habitat does not occur during such operations. Prior to the onset of work, the City should ensure that there is a plan to allow a prompt and effective response to any accidental spills. All workers should be informed of the importance of preventing spills, and of the appropriate measures to take should a spill occur.

Because the San Francisco garter snake is a California fully protected species, no incidental take is allowed; take must be fully avoided. In addition to the above mitigation measures, of which many if not all are also transferable to San Francisco garter snake, the following mitigation measures are recommended to specifically avoid take of San Francisco garter snake during Project activities, with the qualifier that additional avoidance and minimization measures or modifications of these measures may be required by regulatory agencies upon CEQA review specific to the Project.

- **BIO/mm-24** Avoidance measures for San Francisco garter snake should be employed in all areas where construction could result in the direct take of this species. Full-time monitoring is recommended during construction at A-1, A-3, A-4, A-5, B-2, B-4, B-5, B-6, B-7, B-8, B-9, B-10, C-2, C-5, C-6, and C-7 to ensure that no unanticipated take of San Francisco garter snake occurs. The qualified biologist should be on call as needed to monitor construction activities in potential habitat and inspect exclusion fencing to ensure it remains intact throughout the duration of construction. The qualified biologist may stop work if necessary to protect San Francisco garter snake, and should notify the City as to how to proceed accordingly.
- **BIO/mm-25** A qualified biologist should conduct pre-construction surveys before any Project activities take place in potential San Francisco garter snake habitat at <u>A 3, A 4, B 7, B 8, B-9, B-10, C-6, and C-7. Surveys should consist of walking transects while conducting visual encounter surveys in areas that will be subject to vegetation clearing, sediment removal, grading, cut and fill, or other ground-disturbing activities. If a San Francisco garter snake is observed during a survey, the USFWS, and CDFW will be notified and the San Francisco garter snake should be monitored until it leaves the area on its own, undisturbed and without harassment.</u>
- **BIO/mm-26** Before any construction activities begin on a Project, a qualified biologist should conduct a training session for all construction personnel. At a minimum, the training should include a description of the San Francisco garter snake and its habitat, the importance of the San Francisco garter snake and its habitat, the general measures that are being implemented to conserve the San Francisco garter snake as they relate to the Project, and the boundaries within which the Project may be accomplished. Brochures, books, and

briefings may be used in the training session provided that a qualified person is on hand to answer any questions.

- **BIO/mm-27** To assist in excluding San Francisco garter snakes from the work area during sediment removal or bank stabilization with large equipment, an exclusion fence should be installed around the work area prior to the commencement of construction activities. Exclusion fencing should be silt-fence type fencing or equivalent, and should not include poly mesh fencing or other similar fencing that could entrap or snag reptiles, amphibians, or other small animals. Exclusion fencing should be installed with the fence stakes placed on the side opposite of the Project location to prevent snakes from using the stakes to maneuver over the fence. Fencing should be keyed-in appropriately (at least 6 inches deep) with 10foot-long turnarounds facing away from the Project location at each end to redirect animals away from openings. Once fencing is in place, a qualified biologist should check the work area once daily to confirm that sensitive species are not present before Project activities commence. The fencing should be maintained until all work has been completed. The fencing should be inspected on a daily basis by a qualified biologist, and any damaged areas should be repaired immediately upon discovery.
- **BIO/mm-28** Under no circumstances should a San Francisco garter snake be handled, relocated, or otherwise harmed or harassed at any time without coordination and approval from USFWS and CDFG.

4.3.2. Central California Coast Steelhead

There is no potential for central California coast steelhead to be adversely impacted by the proposed routine maintenance activities at the B and C Zones; however, there is a low potential for the species to be impacted during emergency clearing activities at A-1 and A-3. Due to the skittish nature of the fish, it is unlikely that mortality or injury will occur as a result of emergency clearing activities at these locations; however, there is the limited potential these activities could result in impacts to egg or spawning habitats. The following avoidance and minimization measures for central California coast steelhead are recommended:

BIO/mm-29 If feasible, immediately prior to completion of emergency clearing activities, a qualified biologist should survey the work area at A-1 and A-3. If central California coast steelhead or eggs are found, the approved biologist should inform the City and the USFWS, and complete the necessary emergency consultation requirements described in the ESA.

BIO/mm-30 If feasible, a qualified biologist should be present at A-1 and A-3 during all emergency activities.

4.3.3. Nesting Migratory Birds

Project activities could have the potential to directly and/or indirectly impact a variety of nesting migratory bird species, including white-tailed kite and saltmarsh common yellowthroat. Project activities, including vegetation removal, equipment use, and associated noise could impact nesting migratory birds and/or special-status bird species adjacent to the BSA. No active nests were noted during the field surveys; however, the following mitigation measures are recommended to avoid or minimize impacts to migratory bird species within the BSA.

- **BIO/mm-31** If Project activities are conducted during the typical nesting bird season (February 15 through September 15), pre-construction nest surveys should be conducted in and near the Project area (within 500 feet for large raptors such as buteos, 250 feet for small raptor such as accipiters, and 100 feet for all other birds) by a qualified biologist. If nesting is identified during the pre-construction survey, the following measures should be implemented:
 - 1. If active nest sites of bird species protected under the MBTA and/or California Fish and Game Code Section 3503 are observed in the survey area, then the Project should be modified and/or delayed as necessary to avoid direct take of the identified nests, eggs, and/or young. Potential Project modifications may include the establishment of protective buffer zones (500 feet for large raptors such as buteos, 250 feet for small raptor such as accipiters, and 100 feet for all other birds) in which a qualified biologist shall monitor all Project-related activities to ensure that they do not impact nesting birds. Monitoring shall continue through work activities until the biologist has determined that the nesting activity has ceased.
 - 2. Active nests should be documented by a qualified biologist, and a letter report should be submitted to the USFWS and CDFG documenting Project compliance with the MBTA and applicable Project mitigation measures.

5. REFERENCES

- Baldwin, B., D. Goldman, D. Keil, R. Patterson, T. Rosatti (editors). 2012. *The Jepson Manual: Vascular Plants of California* (second edition). Berkeley, California: University of California Press.
- California Coastal Commission (CCC). 2011. Definition and Delineation of Wetlands in the Coastal Zone. San Francisco: State of California Resources Agency, California Coastal Commission.
- California Native Plant Society (CNPS). 2013. Inventory of Rare and Endangered Plants (online edition, v8-01a). California Native Plant Society. Available at: http://cnps.site.aplus.net/cgibin/inv/inventory.cgi. Accessed May 6, 2013.
- California Natural Diversity Data Base (CNDDB). 2013. Rarefind data for the Half Moon Bay, Montara Mountain, Woodside 7.5-minute U.S. Geological Survey topographic quadrangles.
- California State University Stanislaus (CSUS). 2006. Draft Endangered, Threatened, and Candidate Species Manual: San Francisco Dusky-Footed Woodrat (Neotoma fuscipes annectens). Available at: http://esrp.csustan.edu/Projects/lsm2/pdf/lsm030.pdf. Access May 30, 2013.
- Calflora. 2013. Information on California plants for education, research and conservation (Calflora). Berkeley, California. Available at: http://www.calflora.org/topMission.html. Accessed May 6, 2013.
- City of Half Moon Bay. 1993. *Local Coastal Program Land Use Plan*. Chapter 3: Environmentally Sensitive Habitat Areas.

- Environmental Laboratory. 1987. U.S Army Corps of Engineers wetlands delineation manual. Technical Report Y-87-1. Vicksburg, Mississippi: U.S. Army Engineer Waterways Experiment Station.
- Environmental Laboratory. 2008. U.S Army Corps of Engineers Regional Supplement to the Corps of Engineers Wetland Delineation Manual; Arid West Region (Version 2.0). J. S. Wakeley, R. W. Lichvar, and C. V. Noble (editors). Vicksburg, Mississippi: ERDC/EL TR-06-16, U.S. Army Engineer Research and Development Center.
- Gallegos, Sean K. 2010. PDP-048-09 Mitigated Negative Declaration and Coastal Development Permit for the extension of Seymour Street from the East End of Seymour Street to Highway 1 in an R-1-B-1 Zoning District Located Within the Public Right-of-Way (City of Half Moon Bay).
- Historic Aerials by NETR Online. 2013. Available at: http://www.historicaerials.com/. Accessed June 4, 2013.
- Holland, Robert F. 1986. *Preliminary descriptions of the terrestrial natural communities of California*. Sacramento, California: California Department of Fish and Game.
- Jennings, M. R. and M. P. Hayes. 1994. *Amphibian and Reptile Species of Concern in California*. Sacramento, California: California Department of Fish and Game.

Munsell Color. 2000. Munsell Soil Color Charts. Year 2000 Revised. GretagMacbeth, New York.

^{. 2009.} Half Moon Bay Municipal Code, Title 18: Zoning.

- Shuford, W. D., and Gardali, T. (editors). 2008. California Bird Species of Special Concern: A ranked assessment of species, subspecies, and distinct populations of birds of immediate conservation concern in California. *Studies of Western Birds 1*. Camarillo, California: Western Field Ornithologists, and Sacramento: California Department of Fish and Game.
- U.S. Army Corps of Engineers. 2008. A Field Guide to the Identification of Ordinary High Water Mark (OHWM) in the Arid West Region of the United States. Robert W. Lichvar and Shawn M. McColley (editors). Hanover, New Hampshire: ERDC/CRREL TR-08-12. U.S. Army Engineer Research and Development Center.
- United States Fish and Wildlife Service (USFWS). 2013. National Wetlands Inventory. Available at: http://www.fws.gov/wetlands/. Accessed May 6, 2013.
- ———. 2007. Endangered Species Accounts: San Francisco Garter Snake (*Thamnophis sirtalis tetrataenia*).
- ------.2006. San Francisco Garter Snake (*Thamnophis sirtalis tetrataenia*) 5-year Review: Summary and Evaluation. Sacramento, California: U.S. Fish and Wildlife Service, Sacramento Field Office.
- ———. 2002. Recovery Plan for the California Red-legged Frog (*Rana aurora draytonii*). Portland, Oregon: U.S. Fish and Wildlife Service.
- Unisted States Geological Survey (USGS). 2013. National Hydrography Dataset GIS Data. Available at: http://nhd.usgs.gov/. Accessed 2013.
- USDA Natural Resources Conservation Service (NRCS). 2003. *Field Indicators of Hydric Soils in the United States, Version 5.01.* G.W. Hurt, P.M. Whited, and R.F. Pringle (editors). Washington, D.C.: USDA NRCS, in cooperation with the National Technical Committee for Hydric Soils, Fort Worth, Texas.
- ------.NRCS. 2013. Plants Database, 2012 National Wetland Plant List, Arid West Region. Available at: http://plants.usda.gov/wetland.html. Accessed May 2013.
 - -----.NRCS. 2013. Soil Survey GIS Data. Available at: http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm. Accessed May 6, 2013.

Appendix A.

Photo-Documentation

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Photograph 1. View facing east along Magnolia Street drainage <u>ditch-swale</u> (C-5). Typical view of manmade ephemeral swale. Note the <u>ditch-feature</u> is overgrown with vegetation. Photograph taken on May 8, 2013.



Photograph 2. View facing south at the eastern end of the Redondo Beach Road drainage ditch-feature (C-7). Typical view of man-made ephemeral swale. Note the sediment and vegetation filling the culvert that crosses beneath Redondo Beach Road. Photograph taken on May 13, 2013.



Photograph 3. View facing west at the southern drainage <u>ditch-feature</u> on Redondo Beach Road (B-10). Typical view of man-made ephemeral ditch. Note that the ditch is overgrown with vegetation, making it difficult to view the channel. On numerous occasions, this has resulted in vehicles driving into the drainage ditch and causing injuries and damage. Photograph taken on May 13, 2013.



Photograph 4. View facing west at the northern drainage ditch on Poplar Road (C-2). Note that the ditch is overgrown with vegetation, making it difficult to view the channel. This poses a safety issue; vehicles haven driven into the drainage ditch. Photograph taken on May 8, 2013.



Photograph 5. View facing west at Miramontes Drainage (B-4). This photograph represents the condition of several drainages drainage features in the BSA that provide suitable upland habitat for California red-legged frog. Photograph taken on May 10, 2013.



Photograph 6. View facing west at the southern drainage <u>ditch-feature</u> on Redondo Beach Road (C-7). Typical view of a roadside depression lacking any drainage characteristics. Photograph taken on May 10, 2013.



Photograph 7. View facing south at the southern end of Railroad Avenue (C-3). Typical view of a roadside <u>ditch-swale</u> that has been filled with sediment and vegetation, and no longer functions. Photograph taken on May 10, 2013.



Photograph 8. View facing east along the Myrtle Street Bubble-Up (B-6). Typical view of a man-made intermittent ditch. Note the presence of an OHWM. Photograph taken on May 10, 2013.



Photograph 9. View facing east along Roosevelt Drainage (B-2). Typical view of a natural perennial drainage. Photograph taken on May 23, 2013.



Photograph 10. View facing east of wild strawberry habitat on the north side of Redondo Beach Road drainage channel (B-10). Photograph taken on May 13, 2013.



Photograph 11. View facing south at the Seymour Basin (B-8). This retention basin provides suitable habitat for California red-legged frog, San Francisco garter snake, and nesting birds covered under the MBTA. Photograph taken on May 9, 2013.



Photograph 12. View facing north at seasonal wetland area adjacent to Wavecrest Road (C-6). The wetland area is dominated by brown-headed rush (*Juncus phaeocephalus*), spreading rush (*Juncus patens*), and dense sedge (*carex densa*). This wetland area is typical for those identified in the BSA. Photograph taken on May 9, 2013.



Photograph 13. View facing south at the Magnolia Street drainage <u>ditch-swale</u> (C-5). Photograph taken during a rain event in winter <u>20122010</u>. As depicted, vegetation and sediment deposits in the drainage <u>ditch-feature</u> can result in severe flooding. Photograph taken at 429 Magnolia Street on December 19, 2010.



Photograph 13. View facing east at the drainage ditch along Wavecrest Road (C-6). Note the road damage that occurred as a result of a winter storm event. Photograph taken at 450 Wavecrest Road on December 21, 2010.



Photograph 14. View facing north at culvert on the western end of the Myrtle Street Bubble-Up (B-6). The area around the culvert has eroded. Photograph taken on May 10, 2013.

Appendix B.

Project Location Maps

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Appendix C.

Special-Status Species and Habitats Considered for Potential Occurrence in the Biological Study Area

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Table A.1.	Special Status	Species and Habitats	Considered for Pot	ential Occurrence	in the Biological St	udv Area	(plants and natura	I communities)
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Species Name	General Habitat Description	Legal Status Federal/State/CNPS	Potential for Occurrence					
PLANT SPECIES OF CONCERN								
San Mateo thorn-mint Acanthomintha duttonii	Annual occurs in serpentine grassland along central California coast and within the San Francisco Bay Area from 0 to 300 meters (m). Flower season: April–June.	FE/SE/1B.1	None: BSA does not contain serpentine grassland. Species not observed during the field survey. Impact to this species are not expected.					
Franciscan onion Allium peninsulare var. franciscanum	Perennial bulb found along dry hillsides from 0 to 300 m. Flower season: May–June.	//1B.2	None: BSA does not contain suitable habitat. Species not observed. Impacts to this species are not expected.					
bent-flowered fiddleneck Amsinckia lunaris	An annual herb that occurs on gravelly slopes, grassland, and openings in woodland (often on serpentine soil). From 50 to 800 m. Flower season: March–June.	//1B.2	Moderate: Suitable habitat for this species is present in non-native grasslands and ruderal areas of the BSA. Species not observed during field survey. Impacts to this species are not expected.					
Anderson's manzanita Arctostaphylos andersonii	A perennial evergreen shrub that occurs in openings and edges among broad-leafed upland forest, chaparral, and north coast coniferous forest. From 60 to 760 m. Flower season: November–May.	//1B.2	None: BSA does not contain suitable habitat. Species not observed during field survey. Impacts to this species are not expected.					
Montara manzanita Arctostaphylos montaraensis	A perennial evergreen shrub that occurs on granite, sandstone outcrops, chaparral and coastal scrub habitats from 200 to 500 m. Flower season: January–March.	//1B.2	None: BSA does not contain suitable habitat or elevation. Species not observed during field survey. Impacts to this species are not expected.					
Kings Mountain manzanita Arctostaphylos regismontana	A perennial evergreen shrub broad-leafed upland forest, chaparral, and north coast coniferous forest with granitic or sandstone based soil. From 305 to 730 m. Flower season: January–April.	//1B.2	None: BSA does not contain suitable habitat or elevation. Species not observed during field survey. Impacts to this species are not expected.					
coastal Coastal marsh milk- vetch Astragalus pycnostachyus var. pycnostachyus	Perennial herb that occurs in coastal marshes, seeps and adjacent sand along the northern and central California coast. From 0 to 150 m. Flower season: April–October.	//1B.2	Low: Suitable habitat for the species is present in the BSA. Species not observed during field survey. Impacts to this species are not expected to occur.					
pappose tarplant <i>Centromadia parryi ssp.</i> parryi	Annual herb that occurs in chaparral, coastal prairie, meadows and seeps, marshes and swamps (coastal salt), and valley and foothill grassland (vernally mesic). From 2 to 420 m. Flower season: May– November.	//1B.2	Low: No records occur within 5 miles of the BSA. Suitable habitat for the species is present within the BSA; however, not within the impact area. Species not observed during field survey. Impacts to this species are not expected to occur.					
Point Reyes bird's-beak Chloropyron maritimum ssp. palustre	An annual herb associated with coastal salt marshes from 0 to 10 m. Flower season: May–October.	//B.2	None: BSA does not contain suitable habitat. Species not observed. Impacts to this species are not expected.					
Species Name	General Habitat Description	Legal Status Federal/State/CNPS	Potential for Occurrence					
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San Francisco Bay spineflower <i>Chorizanthe cuspidata</i> var. <i>cuspidata</i>	An annual herb that grows in sand along the central California coast from 0 to 300 m. Flower season: April–June.	//1B.2	None: BSA does not contain suitable habitat. Species not observed. Impacts to this species are not expected.					
Franciscan thistle Cirsium andrewsii	Biennial herb found along bluffs, ravines, seeps, and occasionally on serpentine from 0 to 100 m. Flower season: May–September.	//1B.2	Low: No records occur within 5 miles of the BSA. Suitable habitat for the species is present within the BSA. Species not observed during field survey. Impacts to this species are not expected to occur.					
fountain thistle <i>Cirsium fontinale</i> var. <i>fontinale</i>	A perennial herb that occurs along serpentine seeps and streams in the San Francisco Bay Area from 120 to 150 m. Flower season: May–August.	FE/SE/1B.1	None: BSA does not contain suitable habitat or elevation. No species observed. Impacts to this species are not expected.					
San Francisco collinsia Collinsia multicolor	An annual herb that occurs in closed-cone coniferous forest and coastal scrub. Occasional found in serpentine. From 30 to 250 m. Flower season: March–May.	//1B.2	Moderate: Suitable habitat for this species is present within the BSA in coastal scrub habitat. Species not observed during field survey. Impacts to this species are not expected.					
western leatherwood Dirca occidentalis	A perennial deciduous shrub that occurs in broad-leafed upland forest, closed-cone coniferous forest, chaparral, cismontane woodland, north coast coniferous forest, riparian forest, and riparian woodland. From 50 to 395 m. Flower season: January–April.	//1B.2	Moderate: Suitable habitat for this species may be present along the A Zone riparian corridors; however, no field surveys were conducted at these locations. In addition, suitable habitat is present in the BSA at the western end of B-2. This species was not observed in the BSA during field surveys. Impacts to this species are not expected.					
San Mateo woolly sunflower Eriophyllum latilobum	A perennial herb found in oak woodlands in the San Francisco Bay Area. From 100 to 150 m. Flower season: May–June.	FE/SE/1B.1	None: BSA does not contain suitable habitat or elevation. This species was not observed in the BSA during field surveys. Impacts to this species are not expected.					
Hillsborough chocolate lily Fritillaria biflora var. ineziana	Perennial bulb associated with serpentine soils in the San Francisco Bay Area. From 0 to 150 m. Flower season: March–April.	//1B.1	None: BSA does not contain serpentine soils. This species was not observed in the BSA during field surveys. Impacts to this species are not expected.					
Marin checker lily Fritillaria lanceolata var. tristulis	A perennial bulb that occurs in coastal bluff scrub, coastal prairie, and coastal scrub. From 15 to 150 m. Flower season: February–May.	//1B.1	Low: No records occur within 5 miles of the BSA; however, suitable habitat is present. Species not observed during field survey. Impacts to this species are not expected to occur.					
fragrant fritillary Fritillaria liliacea	A perennial bulb found in heavy soils on open hills and fields near coast. From 0 to 200 m. Flower season: February–April.	//1B.2	Moderate: Suitable habitat for the species is present within the BSA. Species not observed during field survey; however, surveys were conducted on the shoulder of the flower season.					

Table A.1. Special Status Species and Habitats Considered for Potential Occurrence in the Biological Study Area (plants and natural communities)

Species Name	General Habitat Description	Legal Status Federal/State/CNPS	Potential for Occurrence
short-leaved evax Hesperevax sparsiflora var. brevifolia	An annual herb that occurs in sandy, grassy or wooded coastal bluffs, terraces and dunes. From 0 to 100 m. Flower season: March–July.	/1B.2	Moderate: Suitable habitat for the species is present within the BSA. Species not observed during field survey. Impacts to this species are not expected to occur.
Marin western flax Hesperolinon congestum	An annual herb associated with serpentine grasslands. From 0 to 200 m in the northwestern San Francisco Bay Area. Flower season: April–August.	FT/ST/1B.1	None: BSA does not contain serpentine soils. This species was not observed in the BSA during field surveys. Impacts to this species are not expected.
Kellogg's horkelia Horkelia cuneata ssp. sericea	Perennial herb. Occurs in closed-cone coniferous forest, maritime chaparral, and coastal scrub with sandy or gravelly openings. From 10 to 200 m. Flower season: April–September.	//1B.1	Moderate: Suitable habitat for the species is present within the BSA. Species not observed during field survey. Impacts to this species are not expected to occur.
Point Reyes horkelia Horkelia marinensis	Occurs on sandy coastal flats between 15 and 760 m. Flower season: May–September.	//1B.2	None: BSA does not contain suitable habitat. This species was not observed in the BSA during field surveys. Impacts to this species are not expected.
Coast yellow leptosiphon Leptosiphon croceus	An annual herb found on open, grassy slopes and coastal bluffs on the central California coast. Occurs at +/- 0 meters. Flower season. April–May.	//1B.1	Moderate: Suitable habitat for the species is present within the BSA. Species not observed during field survey. Impacts to this species are not expected to occur.
rose leptosiphon Leptosiphon rosaceus	An annual herb found on open, grassy slopes and coastal bluffs on the central California coast. Occurs at +/- 0 meters. Flower season: April–June.	//1B.1	Moderate: Suitable habitat for the species is present within the BSA. Species not observed during field survey. Impacts to this species are not expected to occur.
Crystal Springs lessingia Lessingia arachnoidea	Occurs in serpentine soil in grassland, coastal scrub, chaparral and woodland in the San Francisco Bay Area. From 40 to 300 m. Flower season: July–October.	//1B.2	None: Serpentine soils do not occur in the BSA. Species not observed during field survey. Impacts to this species are not expected to occur.
coast lily Lilium maritimum	A perennial herb that occurs in coastal prairie or scrub, peatland, and gaps in closed-cone-pine forest. From 0 to 150 m. Flower season: May–July.	//1B.1	Low: Records are located far from the BSA. This species was not observed in the BSA during field surveys. Impacts to this species are not expected.
Indian Valley bush-mallow Malacothamnus aboriginum	A perennial deciduous shrub associated with rocky, granitic areas in chaparral and cismontane woodland. From 150 to 1,700 m. Flower season: April–October.	//1B.2	None: BSA does not contain suitable habitat or elevation. Species not observed in the BSA during field surveys. Impacts to this species are not expected.
Arcuate bush-mallow Malacothamnus arcuatus	A shrub associated with chaparral. Flower season: April–September.	//1B.2	None: BSA does not contain suitable habitat. No species observed. Impacts to this species are not expected.

Fable A.1. Special Status Species a	nd Habitats Considered for Potential	Occurrence in the Biological Study	Area (plants and natural communities)
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Species Name	e General Habitat Description Le		Potential for Occurrence
Davidson's bush-mallow Malacothamnus davidsonii	A perennial deciduous shrub that occurs in chaparral, cismontane woodland, coastal scrub and riparian woodlands. From 185 to 855 m. Flower season: June–January	//1B.2	None: BSA falls outside of the species elevation range. No species observed. Impacts to this species are not expected.
Hall's bush-mallow Malacothamnus hallii	low A stout shrub associated with open chaparral. From 0 to 760 m. Flower season: May–July.		None: BSA does not contain suitable habitat. No species observed. Impacts to this species are not expected.
woodland woollythreads Monolopia gracilens	An annual herb associated with serpentine grassland, oak woodland and open chaparral. From 100 to 1200 m. Flower season: February–July	//1B.2	None: BSA does not contain suitable habitat. No species observed. Impacts to this species are not expected.
Dudley's lousewort Pedicularis dudleyi	A perennial herb that occurs in chaparral, cismontane woodland, north coast coniferous forest, and valley and foothill grasslands. From 60 to 900 m. Flower season: April–June.	//1B.2	None: BSA does not contain suitable habitat. No species observed. Impacts to this species are not expected.
White-rayed pentachaeta Pentachaeta bellidiflora	Occurs in grassy or rocky areas on the central California coast and in the San Francisco Bay Area from 0 to 620 m. Flower season: March–May.	FE/SE/1B.1	Moderate: Suitable habitat for the species is present in non-native grasslands and ruderal areas in the BSA. Species not observed during field survey. Impacts to this species are not expected to occur.
Choris' popcorn-flower Plagiobothrys chorisianus var. chorisianus	noris' popcorn-flower 'agiobothrys chorisianus (acoastal scrub and chaparral. From 0 to 650 m. Flower season: March- June.		High: CNDDB records indicate that this species was observed within close proximity to the BSA. Suitable habitat for the species is present. Species was observed during the field survey in the BSA at drainages B-5 and B-10; however, outside of the proposed impact areas. Impacts to this species are not expected to occur.
Oregon polemonium Polemonium carneum	A perennial herb found in moist to dry, open areas. From 0 to 800 m. Flower season: April–June.	//2.2	Moderate: Suitable habitat for the species is present within the BSA. Species not observed during field survey. Impacts to this species are not expected to occur.
Hickman's cinquefoil Potentilla hickmanii	Occurs in vernally wet meadows and open pine forests below 100 m. Found along the central California coast. Flower season: April–June.	FE/SE/1B.1	Moderate: Suitable habitat for the species is present in the BSA in wetland features. No species were observed during the field survey. Impacts to this species are not expected.
San Franciscan campion Silene verecunda ssp. verecunda	A perennial herb occurring in open areas, chaparral, sagebrush, oak woodland, pinyon/juniper woodland and conifer forest habitats. From 0 to 3400 m. Flower season: summer.	//1B.2	Low: CNDDB records are old and unreliable. No species observed. Impacts to this species are not expected.

Table A.1. Special Status Species and Habitats Considered for Potential Occurrence in the Biological Study Area (plants and natural communities)

Species Name	General Habitat Description	Legal Status Federal/State/CNPS	Potential for Occurrence
saline clover Trifolium hydrophilum	An annual herb that occurs in marshes and swamps, vernal pools and valley and foothill grasslands (mesic and alkaline soils). From 0 to 300 m. Flower season: April–June.	//1B.2	Low: Suitable habitat for the species is present in the BSA in wetland features. No species were observed during the field survey. Impacts to this species are not expected.
San Francisco owl's-clover Triphysaria floribunda	An annual herb found in coastal grasslands and on serpentine slopes. From 0 to 200 m. Flower season: April–May.	//1B.2	Moderate: Suitable habitat for the species is present within the BSA. Species not observed during field survey. Impacts to this species are not expected to occur.
coastal triquetrella <i>Triquetrella californica</i>	Forms loose mats on exposed to shaded soil, rocks, sand or gravel in dry or moist situations. Most occurrences have been located within 10 miles of the ocean. From 0 to 500 m.	//1B.2	Low: No occurrences have been recorded within 5 miles of the BSA. Suitable habitat for the species is present within the BSA; however, species not observed during field survey. Impacts to this species are not expected to occur.
NATURAL COMMUNITIES C	DF CONCERN		
northern coastal salt marsh	Marsh habitat supporting herbaceous, suffrutescent, salt-tolerant hydrophy summer and dormant in winter. Characteristic species include <i>Jaumea car</i> californicum, and <i>Frankenia salina</i> . Developed around Humboldt Bay, Tom Bay, Elkhorn Slough, and Morro Bay.	None: Area of impact does not support northern coastal salt marsh community.	
northern maritime chaparral	Dense shrub habitat composed of several species of manzanita, wild lilac a with sandy substrates in the coastal fog zone, usually on rolling to hilly terra Cruz to Sonoma Counties.	None: Area of impact does not support northern maritime chaparral community.	
serpentine bunchgrass	An open grassland community that is dominated by perennial bunchgrasse low, but native species dominate the composition. Associated species inclu <i>lepida, N. pulchra,</i> and <i>Melica californica</i> . Always occur on serpentine subs	es. Typically, total cover is ude <i>Nassela cernua, N.</i> strates.	None: Area of impact does not support a serpentine bunchgrass community.
valley needlegrass grassland	Grassland reaching up to 2 feet tall and dominated by <i>Nassella</i> sp., which forming grass. Annual grasses occur between the perennials, often exceed cover. Usually occurs on fine-textured soils that are wet in the winter and v	None: Area of impact does not support a valley needlegrass grassland community.	

Table A.1. Special Status Species and Habitats Considered for Potential Occurrence in the Biological Study Area (plants and natural communities)

Species Name	General Habitat Description	Legal Status Federal/State	Potential for Occurrence
WILDLIFE SPECIES OF COM	ICERN	-	
Invertebrates			
San Bruno elfin butterfly Callophrys mossii bayensis	A small brownish butterfly that occurs in coastal mountains near San Francisco Bay, in the fog-belt of steep north-facing slopes that receive little direct sunlight. The primary larval host plant is stonecrop (<i>Sedum spathulifolium</i>).	FE/	None: Suitable habitat and the larval host plant were not observed in the BSA. Impacts to this species are not expected.
bay checkerspot butterfly Euphydryas editha bayensis	A medium-sized butterfly that occurs in habitats with shallow, serpentine-derived or similar soils. The primary larval host plant is dwarf plantain (<i>Plantago erecta</i>) and occasionally purple owl's clover (<i>Castilleja densiflora</i> or <i>C. exserta</i>).	FT/	None: BSA does not provide suitable habitat. Impacts to this species are not expected.
mission blue butterfly Plebejus icarioides missionensis	A small bluish-lavender or brown butterfly that occurs in coastal grassland and coastal chaparral dominated habitats. The primary larval food plant is lupine (<i>Lupinus albifrons, L. formosus, L. variicolor</i>).	FE/	None: Suitable habitat and the larval host plant were not observed in the BSA. Adjacent property may offer suitable habitat and the larval food plant; however, these properties were not surveyed. Impacts to this species are not expected.
Myrtle's silverspot Speyeria zerene myrtleae	A medium-sized butterfly found in coastal dune or prairie habitat. The primary larval food plant is violets (typically <i>Viola adunca</i>). Populations range from the Golden Gate in San Francisco north to the mouth of the Russian River in Sonoma County.	FE/	None: BSA falls outside the species range. Impacts to this species are not expected.
Fish			
Central California coast steelhead DPS Oncorhynchus mykiss irideus	Clear, cool water with abundant in-stream cover, well-vegetated stream margins, relatively stable water flow, and a 1:1 pool-to-riffle ratio.	FT/CSC	High: A-1 and A-3 provide suitable habitat for potential steelhead; however, these locations were not visited during the field survey. B and C Locations do not provide suitable
Amphibiana			habitat for the species.
California tiger salamander Ambystoma californiense	Occurs in grasslands or oak woodlands that support natural ephemeral pools or ponds that mimic them. This species requires seasonal water for breeding and small mammal burrows, crevices in logs, piles of lumber, and shrink-swell cracks in the ground for refuges. To be suitable, aquatic sites must retain at least 30 centimeters (cm) of water for a minimum of 10 weeks in the winter.	FT/ST, CSC	None: No species have been recorded within a 5-mile radius of the BSA. No species were observed during the field survey. Impacts to this species are not expected to occur.
California red-legged frog Rana draytonii	Aquatic habitats with little or no flow and surface water depths to at least 2.3 feet. Presence of fairly sturdy underwater supports such as cattails.	FT/CSC	Moderate to High: CNDDB records show occurrences throughout the BSA in 2004, 2006, 2010, and 2011. BSA contains drainages that may provide suitable breeding habitat as well as non-native grasslands that may provide suitable upland habitat. No species observed during the field survey.
			A-2-HMB-14-0004

Table A.Z. Opecial olatos opecies and habitats considered for relefitial occurrence in the biological oldey Area (who	ble A.2. Special Status Species and Habitats Considered for Potential Occurrence in the Biological St	idy Area (*	wildlife
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Species Name	me General Habitat Description		Potential for Occurrence
Reptiles			
Western pond turtle Emys marmorata	Occurs in ponds, lakes, rivers, streams, creeks, marshes, and irrigation ditches with abundant vegetation and either rocky or muddy bottoms. Diurnal. Active from February to November.	/CSC	None: No occurrences are recorded within 5 miles of the BSA. No species observed during field survey. Impacts to this species are not expected to occur.
San Francisco garter snake Thamnophis sirtalis tetrataenia	Occurs in ponds and other wetlands where their preferred prey (California red-legged frog) reside. Grasslands and vegetated bank side areas are often used for basking.	FE/SE	Low to Moderate: Species have been recorded within 5 miles of the BSA. Surrounding area contains drainages and seasonal wetlands that may provide suitable habitat and foraging for the species.
Birds			
western snowy plover Charadrius alexandrinus	Shores, peninsulas, offshore islands, bays, estuaries, and rivers along the Pacific Coast. Breeding sites entail coastal beaches above the high tide line, sand spits, dune-backed beaches, and river bars.	FT, MBTA/CSC	Moderate: There is moderate potential for western snowy plover to occur in the BSA at the western end of drainage B-1 in the coastal dune scrub habitat; however, no work activities are expected to occur in this area. Species not observed during the field survey. Impacts to this species are not expected to occur.
white-tailed kite <i>Elanus leucurus</i>	Open grasslands, meadows, or marshlands for foraging close to isolated trees for nesting and perching.	MBTA/FP	High: Grasslands provide suitable foraging habitat for white- tailed kite. The surrounding riparian corridors may provide suitable nesting habitat; however, the proposed Project would not impact trees suitable for nesting. Species observed foraging during the field survey.
saltmarsh common yellowthroat Geothlypis trichas sinuosa	Wet meadow, fresh emergent wetland, saline emergent wetland habitats, and valley foothill riparian.	MBTA/CSC	Low: Species were observed along Frenchman's Creek and at the mouth of Pilarcitos Creek in 1990. Species not observed during the field survey. Impacts to this species are not expected to occur.
California clapper rail Rallus longirostris obsoletus	Occurs in salt and brackish marshes dominated by pickleweed and Pacific cordgrass. Currently, this species is restricted to marsh areas near San Francisco Bay. The last California clapper rail to be sighted in Morro Bay was documented in 1939.	FE, MBTA/SE	None: There is no suitable habitat for the species in the BSA. Species not observed during the field survey. Impacts to this species are not expected to occur.

Table A.2.	Special Status	Species and Habitats	Considered for	Potential Occurrer	nce in the Biological	Study Area (wildlife)
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Species Name	General Habitat Description		Legal Status Federal/State	Potential for Occurrence
Mammals				
San Francisco dusky-footed Medium-sized rodents found in grasslands, scrub, and wooded areas voodrat throughout the San Francisco Bay area.		/CSC	Moderate: The BSA supports woodland communities that may provide habitat for the species; however, the proposed work activities are not expected to impact these areas. Species not observed during surveys. Impacts to this species are not expected to occur.	
American badger <i>Taxidea taxus</i>	Occurs in open stages of shrub, forest, and herbace needs uncultivated ground with friable soils.	eous habitats;	/CSC	None: No suitable badger burrows or sign identified in the BSA during the survey. Impacts to this species are not expected to occur.
Notes for Tables A.1. and A.2		California Nativ	ve Plant Society (CNP	S):
Sources: Baldwin et al. (2012), CNDDB (2013), USFWS (2013).List 1B = Rare, threatened, or endangered in California and elsewhere List 2 = Rare, threatened, or endangered in California, but more common List 3 = Plants about which more information is needed List 4 = Watch list of plants of limited distributionFederal:List 1B = Rare, threatened, or endangered in California, but more common List 3 = Plants about which more information is needed List 4 = Watch list of plants of limited distributionFE = Federal EndangeredCNPS Threat Code: I = Seriously endangered in California (more than 80% of occurre immediacy of threat)State:.2 = Fairly endangered in California (20–80% occurrences threatened) .3 = Not very endangered I California (<20% of occurrences threatened .3 = Not very endangered I California (<20% of occurrences threatened or ST = State Rare CSC = California Special Concern Species FP = Fully Protected		ered in California, but more common elsewhere ed in California, but more common elsewhere nation is needed istribution rrnia (more than 80% of occurrences threatened / high degree and 0–80% occurrences threatened) <20% of occurrences threatened or no current threats known)		
None = No potential for the species or habitat to occur due to lack of suitable habitat in the BSA. Low = Species has been mapped within 5 miles of the BSA, but record is old/unreliable, the				
appropriate habitat is not present, or the record is far from the Project area. Moderate = Records have been mapped near the Project area and/or suitable habitat is present, but records are old or far from the Project area.				
High = Species has high likelihood Project area, and suitable habitat is	of presence in the BSA, has been mapped in close proximity to the present.			

Appendix D.

Species Observed During the Field Survey

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Table D.1. Species Observed During the Field Survey

Scientific Name	Common Name	Native	Species Status/Notes
PLANT SPECIES*			
Gymnosperms			
Cupressaceae	Cypress Family	_	-
Cupressus macrocarpa	Monterey cypress	Yes	_
Pinaceae	Pine Family	_	-
Pinus radiata	Monterey pine	Yes	-
Angiosperms (Eudicots)			
Anacardiaceae	Sumac Family	_	_
Toxicodendron diversilobum	Poison oak	Yes	_
Apiaceae	Carrot Family	-	-
Apiastrum angustifolium	Wild celery	Yes	-
Conium maculatum	Poison hemlock	No	-
Foeniculum vulgare	Sweet fennel	No	_
Lepidium draba	Whitetop	No	_
Аросупасеае	Dogbane Family	-	_
Vinca major	Periwinkle	No	_
Araliaceae	Ginseng Family	-	-
Hedera helix	English ivy	No	-
Asteraceae	Sunflower Family	-	-
Achillea millefolium	Yarrow	Yes	-
Artemisia californica	California sagebrush	Yes	-
Artemisia douglasiana	Mugwort	Yes	-
Artemisia pycnocephala	Coastal sagewort	Yes	-
Aster chilensis	Common California aster	Yes	-
Baccharis glutinosa	Marsh baccharis	Yes	-
Baccharis pilularis	Coyotebrush	Yes	-
Carduus pycnocephalus	Italian thistle	No	-
Carpobrotus chilensis	Iceplant	No	-
Carpobrotus edulis	Iceplant	No	-
Cirsium vulgare	Bull thistle	No	-
Delairea odorata	Cape ivy	No	-
Erigeron glaucus	Seaside daisy	Yes	-
Gnaphalium palustre	Lowland cudweed	Yes	-
Helminthotheca (Picris) echioides	Bristly ox-tongue	No	-
Hypochaeris radicata	Rough cat's ear	No	_
Matricaria discoidea	Pineapple weed	No	_
Senecio vulgaris	Common groundsel	No	_

Table D.1.	Species	Observed	During the	Field Survey
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Scientific Name	Common Name	Native	Species Status/Notes
Sonchus oleraceus	Sow thistle	No	-
Taraxacum officinale	Dandelion	No	_
Tragopogon porrifolius	Purple salsify	No	_
Brassicaceae	Mustard Family	-	-
Brassica nigra	Black mustard	No	_
Brassica rapa	Field mustard	No	_
Raphanus sativus	Wild radish	No	_
Boraginaceae	Borage Family	-	-
Amsinckia menziesii	Fiddleneck	Yes	_
Borago officinalis	Common borage	No	_
Plagiobothrys chorisianus var. chorisianus	Choris' popcornflower	Yes	CNPS 1B.2
Caprifoliaceae	Honeysuckle Family	-	-
Lonicera involucrata	Twinberry	Yes	_
Convolvulaceae	Morning-glory Family	-	-
Calystegia sp.	Unknown	Unknown	_
Cucurbitaceae	Gourd Family	-	-
Marah fabaceus var. agrestis	Wild cucumber	Yes	_
Fabaceae	Pea Family	-	-
Acacia sp.	Acacia	No	_
Acmispon cytisoides (Lotus scopularius)	Deerweed	Yes	_
Cytisus scoparius	Scotchbroom	No	_
Lunpinus arboreus	Yellow bush lupine	Yes	_
Medicago polymorpha	Bur clover	No	_
Trifolium hirtum	Rose clover	No	_
Vicia sp.	Unknown vetch	Unknown	_
Fagaceae	Beech Family	-	-
Quercus agrifolia	Coast live oak	Yes	_
Geraniaceae	Geranium Family	-	-
Erodium botrys	Storksbill	No	_
Erodium brachycarpum	Foothill filaree	No	_
Geranium dissectum	Cutleaf geranium	No	_
Lamiaceae	Mint Family	_	-
Clinopodium (Satureja) douglasii	Yerba buena	Yes	-
Monardella villosa	Coyote mint	Yes	
Rosmarinus officinalis	Rosemary	Yes	-
Stachys bullata	California hedge nettle	Yes	-
Linaceae	Flax Family	-	-
Linum bienne	Narrowleaf flax	No	-

Scientific Name	Common Name	Native	Species Status/Notes
Malvaceae	Mallow Family	-	_
Malva parviflora	Cheeseweed	No	-
Myrtaceae	Myrtle Family	-	-
Eucalyptus globulus	Blue-gum eucalyptus	No	_
<i>Eucalyptus</i> sp.	Eucalyptus	No	-
Onagraceae	Willowherb Family	-	-
Oenothera sp.	Evening primrose	Unknown	-
Taraxia ovata	Suncup	Yes	-
Orobanchaceae	Broom Rape Family	-	-
Bellardia trixago	Mediterranean lineseed	No	_
Oxalidaceae	Wood Sorrel Family	-	-
Oxalis pes-caprae	Bermuda buttercup	No	-
Papaveraceae	Poppy Family	-	-
Eschscholzia californica	California poppy	Yes	-
Phyrmaceae	Lopseed Family	-	-
Mimulus aurantiacus	Sticky monkey flower	Yes	-
Plantaginaceae	Plantain Family	-	-
Plantago coronopus	Cut leaf plantain	No	_
Plantago lanceolata	English plantain	No	-
Polygonaceae	Buckwheat Family	-	-
Eriogonum latifolium	Coast buckwheat	Yes	-
Rumex acetosella	Sheep sorrel	No	-
Rumex crispus	Curly dock	No	-
Primulaceae	Primrose Family	-	-
Anagallis arvensis	Scarlet pimpernel	No	-
Ranunculaceae	Buttercup Family	-	-
Ranunculus californicus	California buttercup	Yes	-
Rhamnaceae	Buckthorn Family	-	-
Ceanothus sp.	Ceanothus	Yes	-
Frangula (Rhamnus) californica	California coffeeberry	Yes	-
Rosaceae	Rose Family	-	-
<i>Fragaria</i> sp.	Strawberry	Unknown	-
Rubus ursinus	California blackberry	Yes	-
Rubus discolor	Himalayan blackberry	No	-
Rubiaceae	Bedstraw Family	-	-
Galium aparine	Common bedstraw	Yes	-
Salicaceae	Willow Family	-	-
Salix lasiolepis	Arroyo willow	Yes	_

Table D.1.	Species	Observed	During the	Field Survey
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Scientific Name	Common Name	Native	Species Status/Notes
Sapindaceae	Soapberry Family	_	_
Aesculus californica	California buckeye	Yes	_
Scrophulariaceae	Snapdragon Family	_	_
Scrophularia californica	Bee plant	Yes	_
Urticaceae	Nettle Family	_	-
Urtica dioica	Stinging nettle	Yes	_
Violaceae	Violet Family	_	_
Viola pedunculata	Johnny jump-up	Yes	_
Angiosperms (monocots)			
Сурегасеае	Sedge Family	_	_
Carex densa	Dense sedge	Yes	_
Cyperus eragrostis	Tall flat sedge	Yes	_
Eleocharis macrostachya	Common spikerush	Yes	_
Scirpus microcarpus	Small fruited bulrush	Yes	_
Iridaceae	Iris Family	_	_
Sisyrinchium bellum	Blue-eyed grass	Yes	_
Sisyrinchium californicum	Yellow-eyed grass	Yes	_
Juncaceae	Rush Family	_	-
Juncus patens	Spreading rush	Yes	_
Juncus phaeocephalus var. phaeocephalus	Brown-headed rush	Yes	-
Juncus sp.	Unknown rush	Unknown	_
Poaceae	Grass Family	-	-
Avena barbata	Slender wild oats	No	-
Avena fatua	Common wild oats	No	-
Bromus diandrus	Ripgut brome	No	_
Bromus hordeaceus	Soft brome	No	-
Cortaderia jubata	Pampas grass	No	-
Distichilis spicata	Salt grass	Yes	-
Ehrharta erecta	Panic veldt grass	No	-
Elymus mollis	American dune grass	Yes	-
Festuca myuros (Vulpia myuros)	Rattail sixweeks grass	No	-
Festuca perennis (Lolium multiflorum)	Italian wild rye	No	-
Hordeum brachyantherum ssp. brachyantherum	Meadow barley	Yes	_
Hordeum marinum	Seaside barley	No	-
Hordeum vulgare	Common barley	No	_
Phalaris aquatica	Harding grass	No	_
Polypogon monspeliensis	Rabbitsfoot grass	No	_

Scientific Name	Common Name	Native	Species Status/Notes
Typhaceae	Cattail Family	-	_
Typha latifolia	Cattail	Yes	-
WILDLIFE SPECIES			
Invertebrate			
Danaus plexippus	Monarch butterfly	Yes	_
Amphibian			
Pseudacris sierra	Sierran tree frog	Yes	_
Avian			
Agelaius phoeniceus	Red-winged blackbird	Yes	_
Ardea herodias	Great blue heron	Yes	-
Buteo jamaicensis	Red-tailed hawk	Yes	-
Buteo lineatus	Red-shouldered hawk	Yes	-
Calypte anna	Anna's hummingbird	Yes	-
Carpodacus mexicanus	House finch	Yes	-
Cathartes aura	Turkey vulture	Yes	-
Columba livia	Rock dove	No	_
Corvus brachyrhynchos	American crow	Yes	-
Elanus leucurus	White-tailed kite	Yes	CDFW fully protected
Euphagus cyanocephalus	Brewer's blackbird	Yes	-
Falco sparverius	American kestrel	Yes	-
Melospiza melodia	Song sparrow	Yes	_
Passer domesticus	House sparrow	No	_
Pipilo maculatus	Spotted towhee	Yes	_
Poecile rufescens	Chestnut-backed chickadee	Yes	_
Spinus tristis	American goldfinch	Yes	_
Streptopelia decaocto	Eurasian collared dove	No	_
Sturnus vulgaris	European starling	No	_
Turdus migratorius	American robin	Yes	_
Zenaida macroura	Mourning dove	Yes	_
Zonotrichia leucophrys	White-crowned sparrow	Yes	-
Mammal			
Canine lupus familiaris	Domestic dog	No	_
Felis catus	Domestic cat	No	_
<i>Mustela</i> sp.	Weasel	Yes	_
Odocoileus hemionus	Black tailed deer	Yes	_
Sylvilagus bachmani	Brush rabbit	Yes	_

Table D.1. Species Observed During the Field Survey

Table D.1.	Species	Observed	During the	Field Survey
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Scientific Name	Common Name	Native	Species Status/Notes

* Data from Baldwin et al. (2012).

Appendix E.

Vegetation Communities Maps

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Citywide Drainage Ditch Maintenance Project

San Mateo C	County	Half Moon I	Bay	Exhibit 2	CA
Project No.	Date	Scale	Pŧ	19feg2re/DPdw5rg3No.	
26185	6/13/13	As Shown			E-9

<dyn type="document" property="path"/>

ENVIRONMENTAL CONSULTANTS 60 Stone Pine Road, Suite 201 Half Moon Bay, CA 94019 Pasadena | San Louis Obispo | Alaska | Arizona | Colorado | Guam | Hawaii | Nevada | New Mexico | North Dakota | Oregon | Pennsyvannia | Texas | Utah | Washington | Wyoming



Appendix F.

Jurisdictional and Coastal Resources Maps

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Appendix G.

Special-Status Species Records

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Table G.1. California Natural Diversity Database (CNDDB) Records Results

Latin Name	Common Name	EONDX	ACCURACY	SITEDATE	FEDLIST	CALLIST	RPLANTRANK	LOCATION
Acanthomintha duttonii	San Mateo thorn-mint	18109	1/5 mile	19890608	Endangered	Endangered	1B.1	EAST SIDE UPPER CRYSTAL SPRINGS RES RD.
Allium peninsulare var. franciscanum	Franciscan onion	45124	1 mile	19020510	None	None	1B.2	CRYSTAL SPRINGS LAKE.
Allium peninsulare var. franciscanum	Franciscan onion	45128	1 mile	19320529	None	None	1B.2	SPRING VALLEY WATER COMPANY ROAD.
Amsinckia lunaris	Bent-flowered fiddleneck	82415	Specific area	20080403	None	None	1B.2	NEAR LOWER CRYSTAL SPRINGS RESERV BLVD, WEST OF SAN MATEO.
Arctostaphylos andersonii	Anderson's manzanita	1416	Nonspecific area	19741228	None	None	1B.2	SKYLINE BLVD, 2.8 MILES NORTH OF KINGS RESERVOIR, SANTA CRUZ MOUNTAINS.
Arctostaphylos montaraensis	Montara manzanita	14057	Specific area	199503XX	None	None	1B.2	NORTH SIDE OF MONTARA MOUNTAIN, BE PEDRO CREEK, SOUTH OF SAN FRANCISC
Arctostaphylos montaraensis	Montara manzanita	20212	Specific area	19910719	None	None	1B.2	MONTARA MOUNTAIN, ABOUT 1.5 AIRMILE
Arctostaphylos montaraensis	Montara manzanita	20211	Specific area	19910717	None	None	1B.2	MONTARA MOUNTAIN, 1 MILE WEST OF PIL
Arctostaphylos regismontana	Kings Mountain manzanita	56356	3/5 mile	19820123	None	None	1B.2	MONTARA MOUNTAIN.
Arctostaphylos regismontana	Kings Mountain manzanita	56346	Nonspecific area	19301106	None	None	1B.2	SKYLINE BLVD. 2.0 MILES N OF KINGS MOU
Astragalus pycnostachyus var. pycnostachyus	Coastal marsh milk-vetch	49632	1 mile	XXXXXXXX	None	None	1B.2	CRYSTAL SPRINGS RESERVOIR.
Astragalus pycnostachyus var. pycnostachyus	Coastal marsh milk-vetch	49631	2/5 mile	20040823	None	None	1B.2	PILLAR POINT.
Calicina minor	Edgewood blind harvestman	22547	1/5 mile	19660123	None	None		SPRING 0.75 MI N OF CRYSTAL SPGS DAM
Callophrys mossii bayensis	San Bruno elfin butterfly	23049	Nonspecific area	19860415	Endangered	None		MONTARA MOUNTAIN, FROM ABOUT 1 MILL VICINCITY OF SOUTH PEAK.
Callophrys mossii bayensis	San Bruno elfin butterfly	23059	Nonspecific area	197703XX	Endangered	None		ON WHITING RIDGE IN THE SAN FRANCISC
Callophrys mossii bayensis	San Bruno elfin butterfly	72010	1/10 mile	20060720	Endangered	None		NORTH SIDE OF MONTARA MOUNTAIN, BE PEDRO CREEK, SOUTH OF SAN FRANCISC
Chorizanthe cuspidata var. cuspidata	San Francisco Bay spineflower	58	1 mile	19330601	None	None	1B.2	NEAR RELIEF HOUSE.
Cirsium fontinale var. fontinale	Fountain thistle	28589	Specific area	20061026	Endangered	Endangered	1B.1	EAST SIDE OF CRYSTAL SPRINGS RESERV
Collinsia multicolor	San Francisco collinsia	56875	1 mile	18930623	None	None	1B.2	PILARCITOS LAKE AND CANYON.
Danaus plexippus	Monarch butterfly	22924	1/5 mile	XXXXXXXX	None	None		
Danaus plexippus	Monarch butterfly	22925	1/5 mile	1991XXXX	None	None		
Danaus plexippus	Monarch butterfly	13262	1/5 mile	19980105	None	None		
Danaus plexippus	Monarch butterfly	22934	1/5 mile	19980105	None	None		
Danaus plexippus	Monarch butterfly	12310	Nonspecific area	19980105	None	None		
Danaus plexippus	Monarch butterfly	3669	1/5 mile	19980105	None	None		SWEETWOOD GROUP CAMP, SAN MATEO
Dipodomys venustus venustus	Santa Cruz kangaroo rat	59322	5 miles	19330808	None	None		REDWOOD CITY, SOUTH SAN FRANCISCO
Dirca occidentalis	Western leatherwood	51482	1 mile	19800516	None	None	1B.2	CRYSTAL SPRINGS LAKE.
Dirca occidentalis	Western leatherwood	29976	1 mile	20070301	None	None	1B.2	IN SAN ANDREAS CANYON BELOW THE DA
Dirca occidentalis	Western leatherwood	29977	2/5 mile	19750301	None	None	1B.2	0.5 MILE BELOW LAKE PILARCTOS DAM.
Dirca occidentalis	Western leatherwood	51527	Specific area	20010330	None	None	1B.2	JUST NORTH OF PILARCITOS LAKE, STREA
Emys marmorata	Western pond turtle	71659	Specific area	20060213	None	None		LOWER CRYSTAL SPRINGS RESERVOIR, S
Emys marmorata	Western pond turtle	71660	Specific area	20060720	None	None		UPPER CRYSTAL SPRINGS RESERVOIR, NO
Emys marmorata	Western pond turtle	71658	Specific area	20060222	None	None		UPPER CRYSTAL SPRINGS RESERVOIR, W
Emys marmorata	Western pond turtle	71663	80 m	20060823	None	None		UPPER CRYSTAL SPRINGS RESERVOIR, A

SERVOIR BELOW HIGHWAY INTERCHANGE WEST OF CANADA

/OIR; 0.5 MILE NNE OF SAWYER CAMP TRAIL WITH SKYLINE

S MOUNTAIN ROAD, SOUTH OF UPPER CRYSTAL SPRINGS

TWEEN OLD SAN PEDRO ROAD AND MIDDLE FORK SAN CO.

WEST OF PILARCITOS DAM, SOUTH OF SAN FRANCISCO.

LARCITOS DAM, SOUTH OF PILARCITOS LAKE.

UNTAIN SUMMIT, SANTA CRUZ MOUNTAINS.

ON COUNTY RD 14.

E SOUTH OF LINDA MAR SCHOOL IN SAN PEDRO VALLEY TO

CO FISH AND GAME PRESERVE 1 MILE EAST OF NORTH PEAK.

TWEEN OLD SAN PEDRO ROAD AND MIDDLE FORK SAN CO.

VOIR, ON BOTH SIDES OF I-280 NEAR PULGAS RIDGE.

COAST BEACHES

BAY.

۹M.

AM BETWEEN FITFIELD RIDGE AND SPRING VALLEY RIDGE.

W OF BLACK MTN.

ORTH OF SKYLINE BLVD. BRIDGE.

EST AND NW OF ADOBE POINT.

BOUT 0.50 MI. NW OF SKYLINE BLVD. BRIDGE.

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Table G.1. California Natural Diversity Database (CNDDB) Records Results

Latin Name	Common Name	EONDX	ACCURACY	SITEDATE	FEDLIST	CALLIST	RPLANTRANK	LOCATION
Emys marmorata	Western pond turtle	80560	80 m	20050801	None	None		ALONG SAN MATEO CREEK, 1.4 KM EAST C LANDS-SFPUC, WEST OF HILLSBOROUGH.
Eriophyllum latilobum	San Mateo woolly sunflower	63073	80 m	20040602	Endangered	Endangered	1B.1	BETWEEN SAWYER RIDGE AND SAN MATE
Falco peregrinus anatum	American peregrine falcon	70079	80 m	20070515	Delisted	Delisted		
Fritillaria liliacea	Fragrant fritillary	6264	1 mile	19310308	None	None	1B.2	SPRING VALLEY, HEAD OF PILARCITOS CF
Fritillaria liliacea	Fragrant fritillary	13989	Specific area	20090225	None	None	1B.2	PULGAS RIDGE, AT THE NORTHEAST END SAN MATEO.
Fritillaria liliacea	Fragrant fritillary	51586	Specific area	19990415	None	None	1B.2	EAST BANK OF LOWER CRYSTAL SPRINGS 280 AND 35.
Geothlypis trichas sinuosa	Saltmarsh common yellowthroat	59824	2/5 mile	19900620	None	None		FRENCHMAN'S CREEK, 1.5 MILES NORTH (
Geothlypis trichas sinuosa	Saltmarsh common yellowthroat	13461	1/5 mile	19900602	None	None		MOUTH OF PILARCITOS CREEK, BETWEEN TREATMENT PLANT.
Geothlypis trichas sinuosa	Saltmarsh common yellowthroat	24803	1/5 mile	1990XXXX	None	None		MARTINS BEACH, AT THE MOUTH OF LOBI
Geothlypis trichas sinuosa	Saltmarsh saltmarsh common yellowthroat	24807	1/5 mile	19900701	None	None		PRINCETON MARSH, W OF PRINCETON AN
Geothlypis trichas sinuosa	Saltmarsh common yellowthroat	24817	1/5 mile	1985XXXX	None	None		UPPER CRYSTAL SPRINGS RESERVOIR, M WATER DEPARTMENT.
Geothlypis trichas sinuosa	Saltmarsh common yellowthroat	24816	1/10 mile	1985XXXX	None	None		SOUTHWEST SIDE OF UPPER CRYSTAL SF
Grindelia hirsutula var. maritima	San Francisco gumplant	16946	1 mile	19850908	None	None	3.2	OCEAN BLUFF, 7.5 MI N OF HALF MOON BA
Hesperevax sparsiflora var. brevifolia	shortShort-leaved evax	72673	Nonspecific area	19700503	None	None	1B.2	WEST SAN MATEO, BLACK MOUNTAIN, SK
Hesperolinon congestum	Marin western flax	8499	Specific area	20010601	Threatened	Threatened	1B.1	SOUTHERN PORTION OF PULGAS RIDGE, 0
Hesperolinon congestum	Marin western flax	70640	Specific area	20010601	Threatened	Threatened	1B.1	EAST SIDE OF LOWER CRYSTAL SPRINGS
Hesperolinon congestum	Marin western flax	9082	80 m	19890517	Threatened	Threatened	1B.1	ROAD BANK AND SERPENTINE OUTCROP
Horkelia cuneata var. sericea	Kellogg's horkelia	64647	1/10 mile	20000425	None	None	1B.1	1.5 AIR MILES EAST OF HALF MOON BAY. V DRAINAGE AND APANILIO CREEK.
Leptosiphon croceus	Coast yellow leptosiphon	46039	Specific area	200404XX	None	None	1B.1	VALLEMAR BLUFF, MOSS BEACH, 50 M NW
Leptosiphon rosaceus	Rose leptosiphon	46064	2/5 mile	193505XX	None	None	1B.1	MOSS BEACH.
Leptosiphon rosaceus	Rose leptosiphon	46065	1/5 mile	195004XX	None	None	1B.1	MONTARA POINT.
Lessingia arachnoidea	Crystal Springs lessingia	1708	1 mile	19261009	None	None	1B.2	HILLSIDE BETWEEN LAKE SAN ANDREAS 8
Lessingia arachnoidea	Crystal Springs lessingia	1674	Nonspecific area	19410906	None	None	1B.2	SAN MATEO CANYON.
Lessingia arachnoidea	Crystal Springs lessingia	1672	Specific area	19940826	None	None	1B.2	PULGAS RIDGE, BOTH SIDES OF SKYLINE
Lessingia arachnoidea	Crystal Springs lessingia	1671	1/5 mile	19601016	None	None	1B.2	0.2 MILE OFF SKYLINE BLVD ALONG RALST
Malacothamnus aboriginum	Indian Valley bush-mallow	63278	1 mile	18790720	None	None	1B.2	SPRING VALLEY.
Malacothamnus arcuatus	Arcuate bush-mallow	55937	Specific area	20040611	None	None	1B.2	SAN MATEO CREEK CANYON AT THE SOU LAKE DAM.
Malacothamnus davidsonii	Davidson's bush-mallow	64316	1 mile	19010713	None	None	1B.2	SPRING VALLEY.
Malacothamnus hallii	Hall's bush-mallow	63283	1 mile	19020720	None	None	1B.2	SPRING VALLEY, VICINITY OF SAN FRANCI
Monolopia gracilens	Woodland woollythreads	80187	1 mile	18930623	None	None	1B.2	PILARCITOS LAKE AND CANYON.
Neotoma fuscipes annectens	San Francisco dusky-footed woodrat	70792	80 m	20070910	None	None		ALBERT CANYON, ALONG HIGHWAY 92, 0.3 OF CRYSTAL SPRINGS RESERVOIR.

OF PILARCITOS 10-008 DAM, SAN FRANCISCO WATERSHED

EO CREEK, SW OF HILLSBOROUGH.

REEK.

OF UPPER CRYSTAL SPRINGS RESERVOIR, SOUTHWESTERN

S RESERVOIR, APPROXIMATELY 0.4 AIRMILE NNW OF HWYS

OF CITY OF HALF MOON BAY.

ELMAR AND FRANCIS BEACHES, IN VICINITY OF SEWAGE

TOS CREEK, APPROX 5 MI S OF HALF MOON BAY.

ND S OF HALF MOON BAY AIRPORT.

IARSH WEST OF ADOBE POINT. MANAGED BY SAN FRANCISCO

PRINGS RESERVOIR, 2 MILES SOUTH OF HWY 32.

AY.

YLINE BLVD.

ON THE EAST SIDE OF CRYSTAL SPRINGS RESERVOIR.

RESERVOIR, 0.5 MILE SSE OF CRYSTAL SPRINGS DAM.

JUST NORTH OF CRYSTAL SPRINGS DAM ON SAN MATEO

WATERSHED DIVIDE BETWEEN FRENCHMANS CREEK

OF END OF JULIANA AVE.

CRYSTAL SPRINGS LAKE.

BLVD JUST NORTH OF JUNCTION WITH HWY 92.

TON ROAD.

TH END OF SAWYER RIDGE, 1.1 AIR MILE ESE OF PILARCITOS

ISCO BAY.

3 MILE EAST OF PILARCITOS CREEK JUNCTION, ~2 MILES WEST

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Table G.1.	California	Natural Div	versity D	Database (CNDDB) Records	Results
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Latin Name	Common Name	EONDX	ACCURACY	SITEDATE	FEDLIST	CALLIST	RPLANTRANK	LOCATION
Northern Coastal Salt Marsh	Northern Coastal Salt Marsh	26269	1/5 mile	19780321	None	None		EAST OF PILLAR POINT NEXT TO PRINCET
Northern Maritime Chaparral	Northern Maritime Chaparral	12757	Specific area	19910716	None	None		WHITING RIDGE AND MONTARA MOUNTAI FRANCISCO WATER DEPARTMENT.
Oncorhynchus mykiss irideus	Steelhead - central California coast DPS	30141	Specific area	19790920	Threatened	None		FRENCHMANS CREEK, NORTH SIDE OF HA
Oncorhynchus mykiss irideus	Steelhead - central California coast DPS	79277	Nonspecific area	20000903	Threatened	None		MILLS CREEK IN BURLEIGH H. MURRAY RA
Oncorhynchus mykiss irideus	Steelhead - central California coast DPS	41534	80 m	19990415	Threatened	None		APANOLIO CREEK, TRIBUTARY TO PILARC HALF MOON BAY.
Pentachaeta bellidiflora	White-rayed pentachaeta	69928	Nonspecific area	1867XXXX	Endangered	Endangered	1B.1	CRYSTAL SPRINGS.
Plagiobothrys chorisianus var. chorisianus	Choris' popcornflower	57049	Specific area	19950527	None	None	1B.2	W OF HWY 1 IN HALF MOON BAY, BETWEE AS NORTH WAVECREST.
Polemonium carneum	Oregon polemonium	73956	2/5 mile	19160422	None	None	2.2	PILARCITOS STONE DAM.
Potentilla hickmanii	Hickman's cinquefoil	19533	2/5 mile	19330506	Endangered	Endangered	1B.1	MOSS BEACH NEAR HALFMOON BAY.
Potentilla hickmanii	Hickman's cinquefoil	35653	Specific area	20080401	Endangered	Endangered	1B.1	DEVILS SLIDE POPULATION; 0.3 TO 0.8 MIL MILE SE OF MARTINI CREEK.
Rana draytonii	California red-legged frog	56076	1/5 mile	20040607	Threatened	None		BETWEEN HIGHWAY 1 AND THE COAST, O
Rana draytonii	California red-legged frog	69656	1/5 mile	20050616	Threatened	None		ADJACENT TO SKYLINE BOULEVARD AND SPRINGS RESERVOIR, WEST OF SAN MAT
Rana draytonii	California red-legged frog	58552	Nonspecific area	20030314	Threatened	None		ALONG LOBITOS CREEK CUTOFF ROAD, 0. OF HALF MOON BAY
Rana draytonii	California red-legged frog	61602	Specific area	20080211	Threatened	None		MUD DAM, ON SAN MATEO CREEK, AND TH
Rana draytonii	California red-legged frog	11954	Nonspecific area	20060712	Threatened	None		ALONG DENNISTON CREEK, UPSTREAM FI
Rana draytonii	California red-legged frog	76481	Specific area	20070129	Threatened	None		SAN MATEO CREEK ARM OF UPPER CRYS AT CRYSTAL SPRINGS RD.
Rana draytonii	California red-legged frog	76027	Specific area	20070315	Threatened	None		UPPER CRYSTAL SPRINGS RESERVOIR, A CANADA RD & OLD CANADA RD.
Rana draytonii	California red-legged frog	76381	Specific area	20080220	Threatened	None		WEST ARM OF PILARCITOS LAKE, ON THE
Rana draytonii	California red-legged frog	76046	Specific area	20070322	Threatened	None		WEST SIDE OF UPPER CRYSTAL SPRINGS
Rana draytonii	California red-legged frog	33319	Specific area	20070919	Threatened	None		ALBERT CANYON CREEK, TRIBUTARY TO F INTERSECTION WITH HIGHWAY 35.
Rana draytonii	California red-legged frog	61604	Specific area	20050728	Threatened	None		SKYLINE QUARRY, WEST OF CRYSTAL SP WEST OF SAN MATEO
Rana draytonii	California red-legged frog	76382	Specific area	20080220	Threatened	None		NE END OF THE WEST ARM OF PILARCITO
Rana draytonii	California red-legged frog	78886	Specific area	20100305	Threatened	None		RV PARK OFF MIRAMONTES PT RD, & GOL CRK, S OF HALF MOON BAY.
Rana draytonii	California red-legged frog	48456	Specific area	20070507	Threatened	None		CRYSTAL SPRINGS DAM, LOWER CRYSTA SAN MATEO.
Rana draytonii	California red-legged frog	70285	Specific area	20061011	Threatened	None		PILARCITOS CREEK, JUST DOWNSTREAM HIGHWAY 1, HALF MOON BAY.
Rana draytonii	California red-legged frog	76053	Specific area	20070302	Threatened	None		WEST SIDE OF LOWER CRYSTAL SPRINGS NEAR BURLINGAME.
Rana draytonii	California red-legged frog	41133	80 m	19990507	Threatened	None		UPPER END OF PRINCETON MARSH, JUST BAY
Rana draytonii	California red-legged frog	76029	80 m	20060825	Threatened	None		WEST SIDE OF UPPER CRYSTAL SPRINGS
Rana draytonii	California red-legged frog	48448	80 m	20020711	Threatened	None		CORINDA LOS TRANCOS CREEK, ABOUT 1

ON.

N IN THE PILARCITOS LAKE DRAINAGE. MANAGED BY SAN

ALF MOON BAY, HALF MOON BAY STATE BEACH.

ANCH STATE PARK.

TOS CREEK, 2.4 MILES SSE OF SCRAPER PEAK, ~3.5 MILE NNE

IN REDONDO BEACH RD. AND MAGNOLIA ST., IN AREA KNOWN

LE EAST OF HWY 1, NORTH OF TOWN OF MONTARA. 0.1 TO 0.5

OFF OF SEYMOUR STREET, HALF MOON BAY

NORTH OF HIGHWAY 92, ON THE EAST SIDE OF CRYSTAL EO.

.5 TO 1.0 MILE WEST OF TUNITAS CREEK ROAD, 6.5 MILES SSE

HE EAST SIDE OF PILARCITOS LAKE.

ROM HIGHWAY 1 AND HALF MOON BAY AIRPORT, EL GRANADA.

TAL SPRINGS RESERVOIR, ABOUT 1 MI WNW OF SKYLINE BLVD

BOUT 0.5 MI S OF ADOBE PT & 1.14 MI NW OF THE JCT OF

WEST AND EAST SIDES.

RESERVOIR, JUST NORTH OF SKYLINE BLVD.

PILARCITOS CREEK, ALONG HIGHWAY 92, 1 MILE WEST OF THE

RINGS RESERVOIR AND NORTH OF SKYLINE BOULEVARD,

S LAKE, ON THE NORTH AND SOUTH SIDES.

F COURSE S OF CREEKSIDE DR, VICINITY OF CANADA VERDE

L SPRINGS RESERVOIR, 1.5 MILES WSW OF THE COLLEGE OF

(WEST) OF THE INTERSECTION OF OAK AVENUE AND

S RESERVOIR, ABOUT 0.75 MI WEST OF HAYNE RD AT I-280

DOWNSTREAM (SOUTH) OF WEST POINT ROAD, HALF MOON

RESERVOIR, JUST NW OF ADOBE PT, NEAR BELMONT.

MILE NORTH OF HIGHWAY 92, NE OF HALF MOON BAY

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Table G.1. California Natural Diversity Database (CNDDB) Records Results

Latin Name	Common Name	EONDX	ACCURACY	SITEDATE	FEDLIST	CALLIST	RPLANTRANK	LOCATION
Rana draytonii	California red-legged frog	68205	80 m	20070111	Threatened	None		FRENCHMANS CREEK, ~0.9 MILE UPSTREA
Rana draytonii	California red-legged frog	76483	80 m	20070130	Threatened	None		WEST SIDE OF UPPER CRYSTAL SPRINGS
Rana draytonii	California red-legged frog	64362	80 m	20081027	Threatened	None		SAN MATEO CREEK, BETWEEN PILARCITO HILLSBOROUGH.
Rana draytonii	California red-legged frog	63554	80 m	20010618	Threatened	None		JUST NORTH OF EL GRANADA
Rana draytonii	California red-legged frog	71138	80 m	20060612	Threatened	None		0.3 MILE NE OF HIGHWAY 1, BETWEEN DER COVE.
Rana draytonii	California red-legged frog	76043	80 m	20060214	Threatened	None		EAST SIDE OF UPPER CRYSTAL SPRINGS HWY 35 & I-280, NEAR SAN MATEO.
Rana draytonii	California red-legged frog	76032	80 m	20060818	Threatened	None		WEST SIDE OF UPPER CRYSTAL SPRINGS SKYLINE BLVD.
Rana draytonii	California red-legged frog	76482	80 m	20070108	Threatened	None		EAST SIDE OF UPPER CRYSTAL SPRINGS & HWY 92.
Rana draytonii	California red-legged frog	42675	Nonspecific area	20110913	Threatened	None		VICINITY OF PILARCITOS CREEK AND SEW
Rana draytonii	California red-legged frog	48717	Nonspecific area	20080221	Threatened	None		STONE DAM RESERVOIR, ON PILARCITOS
Serpentine Bunchgrass	Serpentine Bunchgrass	8498	Specific area	199105XX	None	None		PULGAS RIDGE EAST OF UPPER AND LOW FRANCISCO WATER DEPARTMENT.
Serpentine Bunchgrass	Serpentine Bunchgrass	19535	Nonspecific area	19910805	None	None		EAST OF LOWER CRYSTAL SPRINGS RESE WATER DEPARTMENT.
Silene verecunda ssp. verecunda	San Francisco campion	60254	1 mile	19000317	None	None	1B.2	MONTARA MOUNTAIN. BY GRADE, SOUTH
Taxidea taxus	American badger	56791	3/5 mile	19480501	None	None		VICINITY OF PEAK MTN., SAN MATEO COUL
Thamnophis sirtalis tetrataenia	San Francisco garter snake	27538	1/5 mile	19970717	Endangered	Endangered		
Thamnophis sirtalis tetrataenia	San Francisco garter snake	27531	1 mile	200309XX	Endangered	Endangered		
Thamnophis sirtalis tetrataenia	San Francisco garter snake	27537	1/5 mile	19870505	Endangered	Endangered		
Thamnophis sirtalis tetrataenia	San Francisco garter snake	27525	1/5 mile	19840510	Endangered	Endangered		
Thamnophis sirtalis tetrataenia	San Francisco garter snake	14768	Specific area	20050511	Endangered	Endangered		
Thamnophis sirtalis tetrataenia	San Francisco garter snake	72663	80 m	20080421	Endangered	Endangered		
Thamnophis sirtalis tetrataenia	San Francisco garter snake	54752	80 m	200309XX	Endangered	Endangered		
Thamnophis sirtalis tetrataenia	San Francisco garter snake	27512	1/5 mile	19870518	Endangered	Endangered		
Thamnophis sirtalis tetrataenia	San Francisco garter snake	27497	1/5 mile	200406XX	Endangered	Endangered		
Thamnophis sirtalis tetrataenia	San Francisco garter snake	27539	1/5 mile	197505XX	Endangered	Endangered		
Thamnophis sirtalis tetrataenia	San Francisco garter snake	27540	1/5 mile	19890609	Endangered	Endangered		
Thamnophis sirtalis tetrataenia	San Francisco garter snake	27515	1/5 mile	20050327	Endangered	Endangered		
Thamnophis sirtalis tetrataenia	San Francisco garter snake	14767	Specific area	20060919	Endangered	Endangered		
Thamnophis sirtalis tetrataenia	San Francisco garter snake	27524	1/5 mile	19851009	Endangered	Endangered		
Thamnophis sirtalis tetrataenia	San Francisco garter snake	60243	80 m	20060530	Endangered	Endangered		
Thamnophis sirtalis tetrataenia	San Francisco garter snake	55709	80 m	20040510	Endangered	Endangered		
Thamnophis sirtalis tetrataenia	San Francisco garter snake	27485	1/5 mile	198XXXXX	Endangered	Endangered		
Thamnophis sirtalis tetrataenia	San Francisco garter snake	64439	Specific area	20050511	Endangered	Endangered		
Valley Needlegrass Grassland	Valley Needlegrass Grassland	9155	Specific area	19910729	None	None		ON SAWYER RIDGE FROM NE CORNER OF SPRINGS RESERVOIR.

AM FROM HIGHWAY 1, NORTH OF HALF MOON BAY.

RESERVOIR, 0.40 MI SW OF CRYSTAL SPRINGS DAM.

S LAKE AND LOWER CRYSTAL SPRINGS RESERVOIR, WEST OF

NNISTON CREEK AND SAN VICENTE CREEK, EAST OF SEAL

RESERVOIR, JUST NORTH OF STATE HWY 92 AND BETWEEN

RESERVOIR, ABOUT 1 MI NW OF ADOBE PT AND JUST SE OF

RESERVOIR, 0.34 MI NW OF THE JUNCTION OF SKYLINE BLVD

AGE DISPSAL FACILITY, WEST OF HWY 1, HALF MOON BAY.

CREEK, ~4 MILES NE OF EL GRANADA.

/ER CRYSTAL SPRINGS RESERVOIR. MANAGED BY SAN

ERVOIR ON BURI BURI RIDGE. MANAGED BY SAN FRANCISCO

SLOPE NEAR TOP.

NTY.

SECTION 20 DOWN TO THE PENINSULA OF LOWER CRYSTAL

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USFWS RECORDS RESULTS

See the following nine pages.

U.S. Fish & Wildlife Service Sacramento Fish & Wildlife Office

Federal Endangered and Threatened Species that Occur in or may be Affected by Projects in the Counties and/or U.S.G.S. 7 1/2 Minute Quads you requested

Document Number: 130612034332 Database Last Updated: September 18, 2011

Quad Lists

Listed Species

Invertebrates Euphydryas editha bayensis bay checkerspot butterfly (T) Critical habitat, bay checkerspot butterfly (X) Haliotes cracherodii black abalone (E) (NMFS) Haliotes sorenseni white abalone (E) (NMFS) Icaricia icarioides missionensis mission blue butterfly (E) Speyeria zerene myrtleae Myrtle's silverspot butterfly (E) Fish Acipenser medirostris green sturgeon (T) (NMFS) Eucyclogobius newberryi critical habitat, tidewater goby (X) tidewater goby (E) Hypomesus transpacificus delta smelt (T) Oncorhynchus kisutch coho salmon - central CA coast (E) (NMFS) Critical habitat, coho salmon - central CA coast (X) (NMFS) Oncorhynchus mykiss Central California Coastal steelhead (T) (NMFS) Central Valley steelhead (T) (NMFS) Critical habitat, Central California coastal steelhead (X) (NMFS) Oncorhynchus tshawytscha Central Valley spring-run chinook salmon (T) (NMFS) winter-run chinook salmon, Sacramento River (E) (NMFS) Amphibians Ambystoma californiense California tiger salamander, central population (T) Rana dravtonii California red-legged frog (T) Critical habitat, California red-legged frog (X) Reptiles Caretta caretta loggerhead turtle (T) (NMFS) Chelonia mydas (incl. agassizi)

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green turtle (T) (NMFS) Dermochelys coriacea leatherback turtle (E) (NMFS) Lepidochelys olivacea olive (=Pacific) ridley sea turtle (T) (NMFS) Thamnophis sirtalis tetrataenia San Francisco garter snake (E) Birds Brachyramphus marmoratus Critical habitat, marbled murrelet (X) marbled murrelet (T) Charadrius alexandrinus nivosus Critical habitat, western snowy plover (X) western snowy plover (T) Diomedea albatrus short-tailed albatross (E) Pelecanus occidentalis californicus California brown pelican (E) Rallus longirostris obsoletus California clapper rail (E) Sternula antillarum (=Sterna, =albifrons) browni California least tern (E) Mammals Arctocephalus townsendi Guadalupe fur seal (T) (NMFS) Balaenoptera borealis sei whale (E) (NMFS) Balaenoptera musculus blue whale (E) (NMFS) Balaenoptera physalus finback (=fin) whale (E) (NMFS) Enhydra lutris nereis southern sea otter (T) Eubalaena (=Balaena) glacialis right whale (E) (NMFS) Eumetopias jubatus Steller (=northern) sea-lion (T) (NMFS) Physeter catodon (=macrocephalus) sperm whale (E) (NMFS) Reithrodontomys raviventris salt marsh harvest mouse (E) Plants Acanthomintha duttonii San Mateo thornmint (E) Cirsium fontinale var. fontinale fountain thistle (E) Eriophyllum latilobum San Mateo woolly sunflower (E) Hesperolinon congestum Marin dwarf-flax (=western flax) (T) Pentachaeta bellidiflora white-rayed pentachaeta (E) Potentilla hickmanii

A-2-HMB-14-0004 Exhibit 2 Page 249 of 523 Hickman's potentilla (=cinquefoil) (E)

Quads Containing Listed, Proposed or Candidate Species:

WOODSIDE (429A) HALF MOON BAY (429B) SAN GREGORIO (429C) LA HONDA (429D) MONTARA MOUNTAIN (448C) SAN MATEO (448D)

County Lists

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Listed Species
Invertebrates
      Branchinecta lynchi
           vernal pool fairy shrimp (T)
      S
      Euphydryas editha bayensis
            bay checkerspot butterfly (T)
            Critical habitat, bay checkerspot butterfly (X)
      S
      Haliotes cracherodii
           black abalone (E) (NMFS)
      S
      Haliotes sorenseni
           white abalone (E) (NMFS)
      S
      Icaricia icarioides missionensis
            mission blue butterfly (E)
      S
      Lepidurus packardi
           vernal pool tadpole shrimp (E)
      S
      Speyeria callippe callippe
            callippe silverspot butterfly (E)
      S
      Speyeria zerene myrtleae
           Myrtle's silverspot butterfly (E)
      S
Fish
      Acipenser medirostris
            green sturgeon (T) (NMFS)
      S
      Eucyclogobius newberryi
            critical habitat, tidewater goby (X)
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tidewater goby (E)
     S
      Hypomesus transpacificus
           delta smelt (T)
      S
      Oncorhynchus kisutch
           coho salmon - central CA coast (E) (NMFS)
           Critical habitat, coho salmon - central CA coast (X) (NMFS)
     S
      Oncorhynchus mykiss
           Central California Coastal steelhead (T) (NMFS)
           Central Valley steelhead (T) (NMFS)
           Critical habitat, Central California coastal steelhead (X) (NMFS)
     S
     Oncorhynchus tshawytscha
           Central Valley spring-run chinook salmon (T) (NMFS)
           winter-run chinook salmon, Sacramento River (E) (NMFS)
     S
Amphibians
      Ambystoma californiense
           California tiger salamander, central population (T)
      S
      Rana draytonii
           California red-legged frog (T)
           Critical habitat, California red-legged frog (X)
      S
Reptiles
      Caretta caretta
           loggerhead turtle (T) (NMFS)
      S
      Chelonia mydas (incl. agassizi)
           green turtle (T) (NMFS)
      S
      Dermochelys coriacea
           leatherback turtle (E) (NMFS)
     S
     Lepidochelys olivacea
           olive (=Pacific) ridley sea turtle (T) (NMFS)
      S
      Masticophis lateralis euryxanthus
           Alameda whipsnake [=striped racer] (T)
           Critical habitat, Alameda whipsnake (X)
     S
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Thamnophis sirtalis tetrataenia
           San Francisco garter snake (E)
     S
Birds
     Brachyramphus marmoratus
           Critical habitat, marbled murrelet (X)
           marbled murrelet (T)
     S
      Charadrius alexandrinus nivosus
           Critical habitat, western snowy plover (X)
           western snowy plover (T)
     S
     Diomedea albatrus
           short-tailed albatross (E)
     S
     Pelecanus occidentalis californicus
           California brown pelican (E)
     S
      Rallus longirostris obsoletus
           California clapper rail (E)
     S
      Sternula antillarum (=Sterna, =albifrons) browni
           California least tern (E)
     S
Mammals
     Arctocephalus townsendi
           Guadalupe fur seal (T) (NMFS)
     S
      Balaenoptera borealis
           sei whale (E) (NMFS)
     S
     Balaenoptera musculus
           blue whale (E) (NMFS)
     S
     Balaenoptera physalus
           finback (=fin) whale (E) (NMFS)
     S
     Enhydra lutris nereis
           southern sea otter (T)
     S
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358 http://www.fws.gov/sacramento/es_species/lists/es_species_lists.cfm

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Eubalaena (=Balaena) glacialis
           right whale (E) (NMFS)
      S
     Eumetopias jubatus
           Steller (=northern) sea-lion (T) (NMFS)
     S
     Physeter catodon (=macrocephalus)
           sperm whale (E) (NMFS)
     S
     Reithrodontomys raviventris
           salt marsh harvest mouse (E)
     S
Plants
     Acanthomintha duttonii
           San Mateo thornmint (E)
     S
     Arctostaphylos hookeri ssp. ravenii
           Presidio (=Raven's) manzanita (E)
     S
      Chorizanthe robusta var. robusta
           robust spineflower (E)
     S
      Cirsium fontinale var. fontinale
           fountain thistle (E)
     S
      Cupressus abramsiana
           Santa Cruz cypress (E)
     S
     Eriophyllum latilobum
           San Mateo woolly sunflower (E)
     S
     Hesperolinon congestum
           Marin dwarf-flax (=western flax) (T)
     S
     Lasthenia conjugens
           Contra Costa goldfields (E)
     S
     Lavia carnosa
           beach layia (E)
     S
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Lessingia germanorum
San Francisco lessingia (E)
S
Pentachaeta bellidiflora
white-rayed pentachaeta (E)
S
Potentilla hickmanii
Hickman's potentilla (=cinquefoil) (E)
S
S
Suaeda californica
California sea blite (E)
S
Trifolium amoenum
showy Indian clover (E)
S
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Proposed Species
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Plants
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Arctostaphylos Franciscana
Critical Habitat, Franciscan Manzanita (X)
S
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Key:
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- (E) Endangered Listed as being in danger of extinction.
- (T) *Threatened* Listed as likely to become endangered within the foreseeable future.
- (P) *Proposed* Officially proposed in the Federal Register for listing as endangered or threatened.

(NMFS) Species under the Jurisdiction of the <u>National Oceanic & Atmospheric Administration Fisheries Service</u>. Consult with them directly about these species.

Critical Habitat - Area essential to the conservation of a species.

- (PX) Proposed Critical Habitat The species is already listed. Critical habitat is being proposed for it.
- (C) Candidate Candidate to become a proposed species.
- (V) Vacated by a court order. Not currently in effect. Being reviewed by the Service.
- (X) Critical Habitat designated for this species

Important Information About Your Species List

How We Make Species Lists

We store information about endangered and threatened species lists by U.S. Geological Survey $7\frac{1}{2}$ minute quads. The United States is divided into these quads, which are about the size of San Francisco.

The animals on your species list are ones that occur within, **or may be affected by** projects within, the quads covered by the list.

- Fish and other aquatic species appear on your list if they are in the same watershed as your quad or if water use in your quad might affect them.
- Amphibians will be on the list for a quad or county if pesticides applied in that area may be carried to their habitat by air currents.
- Birds are shown regardless of whether they are resident or migratory. Relevant birds on the county list should be considered regardless of whether they appear on a quad Ais2-HMB-14-0004 Exhibit 2

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Plants

Any plants on your list are ones that have actually been observed in the area covered by the list. Plants may exist in an area without ever having been detected there. You can find out what's in the surrounding quads through the California Native Plant Society's online <u>Inventory of Rare and Endangered Plants</u>.

Surveying

Some of the species on your list may not be affected by your project. A trained biologist and/or botanist, familiar with the habitat requirements of the species on your list, should determine whether they or habitats suitable for them may be affected by your project. We recommend that your surveys include any proposed and candidate species on your list. See our <u>Protocol</u> and <u>Recovery Permits</u> pages.

For plant surveys, we recommend using the <u>Guidelines for Conducting and Reporting</u> <u>Botanical Inventories</u>. The results of your surveys should be published in any environmental documents prepared for your project.

Your Responsibilities Under the Endangered Species Act

All animals identified as listed above are fully protected under the Endangered Species Act of 1973, as amended. Section 9 of the Act and its implementing regulations prohibit the take of a federally listed wildlife species. Take is defined by the Act as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect" any such animal.

Take may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or shelter (50 CFR §17.3).

Take incidental to an otherwise lawful activity may be authorized by one of two procedures:

• If a Federal agency is involved with the permitting, funding, or carrying out of a project that may result in take, then that agency must engage in a formal <u>consultation</u> with the Service.

During formal consultation, the Federal agency, the applicant and the Service work together to avoid or minimize the impact on listed species and their habitat. Such consultation would result in a biological opinion by the Service addressing the anticipated effect of the project on listed and proposed species. The opinion may authorize a limited level of incidental take.

• If no Federal agency is involved with the project, and federally listed species may be taken as part of the project, then you, the applicant, should apply for an incidental take permit. The Service may issue such a permit if you submit a satisfactory conservation plan for the species that would be affected by your project.

Should your survey determine that federally listed or proposed species occur in the area and are likely to be affected by the project, we recommend that you work with this office and the California Department of Fish and Game to develop a plan that minimizes the project's direct and indirect impacts to listed species and compensates for project-related loss of habitat. You should include the plan in any environmental documents you file.

Critical Habitat

When a species is listed as endangered or threatened, areas of habitat considered essential to its conservation may be designated as critical habitat. These areas may require special management considerations or protection. They provide needed space for growth and normal behavior; food, water, air, light, other nutritional or physiological requirements; cover or shelter; and sites for breeding, reproduction, rearing of offspring, germination or seed dispersal.

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A-2-HMB-14-0004 Exhibit 2 Page 255 of 523 Although critical habitat may be designated on private or State lands, activities on these lands are not restricted unless there is Federal involvement in the activities or direct harm to listed wildlife.

If any species has proposed or designated critical habitat within a quad, there will be a separate line for this on the species list. Boundary descriptions of the critical habitat may be found in the Federal Register. The information is also reprinted in the Code of Federal Regulations (50 CFR 17.95). See our <u>Map Room</u> page.

Candidate Species

We recommend that you address impacts to candidate species. We put plants and animals on our candidate list when we have enough scientific information to eventually propose them for listing as threatened or endangered. By considering these species early in your planning process you may be able to avoid the problems that could develop if one of these candidates was listed before the end of your project.

Species of Concern

The Sacramento Fish & Wildlife Office no longer maintains a list of species of concern. However, various other agencies and organizations maintain lists of at-risk species. These lists provide essential information for land management planning and conservation efforts. <u>More info</u>

Wetlands

If your project will impact wetlands, riparian habitat, or other jurisdictional waters as defined by section 404 of the Clean Water Act and/or section 10 of the Rivers and Harbors Act, you will need to obtain a permit from the U.S. Army Corps of Engineers. Impacts to wetland habitats require site specific mitigation and monitoring. For questions regarding wetlands, please contact Mark Littlefield of this office at (916) 414-6520.

Updates

Our database is constantly updated as species are proposed, listed and delisted. If you address proposed and candidate species in your planning, this should not be a problem. However, we recommend that you get an updated list every 90 days. That would be September 10, 2013.

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Attachment A.

Section 1602 Draft Lake and Streambed Alteration Agreement (Notification No. 1600-2012-0173-R3)

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CALIFORNIA DEPARTMENT OF FISH AND GAME BAY DELTA REGION 7329 SILVERADO TRAIL NAPA, CALIFORNIA 94558 (707) 944-5520 WWW.DFG.CA.GOV



STREAMBED ALTERATION AGREEMENT

NOTIFICATION NO. 1600-2012-0173-R3 Several Creeks and named and unnamed ditches and drainages in Half Moon Bay

CITY OF HALF MOON BAY ROUTINE DITCH MAINTENANCE

This Streambed Alteration Agreement (Agreement) is entered into between the California Department of Fish and Game (DFG) and the City of Half Moon Bay (Permittee) as represented by Laura Snideman.

RECITALS

WHEREAS, pursuant to Fish and Game Code (FGC) section 1602, Permittee notified DFG on May 31, 2012 that Permittee intends to complete the project described herein.

WHEREAS, pursuant to FGC section 1603, DFG has determined that the project could substantially adversely affect existing fish or wildlife resources and has included measures in the Agreement necessary to protect those resources.

WHEREAS, Permittee has reviewed the Agreement and accepts its terms and conditions, including the measures to protect fish and wildlife resources.

NOW THEREFORE, Permittee agrees to complete the project in accordance with the Agreement.

PROJECT LOCATION

This Agreement authorizes routine maintenance of various sites that fall under the jurisdiction and responsibility of the Permittee. Work locations (Exhibit A) are located at:

Area A:

- 1. A-1. Frenchmans Creek- East City limit to the Coastside Trail
- 2. A-2. Cabrillo Property Drainage Southeasterly corner of parcel
- 3. A-3. Pilarcitos Creek- East City limit to the Coastside Trail
- 4. A-4. Arroyo Leon Creek- Miramontes Street Bridge
- 5. A-5. Seymour Drainage- Railroad right-of-way (R/W) to the Coastside Trail

Area B:

- 6. B-1. Roosevelt Drainage- Alameda Avenue to Coastside Trail
- 7. B-2. Kehoe Ditch Drainage- Highway 1 to the Coastside Trail
- 8. B-3. Kelly Drainage- South of Kelly Avenue Railroad R/W to the Coastside Trail
- 9. B-4. Miramontes Drainage- Railroad R/W to the Coastside Trail
- 10.B-5. Central Drainage- Railroad Avenue to Coastside Trail
- 11.B-6. Myrtle Street Bubble-up- Railroad Avenue to Coastside Trail
- 12.B-7. Magnolia Drainage- First Avenue to Railroad R/W
- 13.B-8. Seymour Detention Basin- At foot of Seymour Street
- 14.B-9. Seymour Drainage- Highway 1 to Railroad R/W.
- 15.B-10. Redondo Beach Road- both sides Railroad R/W to the Coastside Trail

Area C:

- 16.C-1. Railroad Avenue West Side-Spruce to Poplar Street
- 17.C-2. Poplar Street Both Sides- Railroad Avenue to Coastside Trail
- 18.C-3. Railroad Avenue West Side- Poplar Street to Magnolia Avenue
- 19.C-4. Grove Street South Side- West of First Street to Railroad Avenue
- 20.C-5. Magnolia Street- Highway 1 to First Avenue
- 21.C-6. Wavecrest Road North Side- Along Smith Field
- 22.C-7. Redondo Beach Road Both Sides- Highway 1 to Railroad R/W

PROJECT DESCRIPTION

Permittee will conduct "routine maintenance activities", generally defined as periodic activities necessary to maintain the water transport capacity of streams, channels and flood control channels, and the structural and functioning integrity of existing flood control and sediment detention structures on or affecting streams. Routine maintenance activities includes sediment, silt, trash and debris removal to clear channel obstructions, vegetation management, repair of existing bank protection, and removal of non-native vegetation. Refer to Exhibit B for Authorized Activities under this Agreement and Exhibit C for definitions of other terms used in this Agreement.

Equipment used will vary by maintenance activity and could include back hoe, loader, dump truck, hand mower and weed eater. No heavy equipment will operate in the active (flowing) stream channel.

PROJECT IMPACTS

Existing fish or wildlife resources the routine maintenance activities could substantially adversely affect include:

Existing fish or wildlife resources the project could potentially substantially adversely affect include: California red-legged frog (CRLF), a California Species of Special Concern (CSC) and a species listed as threatened under the Endangered Species Act (ESA); San Francisco garter snake (SFGS), a species listed as endangered under the

ESA and the California Endangered Species Act (CESA); steelhead, a threatened species under the Endangered Species Act (ESA) and a CSC; San Francisco dusky-footed woodrat (SFDW); nesting birds; roosting bats; water quality and wetland and riparian vegetation.

The adverse effects the project could potentially have on the fish or wildlife resources identified above include: potential increase in sediment transport during project activities; increase in turbidity during project activities; direct take of species during project activities; temporary loss or impediment of terrestrial animal species travel routes due to temporary structures; loss of emergent vegetation; and disturbance to wildlife associated with construction noise.

MEASURES TO PROTECT FISH AND WILDLIFE RESOURCES

1. Administrative Measures

Permittee shall meet each administrative requirement described below.

- 1.1 <u>Documentation at Work Sites</u>. Permittee shall make the Agreement, any extensions and amendments to the Agreement, and all related notification materials and California Environmental Quality Act (CEQA) documents, readily available at the work sites at all times. Such materials shall be presented to DFG personnel or personnel from other state, federal, or local agencies, upon request.
- 1.2 <u>Providing Agreement to Persons at Work Sites</u>. Permittee shall provide copies of the Agreement and any extensions and amendments to the Agreement to all persons who will be working on the project at the work site on behalf of Permittee, including but not limited to contractors, subcontractors, inspectors, and monitors.
- 1.3 <u>Notification of Conflicting Provisions</u>. Permittee shall notify DFG if Permittee determines or learns that a provision in the Agreement might conflict with a provision imposed on the project by another local, state, or federal agency. In that event, DFG shall contact Permittee to resolve any conflict.
- 1.4 <u>Work Site Entry and Inspections</u>. Permittee agrees that DFG personnel may enter the work site(s) at any time to inspect routine maintenance activities performed and to verify compliance with this Agreement.
- 1.5 <u>Additional Measures</u>. As a result of any field inspection, DFG may require that additional measures be applied to specific activities to protect sensitive biological resources. Such measures may be

amended into this Agreement with the agreement of both parties, or if an exception to authorized activities is identified, Permittee may be asked to submit separate written notification to DFG pursuant to Measure 1.7.

- 1.6 <u>Authorized Routine Maintenance Activities</u>. Only those activities specifically described in the Project Description shall be conducted under this Agreement.
- 1.7 Exceptions to Authorized Activities. Permittee shall submit separate written notification (Forms FG 2023 and FG 2024) pursuant to Section 1602 of the FGC, together with the required fee prescribed in the DFG Streambed Alteration Agreement fee schedule, and otherwise follow the normal notification process prior to the commencement of work activities in all cases where one or more of the following conditions apply:
 - The proposed work does not meet the criteria established for routine maintenance activities in the Project Description of this Agreement;
 - The nature of the proposed work is substantially modified from the work described in the Project Description of this Agreement;
 - DFG advises Permittee that conditions affecting fish and wildlife resources have substantially changed at a specified work site or that such resources would be adversely affected by the proposed maintenance activity; and/or
 - The proposed work would adversely impact a State of California (State) Species of Special Concern or State or federally listed rare, threatened, endangered or candidate species or its habitat.
- 1.8 <u>Unauthorized Take</u>. This Agreement does not authorize the take of any State or federally listed threatened species, endangered species, CSC, or candidate species. If DFG determines, or Permittee finds that there are such species on the work site, Permittee shall notify DFG, US Fish and Wildlife Service (USFWS), and/or National Oceanic Atmospheric Association, National Marine Fisheries Service (NMFS) as appropriate. Permittee shall immediately cease work until DFG and other applicable agencies deem that the concern over special status species has been resolved. This Agreement does not authorize capture and/or handling of listed species.

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2. Avoidance and Minimization Measures

To avoid or minimize adverse impacts to fish and wildlife resources identified above, Permittee shall implement each measure listed below.

- 2.1 <u>Seasonal Work Period for A-1 through A-5, B-2; B-4; B-5; B-8; B-9; B-10; C-1; C-2; C-3; C-5; C-6; and C-7 Locations</u>. To minimize adverse impacts to fish and wildlife and their habitats, work within these project areas shall be limited to June 15 to October 31. Revegetation is not limited to this work period.
- 2.2 <u>Seasonal Work Period for B-1, B-3, B-6, B-7, C-4.</u> To minimize adverse impacts to fish and wildlife and their habitats, work within these project areas shall be limited to April 15 to October 31. Revegetation is not limited to this work period.
 - 2.2.1 <u>Seasonal Work Period Modification</u>. If CRLF are found to be in the maintenance activity areas, the Seasonal Work Period in Measure 2.1 shall be implemented.
- 2.3 <u>Sensitive Fisheries</u>. Permittee shall obtain written permission from DFG prior to conducting routine maintenance activities in watercourses with sensitive fisheries. The sites with sensitive fisheries include but are not limited to: A-1; A-3; A-4. Weed abatement (limited to abatement above the ordinary high water mark) may be conducted without prior DFG approval as long as it is not in CRLF or SFGS habitat or potential habitat. DFG reserves the right to provide additional provisions to this Agreement if sensitive fisheries are present at a work area.
- 2.4 <u>Weather Forecast</u>. Permittee shall monitor the seventy-two hour forecast from the National Weather Service (<u>http://www.nws.noaa.gov</u>). When there is a forecast of more than 40% chance of rain, or at the onset of unanticipated precipitation, the Permittee shall remove all equipment and shall implement erosion and sediment control measures and all Project activities shall cease.
- 2.5 <u>Dry Out Period</u>. No work will occur during a dry out period of 24 hours after there has been 1/4 inch or more of precipitation.
- 2.6 <u>No Equipment in Channel.</u> No equipment shall be operated in a flowing stream at anytime except as may be necessary to construct a dewatering system or divert water flow around the work site.
- 2.7 <u>DFG-Approved Qualified Biologist(s) and Biological Monitor(s)</u>. Within a minimum of 30 days prior to initiating special-status surveys

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> within the Project area, Permittee shall submit to DFG for approval, the names and resumes of all biologists and biological monitors involved in conducting surveys and/or monitoring work.

A qualified biologist is an individual who shall have a minimum of five years of academic training and professional experience in biological sciences and related resource management activities with a minimum of two years conducting surveys for each species that may be present within the Project area.

A biological monitor is an individual who shall have academic and professional experience in biological sciences and related resource management activities as it pertains to this Project, experience with construction-level biological monitoring, be able to recognize species that may be present within the Project area, and be familiar with the habits and behavior of those species.

- 2.8 <u>Nesting Bird Survey</u>. If covered activities are scheduled during the nesting season of raptors and migratory birds (refer to Measure 2.9), a focused survey for active nests of such birds shall be conducted by the qualified biologist within 15 days prior to the beginning of project-related activities. Surveys shall be conducted in all suitable habitat located at Project work sites, in staging, storage and soil stockpile areas, and along transportation routes. The minimum survey radii surrounding the work area shall be the following: i) 250 feet for passerines; ii) 500 feet for other small raptors such as accipiters; iii) 1,000 feet for larger raptors such as buteos. The bird survey methodology and the results of the survey shall be submitted to the DFG prior to commencement of project activities.
- 2.9 <u>Nesting Season</u>. Nesting seasons shall be defined as followed: i) March 15 to August 30 for smaller bird species such as passerines;
 ii) February 15 to September 15 for raptors.
- 2.10 <u>Active Nests</u>. An active nest is defined as a nest having eggs or chicks present, or a nest that adult birds have staked a territory and are displaying, constructing a nest, or are repairing an old nest. If active nests are found, the Permittee shall consult with the DFG and the USFWS regarding appropriate action to comply with the Migratory Bird Treaty Act of 1918 and the FGC. If a lapse in project-related work of 15 days or longer occurs, another focused survey shall be conducted before project work is reinitiated. If active nests are found, the Permittee shall consult with the DFG and the USFWS prior to resumption of project activities.

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- 2.11 <u>Active Nest Buffers</u>. Active nest sites shall be designated as "Ecologically Sensitive Areas" and protected (while occupied) during project activities with the establishment of a fence barrier surrounding the nest site. The minimum distances of the protective buffers surrounding each identified nest site shall be the following: i) 1000 feet for large raptors such as buteos; ii) 250 feet for small raptors such as accipiters; iii) 250 feet for passerines. A biological monitor or qualified biologist shall monitor the behavior of the birds (adults and young, when present) at the nest site to ensure that they are not disturbed by project-related activities. Nest monitoring shall continue during project-related construction work until the young have fully fledged, are no longer being fed by the parents and have left the nest site, as determined by a biological monitor.
- 2.12 Nesting Habitat Removal or Modification. No trees, shrubs or wetland and marsh habitat shall be disturbed that contain active bird nests until all eggs have hatched, and young have fully fledged (are no longer being fed by the adults, and have completed left the nest site). To avoid potential impact to tree or shrub-nesting birds, any removal, trimming or pruning of trees or shrubs shall be conducted during the time period of September 16 to February 14. At the discretion of DFG, tree removal or modification may be authorized between the period of February 15 and September 15 provided that the qualified biologist has completely surveyed the work area and confirmed the absence of nesting activity. No habitat removal or modification shall occur within the Ecologically Sensitive Area fenced nest zone even if the nest continues to be active beyond the typical nesting season for the species (refer to Measure 2.9), until the young have fully fledged and will no longer be adversely affected by the project.
- 2.13 <u>SFDW Preconstruction Survey.</u> A preconstruction survey for SFDW by a qualified biologist shall be conducted within two weeks prior to project activities. If SFDW houses are present, the DFG shall be notified immediately.
- 2.14 <u>Protection of SFDW.</u> In the event a SFDW nest is found in the project area, the Permittee shall survey the immediate project area and areas expected to be disturbed by project activities as well as a 50-foot buffer around those areas. The locations of any detected nests, sighted individuals or carcasses shall be plotted on a base map or maps. The base map or maps shall consist of an aerial photograph of the project area, predicted disturbed areas and the 50-foot buffer, each of which will be identified on the map or maps. The map or maps will be of such scale as to allow identification of individual nest sites or nest clusters. Map(s) shall be submitted to

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> the DFG. DFG shall submit written avoidance and mitigation measures to the Permittee and those measures shall be considered part of this Agreement.

2.15 <u>Other Surveys</u>. If habitat for rare plants, or other special-status species exists at a given work site and such species are known to exist within reasonable dispersal distance (see definition in Exhibit B) of the work area, a qualified biologist shall conduct a reconnaissance-level survey (if survey is not specified in this Agreement) within 48 hours of the commencement of routine maintenance activities. At work sites where heavy equipment will be used, upland access routes and staging areas should also be surveyed.

If special-status species are found during surveys or construction, work activities shall cease and Permittee shall notify DFG prior to project activities. DFG reserves the right to provide additional measures to this Agreement in the event that special-status species are discovered.

CRLF and/or SFGS Sensitive Sites

The following measures shall be complied with for the sites considered to potentially have habitat or occurrences of CRLF and SFGS: A-1; A-3; A-4; B-2; B-4; B-5; B-8; B-9; B-10; C-1; C-2; C-3; C-5; C-6; C-7 and Seymour Detention Basin.

- 2.16 <u>CRLF Survey</u>. Prior to and within 48 hours of the planned start of project activities, a focused survey for CRLF using agency approved protocol shall be conducted by a qualified biologist to determine if they are in the area. If CRLF are found, the DFG shall be notified immediately to determine the correct course of action and Project Activities shall not commence until after May 30 (with the exception of the Seymour Detention Basin-refer to Measure 2.28) and not begin until approved by the DFG. DFG reserves the right to provide additional measures to this Agreement to protect sensitive species.
- 2.17 <u>Monitors On-Site for CRLF and SFGS.</u> Biological monitor(s) and/or qualified biologists shall be on the project site while routine maintenance activities are being conducted at these sites.
- 2.18 <u>Vegetation Removal by Mowing at CRLF and SFGS Sensitive Sites.</u> For control of weeds and grasses on channel banks and access roads, vegetation shall be cut down to 3 inches by handtools (weedwhacker, etc). Once the ground is visible, a visual survey for SFGS and CRLF shall be conducted. If no sensitive species are

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> found in the area, removal of vegetation may continue by mowing very slowly with a biological monitor walking in front of the mower to observe. If a CRLF and/or SFGS are observed, all activities shall cease and DFG shall be notified immediately. CRLF can be relocated only if a person is permitted by the USFWS and approved by DFG for this specific project to handle CRLF.

- 2.19 <u>Vehicle Restrictions.</u> Any vehicle parked on site for more than 15 minutes shall be inspected by the biological monitor or qualified biologist before it is moved to ensure that CRLF or SFGS have not moved under the vehicle. Any parking areas must be checked in advance by the biological monitor or qualified biologist.
- 2.20 <u>No Stockpiling of Vegetation</u>. Vegetation removed shall be placed directly into a disposal vehicle and removed from the site. Vegetation shall not be piled on the ground unless it is later transferred, piece by piece, under the direct supervision of the biological monitor or qualified biologist.
- 2.21 <u>No Stockpiling of Soil</u>. To protect SFGS burrows, soil shall not be stockpiled on the ground unless it is on a paved surface, or on the area between the road-side drainages and the road in Area C, or an area where there aren't burrows.
- 2.22 <u>CRLF Exclusion for Sediment Removal with Large Equipment.</u> If CRLF are found in routine maintenance activity sites using large equipment to remove sediment, CRLF shall be excluded from the project site. DFG-approved exclusion fencing shall be installed around the sediment removal site, staging areas and any areas where fill may be dumped. After installation of the fence barrier, a biological monitor shall daily inspect the project work area, staging and stockpiling area prior to the commencement of activities. If the biological monitor determines that sensitive species are not within the work area, equipment or materials may be moved onto the work site and project activities may commence under the observation of the biological monitor.
- 2.23 <u>Cease Activities for CRLF</u>. If CRLF enters the work area, all work shall stop until the animal leaves on its own. If a person is permitted by the USFWS and approved by DFG for this specific project to handle CRLF, only they can handle and relocate CRLF.
- 2.24 <u>Stop Work Authority for CRLF.</u> The biological monitor and/or qualified biologist shall have the authority to halt work activities that may affect CRLF adults, tadpoles or egg masses until they can be moved out of harms way.

- 2.25 <u>CRLF and SFGS Sightings.</u> Any sightings and/or injuries to CRLF or SFGS shall be immediately reported to the DFG.
- 2.26 <u>Cease Activities for SFGS.</u> SFGS is protected under FGC Section 5050. Under this statute, take of a fully protected species may not occur except for scientific or recovery purposes. Catch, pursue, capture or attempt to catch, pursue and capture is considered take as defined in Section 86 of the FGC. Because of this, any SFGS encountered in the work area shall not be handled and shall be left alone until it leaves the area on its own. If SFGS are found in the project area, Permittee shall cease project activities and immediately notify the DFG. Activities shall not resume until measures to avoid take of SFGS are adopted.
- 2.27 <u>CRLF Survey of Seymour Detention Basin</u>. Prior to and within 48 hours of the planned start of routine maintenance activities, a focused survey for CRLF using agency approved protocol shall be conducted by a DFG-approved biological monitor to determine if they are in the area. If CRLF are found, the DFG shall be notified immediately to determine the correct course of action and maintenance activities shall not begin until approved by the DFG. DFG may request Permittee to notify the DFG for a separate Agreement pursuant to FGC Section 1602 for this activity.
- 2.28 <u>Seasonal Work Period for Seymour Detention Basin</u>. If CRLF are found in this detention basin and water is present in the basin, sediment removal activities shall be performed from September 1 to October 15. Dredging and de-watering operations shall be approved by DFG prior to commencement of activities.
- 2.29 <u>Vegetation Removal at Seymour Detention Basin.</u> Tule and emergent vegetation shall be removed by hand. Vegetation surrounding the detention basin may be removed as stated in Measure 2.18 if no CRLF are observed.
- 2.30 <u>California Red-Legged Frog Breeding Season Protective Measures If</u> <u>CRLF are found in any project area,</u> work that will be performed during the breeding season for the California red-legged frog (November 1 to May 30), the following conditions shall apply:
 - In work areas containing emergent vegetation (e.g., tules, cattails), vegetation shall be inspected for CRLF eggs masses prior to work.
 A buffer of vegetation at least 10 feet in diameter shall be left around any egg masses found. Permittee shall keep a record of any sites where egg masses are found and shall conduct

A-2-HMB-14-0004 Exhibit 2 Page 267 of 523 vegetation removal at these sites prior to November 1 in subsequent years.

- Staff shall avoid entering the channel to avoid dislodging egg masses. Trimming activities shall be performed from the banks, if possible.
- 2.31 <u>Leave Wildlife Unharmed</u>. If any wildlife is encountered during routine maintenance activities, said wildlife shall be allowed to leave the Project site unharmed.
- 2.32 <u>Designation of Work Area.</u> Prior to project activities, a biological monitor shall clearly mark/flag or erect temporary construction fencing to designate the work area and to delineate the areas that shall be avoided. The biological monitor shall clearly mark/flag all trees within the designated work area that shall be avoided. Flagging and or temporary construction fencing shall be removed immediately after the completion of construction work.
- 2.33 Existing Access Roads. Access to the Project site shall be via existing roads and access ramps. Any other heavy equipment shall be positioned on the existing paved access road located above the top-of-bank.
- 2.34 <u>Vegetation Disturbance</u>. Disturbance or removal of vegetation shall not exceed the minimum necessary to complete operations. Vegetation outside the Project work area shall not be removed or damaged without prior consultation and written approval of a DFG representative.
- 2.35 Trimming of Vegetation. Trimming is defined herein as the removal of vegetation to the extent necessary to allow a specific level of access and for specific types of equipment (excavator) or to restore normal streamflow. There shall be no vegetation removal in excess of what is necessary to allow the level of access needed or to restore normal streamflow. Trees, shrubs and emergent wetland plants may be removed from natural channels if they are below ordinary high water (OHW) and are restricting the capacity of the stream channel and are causing erosion or flooding. Branches and/or limbs overhanging the channel and impacting water flows shall be properly pruned. Only those branches in the lower third of any woody plant and less than three (3) inches in diameter may be trimmed to accommodate maintenance activities. Understory groundcover and vines such as mugwort, blackberry or ferns may be trimmed only as needed to accommodate maintenance activities. No bulldozers, backhoes, or other heavy equipment shall be used to remove tree

branches or trees. No vegetation shall be removed by excavation or cutting off below the soil. All pruned material shall be removed from the area and properly disposed of.

- 2.36 <u>Change of Conditions</u>. If, in the opinion of DFG, conditions arise, or change, in such a manner as to be considered deleterious to the stream or wildlife, operations shall cease until corrective measures approved by DFG are taken.
- 2.37 <u>Injury or Mortality of Special-Status Species.</u> If Permittee or its employees, contractors, or agents injures or kills a special-status species, or finds any such animal injured or dead, all activities in the work area shall immediately cease, and DFG and USFWS shall be notified by telephone within 30 minutes of the discovery. A written report detailing the time, location, and general circumstances under which the dead or injured individual animal was found shall be submitted to DFG and the USFWS no later than five (5) business days following the incident.
- 2.38 Education Session before Commencement of Work. A qualified biologist or biological monitor shall hold an annual training session for staff responsible for performing routine maintenance activities. Staff shall be trained to recognize special-status species and their habitats. Staff shall also be trained to use protective measures to ensure that such species are not adversely impacted by routine maintenance activities. The training program shall be updated at least annually to reflect current special-status species management practices. At least one staff person with up-to-date training in special-status species protective measures shall be present at each work site at all times. Any personnel joining the work crew later shall receive the same training before beginning work. The penalties for noncompliance of conditions in this Agreement shall be relayed to all project personnel.
- 2.39 <u>Limitations on Sediment Removal.</u> Annual sediment removal shall conform to the following limits:
 - Natural channels not to exceed 30 cubic yards, limited to 500 linear feet per stream;

• Engineered earthen channels and drainages- not to exceed 45 cubic yards, limited to 1,000 linear feet per stream. Removal equipment shall be staged on the road or outside bank of the drainage;

A-2-HMB-14-0004 Exhibit 2 Page 269 of 523 Concrete-lined channels – not to exceed 90 cubic yards, limited to 5,000 linear feet per channel;

 Additional sediment removal around bridge footings and in culverts, storm drain outlets, trash racks/trash capture devices, and water diversion inlets – not to exceed 50 cubic yards;

Seymour Sediment Basin. If CRLF are not found, unlimited amount of sediment removal may occur on an as-needed basis. If CRLF are found, Permittee shall consult with DFG to determine the proper technique and amount of sediment to be removed at the proper time. This site shall be surveyed for CRLF each year sediment removal is proposed.

- 2.40 <u>Limitations on Bank Stabilization/Bank Repair</u>. This Agreement does not authorize bank or channel fill, such as placement of imported soils, riprap, etc., with the exception of fill required for in-kind repair or replacement of existing bank stabilization.
- 2.41 Limitations on Vegetation Removal at Sites A-1 through A-5 and B-2 and C-6. The disturbance or removal of vegetation shall not exceed the minimum necessary to prevent potential flooding. Precautions shall be taken to avoid other damage to vegetation by people or equipment. Woody and herbaceous plants, fallen trees, or trunks or limbs lodged in the bed or bank causing flow restriction shall be cut off at the bed or bank invert with small tools and removed with winch and cable or other equipment operated from top of bank. Root structures are not to be disturbed.
 - 2.41.1 <u>Stumps or Large Woody Debris Restrictions</u>. Embedded pieces of large woody debris or stumps that potentially serve as basking sites or that encourage pool formation shall be left in place if it does not obstruct the flow of water and there is adequate flood flow capacity.
 - 2.41.2 <u>Embedded Objects</u>. Objects embedded/anchored in the bank, such as tree stumps, shall not be removed during periods of heavy flow if removal would result in release of sediment into the channel. However, protruding objects that could capture additional debris and result in obstruction of the channel (e.g. the branches and trunk of a downed tree) may be trimmed. If an embedded object must be removed to prevent a debris jam, Best Management Practices (BMPs) (See Measure 2.44) shall be used to prevent release of sediment into the channel, and the bank shall be reseeded, re-vegetated, mulched and/or covered with erosion-control

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fabric following removal.

- 2.41.3 <u>No Tree Removal</u>. No trees over 4 inches diameter at breast height (DBH) may be removed. Exceptions require the prior written approval from DFG. Any trees removed shall be replaced according to Measure 3.1, and exposed/ disturbed areas shall be re-vegetated as described in Measure 3.4.
- 2.42 Limitation of Vegetation Removal at earthen channels (Area B and C) and earthen drainagees along the Coastside Trail (Areas B and C) and sites not listed in Measure 2.41. Hand tools shall be used to weed or trim vegetation to clear the earthen channel or roadside drainage. Mowing shall occur only in areas between the drainage and the road at sites within and near CRLF areas and shall be limited to the area necessary to prevent flooding or trapping sediment. If mowing is needed on the banks opposite of the road, Permittee shall comply with Measure 2.18. Precautions shall be taken to avoid other damage to vegetation by people or equipment.
 - 2.42.1 <u>No Tree Removal</u>. No trees over 4 inches diameter at breast height (DBH) may be removed. Exceptions require the prior written approval from DFG. Any trees removed shall be replaced according to Measure 3.1, and exposed/ disturbed areas shall be re-vegetated as described in Measure 3.4.
- 2.43 <u>Disposal of Invasive Plant Material</u>. Invasive plant material removed during work activities shall be bagged and appropriately incinerated or disposed of in a landfill or permitted composting facility.
- 2.44 <u>Stream Diversion.</u> The work area during sediment removal activities shall be isolated from the creek. To isolate the work area, water tight coffer dams shall be constructed upstream and downstream of the work area and water diverted through a suitably sized pipe, from upstream of the upstream coffer dam and discharged downstream of the downstream coffer dam. Coffer dams shall be constructed of a non-erodible material which does not contain soil or fine sediment. Coffer dams and the stream diversion system shall remain in place and functional throughout the construction period. If, the coffer dams or stream diversion fail, they shall be repaired immediately.
- 2.45 <u>Water Surface Elevation</u>. During dewatering of the creek, the decrease in water surface elevation (WSE) shall be controlled such that WSE does not change at a rate that increases turbidity to the

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creek that could be deleterious to aquatic life and the likelihood of stranding aquatic life up- and downstream of the creek.

- 2.46 <u>Check for Stranded Aquatic Life.</u> The biological monitor shall check daily for stranded aquatic life as the water level in the dewatering area drops. All reasonable efforts shall be made to capture and move all stranded aquatic life observed in the dewatered areas. Capture methods may include fish landing nets, dip nets, buckets and by hand. Captured aquatic life shall be released immediately in the closest body of water adjacent to the work site. This condition does not allow for the take or disturbance of any state or federally listed species.
- 2.47 <u>Nonnative Aquatic Species Removal.</u> Any aquatic nonnative invasive species found shall be disposed of properly and shall not be placed into back into drainage. Permittee shall send a list to DFG of species found and the location they were found after completion of covered activities.
- 2.48 <u>Silt Curtains.</u> The Permittee shall deploy silt curtains or other appropriate silt filtering devices, such as straw bales, around the excavation site to prevent heavily silted water from impacting areas around the site. The silt curtain or silt filtering devices shall be maintained throughout all phases of the excavation and construction activities.
- 2.49 <u>Cease Project for Elevation of Turbidity Levels.</u> Upon DFG determination that turbidity/siltation levels resulting from project related activities constitute a threat to aquatic life, activities associated with the turbidity/siltation shall be halted until effective DFG approved control devices are installed or abatement procedures are initiated. The DFG may take enforcement action if appropriate turbidity and siltation control measures are not deployed.
- 2.50 <u>Spoils</u>. Spoil shall not be placed where it could enter the stream, riparian or wetland areas. Spoil shall not be placed over riparian or wetland vegetation except as specifically noticed to and accepted by DFG.
- 2.51 <u>Staging Areas</u>. Staging areas shall be located at least 30 feet from the top of bank or on the outboard side of levees. Vegetation disturbance shall be limited to the immediate construction footprint and a single access pathway, where feasible.

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- 2.52 <u>Removal of Native Material</u>. Except as explicitly described in this Agreement, the removal of native soils, rock, gravel, vegetation, and vegetative debris from the stream bed or stream banks is prohibited.
- 2.53 <u>Removal of Trash and Debris</u>. Permittee shall remove all raw construction materials and wastes from work sites following the completion of maintenance activities. Food-contaminated wastes generated during work shall be removed on a daily basis to avoid attracting predators to work sites. All temporary fences, barriers, and/or flagging shall be completely removed from work sites and properly disposed of upon completion of maintenance activities. Permittee or its contractors shall not dump any litter or construction debris within the riparian/stream zone.
- 2.54 <u>Erosion Control Best Management Practices (BMPs)</u>. All exposed soils within the work area shall be stabilized immediately following the completion of earthmoving activities to prevent erosion into the stream channel. Erosion control BMPs, such as silt fences, straw hay bales, gravel or rock lined drainages, water check bars, and broadcasted straw shall be used. Erosion control fabrics shall be constructed of biodegradable materials, such as coir or jute, unless otherwise authorized by DFG. Erosion control BMPs shall be monitored during and after each storm event for effectiveness. Modifications, repairs and improvements to erosion control BMPs shall be made as needed to protect water quality. At no time shall silt laden runoff be allowed to enter the stream or directed to where it may enter the stream.
- 2.55 <u>Vehicle/Equipment Maintenance</u>. Any equipment or vehicles driven and/or operated in proximity of the stream shall be maintained in good working order to prevent the release of contaminants that if introduced to water could be deleterious to aquatic life, wildlife, or riparian habitat.
- 2.56 Equipment Storage and Stationary Operation. Staging and storage areas for equipment, materials, fuels, lubricants and solvents shall be located outside of the stream channel and banks. Stationary equipment such as motors, pumps, generators, compressors and welders, located adjacent to the stream, shall be positioned over drip-pans. Any equipment or vehicles driven and/or operated in proximity to the stream must be checked and maintained daily. Vehicles must be moved away from the stream prior to refueling and lubrication.
- 2.57 <u>Storage and Handling of Hazardous Materials</u>. Any hazardous or toxic materials that could be deleterious to aquatic life shall be
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> contained in watertight containers or removed from the project site. Such materials include, but are not limited to, debris soil, silt, bark, rubbish, creosote-treated wood, raw cement/concrete or washings thereof, asphalt, paint or other coating material, and oil or other petroleum products. These materials shall be prevented from contaminating the soil and/or entering the waters of the State. Any such materials, placed within or where they may enter a stream or lake, by Permittee or any party working under contract, or with permission of Permittee, shall be removed immediately. Best Management Practices (BMPs) shall be employed to accomplish these requirements.

2.58 <u>Clean Up Prior to Onset of Wet Weather</u>. Upon completion of construction and prior to the onset of wet weather, all construction material and/or debris, including removed vegetation, shall be removed from the stream channel to an area not subject to inundation.

3. Compensatory Measures

To compensate for adverse impacts to fish and wildlife resources identified above that cannot be avoided or minimized, Permittee shall implement each measure listed below.

- 3.1 <u>Tree Replacement.</u> If trees need to be removed as approved by DFG, trees shall be replaced at the following ratios (replacement trees to removed trees) to mitigate for permanent net loss of canopy cover:
 - Oaks 6:1 ratio
 - For native trees other than oaks 3:1 ratio
 - Non-native trees 2:1 ratio.
- 3.2 Replacement trees shall consist of 5-gallon saplings, stakes, or other suitable nursery stock and shall be native species adapted to the lighting, soil and hydrological conditions at the replanting site. If replanting within the work area is infeasible due to slope steepness or other physical constraints, replacement trees may be planted at an alternate location along the stream corridor. Trees shall be replaced by December 31 of the year impacts occur in a location that is not subject to future maintenance or construction work. Permittee shall contact DFG a minimum of 30 days prior to replanting work for review and written approval of the replanting site.

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- 3.3 <u>Re-vegetation Survivorship</u>. To ensure a successful re-vegetation effort, all plants shall be monitored and maintained as necessary for eight (8) years. The following success criteria shall apply:
 - All plantings shall have a minimum of 80% survival at the end of 8 years.
 - Vegetation cover shall consist of no more than 10% non-native species.
 - If the survival and/or cover requirements are not meeting these goals, Permittee is responsible for replacement planting, additional watering, weeding, invasive exotic eradication, or any other practice, to achieve these requirements. Replacement plants shall be monitored with the same survival and growth requirements for eight years after planting.
- 3.4 <u>Re-vegetation Monitoring</u>. Re-vegetation monitoring shall be conducted annually for a period of eight (8) years to determine whether these goals have been met. If the survival and/or cover requirements are not projected to meet these goals, based on annual monitoring, Permittee is responsible for replacement planting, additional watering, weeding, invasive exotic eradication, or any other practice(s) that would to achieve these requirements. Additional watering, if utilized, shall only occur as necessary for up to two years after initial planting.
- 3.5 <u>Vegetation Replacement.</u> All exposed/disturbed areas and access points draining to the stream zone and left barren of vegetation following maintenance activities shall be re-vegetated with native plants or seeded with a blend of erosion control grass seeds and locally native wildflowers. Non-native grass species shall not exceed 25% of the total seed mix by count, and all nonnative grass seed shall be sterile (i.e. incapable of reproducing). All other areas of disturbed soil which drain towards the stream channel shall be seeded with native erosion control grass seeds. Re-vegetation shall be completed immediately (within two weeks) after construction activities cease. Seed shall be covered with broadcast straw, jute netting, coconut fiber blanket or a similar erosion control blanket/mulch. Erosion control blankets with monofilament or woven plastic strands shall not be used.

4. Reporting Measures

Permittee shall meet each reporting requirement described below.

4.1 <u>Notification of Proposed Activities</u>. Permittee shall provide DFG written notification of proposed routine maintenance activities to be performed in the upcoming year by March 15 each year. Notification reports shall describe the project location, general topography, hydrological features, vegetative cover within 50 feet of the work area, length and width of impact area, and a detailed description of proposed modifications to the banks and/or channel. Reports shall be submitted to DFG regardless of whether work is proposed.

DFG shall append annual notification reports of proposed maintenance activities to this Agreement. For streamlined tracking, Permittee shall label annual notification reports according to the following convention: Exhibit C-[year] (e.g. Exhibit C-2013, Exhibit C-2014).

- 4.2 <u>Additional Sites</u>. Permittee may notify DFG of work at additional sites (in addition to the sites as stated in Project Location) if the proposed work fits the definition of routine maintenance, as specified in the Project Description. Work at additional sites may be submitted as described above.
- 4.3 <u>Annual Reports for Completed Projects</u>. On an annual basis, Permittee shall provide DFG written notification of maintenance projects completed. Annual reports shall include the project identification (site name and location), a brief project description, and the appropriate fee from the current DFG Streambed Alteration Agreement Fee Schedule for work completed under this Agreement based upon the number of projects completed in the reporting period. The annual report is due on <u>December 15</u> of each year. A report shall be submitted to DFG regardless of whether work was completed. DFG may terminate this Agreement if reports and fees are not submitted by this deadline.
- 4.4 <u>Bird Survey Methods and Results.</u> Prior to commencement of project activities the Permittee shall submit to DFG a report containing the bird survey methods and results of the survey. Refer to Notification Number 1600-2012-0173-R3 when submitting the report to the DFG.
- 4.5 <u>CRLF Survey Methods and Results.</u> Prior to commencement of project activities the Permittee shall submit to DFG a report containing the CRLF survey methods and results of the survey. Refer to Notification Number 1600-2012-0173-R3 when submitting the report to the DFG.

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- 4.6 <u>Biological Surveys</u>. If other surveys are conducted for compliance with this Agreement, the survey methods and results of the survey shall be submitted to DFG prior to commencement of work. Refer to Notification Number 1600-2012-0173-R3 when submitting the report to the DFG.
- 4.7 <u>List of Nonnative Species.</u> Permittee shall submit to DFG within two weeks of project completion, a list of location and species for any nonnative invasive species found in the Project area.
- 4.8 <u>Notification to the California Natural Diversity Database (CNDDB).</u> If any listed, rare, or special status species are detected during project surveys or on or around the project site during project activities, the Permittee shall submit CNDDB Field Survey Forms to DFG in the manner described at the CNDDB website (<u>http://www.dfg.ca.gov/biogeodata/cnddb/submitting_data_to_cnddb.</u> <u>asp</u>) within 14 working days of the sightings. Copies of such submittals shall also be submitted to the DFG regional office as specified below.

CONTACT INFORMATION

Any communication that Permittee or DFG submits to the other shall be in writing and any communication or documentation shall be delivered to the address below by U.S. mail, fax, or email, or to such other address as Permittee or DFG specifies by written notice to the other.

To Permittee:

Laura Snideman City Manager City of Half Moon Bay 501 Main Street Half Moon Bay, Ca 94019 Work (650)726-8260 Fax (650) 726-8261 Iauras@hmbcity.com

<u>To DFG</u>:

Department of Fish and Game Bay Delta Region 7329 Silverado Trail Napa, California 94558 Attn: Lake and Streambed Alteration Program – Suzanne DeLeon Notification #1600-2012-0173-R3

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> Fax (707) 944-5553 sdeleon@dfg.ca.gov

LIABILITY

Permittee shall be solely liable for any violations of the Agreement, whether committed by Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents or contractors and subcontractors, to complete the project or any activity related to it that the Agreement authorizes.

This Agreement does not constitute DFG's endorsement of, or require Permittee to proceed with the project. The decision to proceed with the project is Permittee's alone.

SUSPENSION AND REVOCATION

DFG may suspend or revoke in its entirety the Agreement if it determines that Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, is not in compliance with the Agreement.

Before DFG suspends or revokes the Agreement, it shall provide Permittee written notice by certified or registered mail that it intends to suspend or revoke. The notice shall state the reason(s) for the proposed suspension or revocation, provide Permittee an opportunity to correct any deficiency before DFG suspends or revokes the Agreement, and include instructions to Permittee, if necessary, including but not limited to a directive to immediately cease the specific activity or activities that caused DFG to issue the notice.

ENFORCEMENT

Nothing in the Agreement precludes DFG from pursuing an enforcement action against Permittee instead of, or in addition to, suspending or revoking the Agreement.

Nothing in the Agreement limits or otherwise affects DFG's enforcement authority or that of its enforcement personnel.

OTHER LEGAL OBLIGATIONS

This Agreement does not relieve Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, from obtaining any other permits or authorizations that might be required under other federal, state, or local laws or regulations before beginning the project or an activity related to it.

This Agreement does not relieve Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, from complying with other applicable statutes in the FGC including, but

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not limited to, FGC sections 2050 et seq. (threatened and endangered species), 3503 (bird nests and eggs), 3503.5 (birds of prey), 5650 (water pollution), 5652 (refuse disposal into water), 5901 (fish passage), 5937 (sufficient water for fish), and 5948 (obstruction of stream).

Nothing in the Agreement authorizes Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, to trespass.

AMENDMENT

DFG may amend the Agreement at any time during its term if DFG determines the amendment is necessary to protect an existing fish or wildlife resource.

Permittee may amend the Agreement at any time during its term, provided the amendment is mutually agreed to in writing by DFG and Permittee. To request an amendment, Permittee shall submit to DFG a completed DFG "Request to Amend Lake or Streambed Alteration" form and include with the completed form payment of the corresponding amendment fee identified in DFG's current fee schedule (see Cal. Code Regs., tit. 14, § 699.5).

TRANSFER AND ASSIGNMENT

This Agreement may not be transferred or assigned to another entity, and any purported transfer or assignment of the Agreement to another entity shall not be valid or effective, unless the transfer or assignment is requested by Permittee in writing, as specified below, and thereafter DFG approves the transfer or assignment in writing.

The transfer or assignment of the Agreement to another entity shall constitute a minor amendment, and therefore to request a transfer or assignment, Permittee shall submit to DFG a completed DFG "Request to Amend Lake or Streambed Alteration" form and include with the completed form payment of the minor amendment fee identified in DFG's current fee schedule (see Cal. Code Regs., tit. 14, § 699.5).

EXTENSIONS

In accordance with FGC section 1605(b), Permittee may request one extension of the Agreement, provided the request is made prior to the expiration of the Agreement's term. To request an extension, Permittee shall submit to DFG a completed DFG "Request to Extend Lake or Streambed Alteration" form and include with the completed form payment of the extension fee identified in DFG's current fee schedule (see Cal. Code Regs., tit. 14, § 699.5). DFG shall process the extension request in accordance with FGC 1605(b) through (e).

If Permittee fails to submit a request to extend the Agreement prior to its expiration, Permittee must submit a new notification and notification fee before beginning or continuing the project the Agreement covers (Fish & G. Code, § 1605, subd. (f)).

EFFECTIVE DATE

The Agreement becomes effective on the date of DFG's signature, which shall be: 1) after Permittee's signature; 2) after DFG complies with all applicable requirements under the California Environmental Quality Act (CEQA); and 3) after payment of the applicable FGC section 711.4 filing fee listed at

http://www.dfg.ca.gov/habcon/ceqa/ceqa_changes.html.

TERM

This Agreement shall expire on **December 31, 2016**, unless it is terminated or extended before then. All provisions in the Agreement shall remain in force throughout its term. Permittee shall remain responsible for implementing any provisions specified herein to protect fish and wildlife resources after the Agreement expires or is terminated, as FGC section 1605(a)(2) requires.

EXHIBITS

The documents listed below are included as exhibits to the Agreement and incorporated herein by reference.

- A. Definition of Terms
- B. Authorized Activities
- C. Annual Notifications of Proposed Work (reserved for future exhibits)

AUTHORITY

If the person signing the Agreement (signatory) is doing so as a representative of Permittee, the signatory hereby acknowledges that he or she is doing so on Permittee's behalf and represents and warrants that he or she has the authority to legally bind Permittee to the provisions herein.

AUTHORIZATION

This Agreement authorizes only the project described herein. If Permittee begins or completes a project different from the project the Agreement authorizes, Permittee may be subject to civil or criminal prosecution for failing to notify DFG in accordance with FGC section 1602.

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CONCURRENCE

The undersigned accepts and agrees to comply with all provisions contained herein.

FOR CITY OF HALF MOON BAY

Laura Snideman Permittee Date

Date

FOR DEPARTMENT OF FISH AND GAME

Craig J. Weightman Acting Environmental Program Manager

Prepared by: Suzanne DeLeon Environmental Scientist

Date Sent: December 22, 2012

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EXHIBIT A DEFINITION OF TERMS

As used herein and for purposes of the Agreement

<u>Best management practices (BMPs):</u> management techniques or activities for stormwater management, pollution prevention and other management objectives. The term BMP is most commonly used in reference to the objectives of the federal Clean Water Act. BMPs may include structural techniques, such as physical stormwater control features, or non-structural techniques, such as public outreach.

<u>Bioengineering:</u> Bioengineering is the combination of biological, mechanical, and ecological concepts to control erosion and stabilize soil through the use of vegetation or a combination of it and construction materials. Both living and nonliving plants can be used. Nonliving plants are used as construction materials, similar to engineered materials. Planted vegetation controls erosion and serves as good wildlife and fisheries habitat in riparian systems.

<u>Channel reach</u>: a section of a stream defined by uniform habitat features, such as a particular type of bed substrate, geomorphologic channel characteristics, and riparian vegetation. In urban environments, reaches may be defined by upstream and downstream barriers, such as bridge footings or weirs.

Concrete-lined channel: flood control channels with concrete sides and bottom.

<u>Debris</u>: non-living vegetative or woody matter, trash, concrete rubble, etc. This definition does not include living vegetation.

<u>Drainage</u>: an open earthen channel modified for drainage or flood control purposes. The modified drainage can flow into an unmodified drainage which has somewhat uniform habitat features and a somewhat defined bank and bed. These drainagees occur mostly from the edge of the urban environment flowing toward the Coastside Trail and ocean. Drainages and ditches are terms that are interchangeable.

Emergency project: is defined in the State Fish and Game Code, section 1600.

<u>Heavy equipment</u>: any equipment used that is larger than a pick-up truck.

<u>Natural channel</u>: a stream or watercourse that has not been modified by human acts such as lining the channel with cement, or creating an artificial channel for drainage or flood control. A natural channel may have in it erosion control structures, culverts or other minor modifications.

<u>Project</u>: a routine maintenance activity performed by Permittee during a given year. Each annual activity shall be construed as one project for fee purposes. A project does not include minor debris removal such as minor tree trimming, removing a shopping cart or a bag of garbage.

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<u>Reasonable dispersal distance</u>: the distance from a particular location, such as a CNDDB occurrence location or a critical habitat location, that a given species would be expected to disperse for mating, breeding, foraging, nesting, and other activities. The reasonable dispersal distance can be determined on a species-by-species level based on current scientific literature. For example, CNDDB occurrences of California redlegged frog in a given creek indicate a high likelihood that this species also occurs downstream within the same creek system because flows provide easy downstream dispersal. As another example, current literature indicates that California tiger salamanders are commonly found in upland habitat within a 1.3-mile radius of breeding ponds.

<u>Special-status species</u>: any species identified as a candidate or sensitive species in local or regional plans, policies or regulations, or by DFG or the U.S. Fish and Wildlife Service. Plants on Lists 1A, 1B, or 2, published by the California Native Plant Society, are also considered special-status species for the purposes of this Agreement.

<u>Structure</u>: storm drain outfalls, culverts, revetments, bank protection, energy dissipaters, grade structures, sediment basins, diversion structures, trash racks, utility line crossings, bridge piers.

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Authorized Activities:

- A. Vegetation Management: Varies with Area
 - A.1.<u>Woody and Herbaceous Vegetation</u>. Parts of woody and herbaceous plants, fallen trees, or trunks and limbs lodged in the bed or bank of the creek may be removed if such vegetation is causing streamflow restriction in the larger creeks such as A-1, A-3 and A-4. Woody vegetation may be removed with a winch and cable. The main body of any heavy equipment used shall be operated from the top of bank. Root structures shall not be disturbed and the debris shall be disposed of at a location where it cannot re-enter State waters.
 - A.2. <u>Removal of Native Trees and Shrubs</u>. Trees and shrubs (dead, dying or live) that are less than four (4) inches diameter at breast height (dbh) may be removed if these trees are located below the Ordinary High Water Mark of the Channel, and are restricting flow capacity and causing erosion or flooding.
 - A.3. <u>Removal of Non-native Trees and Shrubs</u>. Non-native shrubs such as giant reed (*Arundo donax*), Scotch broom (*Genista monspessulana*), French broom (*Cytisus scoparius*) and pampas grass (*Cortaderia selloana*) may be removed in order to maintain channel capacity and improve native riparian habitat. Non-native trees such as *Eucalyptus* spp. and tree-of-heaven (*Ailanthus altissima*) that are less than four (4) inches dbh may also be removed. The root mass of any tree or shrub removed shall be left in place to maintain bank stability.
 - A.4. <u>Weeds and Grasses at CRLF and SFGS Sensitive Sites</u>. For control of weeds and grasses on channel banks and access roads, vegetation shall be cut down to 3 inches by handtools (weedwhacker, etc). If no sensitive species are found in the area, removal of vegetation may continue by mowing very slowly with a biological monitor walking in front of the mower to observe
 - A.5. <u>Tule, Cattail or other Emergent Vegetation</u>. Removal by hand tools in the Seymour Sediment Basin.
 - A.6. <u>Habitat Enhancement</u>. Channel habitat may be enhanced with activities such as planting of native trees and shrubs that are appropriate to the local area and maintenance of the enhancement plantings.
- B. Debris and Sediment Removal
 - B.1 <u>Natural Channels</u>. Not to exceed 30 cubic yards (cy), limited to 500 linear feet per stream per year
 - B.2 <u>Earthen Channels and Drainages.</u> Not to exceed 45 cubic yards, limited to 1,000 linear feet per stream. Removal equipment shall be staged on the road or

outside bank of the drainage.

- B.3 <u>Concrete-lined Channels</u>. Not to exceed 90 cy, limited to 5,000 linear feet per channel.
- B.4 <u>Structures</u>. Sediment removal around bridge footing and in culverts, storm drain outlest, trash racks/trash capture devices, and water diversion inlets-not to exceed 50 cy
- B.5 <u>Seymour Sediment Basin</u>. If CRLF are not found, unlimited amount of sediment removal may occur on an as-needed basis. If CRLF are found, Permittee shall consult with DFG to determine the proper technique and amount of sediment to be removed at the proper time. This site shall be surveyed for CRLF each year sediment removal is proposed.

This RMA shall be amended as a list of sensitive areas is developed.

C. Bank Repair

- C.1 <u>Bioengineering</u>. The primary repair method shall be bioengineering techniques such as turf reinforcement brush walls, etc. If bioengineering (see definition of bioengineering) techniques do not provide a solution to the repair of the eroded banks (because of such as poor soils, percolation of water, limited space or steepness of slopes) other methods may be explored. Riprap would be the last resort in that no other method would be effective.
- C.2 <u>Length of Repair</u>. Repair in natural channels would be limited to 100 feet at each site using the method of least impact to accomplish the repair.
- D. Temporary Water Diversions
 - D.1 Temporary water_diversions associated with other related maintenance activities using structures such as cofferdams not exceeding 3 feet in height or sumps, with or without pumps, provided that all water is discharged into a silt control structure before release and provided that the channel is restored to its original configuration after work is completed.

Exempt Activities

The following routine maintenance activities are not subject to the provisions of the RMA and are not subject to the provisions of Section 1600 of the FGC if performed within the parameters stated below.

a. Trash and debris removal not including silt removal (baby diapers, shopping carts, car bodies, metal, wood, plastic etc).

A-2-HMB-14-0004 Exhibit 2 Page 285 of 523 b. Removal of fallen trees from the flow line of the channel that would cause flooding or serious erosion of the banks.

c. Removal of trash and vegetation from pilings and piers is limited to vegetation that has flowed down the channel and has piled up against the pilings and piers or trapped in front of the culverts that would impede the flow leading to potential flooding upstream.

Note: Materials embedded in the bottom of the channel are subject to the provisions of Section 1600.

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EXHIBIT C ANNUAL NOTIFICATIONS OF COMPLETED WORK

(Reserved for future exhibits)

A-2-HMB-14-0004 Exhibit 2 Page 287 of 523 Attachment B.

Wetland Data Forms

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		WET	LAND DE	TERN	/INAT	ION DA	TA FO	RM – A	ARID	WEST	REGION		
Project/Site:	Cit Pro	vide Drain vject/B-4	nage Mainten	ance	City	/County: <u>H</u> a	alf Moon E	Bay, CA			Sampling Date	e: <u>5/23/13</u>	
Applicant/Owner	:	City of I	Half Moon Bay	/		State: C/	٩				Sampling Point: B-4		
Investigator(s):		Jason Wie	ener				S	ection, T	ownshi	p, Range:			
Landform (hillslo terrace, etc.):	pe,	Marine	Terrace		Loc cor	cal relief (convex, none	oncave,):				Slope	(%): 0-2%	1
Subregion (LLR)	: (2		Lat:			Long	:			Datum:		
Soil Map Unit Na	ame:									NWI CI	assification:		
Are climatic / hyd	drolo	gic condi	tions on the si	te typica	al for this	time of ye	ar? (If no,	explain ii	n Rema	arks.)		Yes 🛛	No 🗌
Are "Normal Circ	ums	stances" p	present?									Yes 🛛	No 🗌
Are the following Vegetation	ı sigı	nificantly of Soil	disturbed? Hydrology		Are the fo Vegeta	ollowing nat	turally pro Soil 🔲	blematic? Hyd	? drology	🗌 (Exp	lain in Remark	s if necess	ary.)
SUMMARY OF I	FIND	INGS (A	ttach site ma	p show	ing sam	pling poin	t location	ns, transe	ects, fe	atures, e	tc.):		
F	lydro	ophytic ve	egetation prese	ent? Ye	es 🗌	No 🖂							
		H	ydric soil pres	ent? Ye	es 🗌	No 🗌							
	٧	Vetland h	ydrology prese	ent? Ye	es 🗌	No 🖂		Is the sa	mpled	area withi	n a wetland?	Yes 🗌	No 🖂
Remarks: F p	eatu erfo	re consis med.	ts of anepher	neral dr	ainage s	wale lackin	ng hydroph	nytic vege	etation o	or hydrolo	gy indicators,	no soil sam	ble

	Tree Stratum (scientific name):	Absolute % Cover	Dominant Species?	Indicator	Dominance Test Workshe	et (DS = Domi	nant Sp	ecies):
1.					# DS that are OBL, FACW,	or FAC:	0	(A)
2.					Total DS across All Strata:		4	(B)
3.					% DS that are OBL, FACW	, or FAC:	0	(A/B)
4.				_	Prevalence Index Worksh	eet:		
	Total Cover:				Total % Cover of:	Multiply by:		
	Sapling/Shrub Stratum:				OBL Species	× 1 =	:	
1.	Baccharis pilularis	10	Y	None	FACW Species	× 2 =	:	
2.				_	FAC Species		:	
3.				_	FACU Species	× 4 =	:	
4.				_	UPL Species	 × 5 =	:	
	Total Cover:	10		_	Column Totals	(A)		(B)
	Herb Stratum:				Previous Index = B/A	۹ =		
1.	Bromus hordeaceus	40	Y	FACU	Hydrophytic Vegetation Ir	idicators:		
2.	Avena fatua	15	Y	None	Dominance tes	st is > 50%.		
3.	<i>Vicia</i> sativa	15	Y	FACU	Morphological	adaptations**		
4.	Medicago polymorpha	5	Ν	FACU	Problematic hy	drophytic vege	tation**	
5.	Rumex crispus	5	N	FAC	Prevalence Inc	lex is <u>< 3</u> .0.		
	Total Cover:	80		_	Hydrophytic vegetation pres	sent? Y	′es 🗌	No 🖂
	Woody Vine Stratum:				Remarks:			
1.					15' Plot taken within center	of drainage sw	ale domi	nated by
2.					non-native grasses and oth	er ruderal spec	les.	
	Total Cover:							
% B Herl	are Ground in % b Stratum: 0 C	Cover of Bio	otic	0	** Indicators of hydric soil a present; give data/explanati	nd wetland hyd ons in Remark	rology m s.	ust be

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SOIL: MATRIX **REDOX FEATURES** Depth (inch) Color (moist) % Color (moist) % Type¹ Loc² Texture Remarks Type: C=Concentration, D=Depletion, RM=Reduced Matrix. ² Location: PL=Pore Lining, RC=Root Channel, M=Matrix. Hydric Soil Indicators (Applicable to all LRRs, unless otherwise noted.): Indicators for Problematic Hydric Soils3: Histosol (A1) Sandy Redox (S5) 1 cm Muck (A9) (LRR C) Histic Epipedon (A2) Stripped Matrix (S6) 2 cm Muck (A10) (LRR B) Black Histic (A3) Loamy Mucky Mineral (F1) Reduced Vertic (F18) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Red Parent Material (TF2) П Stratified Layers (A5) (LRR C) Depleted Matrix (F3) Other (Explain in Remarks) 1 cm Muck (A9) (LRR D) Redox Dark Surface (F6) ³Indicators of hydrophytic vegetation and Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) wetland hydrology must be present. Thick Dark Surface (A12) Restrictive layer if present: Redox Depressions (F8) Sandy Mucky Mineral (S1) Vernal Pools (F9) Type: Depth: Sandy Gleyed Matrix (S4) Hydric soil present? No 🗌 Yes 🗌 Remarks: Soil sample not performed **HYDROLOGY:** Wetland Hydrology Indicators, Primary (1 is sufficient): Surface Water (A1) Salt Crust (B11) High Water Table (A2) Biotic Crust (B12) Saturation (A3) \square Aquatic Invertebrates (B13) Water Marks, NR (B1) Hydrogen Sulfide Odor (C1) Sediment Deposits, NR (B3) Oxidized Rhizospheres along Living Roots (C3) П Drift Deposits, NR (B3) Presence of Reduced Iron (C4) Surface Soil Cracks (B6) Recent Iron Reduction in Plowed Soils (C6) П

Water-stained Leaves (B9) Wetland Hydrology Indicators, Secondary (2+ required):

Inundation Visible on Aerial Imagery (B7)

Water Marks, NR (B1) Sediment Deposits, R (B2)

Drift Deposits, R (B3)

Drainage Patterns (B10)

 \boxtimes

Thin Muck Surface (C7)
Thin Muck Sunace (07)

Crayfish Burrows (C8)

Other (Explain in Remarks)

- Saturation Visible on Aerial Imagery(C9)
- Shallow Aquitard (D3)

Dry-Season Water Ta	ble (C2)				FAC-Neutral Test (D5)						
NR = Non-riverine; R = Riv	rerine										
Surface water present?	Yes		No	\boxtimes	Depth (inches):						
Water table present?	Yes		No		Depth (inches):						
Saturation present?**	Yes		No		Depth (inches):		Wetland hydrology present?	Yes 🗌	No	\boxtimes	
**includes capillary fringe											
Describe recorded data, if	available	(strea	ım ga	uge,	monitoring well, ae	erial photos,	previous inspections):				
Remarks: Feature is an	ephemera	al swa	le red	ceivin	a minimal overland	d flow from a	diacent uplands and drainage from C	City stormwa	ter_		

management infrastructure. Hydrology indicators week and are not indicative of wetland hydrology. No OHWM observed. Exhibit 2

		WET	LAND DE	TERM	MINA	TION D	ATA FO	RM – AF	RID	WEST R	EGION		
Project/Site:	Citv Pro	wide Drai ject/B-5	nage Maintena	ance	C	ity/County:	Half Moon E	Bay, CA		Sa	mpling Date	e: <u>5/23/13</u>	
Applicant/Owner	:	City of I	Half Moon Bay	1		State: 0	CA			Sa	mpling Point	t: B-5A	
Investigator(s):		Jason Wie	ener				S	Section, Tov	wnship	, Range:			
Landform (hillslo terrace, etc.):	pe,	Marine	Terrace			Local relief (convex, non	concave, e):				Slope	(%): 0-2%	1
Subregion (LLR)	: (2		Lat:			Long	:			Datum:		
Soil Map Unit Na	ame:									NWI Clas	sification:		
Are climatic / hyd	drolo	gic condi	tions on the sit	te typic	al for t	his time of y	ear? (If no,	explain in	Rema	rks.)		Yes 🛛	No 🗌
Are "Normal Circ	ums	tances" p	present?									Yes 🛛	No 🗌
Are the following Vegetation	sigr	nificantly o Soil 🔲	disturbed? Hydrology		Are th Veg	e following n etation 🔲	aturally pro	blematic? Hydro	ology	🗌 (Explai	n in Remark	s if necess	ary.)
SUMMARY OF I	FINC	INGS (A	ttach site map	o show	ving s	ampling poi	nt locatior	ns, transec	ts, fea	atures, etc.):		
F	lydro	ophytic ve	egetation prese	ent? Ye	es 🛛	No 🗌							
		Hy	ydric soil prese	ent? Ye	es 🗌	No 🗌							
	V	Vetland h	ydrology prese	ent? Ye	es 🖂	No 🗌		Is the sam	pled a	area within a	a wetland?	Yes 🗌	No 🗌
Remarks: F p	eatu erfoi	re is an is med.	solated depres	sion do	ominat	ed by hydro	ohytic vege	tation with	hydrol	ogic indicat	ors present.	No soil sa	mple

	Tree Stratum (scientific name):	Absolute % Cover	Dominant Species?	Indicator	Dominance To	est Worksheet	(DS = Dom	inant Spe	ecies):
1.					# DS that are 0	OBL, FACW, or	FAC:	1	(A)
2.					Total DS acros	s All Strata:		1	(B)
3.				_	% DS that are	OBL, FACW, or	r FAC:	100	(A/B)
4.					Prevalence In	dex Workshee	t:		
	Total Cover:				Total % Cover	of:	Multiply by	:	
	Sapling/Shrub Stratum:				OBL Species		× 1 :	=	
1.					FACW Species	5	- × 2	=	
2.					FAC Species		- × 3	=	
3.					FACU Species		× 4	=	
4.					UPL Species		- × 5	=	
	Total Cover:				Column Totals		(A)		(B)
	Herb Stratum:				Previou	s Index = B/A =			
1.	Eleocharis macrostachya	95	Y	OBL	Hydrophytic \	egetation Indi	cators:		
2.	Mentha pulegium	5	Ν	OBL	X D	ominance test is	s > 50%.		
3.				_	М	orphological ad	aptations**		
4.					Pi	roblematic hydro	ophytic vege	etation**	
5.					Pi	revalence Index	is <u>< </u> 3.0.		
	Total Cover:	100			Hydrophytic ve	getation preser	nt?	Yes 🛛	No 🗌
	Woody Vine Stratum:				Remarks:				
1.				<u> </u>	5' Plot taken w	ithin center of is	solated depr	essional a	area
2.					surrounded by	non-native gras	ssiano ano r	uderar ve	gelation.
	Total Cover:								
% B Her	are Ground in % o Stratum: 0 C	Cover of Bio	otic	10	** Indicators of present; give d	hydric soil and lata/explanation	wetland hyd is in Remark	drology m (s.	ust be

A-2-HMB-14-0004 Exhibit 2 Page 291 of 523 SOIL: **REDOX FEATURES** MATRIX Depth (inch) Loc² Texture Color (moist) % Color (moist) % Type¹ Remarks Type: C=Concentration, D=Depletion, RM=Reduced Matrix. ² Location: PL=Pore Lining, RC=Root Channel, M=Matrix. Hydric Soil Indicators (Applicable to all LRRs, unless otherwise noted.): Indicators for Problematic Hydric Soils³: Histosol (A1) Sandy Redox (S5) 1 cm Muck (A9) (LRR C) Histic Epipedon (A2) Stripped Matrix (S6) 2 cm Muck (A10) (LRR B) Black Histic (A3) Loamy Mucky Mineral (F1) Reduced Vertic (F18) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Red Parent Material (TF2) Stratified Layers (A5) (LRR C) П Depleted Matrix (F3) Other (Explain in Remarks) 1 cm Muck (A9) (LRR D) Redox Dark Surface (F6) ³Indicators of hydrophytic vegetation and wetland hydrology must be present. Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Thick Dark Surface (A12) Restrictive layer if present: Redox Depressions (F8) Sandy Mucky Mineral (S1) Vernal Pools (F9) Type: Sandy Gleyed Matrix (S4) Hydric soil present? Yes 🗌 No 🗌 Depth: Soil sample not performed. Remarks: **HYDROLOGY:** Wetland Hydrology Indicators, Primary (1 is sufficient):

	, ,,	·	, (/	
	Surface Water (A1)						Salt Crust (B11)
	High Water Table (A2)					\boxtimes	Biotic Crust (B12)
	Saturation (A3)						Aquatic Invertebrates (B13)
	Water Marks, NR (B1)						Hydrogen Sulfide Odor (C1)
	Sediment Deposits, NR	(B3)					Oxidized Rhizospheres along Living Roots (C3)
	Drift Deposits, NR (B3)						Presence of Reduced Iron (C4)
\bowtie	Surface Soil Cracks (B6))					Recent Iron Reduction in Plowed Soils (C6)
	Inundation Visible on Ae	rial Ima	agery	(B7)			Other (Explain in Remarks)
	Water-stained Leaves (E	39)					
Wet	tland Hydrology Indicators	, Seco	ndary	(2+ r	equir	red):	
	Water Marks, NR (B1)						Thin Muck Surface (C7)
	Sediment Deposits, R (E	32)					Crayfish Burrows (C8)
	Drift Deposits, R (B3)						Saturation Visible on Aerial Imagery(C9)
\bowtie	Drainage Patterns (B10)						Shallow Aquitard (D3)
	Dry-Season Water Table	e (C2)				\boxtimes	FAC-Neutral Test (D5)
NR	= Non-riverine; R = Riveri	ne					
Sur	face water present?	Yes		No		Depth (inches)	
Wat	tor table procent?	Voc		No		Dopth (inches)	
vvai		165		INU N			
Sati	uration present?^^	Yes		NO		Depth (inches)	: Wetland hydrology present? Yes 🖾 No 🗋
^^in	cludes capillary fringe						
Des	scribe recorded data, if ava	ailable	(strea	ım ga	uge,	monitoring well,	aerial photos, previous inspections):
Ren	narks: Feature is an iso	lated d	epres	sion.	Biot	ic crust consistir	g of algal/microbial mat present throughout feature. Soils with significant
	cracking demons	strating	high	shrii	nk sv	vell.	Exhibit 2
1							

	WET	LAND DETE	RMINAT	ION DA	TA FOR	M – ARID	WEST REGION		
Project/Site:	Citwide Drai Project/B-5	nage Maintenance	e City	//County: <u>H</u>	alf Moon Ba	y, CA	Sampling Date	ə: <u>5/23/13</u>	
Applicant/Owner	: City of	Half Moon Bay		State: C	A		Sampling Poin	t: B-5B	
Investigator(s):	Jason Wi	ener			Sec	tion, Townshi	p, Range:		
Landform (hillslo terrace, etc.):	pe, Marine	Terrace	Lo co	cal relief (c nvex, none	oncave,):		Slope	(%): 0-2%	, ວ
Subregion (LLR)	: <u>C</u>	L	_at:		Long:		Datum:		
Soil Map Unit Na	ıme:						NWI Classification:		
Are climatic / hyc	- Irologic cond	itions on the site ty	pical for this	s time of ye	ar? (If no, e	plain in Rema	arks.)	Yes 🛛	No 🗌
Are "Normal Circ	umstances"	present?						Yes 🛛	No 🗌
Are the following Vegetation	significantly Soil	disturbed? Hydrology	Are the f Vegeta	ollowing na ation 🔲	turally probl	ematic? Hydrology	(Explain in Remark	s if necess	ary.)
SUMMARY OF F	INDINGS (A	ttach site map sł	howing sam	pling poin	t locations,	transects, fe	atures, etc.):		
н	lydrophytic ve	egetation present?	Yes 🗌	No 🖂					
	н	ydric soil present?	Yes 🗌	No 🗌					
	Wetland h	vdrology present?	Yes 🗌	No 🖂	le	the sampled	area within a wetland?	Yes 🗌	No 🖂
Remarks: F	eature consis	sts of an ephemera	al drainage s	swale lackir	ng hydrophy	ic vegetation of	or hydrology indicators,	no soil sam	ple

	Tree Stratum (scientific name):	Absolute % Cover	Dominant Species?	Indicator	Dominance Test Workshee	∍t (DS = Don	ninant Spe	ecies):
1.					# DS that are OBL, FACW, o	or FAC:	0	(A)
2.					Total DS across All Strata:		2	(B)
3.					% DS that are OBL, FACW,	or FAC:	0	(A/B)
4.					Prevalence Index Workshe	et:		
	Total Cover:				Total % Cover of:	Multiply b	y:	
	Sapling/Shrub Stratum:				OBL Species	× 1	=	
1.					FACW Species	× 2	: =	
2.					FAC Species	× 3	i =	
3.					FACU Species	× 4	· =	
4.					UPL Species	× 5) =	
	Total Cover:			_	Column Totals	(A)	((B)
	Herb Stratum:			_	Previous Index = B/A	.=		
1.	Bromus hordeaceus	40	Y	FACU	Hydrophytic Vegetation In	dicators:		
2.	Helminthotheca (Picris) echioides	40	Y	FACU	Dominance test	: is > 50%.		
3.	Rumex crispus	15	Ν	FACW	Morphological a	adaptations**	r	
4.	Medicago polymorpha	5	N	FACU	Problematic hyd	drophytic veg	jetation**	
5.					Prevalence Inde	ex is <u>< </u> 3.0.		
	Total Cover:	100			Hydrophytic vegetation pres	ent?	Yes 🗌	No 🖂
	Woody Vine Stratum:				Remarks:			
1. 2.				<u>.</u>	15' Plot taken within center of non-native grasses and othe	of drainage s r ruderal spe	wale domir ecies.	nated by
	Total Cover:				1			
% B Her	bare Ground in % b Stratum: 0 C	Cover of Bio	otic	0	** Indicators of hydric soil ar present; give data/explanation	nd wetland hy	/drology mi rks.	ust be

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SOIL: MATRIX REDOX FEATURES Depth (inch) Color (moist) % Color (moist) % Type¹ Loc² Texture Remarks Type: C=Concentration, D=Depletion, RM=Reduced Matrix. ² Location: PL=Pore Lining, RC=Root Channel, M=Matrix. Hydric Soil Indicators (Applicable to all LRRs, unless otherwise noted.): Indicators for Problematic Hydric Soils3: Sandy Redox (S5) Histosol (A1) 1 cm Muck (A9) (LRR C) Histic Epipedon (A2) Stripped Matrix (S6) 2 cm Muck (A10) (LRR B) Black Histic (A3) Loamy Mucky Mineral (F1) Reduced Vertic (F18) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Red Parent Material (TF2) П Stratified Layers (A5) (LRR C) Depleted Matrix (F3) Other (Explain in Remarks) 1 cm Muck (A9) (LRR D) Redox Dark Surface (F6) ³Indicators of hydrophytic vegetation and Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) wetland hydrology must be present. Thick Dark Surface (A12) Restrictive layer if present: Redox Depressions (F8) Sandy Mucky Mineral (S1) Vernal Pools (F9) Type: Sandy Gleyed Matrix (S4) Hydric soil present? No 🗌 Depth: Yes 🗌 Remarks: Soil sample not performed **HYDROLOGY:** Wetland Hydrology Indicators, Primary (1 is sufficient): Surface Water (A1) Salt Crust (B11) High Water Table (A2) Biotic Crust (B12) Saturation (A3) Aquatic Invertebrates (B13) Water Marks, NR (B1) Hydrogen Sulfide Odor (C1) Sediment Deposits, NR (B3) Oxidized Rhizospheres along Living Roots (C3) Drift Deposits, NR (B3) Presence of Reduced Iron (C4) Surface Soil Cracks (B6) Recent Iron Reduction in Plowed Soils (C6)

	Inundation Visible on Aerial	Imagery	/ (B7)			Oth	ier (Explain in Remarks)			
	Water-stained Leaves (B9)									
Wet	land Hydrology Indicators, Se	condary	y (2+ i	requir	ed):					
	Water Marks, NR (B1)					Thi	n Muck Surface (C7)			
	Sediment Deposits, R (B2)					Cra	ayfish Burrows (C8)			
	Drift Deposits, R (B3)					Sat	turation Visible on Aerial Imagery(C9)			
\boxtimes	Drainage Patterns (B10)					Sha	allow Aquitard (D3)			
	Dry-Season Water Table (C	2)				FA	C-Neutral Test (D5)			
NR	= Non-riverine; R = Riverine									
Surf	ace water present? Ye	s 🗆	No	\boxtimes	Depth (inches):				
Wat	er table present? Ye	s 🗌	No		Depth (inches):				
Satu	uration present?** Ye	s 🗆	No		Depth (inches):	Wetland hydrology present?	Yes 🗌	No	\boxtimes
**ind	cludes capillary fringe									
Des	cribe recorded data, if availal	ole (stre	am ga	uge,	monitoring well,	aeri	al photos, previous inspections):			
Ren	narks: Feature is an ephen management infrast	ieral swa ructure.	ale re Hydr	ceivin ology	g minimal overla indicators week	and f	flow from adjacent uplands and drainage from Cit d are not indicative of wetland hydrology. No OH	ty stormwa WM obser	ter Ved04	1
								Exr	nbit 2	2

		WET	LAND DE	TERM	INATION	DATA F	ORN	/I – ARID	WEST F	REGION		
Project/Site:	Citv Pro	wide Drain bject/B-6	nage Maintena	ance	City/Cour	nty: <u>Half Moor</u>	n Bay	, CA	Sa	ampling Date	: 5/23/13	
Applicant/Owner	:	City of I	Half Moon Bay	1	Sta	te: CA			Sa	mpling Point	t: B-6A	
Investigator(s):		Jason Wie	ener				Sect	ion, Townshi	p, Range:			
Landform (hillslo terrace, etc.):	pe,	Marine	Terrace		Local re convex,	lief (concave, none):	,			Slope	(%): 0-2%	0
Subregion (LLR)	: (C		Lat:		Lor	ng:			Datum:		
Soil Map Unit Na	ame:								NWI Clas	sification:		
Are climatic / hyd	drolo	gic condi	tions on the sit	e typica	for this time	of year? (If n	io, exj	plain in Rema	arks.)		Yes 🛛	No 🗌
Are "Normal Circ	ums	stances" p	present?								Yes 🛛	No 🗌
Are the following Vegetation	sigr	nificantly o Soil 🔲	disturbed? Hydrology	A	re the followin	ng naturally p Soil [oroble	matic? Hydrology	🗌 (Expla	in in Remark	s if necess	ary.)
SUMMARY OF I	FINC	DINGS (A	ttach site ma	o showi	ng sampling	point locati	ons,	transects, fe	atures, etc	.):		
F	lydro	ophytic ve	egetation prese	ent? Yes	s 🖂 No							
		Hy	ydric soil prese	ent? Yes	s 🗌 No							
	۷	Vetland h	ydrology prese	ent? Yes	No		ls	the sampled	area within	a wetland?	Yes 🗌	No 🗌
Remarks: F o	eatu bser	re consis	ts of an interm e feature. No s	ittent dra soil sam	ainage ditch. ble performed	Hydrophytic J.	vege	tation is pres	ent in portio	ons of the fea	ture. An Ol	HWM was

	Tree Stratum (scientific name):	Absolute % Cover	Dominant Species?	Indicator	Dominance Test	Worksheet (DS = Dom	inant Spe	cies):
1.					# DS that are OBL	, FACW, or FAC:	3	(A)
2.					Total DS across A	ll Strata:	3	(B)
3.					% DS that are OB	_, FACW, or FAC:	100	(A/B)
4.					Prevalence Index	Worksheet:		
	Total Cover:				Total % Cover of:	Multiply by	:	
	Sapling/Shrub Stratum:				OBL Species	× 1 :	=	
1.					FACW Species	× 2 :	=	
2.					FAC Species	× 3 :	=	
3.					FACU Species	× 4 :	=	
4.					UPL Species	× 5 :	=	
	Total Cover:				Column Totals	(A)	(B)
	Herb Stratum:				Previous In	dex = B/A =		
1.	Typha latifolia	50	Y	OBL	Hydrophytic Vege	etation Indicators:		
2.	Eleocharis macrostachya	20	Y	OBL	X Domi	nance test is > 50%.		
3.	Cyperus eragrostis	20	Y	FACW	Morph	nological adaptations**		
4.	Raphanus sativus	5	Ν	None	Proble	ematic hydrophytic vege	etation**	
5.	Rumex crispus	5	Ν	FAC	Preva	lence Index is <u>< 3</u> .0.		
	Total Cover:	100			Hydrophytic veget	ation present?	Yes 🛛	No 🗌
	Woody Vine Stratum:				Remarks:			
1.					5' Plot taken withir	center of drainage ditc	h.	
2.								
	Total Cover:							
% B Her	Bare Ground in % b Stratum: 0 C	Cover of Bio	otic	0	** Indicators of hyd present; give data/	tric soil and wetland hyd explanations in Remark	irology mເ ເຣ.	ust be

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SOIL: MATRIX REDOX FEATURES Depth (inch) Color (moist) % Color (moist) % Type¹ Loc² Texture Remarks Type: C=Concentration, D=Depletion, RM=Reduced Matrix. ² Location: PL=Pore Lining, RC=Root Channel, M=Matrix. Hydric Soil Indicators (Applicable to all LRRs, unless otherwise noted.): Indicators for Problematic Hydric Soils3: Sandy Redox (S5) Histosol (A1) 1 cm Muck (A9) (LRR C) Histic Epipedon (A2) Stripped Matrix (S6) 2 cm Muck (A10) (LRR B) Black Histic (A3) Loamy Mucky Mineral (F1) Reduced Vertic (F18) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Red Parent Material (TF2) П Stratified Layers (A5) (LRR C) Depleted Matrix (F3) П Other (Explain in Remarks) 1 cm Muck (A9) (LRR D) Redox Dark Surface (F6) ³Indicators of hydrophytic vegetation and Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) wetland hydrology must be present. Thick Dark Surface (A12) Restrictive layer if present: Redox Depressions (F8) Sandy Mucky Mineral (S1) Vernal Pools (F9) Type: Sandy Gleyed Matrix (S4) Hydric soil present? No 🗌 Depth: Yes 🗌 Remarks: Soil sample not performed **HYDROLOGY:** Wetland Hydrology Indicators, Primary (1 is sufficient): Surface Water (A1) Salt Crust (B11) High Water Table (A2) Biotic Crust (B12) Saturation (A3) Aquatic Invertebrates (B13) Water Marks, NR (B1) Hydrogen Sulfide Odor (C1) Sediment Deposits, NR (B3) Oxidized Rhizospheres along Living Roots (C3) Drift Deposits, NR (B3) Presence of Reduced Iron (C4) Surface Soil Cracks (B6) Recent Iron Reduction in Plowed Soils (C6) П

	Inundation Visible on Aerial In	nagery	(B7)			0	Other (Explain in Remarks)			
	Water-stained Leaves (B9)									
Wet	land Hydrology Indicators, Sec	ondary	/ (2+ I	equir	red):					
	Water Marks, NR (B1)					TI	Thin Muck Surface (C7)			
	Sediment Deposits, R (B2)					С	Crayfish Burrows (C8)			
\boxtimes	Drift Deposits, R (B3)					S	Saturation Visible on Aerial Imagery(C9)			
\boxtimes	Drainage Patterns (B10)					S	Shallow Aquitard (D3)			
	Dry-Season Water Table (C2)				\boxtimes	F	FAC-Neutral Test (D5)			
NR	= Non-riverine; R = Riverine									
Sur	ace water present? Yes		No	\boxtimes	Depth (inches	;):				
Wat	er table present? Yes		No		Depth (inches	;):				
Sati	uration present?** Yes		No		Depth (inches	;):	Wetland hydrology present? Yes	\boxtimes	No	
**in	cludes capillary fringe									
Des	cribe recorded data, if available	e (strea	am ga	uge,	monitoring well,	, ae	aerial photos, previous inspections):			
Ren	narks: Feature is an intermitte stormwater managem	ent dra ent infi	ainage rastru	e ditcl cture	n receiving minir . An OHWM wa	ma as c	al overland flow from adjacent uplands and drainage from (observed as well as several indicators of hydrology.	City 14-()004 hit 2	

		WETI		TEF	MINA	ATION DA	TA FO	RM –	ARID	WEST REGION	I		
Project/Site:	Cit Pro	wide Drain oject/B-6	age Maintena	ance		City/County: <u>H</u>	alf Moon E	Bay, CA		Sampling Da	ate: <u>5/23/</u>	13	
Applicant/Owner:	:	City of H	lalf Moon Bay	/		State: C	A			Sampling Po	int: B-6B		
Investigator(s):		Jason Wie	ner				S	Section, 1	Township	o, Range:			
Landform (hillslop terrace, etc.):	pe,	Marine 7	Terrace			Local relief (c convex, none	oncave,			Slop	be (%):	0-2%	
Subregion (LLR):	: (2		La	t:		Long	:		Datum:			
Soil Map Unit Na	me:									NWI Classification:			
Are climatic / hyd	Irolo	gic conditi	ions on the si	te typ	ical for	this time of ye	ar? (If no,	explain	in Rema	irks.)	Yes		No 🗌
Are "Normal Circ	ums	stances" pr	resent?								Yes		No 🗌
Are the following Vegetation	sigi	nificantly d Soil 🔲	listurbed? Hydrology		Are th Veg	e following na etation	turally pro Soil 🔲	blematic Hy	;? drology	(Explain in Rema	arks if neo	cessa	ıry.)
SUMMARY OF F	IND	NGS (At	tach site ma	p sho	wing s	ampling poir	nt locatior	ns, trans	ects, fe	atures, etc.):			
н	lydro	ophytic veç	getation prese	ent?	Yes 🛛	No 🗌							
		Hy	dric soil prese	ent?	Yes 🗌	No 🖂							
	v	Vetland hy	/drology prese	ent?	Yes 🖂	No 🗌		Is the s	ampled	area within a wetland'	? Yes		No 🖂
Remarks: Fe	eatu	re consist	s of a vernal r	marsł	1 adjace	ent to drainage	e ditch.						

	Tree Stratum (scientific name):	Absolute % Cover	Dominant Species?	Indicator	Dominance Test Works	sheet (DS = Do	minant Spe	ecies):
1.					# DS that are OBL, FAC	W, or FAC:	3	(A)
2.					Total DS across All Strat	a:	3	(B)
3.					% DS that are OBL, FAC	W, or FAC:	100	(A/B)
4.					Prevalence Index Work	sheet:		
	Total Cover:			-	Total % Cover of:	Multiply I	by:	
	Sapling/Shrub Stratum:				OBL Species	×	1 =	
1.					FACW Species	×	2 =	
2.					FAC Species	×	3 =	
3.					FACU Species	×	4 =	
4.					UPL Species	×	5 =	
	Total Cover:				Column Totals	(A)		(B)
	Herb Stratum:				Previous Index =	B/A =	<u> </u>	
1.	Sisyrinchium bellum	35	Y	FACW	Hydrophytic Vegetation	n Indicators:		
2.	Juncus phaeocephalus	35	Y	FACW	X Dominance	test is > 50%.		
3.	Carex densa	20	Y	OBL	Morphologic	al adaptations*	*	
4	Mentha pulegium	10	N	OBI	Problematic	hvdrophytic ve	aetation**	
5.					Prevalence	Index is < 3.0 .	gotation	
0.	Total Cover:	100			Hydrophytic vegetation p	present?	Yes 🖂	No 🗌
	Woody Vine Stratum:				Remarks:			
1.	-				15' Plot taken within cen	ter of vernal ma	ırsh adjacer	nt to
2.					drainage ditch.			
	Total Cover:							
% E Her	Bare Ground in % b Stratum: 0 C	Cover of Bio	otic	2	** Indicators of hydric so present; give data/explar	il and wetland h nations in Rema	ydrology m arks.	ust be

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SOIL:													
_	MATRIX				REI	DOX FE	EATURES						
Depth (inch)	Color (moist)	%	Colo	or (mo	oist)	%	Type ¹	Loc ²		Texture		Remarks	
0-6	10YR 2/1	100							(Clay Loam			
6-24	10YR 2/2	100								Clay			
										,	·		
								·			·		
·		<u> </u>									. <u> </u>		
						<u> </u>					·		
								· <u> </u>					
¹ Type: C=Conce	ntration, D=Dep	letion, R	M=Re	duced	d Matri	x. ² Loc	ation: PL=P	ore Lining), RC=R	oot Channel,	M=Matrix.		
Hydric Soil Indica	tors (Applicable	to all LF	≀Rs, u	nless	otherw	ise not	ed.):		In	dicators for P	roblematic	Hydric Soils	S ³ :
Histosol (A1))				Sandy	/ Redox	: (S5)				luck (A9) (Ll	RR C)	
Histic Epiped	don (A2)				Stripp	ed Matr	rix (S6)			□ 2 cm M	luck (A10) (l	LRR B)	
Black Histic	(A3)				Loamy	y Mucky	/ Mineral (F	1)			ed Vertic (F	18)	
Hydrogen Su	ulfide (A4)				Loamy	y Gleye	d Matrix (F2	2)		☐ Red Pa	arent Materia	al (TF2)	
Stratified Lay	yers (A5) (LRR (C)			Deple	ted Mat	rix (F3)			Other (Explain in F	(emarks)	
1 cm Muck (A9) (LRR D)				Redox	C Dark S	Surface (F6)			³ Indicators o	f hydrophyti	ic vegetatio	n and
Depleted Be	low Dark Surfac	e (A11)			Deple	ted Dar	k Surface (F	=7)		wetland hyd	rology must	be present	
Thick Dark S	Surface (A12)				Redox	(Depre	ssions (F8)			Restrictive la	ayer if prese	ent:	
Sandy Muck	y Mineral (S1)				Verna	l Pools	(F9)			Туре:			
Sandy Gleye	ed Matrix (S4)			Hydri	c soil p	present?	? Yes		No 🛛	Depth:			
Remarks: Soil s	sample indicativ	e of sea	sonall	y perc	hed w	ater tab	le above ve	ry poorly	drained	clay soils.			
HYDRC	LOGY:												
Wetland Hydrolog	y Indicators, Pr	imary (1	is suf	ficient	:):								
Surface Wat	er (A1)						Salt Crust	t (B11)					
High Water	Table (A2)					\boxtimes	Biotic Cru	st (B12)					
Saturation (A	43)						Aquatic Ir	vertebrate	es (B13)	1			
Water Marks	s, NR (B1)						Hydrogen	Sulfide C	odor (C1)			
Sediment De	eposits, NR (B3))					Oxidized	Rhizosphe	eres alo	ng Living Roc	ots (C3)		
Drift Deposit	s, NR (B3)						Presence	of Reduc	ed Iron	(C4)			
Surface Soil	Cracks (B6)						Recent Iro	on Reduct	tion in P	lowed Soils (C6)		
Inundation V	isible on Aerial	Imagery	(B7)				Other (Ex	plain in R	emarks)				
Water-staine	ed Leaves (B9)												
Wetland Hydrolog	y Indicators, Se	econdary	(2+ re	equire	ed):								
Water Marks	s, NR (B1)						Thin Mucl	< Surface	(C7)				
Sediment De	eposits, R (B2)						Crayfish E	Burrows (C	C8)				
Drift Deposit	s, R (B3)						Saturatior	n Visible o	n Aerial	Imagery(C9)			
🛛 Drainage Pa	tterns (B10)						Shallow A	quitard (E	03)				
Dry-Season	Water Table (C	2)				\boxtimes	FAC-Neut	tral Test (I	D5)				
NR = Non-riverine	e; R = Riverine												
Surface water pre	sent? Ye	s 🗆	No	\boxtimes	Depth	(inches	s):						
Water table prese	ent? Ye	s П	No	\bowtie	Denth	(inches	s):		_				
Saturation preserve	ıt?** ∨∽		No		Denth	(incher	s).		_ Wotlan	d hydrology r	resent?	Yee 🕅	No 🗖
**includes capillar	rv fringe	J	NU	ĽΝ	Deptil	INCIDES	·/·		- vv clial		5.030mt!		
Describe recorder	data if availab	la (atrac	maa	100 7	nonitor		aorial abo	toe provid		ections):			
Describe recorder	u uala, 11 dvalidl	NG (SUBS	un yal	iye, fi		ing well	, aeriai prio	ios, previt	us insp				
Remarks: Feat	ure is vernal ma	irsh adja	cent to	o drai	nage d	itch. So	oils and hyd	rology ind	licators	clay soils, bio	otic crust) in	dicate seas	sonally
perci	i waler ladie.										A-2-ŀ	HMB-14-(0004
L												Exhi	ibit 2

		WETI	AND DE	TER	RMIN/	ATION DA	TA FOI	RM – ARID	WEST REGION		
Project/Site:	Cit Pro	wide Drair bject/B-7	age Maintena	ance	(City/County: <u>Ha</u>	alf Moon B	ay, CA	Sampling Date	e: <u>5/23/13</u>	
Applicant/Owner:	:	City of ⊢	lalf Moon Bay	/		State: C	A		Sampling Poin	t: B-7A	
Investigator(s):		Jason Wie	ner				S	ection, Townshi	o, Range:		
Landform (hillslop terrace, etc.):	pe,	Marine ⁻	Terrace			Local relief (c convex, none	oncave,):		Slope	(%): 0-2%	þ
Subregion (LLR):	: (0		La	t:		Long:		Datum:		
Soil Map Unit Na	me:								NWI Classification:		
Are climatic / hyd	Irolc	gic condit	ons on the si	te typ	ical for	this time of ye	ar? (If no,	explain in Rema	arks.)	Yes 🛛	No 🗌
Are "Normal Circ	ums	stances" pi	resent?							Yes 🛛	No 🗌
Are the following Vegetation	sigi	nificantly d Soil 🔲	isturbed? Hydrology		Are th Veg	e following na etation	turally prol Soil 🔲	blematic? Hydrology	(Explain in Remark	s if necess	ary.)
SUMMARY OF F	IND	DINGS (At	tach site ma	p sho	wing s	ampling poin	t location	s, transects, fe	atures, etc.):		
н	lydro	ophytic ve	getation prese	ent?	Yes 🛛	No 🗌					
		Ну	dric soil prese	ent?	Yes 🗌	No 🗌					
	٧	Vetland hy	drology prese	ent?	Yes 🖂	No 🗌		Is the sampled	area within a wetland?	Yes 🗌	No 🗌
Remarks: Fe	eatu	ire consist	s of a vernal ı	marsh	n adjace	ent to drainage	e ditch and	detention basin	. No soil sample perform	med.	

	Tree Stratum (scientific name):	Absolute % Cover	Dominant Species?	Indicator	Dominance	Test Worksheet	(DS = Dor	ninant Spe	ecies):	
1.				_	# DS that are	e OBL, FACW, or	FAC:	2	(A)	
2.					Total DS acr	oss All Strata:		2	(B)	
3.					% DS that a	e OBL, FACW, o	r FAC:	100	(A/B)	
4.				_	Prevalence	Index Workshee	t:			
	Total Cover:				Total % Cov	er of:	Multiply b	iply by:		
	Sapling/Shrub Stratum:				OBL Species	3	× 1	=		
1.					FACW Spec	ies	- × 2	! =		
2.					FAC Species	3	- × 3	=		
3.				_	FACU Speci	es	× 4	- =		
4.				_	UPL Species	3	- × 5	=		
	Total Cover:				Column Tota	ls	(A)	((B)	
	Herb Stratum:				Previo	ous Index = B/A =				
1.	Carex densa	45	Y	OBL	Hydrophytic	· Vegetation Indi	cators:			
2.	Eleocharis macrostachya	40	Y	OBL	х	Dominance test is	s > 50%.			
3.	Helminthotheca (Picris) echioides	15	Ν	FACU		Morphological ad	aptations**			
4.				_		Problematic hydr	ophytic veg	etation**		
5.						Prevalence Index	: is <u>< 3</u> .0.			
	Total Cover:	100			Hydrophytic	vegetation preser	nt?	Yes 🛛	No 🗌	
	Woody Vine Stratum:				Remarks:					
1.					15' Plot take	n within center of	vernal mar	sh.		
2.										
	Total Cover:			_						
% B Herl	are Ground in % o Stratum: 0 C	Cover of Bio rust:	otic	5	** Indicators present; give	of hydric soil and data/explanation	wetland hy is in Rema	/drology m rks.	ust be	

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SOIL: MATRIX REDOX FEATURES Depth (inch) Color (moist) % Color (moist) % Type¹ Loc² Texture Remarks Type: C=Concentration, D=Depletion, RM=Reduced Matrix. ² Location: PL=Pore Lining, RC=Root Channel, M=Matrix. Hydric Soil Indicators (Applicable to all LRRs, unless otherwise noted.): Indicators for Problematic Hydric Soils3: Histosol (A1) Sandy Redox (S5) 1 cm Muck (A9) (LRR C) Histic Epipedon (A2) Stripped Matrix (S6) 2 cm Muck (A10) (LRR B) Black Histic (A3) Loamy Mucky Mineral (F1) Reduced Vertic (F18) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Red Parent Material (TF2) П Stratified Layers (A5) (LRR C) Depleted Matrix (F3) Other (Explain in Remarks) 1 cm Muck (A9) (LRR D) Redox Dark Surface (F6) ³Indicators of hydrophytic vegetation and Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) wetland hydrology must be present. Thick Dark Surface (A12) Restrictive layer if present: Redox Depressions (F8) Sandy Mucky Mineral (S1) Vernal Pools (F9) Type: Sandy Gleyed Matrix (S4) Hydric soil present? No 🗌 Depth: Yes 🗌 Remarks: No soil sample performed. **HYDROLOGY:** Wetland Hydrology Indicators, Primary (1 is sufficient): Surface Water (A1) Salt Crust (B11) High Water Table (A2) \boxtimes Biotic Crust (B12) Saturation (A3) Aquatic Invertebrates (B13) Water Marks, NR (B1) Hydrogen Sulfide Odor (C1) Sediment Deposits, NR (B3) Oxidized Rhizospheres along Living Roots (C3) Drift Deposits, NR (B3) Presence of Reduced Iron (C4) Surface Soil Cracks (B6) Recent Iron Reduction in Plowed Soils (C6)

Water-stained Leaves (B9)

Inundation Visible on Aerial Imagery (B7)

wetland Hydrology	Indicators, Secondary	(2+ required):

_		(-)						
Wet	land Hydrology Indicato	ors, Seco	ndary	(2+ r	equir	red):		
	Water Marks, NR (B1))					Thin Muck Surface (C7)	
	Sediment Deposits, R	(B2)					Crayfish Burrows (C8)	
	Drift Deposits, R (B3)						Saturation Visible on Aerial Imagery(C9)	
\boxtimes	Drainage Patterns (B1	0)					Shallow Aquitard (D3)	
	Dry-Season Water Ta	ble (C2)				\boxtimes	FAC-Neutral Test (D5)	
NR	= Non-riverine; R = Riv	erine						
Surf	ace water present?	Yes		No	\boxtimes	Depth (inches)	;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;	
Wat	er table present?	Yes		No	\boxtimes	Depth (inches)	3):	
Satu	uration present?**	Yes		No	\boxtimes	Depth (inches)	s): Wetland hydrology present? Yes 🛛 N	o 🗆
**ind	cludes capillary fringe							
Des	cribe recorded data, if a	available	(strea	ım ga	uge,	monitoring well,	, aerial photos, previous inspections):	
Ren	narks: Feature is verr	nal marsh	ı adja	cent t	o dra	inage ditch and	I detention basin. Soil cracking, vegetation and other hydrology inc	icators
	(biolic crust) li	nuicate s	easor	ially p	Jerch	water table.	Exhibi	it 2

Other (Explain in Remarks)

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		WETI		TEF	MIN	ATION DA	TA FO	RM -	- ARID	WEST REGION	I		
Project/Site:	Cit Pro	vide Drain)ject/B-7	age Maintena	ance		City/County: H	alf Moon E	Bay, C	٩	Sampling D	ate: <u>5/23</u>	/13	
Applicant/Owner:		City of H	lalf Moon Bay	/		State: C	A			Sampling Po	oint: B-7E	3	
Investigator(s):		Jason Wie	ner				S	Section	, Townshi	p, Range:			
Landform (hillslop terrace, etc.):	pe,	Marine 7	Terrace			Local relief (convex, none	concave, e):			Slo	pe (%):	0-2%	
Subregion (LLR):	: (2		La	.t:		Long	:		Datum:			
Soil Map Unit Na	me:									NWI Classification:			
Are climatic / hyd	Irolo	gic conditi	ions on the si	te typ	ical for	this time of ye	ear? (If no,	explai	n in Rema	arks.)	Yes	\boxtimes	No 🗌
Are "Normal Circ	ums	tances" pr	resent?								Yes	\boxtimes	No 🗌
Are the following Vegetation	sigi	nificantly d Soil □	listurbed? Hydrology		Are th Veg	e following na etation	aturally pro	blema I	tic? Hydrology	(Explain in Rem	arks if ne	cessa	ıry.)
SUMMARY OF F	IND	NGS (At	tach site ma	p sho	wing s	ampling poir	nt locatior	ns, trai	nsects, fe	atures, etc.):			
н	ydro	ophytic ve	getation prese	ent?	Yes 🗌	No 🖂							
		Hy	dric soil prese	ent?	Yes 🗌	No 🗌							
	v	Vetland hy	/drology prese	ent?	Yes 🗌	No 🖂		Is the	sampled	area within a wetland	? Yes	30	No 🖂
Remarks: U	plar	d adjacen	t to seasonal	wetla	and area	a at data poin	t B-7A.						

	Tree Stratum (scientific name):	Absolute % Cover	Dominant Species?	Indicator	Dominance Test Worksho	et (DS = Dor	ninant Sp	ecies):
1.					# DS that are OBL, FACW,	or FAC:	0	(A)
2.					Total DS across All Strata:		3	(B)
3.					% DS that are OBL, FACW	, or FAC:	0	(A/B)
4.					Prevalence Index Worksh	ieet:		
	Total Cover:			_	Total % Cover of:	Multiply b	y:	
	Sapling/Shrub Stratum:				OBL Species	× 1	=	
1.					FACW Species	× 2	2 =	
2.					FAC Species	× 3	3 =	
3.				_	FACU Species	× 4	+ =	
4.				_	UPL Species	 × 5	i =	
	Total Cover:				Column Totals	(A)		(B)
	Herb Stratum:				Previous Index = B/	A =		
1.	Phalaris aquatica	40	Y	FACU	Hydrophytic Vegetation I	ndicators:		
2.	Helminthotheca (Picris) echioides	15	Y	FACU	Dominance te	st is > 50%.		
3.	Rumex crispus	5	N	FAC	Morphological	adaptations**	r	
4.		-			Problematic h	ydrophytic veç	getation**	
5.					Prevalence In	dex is <u>< 3</u> .0.		
	Total Cover:	60			Hydrophytic vegetation pre	sent?	Yes 🗌	No 🖂
	Woody Vine Stratum:				Remarks:			
1.	Rubus discolor	60	Y	FACU	15' Plot taken adjacent to v	ernal marsh ii	n upland d	ominated
2.					by non-native grasses and	ruderal specie	es.	
	Total Cover:	60						
% B Herl	are Ground in % b Stratum: 0 C	Cover of Bio	otic	0	** Indicators of hydric soil a present; give data/explanat	ind wetland hy tions in Rema	/drology m rks.	iust be

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SOIL: MATRIX REDOX FEATURES Depth (inch) Color (moist) % Color (moist) % Type¹ Loc² Texture Remarks Type: C=Concentration, D=Depletion, RM=Reduced Matrix. ² Location: PL=Pore Lining, RC=Root Channel, M=Matrix. Hydric Soil Indicators (Applicable to all LRRs, unless otherwise noted.): Indicators for Problematic Hydric Soils3: Histosol (A1) Sandy Redox (S5) 1 cm Muck (A9) (LRR C) Histic Epipedon (A2) Stripped Matrix (S6) 2 cm Muck (A10) (LRR B) Black Histic (A3) Loamy Mucky Mineral (F1) Reduced Vertic (F18) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Red Parent Material (TF2) П Stratified Layers (A5) (LRR C) Depleted Matrix (F3) Other (Explain in Remarks) 1 cm Muck (A9) (LRR D) Redox Dark Surface (F6) ³Indicators of hydrophytic vegetation and Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) wetland hydrology must be present. Thick Dark Surface (A12) Restrictive layer if present: Redox Depressions (F8) Sandy Mucky Mineral (S1) Vernal Pools (F9) Type: Sandy Gleyed Matrix (S4) Hydric soil present? No 🗌 Depth: Yes 🗌 Remarks: Soil sample not performed **HYDROLOGY:** Wetland Hydrology Indicators, Primary (1 is sufficient): Surface Water (A1) Salt Crust (B11) High Water Table (A2) Biotic Crust (B12) Saturation (A3) Aquatic Invertebrates (B13) Water Marks, NR (B1) Hydrogen Sulfide Odor (C1) Sediment Deposits, NR (B3) Oxidized Rhizospheres along Living Roots (C3) Drift Deposits, NR (B3) Presence of Reduced Iron (C4) Surface Soil Cracks (B6) Recent Iron Reduction in Plowed Soils (C6) Other (Explain in Remarks) Inundation Visible on Aerial Imagery (B7) (5.6)

	(БЭ)												
Wetland Hydrology Indicate	ors, Seco	ndary	(2+ r	equir	red):								
Water Marks, NR (B1))					Thin	Muck Surfa	face (C	7)				
Sediment Deposits, R	(B2)					Cray	fish Burrow	ws (C8)					
Drift Deposits, R (B3)						Satu	ration Visib	ble on A	Aerial Imagery(C9)				
Drainage Patterns (B1	0)					Sha	low Aquitar	ard (D3)					
Dry-Season Water Ta	ble (C2)					FAC	-Neutral Te	est (D5))				
NR = Non-riverine; R = Riv	erine							. ,					
Surface water present?	Yes		No	\boxtimes	Depth (inches):							
Water table present?	Yes		No		Depth (inches):							
Saturation present?**	Yes		No		Depth (inches):		W	etland hydrology present?	Yes		No	\boxtimes
**includes capillary fringe													
Describe recorded data, if a	available	(strea	ım ga	uge,	monitoring well	aeria	l photos, pr	previous	inspections):				
Remarks:									A-2-	-HMB-	14-(2004	4
										I	Exhi	ibit 2	2

		WETI	LAND DE	TER	MINA	TION DA	TA FOI	RM – ARID	WEST REGION		
Project/Site:	Citv Pro	vide Drair ject/B-10	nage Maintena	ance	C	City/County: H	alf Moon B	Say, CA	Sampling Dat	e: <u>5/23/13</u>	
Applicant/Owner	:	City of H	lalf Moon Bay	/		State: C	A		Sampling Poir	nt: B-10A	
Investigator(s):	J	ason Wie	ner				S	ection, Townsh	iip, Range:		
Landform (hillslo terrace, etc.):	pe,	Marine	Terrace			Local relief (c convex, none	concave, e):		Slope	e (%): <u>0-2%</u>	, 0
Subregion (LLR)	: <u>c</u>)		Lat:			Long:		Datum:		
Soil Map Unit Na	me:								NWI Classification:		
Are climatic / hyc	Irolo	gic condit	ions on the si	te typio	cal for t	this time of ye	ear? (If no,	explain in Rem	arks.)	Yes 🛛	No 🗌
Are "Normal Circ	ums	tances" p	resent?							Yes 🛛	No 🗌
Are the following Vegetation	sign	ificantly d Soil 🔲	listurbed? Hydrology		Are the Veg	e following na etation	aturally pro Soil	blematic? Hydrolog	y 🔲 (Explain in Remar	ks if necess	ary.)
SUMMARY OF F	IND	INGS (At	tach site ma	p shov	wing s	ampling poir	nt location	s, transects, f	eatures, etc.):		
н	lydro	phytic ve	getation prese	ent? Y	′es 🖂	No 🗌					
		Hy	dric soil prese	ent? Y	′es 🗌	No 🗌					
	W	/etland hy	drology prese	ent? Y	′es 🖂	No 🗌		Is the sampled	area within a wetland?	Yes 🗌	No 🗌
Remarks: F	eatu	re consist	s of a vernal ı	narsh	adjace	ent to drainage	e ditch. No	o soil sample p	erformed.		

	Tree Stratum (scientific name):	Absolute % Cover	Dominant Species?	Indicator	Dominance Test Worksheet (DS = Dominant Species):				
1.					# DS that are OBL, FACW	1	(A)		
2.					Total DS across All Strata	:	1	(B)	
3.					% DS that are OBL, FAC	V, or FAC:	100	(A/B)	
4.					Prevalence Index Works	heet:			
	Total Cover:				Total % Cover of:	Multiply by:			
	Sapling/Shrub Stratum:				OBL Species	× 1 =			
1.					FACW Species	× 2 =	-		
2.					FAC Species	× 3 =	-		
3.					FACU Species	× 4 =	-		
4.					UPL Species	× 5 =	-		
	Total Cover:				Column Totals (A)			(B)	
	Herb Stratum:				Previous Index = B	/A =			
1.	Juncus phaeocephalus	70	Y	FACW	Hydrophytic Vegetation Indicators:				
2.	Holcus lanatus	15	Ν	FAC	X Dominance te	est is > 50%.			
3.	Juncus patens	15	N	FACW	Morphologica	I adaptations**			
4.					Problematic I	nydrophytic vege	tation**		
5.					Prevalence Ir	ndex is <u>< 3</u> .0.			
	Total Cover:	100			Hydrophytic vegetation pr	esent?	′es 🛛	No 🗌	
	Woody Vine Stratum:				Remarks:				
1.					15' Plot taken within verna	ıl marsh.			
2.									
	Total Cover:								
% B Herl	% Bare Ground in% Cover of BioticHerb Stratum:0Crust:			40	** Indicators of hydric soil and wetland hydrology must be present; give data/explanations in Remarks.				

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MATRIX **REDOX FEATURES** Depth (inch) Color (moist) % Color (moist) % Type¹ Loc² Texture Remarks Type: C=Concentration, D=Depletion, RM=Reduced Matrix. ² Location: PL=Pore Lining, RC=Root Channel, M=Matrix. Hydric Soil Indicators (Applicable to all LRRs, unless otherwise noted.): Indicators for Problematic Hydric Soils3: Sandy Redox (S5) 1 cm Muck (A9) (LRR C) Histosol (A1) Histic Epipedon (A2) Stripped Matrix (S6) 2 cm Muck (A10) (LRR B) Black Histic (A3) Loamy Mucky Mineral (F1) Reduced Vertic (F18) Red Parent Material (TF2) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Stratified Layers (A5) (LRR C) Π Depleted Matrix (F3) Other (Explain in Remarks) 1 cm Muck (A9) (LRR D) Redox Dark Surface (F6) ³Indicators of hydrophytic vegetation and Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) wetland hydrology must be present. Thick Dark Surface (A12) Restrictive layer if present: Redox Depressions (F8) Sandy Mucky Mineral (S1) Vernal Pools (F9) Type: Hydric soil present? Sandy Gleyed Matrix (S4) Yes□ No 🗖 Depth: No soil sample performed. Landform very hummocky with significant soil cracking. Soil surface soft, indicative of organic matter Remarks: accumulation. HYDROLOGY: Wetland Hydrology Indicators, Primary (1 is sufficient): Surface Water (A1) Salt Crust (B11) High Water Table (A2) \boxtimes Biotic Crust (B12) Saturation (A3) П Aquatic Invertebrates (B13) Water Marks, NR (B1) Hydrogen Sulfide Odor (C1) Sediment Deposits, NR (B3) Oxidized Rhizospheres along Living Roots (C3) П Drift Deposits, NR (B3) Presence of Reduced Iron (C4) Surface Soil Cracks (B6) Recent Iron Reduction in Plowed Soils (C6) П Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Water-stained Leaves (B9) Wetland Hydrology Indicators, Secondary (2+ required): Water Marks, NR (B1) Thin Muck Surface (C7) Sediment Deposits, R (B2) Crayfish Burrows (C8) \square Drift Deposits, R (B3) Saturation Visible on Aerial Imagery(C9) \Box \boxtimes Drainage Patterns (B10) Shallow Aquitard (D3) Dry-Season Water Table (C2) FAC-Neutral Test (D5) \boxtimes NR = Non-riverine; R = Riverine Surface water present? Yes No \boxtimes Depth (inches): Water table present? Yes Depth (inches): No Saturation present?** Yes Wetland hydrology present? Yes 🛛 No 🗌 No Depth (inches): *includes capillary fringe Describe recorded data, if available (stream gauge, monitoring well, aerial photos, previous inspections): Feature is vernal marsh adjacent to drainage ditch. Soil cracking, vegetation and other hydrology indicators (biotic crus Remarks:) indicate seasonally perch water table. Exhibit 2

SOIL:

		WETL	AND DE	TERN	MINA	TION D	ATA FO	RM –	ARID	WEST REGIO	ON		
Project/Site:	Citv Pro	vide Drain ject/B-10	age Maintena	ance	С	ity/County: H	lalf Moon E	3ay, CA	١	Sampling	Date	5/23/13	
Applicant/Owner	:	City of H	lalf Moon Bay	,		State: CA			Sampling	Sampling Point: B-10B			
Investigator(s):	,	Jason Wie	ner				5	Section,	Townshi	o, Range:			
Landform (hillslo terrace, etc.):	pe,	Marine 7	Ferrace		(Local relief (convex, non	concave, e):				lope ((%): <u>0-2%</u>	1
Subregion (LLR)	: (2		Lat:			Long	I:		Datum	ı:		
Soil Map Unit Na	ame:									NWI Classificatio	on:		
Are climatic / hyc	drolo	gic conditi	ons on the sit	te typic	al for t	his time of y	ear? (If no,	explair	n in Rema	arks.)		Yes 🛛	No 🗌
Are "Normal Circ	ums	tances" pr	esent?									Yes 🛛	No 🗌
Are the following Vegetation	Are the following significantly disturbed? Are the following naturally problematic? Vegetation D Soil Hydrology Vegetation Soil Hydrology (Explain in Remarks if necessary.)												
SUMMARY OF F	FINC	INGS (Att	tach site mar	o show	/ing sa	ampling poi	nt locatior	ns, tran	sects, fe	atures, etc.):			
н	lydro	phytic veç	getation prese	ent? Ye	es 🗌	No 🖂							
		Hy	dric soil prese	ent? Ye	es 🗌	No 🗌							
	v	Vetland hy	drology prese	ent? Ye	es 🗌	No 🖂		Is the	sampled	area within a wetla	nd?	Yes 🗌	No 🖂
Remarks: U	Iplar	d adjacen	t to seasonal	wetlan	d area	at data poir	t B-10A.						

	Tree Stratum (scientific name):	Absolute % Cover	Dominant Species?	Indicator	Dominance Test Worksheet (DS = Dominant Species):				
1.					# DS that are OBL, FACW, or FAC	: <u>1</u> (A)			
2.					Total DS across All Strata:	4 (B)			
3.					% DS that are OBL, FACW, or FA	C: 25 (A/B)			
4.				_	Prevalence Index Worksheet:				
	Total Cover:				Total % Cover of: Mu	ltiply by:			
	Sapling/Shrub Stratum:				OBL Species	× 1 =			
1.	Baccharis pilularis	15	Y	None	FACW Species	× 2 =			
2.					FAC Species	× 3 =			
3.					FACU Species	× 4 =			
4.					UPL Species	× 5 =			
	Total Cover:	15		_	Column Totals (A)	(B)			
	Herb Stratum:			_	Previous Index = B/A =				
1.	Bromus hordeaceus	20	Y	FACU	Hydrophytic Vegetation Indicato	rs:			
2.	Helminthotheca (Picris) echioides	15	Y	FACU	Dominance test is > 5	0%.			
3.	Rumex crispus	15	Y	FAC	Morphological adapta	tions**			
4.	Juncus effusus	10	N	FACW	Problematic hydrophy	tic vegetation**			
5.					Prevalence Index is <	_3.0.			
	Total Cover:	60			Hydrophytic vegetation present?	Yes 🗌 🛛 No 🖂			
	Woody Vine Stratum:				Remarks:				
1.					15' Plot taken adjacent to vernal marsh in upland domin				
2.					by non-native grasses and ruderal	species.			
	Total Cover:			_					
% B Herl	are Ground in % b Stratum: 0 C	Cover of Bio rust:	otic	0	** Indicators of hydric soil and wetland hydrology must be present; give data/explanations in Remarks.				

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SOIL: MATRIX **REDOX FEATURES** Depth (inch) Color (moist) % Color (moist) % Type¹ Loc² Texture Remarks Type: C=Concentration, D=Depletion, RM=Reduced Matrix. ² Location: PL=Pore Lining, RC=Root Channel, M=Matrix. Hydric Soil Indicators (Applicable to all LRRs, unless otherwise noted.): Indicators for Problematic Hydric Soils3: Sandy Redox (S5) 1 cm Muck (A9) (LRR C) Histosol (A1) Histic Epipedon (A2) Stripped Matrix (S6) 2 cm Muck (A10) (LRR B) Black Histic (A3) Loamy Mucky Mineral (F1) Reduced Vertic (F18) Loamy Gleyed Matrix (F2) Red Parent Material (TF2) Hydrogen Sulfide (A4) П Stratified Layers (A5) (LRR C) Depleted Matrix (F3) Other (Explain in Remarks) 1 cm Muck (A9) (LRR D) Redox Dark Surface (F6) ³Indicators of hydrophytic vegetation and Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) wetland hydrology must be present. Thick Dark Surface (A12) Restrictive layer if present: Redox Depressions (F8) Sandy Mucky Mineral (S1) Vernal Pools (F9) Type: Depth: Sandy Gleyed Matrix (S4) Hydric soil present? No 🗌 Yes□ Remarks: Soil sample not performed HYDROLOGY: Wetland Hydrology Indicators, Primary (1 is sufficient): Surface Water (A1) Salt Crust (B11) High Water Table (A2) Biotic Crust (B12) Saturation (A3) Aquatic Invertebrates (B13) Water Marks, NR (B1) Hydrogen Sulfide Odor (C1) Sediment Deposits, NR (B3) Oxidized Rhizospheres along Living Roots (C3) Drift Deposits, NR (B3) Presence of Reduced Iron (C4) Surface Soil Cracks (B6) Recent Iron Reduction in Plowed Soils (C6) П Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Water-stained Leaves (B9) Wetland Hydrology Indicators, Secondary (2+ required):

Water Marks, NR (B1) Thin Muck Surface (C7) Sediment Deposits, R (B2) Crayfish Burrows (C8) Drift Deposits, R (B3) Drainage Patterns (B10) Dry-Season Water Table (C2) NR = Non-riverine; R = Riverine

Saturation Visible on Aerial Imagery(C9) Shallow Aquitard (D3) FAC-Neutral Test (D5) Surface water present? Yes No \boxtimes Depth (inches): Water table present? Yes No Depth (inches): Saturation present?** Yes Depth (inches): Wetland hydrology present? No *includes capillary fringe

Describe recorded data, if available (stream gauge, monitoring well, aerial photos, previous inspections):

Remarks:

Yes 🗌 No 🖾

	W	ETLAND DE	TERMIN	ATION DA	TA FORM	/I – ARID	WEST REGION		
Project/Site:	Citwide Drainage Maintenance Project/C-2		ance	City/County: <u>Ha</u>	Sampling Date	Sampling Date: 5/23/13			
Applicant/Owner	: City	of Half Moon Ba	y	State: CA			Sampling Point: C-2A		
Investigator(s):	Jason	Wiener			Sect	tion, Township	o, Range:		
Landform (hillslo terrace, etc.):	pe, Mar	ine Terrace		Local relief (co convex, none)	oncave, :		Slope	(%): 0-2%	, D
Subregion (LLR)	: <u>C</u>		Lat:		Long:		Datum:		
Soil Map Unit Na	me:						NWI Classification:		
Are climatic / hyc	Irologic co	onditions on the s	te typical for	this time of yea	ar? (If no, ex	plain in Rema	rks.)	Yes 🛛	No 🗌
Are "Normal Circ	umstance	s" present?						Yes 🛛	No 🗌
Are the following	significar	tly disturbed?	Are tl	he following nat	urally proble	matic?			
Vegetation	Soil	Hydrology	🗌 Ve	getation 🗌	Soil 🗌	Hydrology	(Explain in Remark	ks if necessa	ary.)
SUMMARY OF F	INDINGS	(Attach site ma	p showing s	sampling point	locations,	transects, fea	atures, etc.):		
н	lydrophyti	c vegetation pres	ent?Yes 🛛	No 🗌					
		Hydric soil pres	ent?Yes 🗌	No 🗌					
	Wetlar	d hydrology pres	ent?Yes 🖂	No 🗌	ls	the sampled a	area within a wetland?	Yes 🗌	No 🗌
Remarks: Fo	eature co	nsists of a vernal	marsh adjac	ent to drainage	ditch. No so	oil sample per	formed.		

	Tree Stratum (scientific name):	Absolute % Cover	Dominant Species?	Indicator	Dominance Test Worksheet (DS = Dominant Spe				
1.					# DS that are OBL, FACW, or FAC:			(A)	
2.					Total DS across All Strata:		3	(B)	
3.					% DS that are OBL, FACW	, or FAC:	66	(A/B)	
4.					Prevalence Index Worksh	leet:			
	Total Cover:				Total % Cover of:	Multiply b	by:		
	Sapling/Shrub Stratum:				OBL Species	×	1 =		
1.	Baccharis pilularis	15	Y	None	FACW Species	×2	2 =		
2.					FAC Species	 × 3	3 =		
3.					FACU Species		4 =		
4.					UPL Species		5 =		
	Total Cover:	15			Column Totals	(A)		(B)	
	Herb Stratum:				Previous Index = B/	A =			
1.	Juncus patens	30	Y	OBL	Hydrophytic Vegetation I	ndicators:			
2.	Sisyrinchium bellum	20	Y	OBL	X Dominance te	st is > 50%.			
3.	Helminthotheca (Picris) echioides	15	Ν	FACU	Morphological	adaptations*	*		
4.	Baccharis salicifolia	15	N	FAC	Problematic hy	ydrophytic ve	getation**		
5.	Mentha pulegium	5	N	OBL	Prevalence Ind	dex is <u>< 3</u> .0.			
	Total Cover:	85			Hydrophytic vegetation pre	sent?	Yes 🛛	No 🗌	
	Woody Vine Stratum:				Remarks:				
1.					15' Plot taken within venal	marsh.			
2.									
	Total Cover:								
% B Hert	are Ground in % o Stratum: 0 C	Cover of Bio	otic	5	** Indicators of hydric soil a present; give data/explanat	ind wetland h	ydrology m ırks.	ust be	

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SOIL: MATRIX **REDOX FEATURES** Depth (inch) Color (moist) % Color (moist) % Type¹ Loc² Texture Remarks Type: C=Concentration, D=Depletion, RM=Reduced Matrix. ² Location: PL=Pore Lining, RC=Root Channel, M=Matrix. Hydric Soil Indicators (Applicable to all LRRs, unless otherwise noted.): Indicators for Problematic Hydric Soils3: Histosol (A1) Sandy Redox (S5) 1 cm Muck (A9) (LRR C) Histic Epipedon (A2) Stripped Matrix (S6) 2 cm Muck (A10) (LRR B) Black Histic (A3) Loamy Mucky Mineral (F1) Reduced Vertic (F18) Red Parent Material (TF2) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) П Stratified Layers (A5) (LRR C) Depleted Matrix (F3) Π Other (Explain in Remarks) 1 cm Muck (A9) (LRR D) Redox Dark Surface (F6) ³Indicators of hydrophytic vegetation and Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) wetland hydrology must be present. Thick Dark Surface (A12) Restrictive layer if present: Redox Depressions (F8) Sandy Mucky Mineral (S1) Vernal Pools (F9) Type: Hydric soil present? No 🗌 Sandy Gleyed Matrix (S4) Yes□ Depth: Remarks: No soil sample performed. HYDROLOGY: Wetland Hydrology Indicators, Primary (1 is sufficient): Surface Water (A1) Salt Crust (B11) High Water Table (A2) \boxtimes Biotic Crust (B12) Saturation (A3) \square Aquatic Invertebrates (B13) Water Marks, NR (B1) Hydrogen Sulfide Odor (C1) Sediment Deposits, NR (B3) Oxidized Rhizospheres along Living Roots (C3) П Drift Deposits, NR (B3) Presence of Reduced Iron (C4) Surface Soil Cracks (B6) Recent Iron Reduction in Plowed Soils (C6) П

Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks) Water-stained Leaves (B9) Wetland Hydrology Indicators, Secondary (2+ required): Water Marks, NR (B1) Thin Muck Surface (C7) Sediment Deposits, R (B2) Crayfish Burrows (C8) Drift Deposits, R (B3) Saturation Visible on Aerial Imagery(C9) \boxtimes Drainage Patterns (B10) Shallow Aquitard (D3) Dry-Season Water Table (C2) FAC-Neutral Test (D5) \boxtimes NR = Non-riverine; R = Riverine Surface water present? Yes No \boxtimes Depth (inches): Water table present? Yes No Depth (inches): Saturation present?** Yes Wetland hydrology present? Yes 🛛 No 🗌 No Depth (inches): *includes capillary fringe Describe recorded data, if available (stream gauge, monitoring well, aerial photos, previous inspections): Feature is vernal marsh adjacent to drainage ditch. Soil cracking, vegetation and other hydrology indicators (biotic crus Remarks: indicate seasonally perch water table. Exhibit 2

		WETI	_AND DE	TER	MINA	TION DA	TA FO	RM – A	RID	WEST REGION		
Project/Site:	Cit Pro	vide Drain ject/C-2	de Drainage Maintenance ect/C-2 City/County: Hal			alf Moon E	f Moon Bay, CA Sampling			e: <u>5/23/13</u>	1	
Applicant/Owner:	:	City of H	lalf Moon Bay	1		State: CA			Sampling Poir	Sampling Point: C-2B		
Investigator(s):		Jason Wie	ner				S	ection, To	ownship	o, Range:		
Landform (hillslop terrace, etc.):	pe,	Marine 7	Terrace			Local relief (c convex, none	oncave,):			Slope	e (%): <u>0-</u>	2%
Subregion (LLR):	: (2		Lat	t:		Long	:		Datum:		
Soil Map Unit Na	me:									NWI Classification:		
Are climatic / hyd	Irolo	gic conditi	ions on the sit	te typi	ical for t	this time of ye	ar? (If no,	explain ir	n Rema	urks.)	Yes 🗵	No 🗌
Are "Normal Circ	ums	tances" pr	resent?								Yes 🗵	No 🗌
Are the following significantly disturbed? Are the following naturally problematic? Vegetation D Soil Hydrology Vegetation Soil Hydrology (Explain in Remarks if necessary.)												
SUMMARY OF F	FIND	INGS (At	tach site ma	o sho	wing s	ampling poin	t location	ns, transe	cts, fe	atures, etc.):		
н	lydro	phytic ve	getation prese	ent? \	Yes 🗌	No 🖂						
		Hy	dric soil prese	ent? N	Yes 🗌	No 🗌						
	v	Vetland hy	drology prese	ent? \	Yes 🗌	No 🖂		Is the sa	mpled	area within a wetland?	Yes] No 🖂
Remarks: U	plar	d adjacen	t to seasonal	wetla	.nd area	ı at data point	C-2A.					

	Tree Stratum (scientific name):	Absolute % Cover	Dominant Species?	Indicator	r Dominance Test Worksheet (DS = Dominant Spec				
1.					# DS that are OBL, FACW, or FAC:	1 (A)			
2.					Total DS across All Strata:	3 (B)			
3.					% DS that are OBL, FACW, or FAC:	33 (A/B)			
4.					Prevalence Index Worksheet:				
	Total Cover:			_	Total % Cover of: Multiply by:				
	Sapling/Shrub Stratum:				OBL Species × 1 =	=			
1.	Baccharis pilularis	40	Y	None	FACW Species × 2 =	=			
2.					FAC Species × 3 =	=			
3.				_	FACU Species × 4 =	=			
4.					UPL Species × 5 =	=			
	Total Cover:	40			Column Totals (A)	(B)			
	Herb Stratum:				Previous Index = B/A =				
1.	Helminthotheca (Picris) echioides	15	Y	FACU	Hydrophytic Vegetation Indicators:				
2.	Baccharis salicifolia	15	Y	FAC	Dominance test is > 50%.				
3.	Rumex crispus	10	Ν	FAC	Morphological adaptations**				
4.	Vicia sativa	10	Ν		Problematic hydrophytic vege	tation**			
5.	Juncus patens	10	Ν	FACW	Prevalence Index is <u>< 3</u> .0.				
	Total Cover:	60			Hydrophytic vegetation present?	/es 🗌 🛛 No 🖾			
	Woody Vine Stratum:				Remarks:				
1. 2.					15' Plot taken adjacent to vernal marsh in upland dominated by shrubs, non-native grasses, and ruderal species.				
	Total Cover:								
% B Herl	are Ground in % o Stratum: 0 C	Cover of Bio	otic	0	** Indicators of hydric soil and wetland hydrology must be present; give data/explanations in Remarks.				

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SOIL: MATRIX REDOX FEATURES Depth (inch) Color (moist) % Color (moist) % Type¹ Loc² Texture Remarks Type: C=Concentration, D=Depletion, RM=Reduced Matrix. ² Location: PL=Pore Lining, RC=Root Channel, M=Matrix. Hydric Soil Indicators (Applicable to all LRRs, unless otherwise noted.): Indicators for Problematic Hydric Soils3: Sandy Redox (S5) Histosol (A1) 1 cm Muck (A9) (LRR C) Histic Epipedon (A2) Stripped Matrix (S6) 2 cm Muck (A10) (LRR B) Black Histic (A3) Loamy Mucky Mineral (F1) Reduced Vertic (F18) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) Red Parent Material (TF2) П Other (Explain in Remarks) Stratified Layers (A5) (LRR C) Depleted Matrix (F3) 1 cm Muck (A9) (LRR D) Redox Dark Surface (F6) ³Indicators of hydrophytic vegetation and wetland hydrology must be present. Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) Thick Dark Surface (A12) Restrictive layer if present: Redox Depressions (F8) Sandy Mucky Mineral (S1) Vernal Pools (F9) Type: Sandy Gleyed Matrix (S4) Hydric soil present? No 🗌 Depth: Yes 🗌 Remarks: Soil sample not performed **HYDROLOGY:** Wetland Hydrology Indicators, Primary (1 is sufficient): Surface Water (A1) Salt Crust (B11) High Water Table (A2) Biotic Crust (B12) Saturation (A3) Aquatic Invertebrates (B13) Water Marks, NR (B1) Hydrogen Sulfide Odor (C1) Sediment Deposits, NR (B3) Oxidized Rhizospheres along Living Roots (C3) Drift Deposits, NR (B3) Presence of Reduced Iron (C4) Surface Soil Cracks (B6) Recent Iron Reduction in Plowed Soils (C6) Inundation Visible on Aerial Imagery (B7) Other (Explain in Remarks)

	Water-stained Leaves (B9)												
Wet	land Hydrology Indicators	s, Seco	ndary	(2+ r	equir	ed):								
	Water Marks, NR (B1)						Thin	Muck Surf	rface (C	:7)				
	Sediment Deposits, R (E	B2)					Cray	fish Burrov	ws (C8)				
	Drift Deposits, R (B3)						Satu	ration Visit	ible on <i>i</i>	Aerial Imagery(C9)				
	Drainage Patterns (B10))					Shal	low Aquita	ard (D3))				
	Dry-Season Water Tabl	e (C2)					FAC	-Neutral Te	est (D5	i)				
NR	= Non-riverine; R = River	ine												
Sur	face water present?	Yes		No	\boxtimes	Depth (inches):							
Wat	er table present?	Yes		No		Depth (inches):							
Sati	uration present?**	Yes		No		Depth (inches):		v	Vetland hydrology present?	Yes	3 □	No	\boxtimes
**in	cludes capillary fringe													
Des	cribe recorded data, if av	ailable	(strea	m ga	uge,	monitoring well,	aeria	l photos, p	orevious	s inspections):				
Ren	narks:									A-2	-HMB	-14-	000	4
												Exh	ibit	2

		WETI	AND DE	TERMI	NATION DA	TA FOR	M – ARID	WEST REGION		
Project/Site:	Citv Pro	vide Drain ject/C-6	age Maintena	ance	City/County: -	lalf Moon Ba	y, CA	Sampling Date	e: 5/23/13	
Applicant/Owner	:	City of H	lalf Moon Bay		State: C	A		Sampling Poin	t: C-6A	
Investigator(s):	J	ason Wie	ner			Sec	tion, Townshi	o, Range:		
Landform (hillslo terrace, etc.):	pe,	Marine 1	Ferrace		Local relief (concave, e):		Slope	(%): 0-2%	0
Subregion (LLR)	: (>		Lat:		Long:		Datum:		
Soil Map Unit Na	ime:							NWI Classification:		
Are climatic / hyc	drolo	gic conditi	ons on the sit	e typical f	or this time of ye	ear? (If no, e	xplain in Rema	urks.)	Yes 🛛	No 🗌
Are "Normal Circ	ums	tances" pr	esent?						Yes 🛛	No 🗌
Are the following Vegetation	sigr	nificantly d	isturbed? Hydrology	Are	e the following nation the following nation the following	aturally probl	ematic? Hydrology	(Explain in Remark	ks if necessa	ary.)
SUMMARY OF F	FIND	INGS (At	tach site map	o showing	g sampling poi	nt locations,	transects, fe	atures, etc.):		
н	lydro	phytic veç	getation prese	ent? Yes	🛛 No 🗌					
		Hy	dric soil prese	ent? Yes [🗆 No 🖂					
	v	Vetland hy	drology prese	ent? Yes	🛛 No 🗌	ls	the sampled	area within a wetland?	Yes 🗌	No 🖂
Remarks: F	eatu	re consists	s of a vernal r	narsh adja	acent to drainag	e ditch.				

VEGETATION:

	Tree Stratum (scientific name):	Absolute % Cover	Dominant Species?	Indicator	Dominance Test Wor	ksheet (DS = Dom	ninant Spe	ecies):
1.				_	# DS that are OBL, FA	CW, or FAC:	2	(A)
2.					Total DS across All Str	rata:	2	(B)
3.				_	% DS that are OBL, FA	ACW, or FAC:	100	(A/B)
4.					Prevalence Index Wo	rksheet:		
	Total Cover:				Total % Cover of:	Multiply by	y:	
	Sapling/Shrub Stratum:				OBL Species	× 1	=	
1.					FACW Species	× 2	=	
2.					FAC Species	× 3	=	
3.					FACU Species	× 4	=	
4.					UPL Species	× 5	=	
	Total Cover:				Column Totals	(A)	(B)
	Herb Stratum:				Previous Index	= B/A =		
1.	Juncus phaeocephalus	60	Y	FACW	Hydrophytic Vegetati	on Indicators:		
2.	Juncus patens	20	Y	FACW	X Dominand	ce test is > 50%.		
3.	Helminthotheca (Picris) echioides	10	Ν	FACU	Morpholog	gical adaptations**		
4.	Holcus lanatus	10	Ν	FAC	Problema	tic hydrophytic veg	etation**	
5.					Prevalenc	e Index is <u>< 3</u> .0.		
	Total Cover:	100			Hydrophytic vegetatior	ı present?	Yes 🛛	No 🗌
	Woody Vine Stratum:				Remarks:			
1.				_	15' Plot taken within ve	ernal marsh.		
2.								
	Total Cover:							
% E Her	Bare Ground in % b Stratum: 0 C	Cover of Bio rust:	otic	15	** Indicators of hydric s present; give data/exp	soil and wetland hy lanations in Remar	drology mi ks.	ust be

	SOIL										
		MATRI	X			RE	DOX FE	ATURES			
De	epth (inch)	Color (moist)	%	Co	olor (m	ioist)	%	Type ¹	Loc ²	Texture	Remarks
	0-6	10YR 2/2	100							Clay Loam	
	6-12	10YR 2/2	98	1	0 YR	5/6	2	С	PL/RC	Clay	Few small indistinct mottles
	12-28	10YR 2/2	100							Clay	
			_								
							. <u></u>				
1 Ty	pe: C=Conc	centration, D=De	pletion,	RM=F	Reduce	ed Matr	ix. ² Loca	ation: PL=P	ore Lining, R	C=Root Channel,	M=Matrix.
Hyc	Iric Soil India	cators (Applicabl	e to all I	_RRs,	unles	s other	wise note	ed.):		Indicators for F	Problematic Hydric Soils ³ :
	Histosol (A	A1)			Ц	Sand	y Redox	(S5)			luck (A9) (LRR C)
	Histic Epip	bedon (A2)			Ц	Stripp	oed Matri	ix (S6)			luck (A10) (LRR B)
	Black Histi	ic (A3)			Ц	Loam	iy Mucky	Mineral (F	1)		ed Vertic (F18)
	Hydrogen	Sulfide (A4)				Loam	iy Gleyed	d Matrix (F2	2)		arent Material (TF2)
	Stratified L		(C)			Deple		rix (F3) Surface (E6)			Explain in Remarks)
		(A9) (LRR D) Polow Dork Surf	000 (11			Dople	ot Dark S	(Fo)) = 7)	³ Indicators o	of hydrophytic vegetation and
	Thick Dark)		Depie			-7)	Restrictive la	rology must be present.
						Neuo					ayer ii present.
		cky Mineral (S1)				verna		(F9)		Type.	
	Sandy Gle	eyed Matrix (54)			Нуа	ric soli	present?	Yes			
нer	narks: 50	II surface cracke	a. Solis	very	irm w	ith few	roots. So	olis indicati	ve of percheo	i water table.	
	HYDE	ROLOGY:									
We	tland Hydrol	ogy Indicators, F	rimary	(1 is sı	ufficie	nt):					
	Surface W	ater (A1)				,		Salt Crust	t (B11)		
	High Wate	r Table (A2)					\boxtimes	Biotic Cru	st (B12)		
	Saturation	(A3)						Aquatic Ir	vertebrates (B13)	
	Water Mar	ks, NR (B1)						Hydrogen	Sulfide Odor	· (C1)	
	Sediment	Deposits, NR (B	3)					Oxidized	Rhizospheres	along Living Roo	ots (C3)
\boxtimes	Drift Depos	sits, NR (B3)						Presence	of Reduced I	lron (C4)	
	Surface So	oil Cracks (B6)						Recent Iro	on Reduction	in Plowed Soils (C6)
	Inundation	Visible on Aeria	I Image	ry (B7))			Other (Ex	plain in Rema	arks)	
	Water-stai	ned Leaves (B9)									
We	tland Hydrol	ogy Indicators, S	Seconda	ry (2+	requii	red):	_			_	
	Water Mar	ks, NR (B1)						Thin Mucl	k Surface (C7	')	
	Sediment	Deposits, R (B2)						Crayfish E	Burrows (C8)		
	Drainage	SITS, R (B3)						Saturation		erial Imagery(C9)	
	Drainage i	Patterns (BTU)	20)						vquitara (D3)		
	Non rivori		UZ)					FAC-Neu	trai Test (D5)		
INIT											
Sur	face water p	present? Y	′es 🗌] No		Deptl	h (inches	s):			
Wa	ter table pre	sent? Y	′es 🗌] No		Deptl	h (inches	.):			
Sat	uration pres	ent?** Y	′es 🗌] No		Deptl	h (inches	.):	W	etland hydrology p	present? Yes 🛛 No 🗌
**in	cludes capil	lary fringe									
Des	cribe record	led data, if availa	able (str	eam g	auge,	monito	ring well,	, aerial pho	tos, previous	inspections):	
L											
Rer	narks: Fe	ature is vernal m	arsh ad	jacent	to dra	ainage o	ditch and	detention I	basin. Soil cr	acking, vegetation	n and other hydrology indicators
	(bi	otic crust) indica	te seaso	onally	perch	water t	able.				A-2-HMR-14-0004
L											

		WETL	AND DET	ERMIN	ATION DA	TA FORI	M – ARID	WEST REGION		
Project/Site:	Citv Pro	vide Drain ject/C-6	age Maintena	nce	City/County: Ha	alf Moon Bay	, CA	Sampling Date	e: 5/23/13	
Applicant/Owner	:	City of H	lalf Moon Bay		State: CA	4		Sampling Poin	t:C-6B	
Investigator(s):	J	ason Wie	ner			Sec	tion, Townshi	o, Range:		
Landform (hillslo terrace, etc.):	pe,	Marine 7	Ferrace		Local relief (co convex, none)	oncave, :		Slope	(%): 0-2%	>
Subregion (LLR)	: (>		Lat:		Long:		Datum:		
Soil Map Unit Na	ime:							NWI Classification:		
Are climatic / hyc	drolo	gic conditi	ons on the site	e typical fo	r this time of yea	ar? (If no, ex	plain in Rema	urks.)	Yes 🛛	No 🗌
Are "Normal Circ	ums	tances" pr	esent?						Yes 🛛	No 🗌
Are the following Vegetation	sigr	nificantly d Soil 🗌	isturbed? Hydrology	Are t	the following nates	turally proble Soil 🔲	ematic? Hydrology	(Explain in Remark	ks if necessa	ary.)
SUMMARY OF F	FIND	INGS (Att	tach site map	showing	sampling poin	t locations,	transects, fe	atures, etc.):		
н	lydro	phytic veç	getation prese	nt?Yes] No 🛛					
		Hy	dric soil prese	nt?Yes] No 🛛					
	٧	Vetland hy	drology prese	nt?Yes] No 🖂	ls	the sampled	area within a wetland?	Yes 🗌	No 🖂
Remarks: U	Iplan	d adjacen	t to seasonal v	vetland are	ea at data point	B-7A.				

VEGETATION:

	Tree Stratum (scientific name):	Absolute % Cover	Dominant Species?	Indicator	Dominance Test Worksho	et (DS = Dor	ninant Spe	ecies):
1.					# DS that are OBL, FACW,	or FAC:	1	(A)
2.					Total DS across All Strata:		3	(B)
3.					% DS that are OBL, FACW	, or FAC:	33	(A/B)
4.					Prevalence Index Worksh	ieet:		
	Total Cover:				Total % Cover of:	Multiply b	y:	
	Sapling/Shrub Stratum:				OBL Species	× 1	=	
1.					FACW Species	× 2	? =	
2.					FAC Species		i =	
3.					FACU Species	× 4	+ =	
4.					UPL Species	 × 5	; =	
	Total Cover:				Column Totals	(A)		(B)
	Herb Stratum:				Previous Index = B/	A =		
1.	Phalaris aquatica	25	Y	FACU	Hydrophytic Vegetation I	ndicators:		
2.	Bromus hordeaceus	25	Y	FACU	Dominance te	st is > 50%.		
3.	Juncus patens	25	Y	FACW	Morphological	adaptations*'	r	
4.	Helminthotheca (Picris) echioides	15	Ν	FAC	Problematic h	ydrophytic veç	getation**	
5.	Rumex crispus	10	N	FAC	Prevalence In	dex is <u>< 3</u> .0.		
	Total Cover:	100			Hydrophytic vegetation pre	sent?	Yes 🗌	No 🖂
	Woody Vine Stratum:				Remarks:			
1. 2.					15' Plot taken adjacent to v by non-native grasses and	ernal marsh in ruderal specie	n upland do es.	ominated
	Total Cover:				1			
% B Herl	are Ground in % o Stratum: 0 C	Cover of Bio	otic	0	** Indicators of hydric soil a present; give data/explanat	ind wetland hy ions in Rema	<u>/</u> drology m rks.	ust be

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SOIL:									
	MATRIX	(F	REDOX FE	ATURES		_	
Depth (inch)	Color (moist)	%	Color	(moist)	%	Type ¹	Loc ²	Texture	Remarks
0-4	10YR 2/1	100						Clay Loam	
4-26	10YR 2/2	100						Clay	
								_	
								_	
¹ Type: C=Conc	entration, D=Dep	pletion, R	M=Red	uced Ma	atrix. ² Loc	ation: PL=P	ore Lining, F	RC=Root Channel,	M=Matrix.
Hydric Soil Indic	cators (Applicable	e to all LF	RRs, un	ess oth	erwise not	ed.):		Indicators for F	Problematic Hydric Soils ³ :
Histosol (A	(1)		Ľ] Sa	ndy Redox	(S5)		🗌 1 cm M	uck (A9) (LRR C)
Histic Epip	edon (A2)		Ľ] Str	ipped Matr	ix (S6)		🗌 2 cm M	uck (A10) (LRR B)
Black Histi	c (A3)		Ľ] Loa	amy Mucky	/ Mineral (F	1)	Reduce	ed Vertic (F18)
Hydrogen :	Sulfide (A4)		Ľ] Loa	amy Gleye	d Matrix (F2	2)	Red Pa	rent Material (TF2)
Stratified L	ayers (A5) (LRR	C)	Ľ	De	pleted Mat	rix (F3)		Other (Explain in Remarks)
1 cm Muck	k (A9) (LRR D)		Ľ] Re	dox Dark S	Surface (F6))	³ Indicators o	f hydrophytic vegetation and
Depleted E	Below Dark Surfa	ce (A11)	Ľ	De	pleted Dar	k Surface (I	F7)	wetland hyd	rology must be present.
Thick Dark	Surface (A12)		Ľ] Re	dox Depre	ssions (F8)		Restrictive la	ayer if present:
Sandy Muc	cky Mineral (S1)] Vei	rnal Pools	(F9)		Type:	
Sandy Gle	yed Matrix (S4)		F	lydric sc	oil present?	Yes	s 🗌 🛛 No	Depth:	
Remarks: Soi	ils very firm with t	few roots							
HYDF	ROLOGY:	• 4		·					
Wetland Hydrold	ogy Indicators, P	rimary (1	is suffic	cient):	_				
Surface W	ater (A1)					Salt Crus	t (B11)		
High Wate	r Table (A2)					Biotic Cru	ist (B12)		
	(A3)					Aquatic Ir	ivertebrates	(B13)	
Water Mar	ks, NR (B1)					Hydroger	Sulfide Odd	or (C1)	. (22)
	Deposits, NR (B3	3)				Oxidized	Rnizosphere	es along Living Roc	ots (C3)
	sits, NR (B3)					Presence	of Reduced	Iron (C4)	
Surface Sc	oil Cracks (B6)		(5-5)			Recent In	on Reduction	n in Plowed Soils (C6)
	Visible on Aerial	Imagery	(B7)			Other (Ex	plain in Rem	iarks)	
Vvater-stail	ned Leaves (B9)		. (0						
vvetland Hydrold	ogy indicators, S	econdary	/ (2+ red	quirea):	_		le Curtana (C	7)	
	KS, NR (BT)						k Surface (C	<i>(</i>)	
	Deposits, R (B2)					Crayfish I	Burrows (C8)) A anial line and m (CO)	
	SITS, R (B3)					Saturation		Aeriai Imagery(C9)	
	Pallerns (BTU)	201					tral Test (DS)	N	
Dry-Seaso	n waler Table (C	,2)				FAC-Neu	trai rest (Do)	
Surface water p	resent? Ye	es 🗌	No	🛛 De	pth (inches	s):			
Water table pres	sent? Ye	es 🗌	No	🛛 De	pth (inches	s):			
Saturation prese	ent?** Ye	es 🗌	No	🛛 De	pth (inches	s):	v	/etland hydrology p	present? Yes 🗌 No 🖾
**includes capill	ary fringe								
Describe record	led data, if availa	ble (strea	am gauę	ge, moni	itoring well	, aerial pho	tos, previous	s inspections):	
Remarks:									
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	WET	LAND DET	ERMIN	ATION DAT	FA FORI	M – ARID	WEST REGION		
Project/Site:	Citwide Drain Project/C-6	nage Maintenar	nce	City/County: Ha	lf Moon Bay	/, CA	Sampling Date	ə: <u>5/23/13</u>	
Applicant/Owner	City of I	Half Moon Bay		State: CA	۱		Sampling Poin	it: C-6C	
Investigator(s):	Jason Wie	ener			Sec	tion, Townshi	p, Range:		
Landform (hillslo terrace, etc.):	pe, Marine	Terrace		Local relief (co convex, none):	ncave, :		Slope	e (%): <u>0-2%</u>	, 0
Subregion (LLR)	: <u>C</u>		Lat:		Long:		Datum:		
Soil Map Unit Na	ame:						NWI Classification:		
Are climatic / hyc	drologic condi	tions on the site	e typical for	r this time of yea	ar? (If no, ex	plain in Rema	arks.)	Yes 🛛	No 🗌
Are "Normal Circ	umstances" p	vresent?						Yes 🛛	No 🗌
Are the following	significantly o	disturbed?	Are t	he following nati	urally proble	ematic?			
Vegetation	Soil 🗌	Hydrology	🗌 Ve	getation	Soil 🗌	Hydrology	(Explain in Remark	ks if necessa	ary.)
SUMMARY OF F	FINDINGS (At	ttach site map	showing	sampling point	locations,	transects, fe	atures, etc.):		
н	lydrophytic ve	getation preser	nt?Yes 🛛	No 🗌					
	Hy	dric soil preser	nt?Yes 🗌] No 🗌					
	Wetland h	ydrology preser	nt?Yes 🛛] No 🗌	Is	the sampled	area within a wetland?	Yes 🗌	No 🗌
Remarks: F	eature consis	ts of an intermit	ttent draina	age ditch. Hydro	phytic vege	atation is prese	ent in portions of the fea	ature. An Ol	HWM was

VEGETATION:

	Tree Stratum (scientific name):	Absolute % Cover	Dominant Species?	Indicator	Dominance Test Works	neet (DS = Dom	ninant Spe	cies):
1.					# DS that are OBL, FACW	I, or FAC:	2	(A)
2.					Total DS across All Strata	12	4	(B)
3.					% DS that are OBL, FAC	N, or FAC:	50	(A/B)
4.					Prevalence Index Works	heet:		
	Total Cover:				Total % Cover of:	Multiply by	y:	
	Sapling/Shrub Stratum:				OBL Species	× 1	=	
1.					FACW Species	× 2	=	
2.					FAC Species	× 3	=	
3.					FACU Species	× 4	=	
4.					UPL Species	 × 5	=	
	Total Cover:				Column Totals	(A)	(B)
	Herb Stratum:			_	Previous Index = E	3/A =		
1.	Cyperus eragrostis	20	Y	FACW	Hydrophytic Vegetation	Indicators:		
2.	Polygonum punctatum	10	Y	OBL	X Dominance t	est is > 50%.		
3.	Brassica rapa	10	Y	FACU	Morphologica	al adaptations**		
4.	Raphanus sativus	10	Y	None	Problematic	hydrophytic veg	etation**	
5.					Prevalence I	ndex is <u>< 3</u> .0.		
	Total Cover:	50			Hydrophytic vegetation pr	esent?	Yes 🛛	No 🗌
	Woody Vine Stratum:				Remarks:			
1.					5' Plot taken within center	of drainage dite	ch.	
2.								
	Total Cover:							
% B Her	Bare Ground in % b Stratum: 50 C	Cover of Bio rust:	otic	5	** Indicators of hydric soil present; give data/explana	and wetland hy ations in Remar	drology mı ks.	ust be

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SOIL: MATRIX **REDOX FEATURES** Depth (inch) Color (moist) % Color (moist) % Type¹ Loc² Texture Remarks Type: C=Concentration, D=Depletion, RM=Reduced Matrix. ² Location: PL=Pore Lining, RC=Root Channel, M=Matrix. Hydric Soil Indicators (Applicable to all LRRs, unless otherwise noted.): Indicators for Problematic Hydric Soils3: Sandy Redox (S5) 1 cm Muck (A9) (LRR C) Histosol (A1) Histic Epipedon (A2) Stripped Matrix (S6) 2 cm Muck (A10) (LRR B) Black Histic (A3) Loamy Mucky Mineral (F1) Reduced Vertic (F18) Red Parent Material (TF2) Hydrogen Sulfide (A4) Loamy Gleyed Matrix (F2) П Stratified Layers (A5) (LRR C) Depleted Matrix (F3) П Other (Explain in Remarks) 1 cm Muck (A9) (LRR D) Redox Dark Surface (F6) ³Indicators of hydrophytic vegetation and Depleted Below Dark Surface (A11) Depleted Dark Surface (F7) wetland hydrology must be present. Thick Dark Surface (A12) Restrictive layer if present: Redox Depressions (F8) Sandy Mucky Mineral (S1) Vernal Pools (F9) Type: Hydric soil present? No 🗌 Sandy Gleyed Matrix (S4) Yes□ Depth: Remarks: Soil sample not performed HYDROLOGY: Wetland Hydrology Indicators, Primary (1 is sufficient): Surface Water (A1) Salt Crust (B11) High Water Table (A2) \boxtimes Biotic Crust (B12) Saturation (A3) П Aquatic Invertebrates (B13) Water Marks, NR (B1) Hydrogen Sulfide Odor (C1) Sediment Deposits, NR (B3) Oxidized Rhizospheres along Living Roots (C3) П Drift Deposits, NR (B3) Presence of Reduced Iron (C4) Surface Soil Cracks (B6) Recent Iron Reduction in Plowed Soils (C6) П

Water-stained Leaves (B9) Wetland Hydrology Indicators, Secondary (2+ required):

Inundation Visible on Aerial Imagery (B7)

Water Marks, NR (B1)

Drift Deposits, R (B3)

Sediment Deposits, R (B2)

Thin Muck Surface (C7)

Crayfish Burrows (C8) \square

Other (Explain in Remarks)

Saturation Visible on Aerial Imagery(C9)

Shallow Aquitard (D3)

 \boxtimes Drainage Patterns (B10) Dry-Season Water Table (C2) FAC-Neutral Test (D5) \boxtimes NR = Non-riverine; R = Riverine Surface water present? Yes No \boxtimes Depth (inches): Water table present? Yes No Depth (inches): Saturation present?** Yes Wetland hydrology present? Yes 🛛 No 🗌 No Depth (inches): *includes capillary fringe Describe recorded data, if available (stream gauge, monitoring well, aerial photos, previous inspections):

Feature is an intermittent drainage ditch receiving minimal overland flow from adjacent uplands and drainage from City Remarks: stormwater management infrastructure. An OHWM was observed as well as several indicators of hydrology Exhibit 2

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Appendix B: Draft Stream Alteration Agreement (SAA)

1. Letter to the California Department of Fish and Wildlife requesting revision of the SAA Project Description and Location

Attachment A. Revised Project Description and Location

Attachment B. Revised Section 1602 Form

2. Original Draft Stream Alteration Agreement



CITY OF HALF MOON BAY

City Hall • 501 Main Street • Half Moon Bay • CA • 94019

November 14, 2013

California Department of Fish and Wildlife Bay Delta Region 7329 Silverado Trail Napa, California 94558 Attn: Lake and Streambed Alteration Program – Suzanne DeLeon Notification #1600-2012-0173-R3

RE: Revised Project Location, Project, Description, and 1602 Notification (Form FG 2023) for the Citywide Drainage Ditch Maintenance Project, Half Moon Bay, CA

Ms. DeLeon,

Attached please find a revised Project Location and Project Description (Attachment A) for incorporation into the Lake and Streambed Alteration Agreement referenced above (Notification #1600-2012-0173-R3). With incorporation of these changes, as well as those requested in a memorandum provided to you August 19, 2013, we hope to finalize this approval process. As discussed in prior correspondence with you, we have included revised pages 1 and 9 of the Notification of Lake or Streambed Alteration (Form FG 2023) (Attachment B). Please note that the dates on page 1 have been updated to reflect that the project term will commence April 15, 2014 and be completed October 31, 2018. Please update the Term section of the Agreement to reflect this change.

Thank you for your assistance with the requested changes and finalization of the Agreement. If there is any additional information required to finalize the Agreement, please contact our office.

Thank you again for your attention.

Sincerely,

Laura Snideman City Manager

Attachment A – Revised Project Location and Project Description Attachment B – Revised Notification of Lake or Streambed Alteration (Form FG 2023)

> A-2-HMB-14-0004 Exhibit 2 Page 318 of 523

Revised Project Description and Project Location for Lake and Streambed Alteration Agreement Notification #1600-2012-0173-R3

Project Location

This agreement authorizes routine maintenance of various sites that fall under the jurisdiction and responsibility of the permittee. Work Locations (Exhibit A) are as follows:

Area B:

- 1. B-1. Roosevelt Drainage- Alameda Avenue to the CoastsideTrail
- 2. B-2. Kehoe Ditch Drainage- Highway 1 to the Coastside Trail
- 3. B-3. Kelly Drainage- South Side of Kelly Avenue, Railroad Ave. ROW to the Coastside Trail
- 4. B-4. Miramontes Drainage- Railroad Avenue to the Coastside Trail
- 5. B-5. Central Drainage- Railroad Avenue to the Coastside Trail
- 6. B-6. Myrtle Street Bubble-Up- Railroad Avenue to the Coastside Trail
- 7. B-9. Seymour Drainage- South Side of Seymour Ave, Highway 1 to the Coastside Trail

8. B-10. Redondo Beach Road- Both Sides of Rendondo Beach Road, Railroad Ave. ROW to the Coastside Trail

Area C:

9. C-1. Railroad Ave- West side of Railroad Ave, Spruce Street to Poplar Street

10. C-2. Poplar Street- Both sides of Poplar Street, Railroad Ave. to the Coastside Trail

11. C-3. Railroad Ave- West side of Railroad Ave, Metzger Street to Grove Street

12. C-4. Grove Street- South side of Grove street, West of First Street to Railroad Avenue

13. C-5. Magnolia Street-Highway 1 to First Avenue

14. C-6. Wavecrest Road- North side of Wavecrest Road, Highway 1 to Smith Field

15. C-7. Redondo Beach Road- Both Sides of Rendondo Beach Road, Railroad Ave. ROW to the Coastside Trail

Project Description

Permittee will conduct "routine maintenance activities", generally defined as periodic activities necessary to maintain the water transport capacity of stream, channels, and flood control channels, and the structural and functioning integrity of existing flood control and sediment detention structures on or affecting streams. Routine maintenance activities include sediment, silt, trash and debris removal to clear channel obstructions, vegetation management, repair of existing bank protection, removal of non-native vegetation, and in-kind culvert repair or replacement. Refer to Exhibit B for Authorized Activities under this Agreement and Exhibit C for definitions of other terms used in the Agreement.

Equipment used will vary by maintenance activity and could include but is not limited to back hoe, loader, dump truck, hand mower, weed eater, articulating mower, and powered and manual hand tools. Goat grazing may be used in suitable locations for control of weeds, grasses and ruderal vegetation in place of hand tools or mowing. No heavy equipment shall operate in the active (flowing) steam channel except as identified in this Agreement.

A-2-HMB-14-0004 Exhibit 2 Page 319 of 523



		FOR DEPA	ARTMENT USE ONLY		
Date Received	Amount Received	Amount Due	Date Complete	Notification No.	
	\$	\$			



STATE OF CALIFORNIA DEPARTMENT OF FISH AND GAME

NOTIFICATION OF LAKE OR STREAMBED ALTERATION



Complete EACH field, unless otherwise indicated, following the enclosed instructions and submit ALL required enclosures. Attach additional pages, if necessary.

1. APPLICANT PROPOSING PROJECT

Name	Laura Snideman, City Manager		
Business/Agency	City of Half Moon Bay		CION
Street Address	501 Main Street	- EN	210
City, State, Zip	Half Moon Bay, CA 94019	RE	
Telephone	(650) 726-8260	Fax	(650) 726-8261
Email	lauras@hmbcity.com		

2. CONTACT PERSON (Complete only if different from applicant)

Name	Mo Sharma						
Street Address	Same as above	-					
City, State, Zip	Same as above						
Telephone	(650) 726-8265	Fax	(650) 726-8261				
Email	mosharma@hmbcity.com						

3. PROPERTY OWNER (Complete only if different from applicant)

Name	Laura Snídeman, City Manager					
Street Address	Same as above					
City, State, Zip	Same as above					
Telephone	(650) 726-8260	Fax	(650) 726-8261			
Email	Same as above		1. (A)			

4. PROJECT NAME AND AGREEMENT TERM

A. Project Name							
B. Agreement Term	Requested	☑ Re	✓ Regular (5 years or less) □ Long-term (greater than 5 years)				
C. Project Term			D. Seasonal Work Period	5	E. Number of Work Days		
Beginning (year) Ending (year)		ar)	Start Date (month/day)	End Date (month/day)			
2014 2018			04/15	10/31	199		

5. AGREEMENT TYPE

Che	ck the applicable box. If box B, C, D, or E is checked, complete	e the specified attachment.					
A.	Standard (Most construction projects, excluding the categories listed below)						
В.	Gravel/Sand/Rock Extraction (Attachment A)	Mine I.D. Number:					
C.	Timber Harvesting (Attachment B)	THP Number:					
D.	□ Water Diversion/Extraction/Impoundment (Attachment C)	SWRCB Number:					
E.	Routine Maintenance (Attachment D)						
F.	DFG Fisheries Restoration Grant Program (FRGP)	FRGP Contract Number:					
G.	☐ Master						
H.	Master Timber Harvesting						

6. FEES

	A. Project	B. Project Cost	C. Project Fee
1	To be determined		
2			
3			
4			
5			
		D. Base Fee (if applicable)	\$1,345.25
		E. TOTAL FEE ENCLOSED	\$1,345.25

7. PRIOR NOTIFICATION OR ORDER

by, the	(Provide the information below)		<u>, 16. – 36.</u> The second	
Applica	ant: City of Half Moon Bay	Notification Number: 1600-2003-5163-3	Date:	10/05/04
B. Is this admini	strative agency (including the Depart □Yes (Enclose a copy of the ord person who directed the applic describe the circumstances rel	nse to an order, notice, or other directive ("order tment)? er, notice, or other directive. If the directive is no cant to submit this notification and the agency he lating to the order.)	ot in writing, ic	entify the sents, and
		□00	ntinued on ad	ditional page

8. PROJECT LOCATION

A. Address or description of project location.	

(Include a map that marks the location of the project with a reference to the nearest city or town, and provide driving directions from a major road or highway)

The attached Index Map and detailed tabulation (HMB Ditch Maintenance Program) show each location and provide detailed information for the ditches and creeks included in this Notification.

						Continue	ed on additional page(s
B. River, stream,	or lake affected	I by the project.	Pacific	Ocean			, , , , , , , , , , , , , , , , , , , ,
C. What water bo	ody is the river,	stream, or lake tr	ributary t	o? Pacific C	cean		
D. Is the river or state or federa	stream segmen al Wild and Scei	t affected by the nic Rivers Acts?	project li	sted in the	□Yes	No No	Unknown
E. County Sa	n Mateo				1		
F. USGS 7.5 Min	ute Quad Map I	Name	i fi	G. Township	H. Range	I. Section	J. 1/4 Section
	Half Moon I	Зау		F5&6S	R5W		
						 Continue	d on additional page(s)
K. Meridian (cheo	ck one)	Humboldt	ZMt.	Diablo 🗌 San	Bernardino	96) V	
L. Assessor's Par	rcel Number(s)						
Please refer to the	e attached tabul	ation.					
						Continue	d on additional page(s)
M. Coordinates (lf available, prov	vide at least latitu	ıde/longi	tude or UTM cod	ordinates and ch	eck appropria	te boxes)
	Latitude:	r.		Lon	gitude:		
Latitude/Longitu	de 🗌	Degrees/Minutes/Seconds Decimal Degrees				Dec	imal Minutes
UTM	Easting:		North	ing:		Zon	e 10 Zone 11
Datum used for L	atitude/Longitud	le or UTM		□ NAD 27		□NAD 83 c	r WGS 84
						A-2	P-HMB-14-0004

PROJECT CATEGORY	NEW CONSTRUCTION	REPLACE EXISTING STRUCTURE	REPAIR/MAINTAIN EXISTING STRUCTURE
Bank stabilization - bioengineering/recontouring			
Bank stabilization - rip-rap/retaining wall/gabion			
Boat dock/pier			
Boat ramp			
Bridge			
Channel clearing/vegetation management			
Culvert			
Debris basin			
Dam			
Diversion structure – weir or pump intake			
Filling of wetland, river, stream, or lake			
Geotechnical survey			
Habitat enhancement - revegetation/mitigation			
Levee			
Low water crossing			
Road/trail			
Sediment removal – pond, stream, or marina			
Storm drain outfall structure			
Temporary stream crossing			
Utility crossing : Horizontal Directional Drilling			
Jack/bore			
Open trench			
Other (specify):			

9. PROJECT CATEGORY AND WORK TYPE (Check each box that applies)

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10. PROJECT DESCRIPTION

A. Describe the project in detail. Photographs of the project location and immediate surrounding area should be included.

- Include any structures (e.g., rip-rap, culverts, or channel clearing) that will be placed, built, or completed in or near the stream, river, or lake.
- Specify the type and volume of materials that will be used.
- If water will be diverted or drafted, specify the purpose or use.

Enclose diagrams, drawings, plans, and/or maps that provide all of the following: site specific construction details; the dimensions of each structure and/or extent of each activity in the bed, channel, bank or floodplain; an overview of the entire project area (i.e., "bird's-eye view") showing the location of each structure and/or activity, significant area features, and where the equipment/machinery will enter and exit the project area.

All of the City's proposed maintenance activities are included within "Attachment A" of the previous Streamed Alteration Agreement dated 10/05/04, Notification Number 1600-2003-5163-3.

In summary, the proposed work includes sediment and silt removal to clear channel obstructions, vegetation management, repair of existing bank protection, removal of non-native vegetation, and minor maintenance activities.

			Continued on additional page(s)
B. Specify the equipment and machinery that will be used to con	nplete the project.		
Backhoe, loader, mechanized mower, dump truck, hand mower,	weed eater, small to	ools.	
			Continued on additional page(s)
C. Will water be present during the proposed work period (specific the stream, river, or lake (specified in box 8.B).	fied in box 4.D) in	V Yes	No (Skip to box 11)
D. Will the proposed project require work in the wetted portion of the channel?	ØYes (<i>Enclose</i> □No	a plan to c	livert water around work site)

11. PROJECT IMPACTS

A. Describe impacts to the bed, channel, and bank of the river, stream, or lake, and the associated riparian habitat. Specify the dimensions of the modifications in length (linear feet) and area (square feet or acres) and the type and volume of material (cubic yards) that will be moved, displaced, or otherwise disturbed, if applicable.

To minimize impacts, biological surveys are conducted prior to working in or near wetlands or habitat areas. The bulk of vegetation management is done by mowing. Sediment removal is limited to restoration of channel flow. Ditch lengths are included in the attached tabulation.

The total yearly volume of material removed would be less than 500 c.y.

Continued on additional page(s)

Vegetation Type	Temporary Impact	Permanent Impact
Grasses and shrubs that do not support	Linear feet: Less than 30,000	Linear feet:
wetland habitat.	Total area:	Total area:
	Linear feet:	Linear feet:
	Total area:	Total area:
Tree Species	Number of Trees to be Removed	Trunk Diameter (range)
No trees greater than 4-inch diameter		
		Continued on additional page
C. Are any special status animal or plant spe	cies, or habitat that could support such	species, known to be present on or
C. Are any special status animal or plant spe near the project site? ☐Yes (List each species and/or describe	cies, or habitat that could support such	species, known to be present on or Unknown
 C. Are any special status animal or plant spe near the project site? ☐Yes (List each species and/or describe) 	cies, or habitat that could support such	species, known to be present on or Unknown Continued on additional page
 C. Are any special status animal or plant spenear the project site? ☐Yes (List each species and/or describe) D. Identify the source(s) of information that such a species of the source (s) of the sourc	cies, or habitat that could support such the habitat below)	species, known to be present on or Unknown Continued on additional page Box 11.C.
 C. Are any special status animal or plant spenear the project site? Yes (List each species and/or describe) D. Identify the source(s) of information that suitological reviews and written reports & instru- 	cies, or habitat that could support such the habitat below)	species, known to be present on or Unknown Continued on additional page Box 11.C. ork.
 C. Are any special status animal or plant spenear the project site? Yes (List each species and/or describe) D. Identify the source(s) of information that suitological reviews and written reports & instruction 	cies, or habitat that could support such the habitat below)	species, known to be present on or Unknown Continued on additional page Box 11.C. ork. Continued on additional page
 C. Are any special status animal or plant spenear the project site? Yes (List each species and/or describe) D. Identify the source(s) of information that suitological reviews and written reports & instruction E. Has a biological study been completed for 	cies, or habitat that could support such the habitat below)	species, known to be present on or Unknown Continued on additional page Box 11.C. ork. Continued on additional page
 C. Are any special status animal or plant spenear the project site? Yes (List each species and/or describe) D. Identify the source(s) of information that suitological reviews and written reports & instruction E. Has a biological study been completed for Yes (Enclose the biological study) 	cies, or habitat that could support such the habitat below)	species, known to be present on or
 C. Are any special status animal or plant spenear the project site? Yes (List each species and/or describe) D. Identify the source(s) of information that suitological reviews and written reports & instruction E. Has a biological study been completed for Yes (Enclose the biological study) Note: A biological assessment or study main 	cies, or habitat that could support such the habitat below) □ No upports a "yes" or "no" answer above in ctions are required before the start of w the project site? ☑ No y be required to evaluate potential project	species, known to be present on or
 C. Are any special status animal or plant spenear the project site? Yes (List each species and/or describe) D. Identify the source(s) of information that suitological reviews and written reports & instruction in the species and written reports & instruction (List each species) E. Has a biological study been completed for Yes (Enclose the biological study) Note: A biological assessment or study mation is the project of the species and years of the study been completed for the species and years (Enclose the biological study) 	cies, or habitat that could support such the habitat below) □ No upports a "yes" or "no" answer above in ctions are required before the start of w the project site? ☑ No <u>y be required to evaluate potential project</u> for the project or project site?	species, known to be present on or
 C. Are any special status animal or plant spenear the project site? Yes (<i>List each species and/or describe</i>) D. Identify the source(s) of information that suitological reviews and written reports & instruction in the second study been completed for Has a biological study been completed for Yes (<i>Enclose the biological study</i>) <i>Note: A biological assessment or study ma</i> Has a hydrological study been completed Yes (<i>Enclose the hydrological study</i>) 	cies, or habitat that could support such the habitat below) □ No upports a "yes" or "no" answer above in ctions are required before the start of w the project site? ☑ No <u>y be required to evaluate potential projector</u> for the project or project site? ☑ No	species, known to be present on or

12. MEASURES TO PROTECT FISH, WILDIFE, AND PLANT RESOURCES		
A. Describe the techniques that will be used to prevent sediment from entering watercour	rses during and after	construction.
All routine maintenance work is done only in the dry-weather months.		
If necessary, coffer dams and sediment barriers are to be installed per the F&G guideline	s, prior to work being	done
,,		uono.
		ditional page (s)
B. Describe project avoidance and/or minimization measures to protect fish, wildlife, and	plant resources.	nionai page(s)
Routine maintenance work in the vicinity of potential wetland habitat will be done per the r and in conformance to the SAA as required.	ecommendations of	biologists
	П. ~	
	Continued on add	litional page(s)
	Continued on add	litional page(s)
3. PERMITS		
List any local, state, and federal permits required for the project and check the correspond each permit that has been issued.	ding box(es). Enclos	e a copy of
A. A local Coastal Development Permit (CDP) is now being processed.	Applied	Issued
3		Issued
C		 ∏Issued
D. Unknown whether local, state, or federal permit is needed for the project.	(Check each box th	at applies)
	Continued on add	litional page(s)

14. ENVIRONMENTAL REVIEW

A. Has a draft or final docu National Environmental Species Act (ESA)?	ment been prepared for th Protection Act (NEPA), Ca	e project pursua Ilifornia Endange	nt to the California Envir ered Species Act (CESA)	onmental Quality Act (CEQA), and/or federal Endangered		
Yes (Check the box fo	or each CEQA, NEPA, CESA,	and ESA docume	nt that has been prepared a	and enclose a copy of each)		
□No (Check the box fo	r each CEQA, NEPA, CESA,	and ESA docume	nt listed below that will be o	r is being prepared)		
Notice of Exemption	Mitigated Negati	ive Declaration	NEPA docum	ent (<i>type</i>):		
☐ Initial Study	Environmental In	vironmental Impact Report				
Negative Declaration	Notice of Determ	nination (Enclose	ESA docume	nt (<i>type</i>):		
	Mitigation, Monit	oring, Reporting	Plan			
B. State Clearinghouse Nu	mber (if applicable)		1. 			
C. Has a CEQA lead agen	cy been determined?	Ves (Compl	ete boxes D, E, and F)	□No (Skip to box 14.G)		
D. CEQA Lead Agency	14	City	of Half Moon Bay			
E. Contact Person	Planning Direc	tor	F. Telephone Number	(650) 726-8251		
G. If the project described	in this notification is part of	f a larger project	or plan, briefly describe	that larger project or plan.		
				□ Continued on additional page(s)		
H. Has an environmental f	ling fee (Fish and Game C	ode section /11	.4) been paid?			
Yes (<i>Enclose proof o</i> A CEQA document will not	f payment) be filed with the County Re	☑ No (<i>Briefly</i> ecorder.	explain below the reasor	n a filing fee has not been paid)		
Note: If a filing fee is requi	red, the Department may n	ot finalize a Lak	e or Streambed Alteration	n Agreement until the filing fee		
15. SITE INSPECTION						
Check one box only.						
☑ In the event the Department of the presentative to ent reasonable time, and	artment determines that a s er the property where the p I hereby certify that I am au nent to first contact (<i>insert</i>	site inspection is project described uthorized to gran name)	necessary, I hereby auth I in this notification will ta t the Department such e	horize a Department ke place at any ntry.		

at (insert telephone number) ________to schedule a date and time to enter the property where the project described in this notification will take place. I understand that this may delay the Department's determination as to whether a Lake or Streambed Alteration Agreement is required and/or the Department's issuance of a draft agreement pursuant to this notification.

16. DIGITAL FORMAT

Is any of the information included as part of the notification available in digital format (i.e., CD, DVD, etc.)?

Yes (Please enclose the information via digital media with the completed notification form)

□ No

17. SIGNATURE

I hereby certify that to the best of my knowledge the information in this notification is true and correct and that I am authorized to sign this notification as, or on behalf of, the applicant. I understand that if any information in this notification is found to be untrue or incorrect, the Department may suspend processing this notification or suspend or revoke any draft or final Lake or Streambed Alteration Agreement issued pursuant to this notification. I understand also that if any information in this notification is found to be untrue or incorrect, the Department may suspend processing this notification. I understand also that if any information in this notification is found to be untrue or incorrect and the project described in this notification has already begun, I and/or the applicant may be subject to civil or criminal prosecution. I understand that this notification applies only to the project(s) described herein and that I am/or the applicant may be subject to civil or criminal prosecution for undertaking any project not described herein unless the Department has been separately notified of that project in accordance with Fish and Game Code section 1602 or 1611.

Signature of Applicant or Applicant's Authorized Representative

10-12-12

Laura Snideman, City Manager Print Name

A-2-HMB **rb4**-00004 Exhibit 2 Page 328 of 523 STATE OF CALIFORNIA DEPARTMENT OF FISH AND GAME

NOTIFICATION OF LAKE OR STREAMBED ALTERATION

Applicant Name: City of Half Moon Bay

Project Title: Routine Ditch Maintenance

ATTACHMENT D

Routine Maintenance

If the applicant is notifying the Department to obtain an agreement for routine maintenance activities, Section I must be completed and the information and documents described in Sections II and III must be submitted with the notification.

I. REGULARLY RE-OCCURRING MAINTENANCE ACTIVITIES

These are generally activities designed to maintain channel capacity. Check each box that applies:

Sediment removal:

- In and around bridges, culverts, storm drain outlets, and/or water diversion inlets
- Stream channel bottom
- Pond or lake
- ☐ Marina basin
- Other: Seymour Detention Basin
- Clearing trash and debris
- Removing fallen trees
- Removing dead (not dormant) trees and shrubs
- Vegetation:
 - Limbing and/or trimming of branches and tree limbs
 - U Vegetation removal under high power lines
 - Mowing levee slopes and stream banks
 - Mowing within stream and floodway channels
 - Removing emergent (e.g., bulrush and cattails) or other near water vegetation with:
 - A hand tools
 - I mechanical vegetation cutters and shredders
 - heavy equipment (soil disturbance)
 - C chemicals

Removing vegetation from the *upper half* of the bank with:

- A hand tools
- I mechanical vegetation cutters or shredders
- heavy equipment (soil disturbance)
- □ chemicals

Removing vegetation from the *lower half* of bank with:

A hand tools

M mechanical vegetation cutters or shredders

heavy equipment (soil disturbance)

□ chemicals

Removing vegetation within the channel with:

A hand tools

M mechanical vegetation cutters and shredders

heavy equipment (soil disturbance)

□ chemicals

Removing invasive, non-native plants with:

And tools

mechanical vegetation cutters and shredders

heavy equipment (soil disturbance)

C chemicals

Other:

Debris and brush pile burning

Burning levees

Minor erosion repair:

Repair at existing erosion control sites

New erosion repair

Revegetation with local, native plant species

NOTIFICATION OF LAKE OR STREAMBED ALTERATION ATTACHMENT D

Chemical application:

- Herbicides
- Rodenticides
- □ Insecticides

Minor bridge work:

□ Reinforcing pilings

Reinforcing aprons

Bridge painting (access and falsework)

Materials to be used for reinforcement:

	Other:		
been street.	Quilon.		the second se

Other:	

Other: _____

II. MAP OR MAPBOOK

Maps must be of sufficient detail to assist in locating maintenance sites and should include the following:

- A. The applicant's jurisdictional boundaries
- B. All watercourses within the jurisdictional boundaries where maintenance will occur
- C. A key to identify each watercourse and the maintenance activities and location (e.g., bridges, water control diversions, and large scale maintenance) of those activities that are likely to occur

III. SPECIAL STATUS SPECIES LOCATIONS

A drawing, diagram, or map that shows the applicant's jurisdictional boundaries and the locations within that area where special status species are known to exist.

	DITCH	MAINTE	City o	of Hal CE PF	f Moor ROGR/	n Bay AM (Updated 10/11/12)
<u>We</u> En	et Weather Activity (Follow-up F& nergency obstruction clearing only.	G Notific	ation F	Requir	<u>ed)</u> :	
<u>Dr</u> Tra	y Weather Activity (Advance F&G ash removal; clearing debris and blo	Notificat ckages; r	t <mark>ion Re</mark> emova	guire I of tre	1 - See I es less t	Note 1 Below) : than 4-inch diameter & shrubs; mowing grass.
<u>Ba</u> Cit	<u>sic Premise</u> : y maintains only ditches or natural o	creeks tha	it recei	ve run-	off from	City maintained streets or City owned property.
Key	Drainage Ditch Location	Owner- ship (2)	Flow Type (3)	Bio. Rev. (4)	Approx. Length (ft.)	Comments
(.	A) Emergency Clearing & Clean-	ip Only				
A-1	Frenchmans Creek East City limit to the Coastside Trail	Pvt. & Fee	Р	No	N/A	Creek is adjacent to or over portions of City Park, APN's 048-384- 020 and 048-391-010
A-2	Cabrillo Property Ditch Southeasterly corner of Parcel	Fee	1	No	N/A	City Prop. APN 048-280-020
A-3	Pilarcitos Creek East City limit to the Coastside Trail	Pvt. & Fee	Р	No	N/A	City Prop. APN's 056-391-050, 056-300-220 and 056-300-210
A-4	Arroyo Leon Creek Miramontes Street Bridge	Fee & R/W	1	No	N/A	Creek is on private property except under the Miramontes St. Bridge
A-5	Seymour Ditch Railroad R/W to the Coastside Trail	Fee	U	No	N/A	Unimproved Seymour Street right-of-way and APN 065-011-010
(E	3) Ditches with Potential Habitat	Impact				
B-1	Roosevelt Ditch Alameda Ave. to the Coastside Trail	Fee & Esmt.	I	Yes	400	Adjacent to or over portions of City Prop., APN's 048-126-180, 048 125-160, 048-125-050 and 12' Easement 048-085-720
B-2	Kehoe Ditch Hwy 1 to the Coastside Trail	Esm't.	U	Yes	2,900	10' wide City easement over portions of APN's 048-340-040; 048- 294-010 thru 290 and 048-295-400
B-3	Kelly Ditch, south of Kelly Ave. Railroad R/W to the Coastside Trail	Esm't & R/W.	U	Yes	700	Portions of APN's 056-093-210 thru 250; 056-096-590; Beach Avenue and Balboa Ave
B-4	Miramontes Ditch Railroad R/W to the Coastside Trail	R/W	U	Yes	700	Street Drainage Only. Often has standing water. Across APN's 056-093-210 & 056-096-640
B-5	Central Ditch Railroad Ave. to CoastsideTrail	R/W	U	Yes	800	Unimproved Central Avenue right-of-way, west of Railroad Avenue
B-6	Myrtle St. Bubble-up Railroad Ave. to the Coastside Trail	R/W	U	Yes	800	Street Drainage Only. Often has standing water. Unimproved Myrtle Street R/W, west of Railroad Ave.
B-7	Magnolia Ditch First Ave. to Railroad R/W	Pvt. & Fee	υ	Yes	400	APN's 064-312-010 thru 070 and 064-313-010 and 020
B-8	Seymour Detention Basin At foot of Seymour St.	Fee	U	Yes	N/A	APN 064-322-340 & 370
B-9	Seymour Ditch Hwy 1 to Railroad R/W	R/W	U	Yes	2,500	Seymour Street R/W
B-10	Redondo Beach Rd., both sides Railroad R/W to the Coastside Trail	R/W	U	Yes	1,800	Street right-of way
<u>A.9.1110</u>						

Кеу	Drainage Ditch Location	Owner- ship (2)	Flow Type (3)	Bio. Rev. (4)	Approx. Length (ft.)	Comments
(0	C) Ditches Not Adjacent to habita	t.				
C-1	Railroad Ave., west side Spruce St. to Poplar St.	R/W	U	No	300	
C-2	Poplar St., both sides Railroad Ave. to Coastside Trail	R/W	U	Yes	1,300	
C-3	Railroad Ave., west side Poplar St. to Magnolia Ave.	R/W	U	No	900	
C-4	Grove St., south side West of First St. to Railroad Ave.	R/W	U	No	400	
C-5	Magnolia St. Hwy 1 to First Ave.	R/W	U	Yes	2,100	
C-6	Wavecrest Rd., north side Alolng Smith Field	R/W	U	No	1,300	
C-7	Redondo Beach Rd., both sides Hwy 1 to Railroad R/W	R/W	U	Yes	2,900	
NOTES: (1) F&G SAA The F&G Streambed Alteration Agreement (SAA) requires that notice of the proposed work for each year be submitted by May 1st. The Permit also requires that a notice of completion of work be submitted annually by September 15th (for maintenance work April through July), and by November 15th (for maintenance work August through October). For Emergency Clearing work, written notification within 14 days after the work begins.						
	(2) Ownership	(3) Drainage Type				
-	Esm't. = City Easement	I = Intermittent Creek/Stream			eam	
	Fee = City Fee Title	P = Perennial Creek/Stream		am		
	Pvt, = Private Property		U = Urban Runoff			
	R/W = Public Right of Way					
(4) Bio. Review: A biologist is needed to identify any protected species or habitat in the work area. If presence of species or habitat is confirmed, the biologist will recommend protective measures (training in plant and species identification; temporary fencing etc.), to be implemented during maintenance work.						



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Appendix B.2: Original Draft Stream Alteration Agreement

CALIFORNIA DEPARTMENT OF FISH AND GAME BAY DELTA REGION 7329 SILVERADO TRAIL NAPA, CALIFORNIA 94558 (707) 944-5520 WWW.DFG.CA.GOV



STREAMBED ALTERATION AGREEMENT NOTIFICATION NO. 1600-2012-0173-R3 Several Creeks and named and unnamed ditches and drainages in Half

CITY OF HALF MOON BAY ROUTINE DITCH MAINTENANCE

This Streambed Alteration Agreement (Agreement) is entered into between the California Department of Fish and Game (DFG) and the City of Half Moon Bay (Permittee) as represented by Laura Snideman.

RECITALS

Moon Bay

WHEREAS, pursuant to Fish and Game Code (FGC) section 1602, Permittee notified DFG on May 31, 2012 that Permittee intends to complete the project described herein.

WHEREAS, pursuant to FGC section 1603, DFG has determined that the project could substantially adversely affect existing fish or wildlife resources and has included measures in the Agreement necessary to protect those resources.

WHEREAS, Permittee has reviewed the Agreement and accepts its terms and conditions, including the measures to protect fish and wildlife resources.

NOW THEREFORE, Permittee agrees to complete the project in accordance with the Agreement.

PROJECT LOCATION

This Agreement authorizes routine maintenance of various sites that fall under the jurisdiction and responsibility of the Permittee. Work locations (Exhibit A) are located at:

Area A:

- 1. A-1. Frenchmans Creek- East City limit to the Coastside Trail
- 2. A-2. Cabrillo Property Drainage Southeasterly corner of parcel
- 3. A-3. Pilarcitos Creek- East City limit to the Coastside Trail
- 4. A-4. Arroyo Leon Creek- Miramontes Street Bridge
- 5. A-5. Seymour Drainage- Railroad right-of-way (R/W) to the Coastside Trail

Ver. 02/16/2010

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- 6. B-1. Roosevelt Drainage- Alameda Avenue to Coastside Trail
- 7. B-2. Kehoe Ditch Drainage- Highway 1 to the Coastside Trail
- 8. B-3. Kelly Drainage- South of Kelly Avenue Railroad R/W to the Coastside Trail
- 9. B-4. Miramontes Drainage- Railroad R/W to the Coastside Trail
- 10.B-5. Central Drainage- Railroad Avenue to Coastside Trail
- 11.B-6. Myrtle Street Bubble-up- Railroad Avenue to Coastside Trail
- 12.B-7. Magnolia Drainage- First Avenue to Railroad R/W
- 13.B-8. Seymour Detention Basin- At foot of Seymour Street
- 14.B-9. Seymour Drainage- Highway 1 to Railroad R/W.
- 15.B-10. Redondo Beach Road- both sides Railroad R/W to the Coastside Trail

Area C:

- 16.C-1. Railroad Avenue West Side-Spruce to Poplar Street
- 17.C-2. Poplar Street Both Sides- Railroad Avenue to Coastside Trail
- 18.C-3. Railroad Avenue West Side- Poplar Street to Magnolia Avenue
- 19.C-4. Grove Street South Side- West of First Street to Railroad Avenue
- 20.C-5. Magnolia Street- Highway 1 to First Avenue
- 21.C-6. Wavecrest Road North Side- Along Smith Field
- 22.C-7. Redondo Beach Road Both Sides- Highway 1 to Railroad R/W

PROJECT DESCRIPTION

Permittee will conduct "routine maintenance activities", generally defined as periodic activities necessary to maintain the water transport capacity of streams, channels and flood control channels, and the structural and functioning integrity of existing flood control and sediment detention structures on or affecting streams. Routine maintenance activities includes sediment, silt, trash and debris removal to clear channel obstructions, vegetation management, repair of existing bank protection, and removal of non-native vegetation. Refer to Exhibit B for Authorized Activities under this Agreement and Exhibit C for definitions of other terms used in this Agreement.

Equipment used will vary by maintenance activity and could include back hoe, loader, dump truck, hand mower and weed eater. No heavy equipment will operate in the active (flowing) stream channel.

PROJECT IMPACTS

Existing fish or wildlife resources the routine maintenance activities could substantially adversely affect include:

Existing fish or wildlife resources the project could potentially substantially adversely affect include: California red-legged frog (CRLF), a California Species of Special Concern (CSC) and a species listed as threatened under the Endangered Species Act (ESA); San Francisco garter snake (SFGS), a species listed as endangered under the

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ESA and the California Endangered Species Act (CESA); steelhead, a threatened species under the Endangered Species Act (ESA) and a CSC; San Francisco dusky-footed woodrat (SFDW); nesting birds; roosting bats; water quality and wetland and riparian vegetation.

The adverse effects the project could potentially have on the fish or wildlife resources identified above include: potential increase in sediment transport during project activities; increase in turbidity during project activities; direct take of species during project activities; temporary loss or impediment of terrestrial animal species travel routes due to temporary structures; loss of emergent vegetation; and disturbance to wildlife associated with construction noise.

MEASURES TO PROTECT FISH AND WILDLIFE RESOURCES

1. Administrative Measures

Permittee shall meet each administrative requirement described below.

- 1.1 <u>Documentation at Work Sites</u>. Permittee shall make the Agreement, any extensions and amendments to the Agreement, and all related notification materials and California Environmental Quality Act (CEQA) documents, readily available at the work sites at all times. Such materials shall be presented to DFG personnel or personnel from other state, federal, or local agencies, upon request.
- 1.2 <u>Providing Agreement to Persons at Work Sites</u>. Permittee shall provide copies of the Agreement and any extensions and amendments to the Agreement to all persons who will be working on the project at the work site on behalf of Permittee, including but not limited to contractors, subcontractors, inspectors, and monitors.
- 1.3 <u>Notification of Conflicting Provisions</u>. Permittee shall notify DFG if Permittee determines or learns that a provision in the Agreement might conflict with a provision imposed on the project by another local, state, or federal agency. In that event, DFG shall contact Permittee to resolve any conflict.
- 1.4 <u>Work Site Entry and Inspections</u>. Permittee agrees that DFG personnel may enter the work site(s) at any time to inspect routine maintenance activities performed and to verify compliance with this Agreement.
- 1.5 <u>Additional Measures</u>. As a result of any field inspection, DFG may require that additional measures be applied to specific activities to protect sensitive biological resources. Such measures may be

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> amended into this Agreement with the agreement of both parties, or if an exception to authorized activities is identified, Permittee may be asked to submit separate written notification to DFG pursuant to Measure 1.7.

- 1.6 <u>Authorized Routine Maintenance Activities</u>. Only those activities specifically described in the Project Description shall be conducted under this Agreement.
- 1.7 <u>Exceptions to Authorized Activities</u>. Permittee shall submit separate written notification (Forms FG 2023 and FG 2024) pursuant to Section 1602 of the FGC, together with the required fee prescribed in the DFG Streambed Alteration Agreement fee schedule, and otherwise follow the normal notification process prior to the commencement of work activities in all cases where one or more of the following conditions apply:
 - The proposed work does not meet the criteria established for routine maintenance activities in the Project Description of this Agreement;
 - The nature of the proposed work is substantially modified from the work described in the Project Description of this Agreement;
 - DFG advises Permittee that conditions affecting fish and wildlife resources have substantially changed at a specified work site or that such resources would be adversely affected by the proposed maintenance activity; and/or
 - The proposed work would adversely impact a State of California (State) Species of Special Concern or State or federally listed rare, threatened, endangered or candidate species or its habitat.
- 1.8 <u>Unauthorized Take</u>. This Agreement does not authorize the take of any State or federally listed threatened species, endangered species, CSC, or candidate species. If DFG determines, or Permittee finds that there are such species on the work site, Permittee shall notify DFG, US Fish and Wildlife Service (USFWS), and/or National Oceanic Atmospheric Association, National Marine Fisheries Service (NMFS) as appropriate. Permittee shall immediately cease work until DFG and other applicable agencies deem that the concern over special status species has been resolved. This Agreement does not authorize capture and/or handling of listed species.

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2. Avoidance and Minimization Measures

To avoid or minimize adverse impacts to fish and wildlife resources identified above, Permittee shall implement each measure listed below.

- 2.1 <u>Seasonal Work Period for A-1 through A-5, B-2; B-4; B-5; B-8; B-9;</u> <u>B-10; C-1; C-2; C-3; C-5; C-6; and C-7 Locations</u>. To minimize adverse impacts to fish and wildlife and their habitats, work within these project areas shall be limited to June 15 to October 31. Revegetation is not limited to this work period.
- 2.2 <u>Seasonal Work Period for B-1, B-3, B-6, B-7, C-4.</u> To minimize adverse impacts to fish and wildlife and their habitats, work within these project areas shall be limited to April 15 to October 31. Revegetation is not limited to this work period.
 - 2.2.1 <u>Seasonal Work Period Modification</u>. If CRLF are found to be in the maintenance activity areas, the Seasonal Work Period in Measure 2.1 shall be implemented.
- 2.3 <u>Sensitive Fisheries</u>. Permittee shall obtain written permission from DFG prior to conducting routine maintenance activities in watercourses with sensitive fisheries. The sites with sensitive fisheries include but are not limited to: A-1; A-3; A-4. Weed abatement (limited to abatement above the ordinary high water mark) may be conducted without prior DFG approval as long as it is not in CRLF or SFGS habitat or potential habitat. DFG reserves the right to provide additional provisions to this Agreement if sensitive fisheries are present at a work area.
- 2.4 <u>Weather Forecast</u>. Permittee shall monitor the seventy-two hour forecast from the National Weather Service (<u>http://www.nws.noaa.gov</u>). When there is a forecast of more than 40% chance of rain, or at the onset of unanticipated precipitation, the Permittee shall remove all equipment and shall implement erosion and sediment control measures and all Project activities shall cease.
- 2.5 <u>Dry Out Period</u>. No work will occur during a dry out period of 24 hours after there has been ¼ inch or more of precipitation.
- 2.6 <u>No Equipment in Channel.</u> No equipment shall be operated in a flowing stream at anytime except as may be necessary to construct a dewatering system or divert water flow around the work site.
- 2.7 <u>DFG-Approved Qualified Biologist(s) and Biological Monitor(s)</u>. Within a minimum of 30 days prior to initiating special-status surveys

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> within the Project area, Permittee shall submit to DFG for approval, the names and resumes of all biologists and biological monitors involved in conducting surveys and/or monitoring work.

A qualified biologist is an individual who shall have a minimum of five years of academic training and professional experience in biological sciences and related resource management activities with a minimum of two years conducting surveys for each species that may be present within the Project area.

A biological monitor is an individual who shall have academic and professional experience in biological sciences and related resource management activities as it pertains to this Project, experience with construction-level biological monitoring, be able to recognize species that may be present within the Project area, and be familiar with the habits and behavior of those species.

- 2.8 <u>Nesting Bird Survey</u>. If covered activities are scheduled during the nesting season of raptors and migratory birds (refer to Measure 2.9), a focused survey for active nests of such birds shall be conducted by the qualified biologist within 15 days prior to the beginning of project-related activities. Surveys shall be conducted in all suitable habitat located at Project work sites, in staging, storage and soil stockpile areas, and along transportation routes. The minimum survey radii surrounding the work area shall be the following: i) 250 feet for passerines; ii) 500 feet for other small raptors such as accipiters; iii) 1,000 feet for larger raptors such as buteos. The bird survey methodology and the results of the survey shall be submitted to the DFG prior to commencement of project activities.
- 2.9 <u>Nesting Season</u>. Nesting seasons shall be defined as followed: i) March 15 to August 30 for smaller bird species such as passerines; ii) February 15 to September 15 for raptors.
- 2.10 <u>Active Nests</u>. An active nest is defined as a nest having eggs or chicks present, or a nest that adult birds have staked a territory and are displaying, constructing a nest, or are repairing an old nest. If active nests are found, the Permittee shall consult with the DFG and the USFWS regarding appropriate action to comply with the Migratory Bird Treaty Act of 1918 and the FGC. If a lapse in project-related work of 15 days or longer occurs, another focused survey shall be conducted before project work is reinitiated. If active nests are found, the Permittee shall consult with the DFG and the USFWS prior to resumption of project activities.

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- 2.11 <u>Active Nest Buffers</u>. Active nest sites shall be designated as "Ecologically Sensitive Areas" and protected (while occupied) during project activities with the establishment of a fence barrier surrounding the nest site. The minimum distances of the protective buffers surrounding each identified nest site shall be the following: i) 1000 feet for large raptors such as buteos; ii) 250 feet for small raptors such as accipiters; iii) 250 feet for passerines. A biological monitor or qualified biologist shall monitor the behavior of the birds (adults and young, when present) at the nest site to ensure that they are not disturbed by project-related activities. Nest monitoring shall continue during project-related construction work until the young have fully fledged, are no longer being fed by the parents and have left the nest site, as determined by a biological monitor.
- 2.12 Nesting Habitat Removal or Modification. No trees, shrubs or wetland and marsh habitat shall be disturbed that contain active bird nests until all eggs have hatched, and young have fully fledged (are no longer being fed by the adults, and have completed left the nest site). To avoid potential impact to tree or shrub-nesting birds, any removal, trimming or pruning of trees or shrubs shall be conducted during the time period of September 16 to February 14. At the discretion of DFG, tree removal or modification may be authorized between the period of February 15 and September 15 provided that the qualified biologist has completely surveyed the work area and confirmed the absence of nesting activity. No habitat removal or modification shall occur within the Ecologically Sensitive Area fenced nest zone even if the nest continues to be active beyond the typical nesting season for the species (refer to Measure 2.9), until the young have fully fledged and will no longer be adversely affected by the project.
- 2.13 <u>SFDW Preconstruction Survey.</u> A preconstruction survey for SFDW by a qualified biologist shall be conducted within two weeks prior to project activities. If SFDW houses are present, the DFG shall be notified immediately.
- 2.14 <u>Protection of SFDW.</u> In the event a SFDW nest is found in the project area, the Permittee shall survey the immediate project area and areas expected to be disturbed by project activities as well as a 50-foot buffer around those areas. The locations of any detected nests, sighted individuals or carcasses shall be plotted on a base map or maps. The base map or maps shall consist of an aerial photograph of the project area, predicted disturbed areas and the 50-foot buffer, each of which will be identified on the map or maps. The map or maps will be of such scale as to allow identification of individual nest sites or nest clusters. Map(s) shall be submitted to

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> the DFG. DFG shall submit written avoidance and mitigation measures to the Permittee and those measures shall be considered part of this Agreement.

2.15 <u>Other Surveys</u>. If habitat for rare plants, or other special-status species exists at a given work site and such species are known to exist within reasonable dispersal distance (see definition in Exhibit B) of the work area, a qualified biologist shall conduct a reconnaissance-level survey (if survey is not specified in this Agreement) within 48 hours of the commencement of routine maintenance activities. At work sites where heavy equipment will be used, upland access routes and staging areas should also be surveyed.

If special-status species are found during surveys or construction, work activities shall cease and Permittee shall notify DFG prior to project activities. DFG reserves the right to provide additional measures to this Agreement in the event that special-status species are discovered.

CRLF and/or SFGS Sensitive Sites

The following measures shall be complied with for the sites considered to potentially have habitat or occurrences of CRLF and SFGS: A-1; A-3; A-4; B-2; B-4; B-5; B-8; B-9; B-10; C-1; C-2; C-3; C-5; C-6; C-7 and Seymour Detention Basin.

- 2.16 <u>CRLF Survey</u>. Prior to and within 48 hours of the planned start of project activities, a focused survey for CRLF using agency approved protocol shall be conducted by a qualified biologist to determine if they are in the area. If CRLF are found, the DFG shall be notified immediately to determine the correct course of action and Project Activities shall not commence until after May 30 (with the exception of the Seymour Detention Basin-refer to Measure 2.28) and not begin until approved by the DFG. DFG reserves the right to provide additional measures to this Agreement to protect sensitive species.
- 2.17 <u>Monitors On-Site for CRLF and SFGS.</u> Biological monitor(s) and/or qualified biologists shall be on the project site while routine maintenance activities are being conducted at these sites.
- 2.18 <u>Vegetation Removal by Mowing at CRLF and SFGS Sensitive Sites.</u> For control of weeds and grasses on channel banks and access roads, vegetation shall be cut down to 3 inches by handtools (weedwhacker, etc). Once the ground is visible, a visual survey for SFGS and CRLF shall be conducted. If no sensitive species are

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> found in the area, removal of vegetation may continue by mowing very slowly with a biological monitor walking in front of the mower to observe. If a CRLF and/or SFGS are observed, all activities shall cease and DFG shall be notified immediately. CRLF can be relocated only if a person is permitted by the USFWS and approved by DFG for this specific project to handle CRLF.

- 2.19 <u>Vehicle Restrictions.</u> Any vehicle parked on site for more than 15 minutes shall be inspected by the biological monitor or qualified biologist before it is moved to ensure that CRLF or SFGS have not moved under the vehicle. Any parking areas must be checked in advance by the biological monitor or qualified biologist.
- 2.20 <u>No Stockpiling of Vegetation</u>. Vegetation removed shall be placed directly into a disposal vehicle and removed from the site. Vegetation shall not be piled on the ground unless it is later transferred, piece by piece, under the direct supervision of the biological monitor or qualified biologist.
- 2.21 <u>No Stockpiling of Soil</u>. To protect SFGS burrows, soil shall not be stockpiled on the ground unless it is on a paved surface, or on the area between the road-side drainages and the road in Area C, or an area where there aren't burrows.
- 2.22 <u>CRLF Exclusion for Sediment Removal with Large Equipment.</u> If CRLF are found in routine maintenance activity sites using large equipment to remove sediment, CRLF shall be excluded from the project site. DFG-approved exclusion fencing shall be installed around the sediment removal site, staging areas and any areas where fill may be dumped. After installation of the fence barrier, a biological monitor shall daily inspect the project work area, staging and stockpiling area prior to the commencement of activities. If the biological monitor determines that sensitive species are not within the work area, equipment or materials may be moved onto the work site and project activities may commence under the observation of the biological monitor.
- 2.23 <u>Cease Activities for CRLF</u>. If CRLF enters the work area, all work shall stop until the animal leaves on its own. If a person is permitted by the USFWS and approved by DFG for this specific project to handle CRLF, only they can handle and relocate CRLF.
- 2.24 <u>Stop Work Authority for CRLF.</u> The biological monitor and/or qualified biologist shall have the authority to halt work activities that may affect CRLF adults, tadpoles or egg masses until they can be moved out of harms way.

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- 2.25 <u>CRLF and SFGS Sightings.</u> Any sightings and/or injuries to CRLF or SFGS shall be immediately reported to the DFG.
- 2.26 <u>Cease Activities for SFGS.</u> SFGS is protected under FGC Section 5050. Under this statute, take of a fully protected species may not occur except for scientific or recovery purposes. Catch, pursue, capture or attempt to catch, pursue and capture is considered take as defined in Section 86 of the FGC. Because of this, any SFGS encountered in the work area shall not be handled and shall be left alone until it leaves the area on its own. If SFGS are found in the project area, Permittee shall cease project activities and immediately notify the DFG. Activities shall not resume until measures to avoid take of SFGS are adopted.
- 2.27 <u>CRLF Survey of Seymour Detention Basin</u>. Prior to and within 48 hours of the planned start of routine maintenance activities, a focused survey for CRLF using agency approved protocol shall be conducted by a DFG-approved biological monitor to determine if they are in the area. If CRLF are found, the DFG shall be notified immediately to determine the correct course of action and maintenance activities shall not begin until approved by the DFG. DFG may request Permittee to notify the DFG for a separate Agreement pursuant to FGC Section 1602 for this activity.
- 2.28 <u>Seasonal Work Period for Seymour Detention Basin</u>. If CRLF are found in this detention basin and water is present in the basin, sediment removal activities shall be performed from September 1 to October 15. Dredging and de-watering operations shall be approved by DFG prior to commencement of activities.
- 2.29 <u>Vegetation Removal at Seymour Detention Basin.</u> Tule and emergent vegetation shall be removed by hand. Vegetation surrounding the detention basin may be removed as stated in Measure 2.18 if no CRLF are observed.
- 2.30 <u>California Red-Legged Frog Breeding Season Protective Measures If</u> <u>CRLF are found in any project area,</u> work that will be performed during the breeding season for the California red-legged frog (November 1 to May 30), the following conditions shall apply:
 - In work areas containing emergent vegetation (e.g., tules, cattails), vegetation shall be inspected for CRLF eggs masses prior to work. A buffer of vegetation at least 10 feet in diameter shall be left around any egg masses found. Permittee shall keep a record of any sites where egg masses are found and shall conduct

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vegetation removal at these sites prior to November 1 in subsequent years.

- Staff shall avoid entering the channel to avoid dislodging egg masses. Trimming activities shall be performed from the banks, if possible.
- 2.31 <u>Leave Wildlife Unharmed</u>. If any wildlife is encountered during routine maintenance activities, said wildlife shall be allowed to leave the Project site unharmed.
- 2.32 <u>Designation of Work Area.</u> Prior to project activities, a biological monitor shall clearly mark/flag or erect temporary construction fencing to designate the work area and to delineate the areas that shall be avoided. The biological monitor shall clearly mark/flag all trees within the designated work area that shall be avoided. Flagging and or temporary construction fencing shall be removed immediately after the completion of construction work.
- 2.33 Existing Access Roads. Access to the Project site shall be via existing roads and access ramps. Any other heavy equipment shall be positioned on the existing paved access road located above the top-of-bank.
- 2.34 <u>Vegetation Disturbance</u>. Disturbance or removal of vegetation shall not exceed the minimum necessary to complete operations. Vegetation outside the Project work area shall not be removed or damaged without prior consultation and written approval of a DFG representative.
- 2.35 Trimming of Vegetation. Trimming is defined herein as the removal of vegetation to the extent necessary to allow a specific level of access and for specific types of equipment (excavator) or to restore normal streamflow. There shall be no vegetation removal in excess of what is necessary to allow the level of access needed or to restore normal streamflow. Trees, shrubs and emergent wetland plants may be removed from natural channels if they are below ordinary high water (OHW) and are restricting the capacity of the stream channel and are causing erosion or flooding. Branches and/or limbs overhanging the channel and impacting water flows shall be properly pruned. Only those branches in the lower third of any woody plant and less than three (3) inches in diameter may be trimmed to accommodate maintenance activities. Understory groundcover and vines such as mugwort, blackberry or ferns may be trimmed only as needed to accommodate maintenance activities. No bulldozers, backhoes, or other heavy equipment shall be used to remove tree

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> branches or trees. No vegetation shall be removed by excavation or cutting off below the soil. All pruned material shall be removed from the area and properly disposed of.

- 2.36 <u>Change of Conditions</u>. If, in the opinion of DFG, conditions arise, or change, in such a manner as to be considered deleterious to the stream or wildlife, operations shall cease until corrective measures approved by DFG are taken.
- 2.37 <u>Injury or Mortality of Special-Status Species.</u> If Permittee or its employees, contractors, or agents injures or kills a special-status species, or finds any such animal injured or dead, all activities in the work area shall immediately cease, and DFG and USFWS shall be notified by telephone within 30 minutes of the discovery. A written report detailing the time, location, and general circumstances under which the dead or injured individual animal was found shall be submitted to DFG and the USFWS no later than five (5) business days following the incident.
- 2.38 Education Session before Commencement of Work. A qualified biologist or biological monitor shall hold an annual training session for staff responsible for performing routine maintenance activities. Staff shall be trained to recognize special-status species and their habitats. Staff shall also be trained to use protective measures to ensure that such species are not adversely impacted by routine maintenance activities. The training program shall be updated at least annually to reflect current special-status species management practices. At least one staff person with up-to-date training in special-status species protective measures shall be present at each work site at all times. Any personnel joining the work crew later shall receive the same training before beginning work. The penalties for noncompliance of conditions in this Agreement shall be relayed to all project personnel.
- 2.39 <u>Limitations on Sediment Removal.</u> Annual sediment removal shall conform to the following limits:

 Natural channels – not to exceed 30 cubic yards, limited to 500 linear feet per stream;

Engineered earthen channels and drainages— not to exceed 45 cubic yards, limited to 1,000 linear feet per stream. Removal equipment shall be staged on the road or outside bank of the drainage;

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> Concrete-lined channels – not to exceed 90 cubic yards, limited to 5,000 linear feet per channel;

 Additional sediment removal around bridge footings and in culverts, storm drain outlets, trash racks/trash capture devices, and water diversion inlets – not to exceed 50 cubic yards;

Seymour Sediment Basin. If CRLF are not found, unlimited amount of sediment removal may occur on an as-needed basis. If CRLF are found, Permittee shall consult with DFG to determine the proper technique and amount of sediment to be removed at the proper time. This site shall be surveyed for CRLF each year sediment removal is proposed.

- 2.40 <u>Limitations on Bank Stabilization/Bank Repair</u>. This Agreement does not authorize bank or channel fill, such as placement of imported soils, riprap, etc., with the exception of fill required for in-kind repair or replacement of existing bank stabilization.
- 2.41 Limitations on Vegetation Removal at Sites A-1 through A-5 and B-2 and C-6. The disturbance or removal of vegetation shall not exceed the minimum necessary to prevent potential flooding. Precautions shall be taken to avoid other damage to vegetation by people or equipment. Woody and herbaceous plants, fallen trees, or trunks or limbs lodged in the bed or bank causing flow restriction shall be cut off at the bed or bank invert with small tools and removed with winch and cable or other equipment operated from top of bank. Root structures are not to be disturbed.
 - 2.41.1 <u>Stumps or Large Woody Debris Restrictions</u>. Embedded pieces of large woody debris or stumps that potentially serve as basking sites or that encourage pool formation shall be left in place if it does not obstruct the flow of water and there is adequate flood flow capacity.
 - 2.41.2 <u>Embedded Objects</u>. Objects embedded/anchored in the bank, such as tree stumps, shall not be removed during periods of heavy flow if removal would result in release of sediment into the channel. However, protruding objects that could capture additional debris and result in obstruction of the channel (e.g. the branches and trunk of a downed tree) may be trimmed. If an embedded object must be removed to prevent a debris jam, Best Management Practices (BMPs) (See Measure 2.44) shall be used to prevent release of sediment into the channel, and the bank shall be reseeded, re-vegetated, mulched and/or covered with erosion-control

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fabric following removal.

- 2.41.3 <u>No Tree Removal</u>. No trees over 4 inches diameter at breast height (DBH) may be removed. Exceptions require the prior written approval from DFG. Any trees removed shall be replaced according to Measure 3.1, and exposed/ disturbed areas shall be re-vegetated as described in Measure 3.4.
- 2.42 Limitation of Vegetation Removal at earthen channels (Area B and C) and earthen drainagees along the Coastside Trail (Areas B and C) and sites not listed in Measure 2.41. Hand tools shall be used to weed or trim vegetation to clear the earthen channel or roadside drainage. Mowing shall occur only in areas between the drainage and the road at sites within and near CRLF areas and shall be limited to the area necessary to prevent flooding or trapping sediment. If mowing is needed on the banks opposite of the road, Permittee shall comply with Measure 2.18. Precautions shall be taken to avoid other damage to vegetation by people or equipment.
 - 2.42.1 <u>No Tree Removal</u>. No trees over 4 inches diameter at breast height (DBH) may be removed. Exceptions require the prior written approval from DFG. Any trees removed shall be replaced according to Measure 3.1, and exposed/ disturbed areas shall be re-vegetated as described in Measure 3.4.
- 2.43 <u>Disposal of Invasive Plant Material</u>. Invasive plant material removed during work activities shall be bagged and appropriately incinerated or disposed of in a landfill or permitted composting facility.
- 2.44 <u>Stream Diversion.</u> The work area during sediment removal activities shall be isolated from the creek. To isolate the work area, water tight coffer dams shall be constructed upstream and downstream of the work area and water diverted through a suitably sized pipe, from upstream of the upstream coffer dam and discharged downstream of the downstream coffer dam. Coffer dams shall be constructed of a non-erodible material which does not contain soil or fine sediment. Coffer dams and the stream diversion system shall remain in place and functional throughout the construction period. If, the coffer dams or stream diversion fail, they shall be repaired immediately.
- 2.45 <u>Water Surface Elevation.</u> During dewatering of the creek, the decrease in water surface elevation (WSE) shall be controlled such that WSE does not change at a rate that increases turbidity to the

creek that could be deleterious to aquatic life and the likelihood of stranding aquatic life up- and downstream of the creek.

- 2.46 <u>Check for Stranded Aquatic Life.</u> The biological monitor shall check daily for stranded aquatic life as the water level in the dewatering area drops. All reasonable efforts shall be made to capture and move all stranded aquatic life observed in the dewatered areas. Capture methods may include fish landing nets, dip nets, buckets and by hand. Captured aquatic life shall be released immediately in the closest body of water adjacent to the work site. This condition does not allow for the take or disturbance of any state or federally listed species.
- 2.47 <u>Nonnative Aquatic Species Removal.</u> Any aquatic nonnative invasive species found shall be disposed of properly and shall not be placed into back into drainage. Permittee shall send a list to DFG of species found and the location they were found after completion of covered activities.
- 2.48 <u>Silt Curtains.</u> The Permittee shall deploy silt curtains or other appropriate silt filtering devices, such as straw bales, around the excavation site to prevent heavily silted water from impacting areas around the site. The silt curtain or silt filtering devices shall be maintained throughout all phases of the excavation and construction activities.
- 2.49 <u>Cease Project for Elevation of Turbidity Levels.</u> Upon DFG determination that turbidity/siltation levels resulting from project related activities constitute a threat to aquatic life, activities associated with the turbidity/siltation shall be halted until effective DFG approved control devices are installed or abatement procedures are initiated. The DFG may take enforcement action if appropriate turbidity and siltation control measures are not deployed.
- 2.50 <u>Spoils</u>. Spoil shall not be placed where it could enter the stream, riparian or wetland areas. Spoil shall not be placed over riparian or wetland vegetation except as specifically noticed to and accepted by DFG.
- 2.51 <u>Staging Areas</u>. Staging areas shall be located at least 30 feet from the top of bank or on the outboard side of levees. Vegetation disturbance shall be limited to the immediate construction footprint and a single access pathway, where feasible.

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- 2.52 <u>Removal of Native Material</u>. Except as explicitly described in this Agreement, the removal of native soils, rock, gravel, vegetation, and vegetative debris from the stream bed or stream banks is prohibited.
- 2.53 <u>Removal of Trash and Debris</u>. Permittee shall remove all raw construction materials and wastes from work sites following the completion of maintenance activities. Food-contaminated wastes generated during work shall be removed on a daily basis to avoid attracting predators to work sites. All temporary fences, barriers, and/or flagging shall be completely removed from work sites and properly disposed of upon completion of maintenance activities. Permittee or its contractors shall not dump any litter or construction debris within the riparian/stream zone.
- 2.54 Erosion Control Best Management Practices (BMPs). All exposed soils within the work area shall be stabilized immediately following the completion of earthmoving activities to prevent erosion into the stream channel. Erosion control BMPs, such as silt fences, straw hay bales, gravel or rock lined drainages, water check bars, and broadcasted straw shall be used. Erosion control fabrics shall be constructed of biodegradable materials, such as coir or jute, unless otherwise authorized by DFG. Erosion control BMPs shall be monitored during and after each storm event for effectiveness. Modifications, repairs and improvements to erosion control BMPs shall silt laden runoff be allowed to enter the stream or directed to where it may enter the stream.
- 2.55 <u>Vehicle/Equipment Maintenance</u>. Any equipment or vehicles driven and/or operated in proximity of the stream shall be maintained in good working order to prevent the release of contaminants that if introduced to water could be deleterious to aquatic life, wildlife, or riparian habitat.
- 2.56 Equipment Storage and Stationary Operation. Staging and storage areas for equipment, materials, fuels, lubricants and solvents shall be located outside of the stream channel and banks. Stationary equipment such as motors, pumps, generators, compressors and welders, located adjacent to the stream, shall be positioned over drip-pans. Any equipment or vehicles driven and/or operated in proximity to the stream must be checked and maintained daily. Vehicles must be moved away from the stream prior to refueling and lubrication.
- 2.57 <u>Storage and Handling of Hazardous Materials</u>. Any hazardous or toxic materials that could be deleterious to aquatic life shall be

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> contained in watertight containers or removed from the project site. Such materials include, but are not limited to, debris soil, silt, bark, rubbish, creosote-treated wood, raw cement/concrete or washings thereof, asphalt, paint or other coating material, and oil or other petroleum products. These materials shall be prevented from contaminating the soil and/or entering the waters of the State. Any such materials, placed within or where they may enter a stream or lake, by Permittee or any party working under contract, or with permission of Permittee, shall be removed immediately. Best Management Practices (BMPs) shall be employed to accomplish these requirements.

2.58 <u>Clean Up Prior to Onset of Wet Weather</u>. Upon completion of construction and prior to the onset of wet weather, all construction material and/or debris, including removed vegetation, shall be removed from the stream channel to an area not subject to inundation.

3. Compensatory Measures

To compensate for adverse impacts to fish and wildlife resources identified above that cannot be avoided or minimized, Permittee shall implement each measure listed below.

- 3.1 <u>Tree Replacement.</u> If trees need to be removed as approved by DFG, trees shall be replaced at the following ratios (replacement trees to removed trees) to mitigate for permanent net loss of canopy cover:
 - Oaks 6:1 ratio
 - For native trees other than oaks 3:1 ratio
 - Non-native trees 2:1 ratio.
- 3.2 Replacement trees shall consist of 5-gallon saplings, stakes, or other suitable nursery stock and shall be native species adapted to the lighting, soil and hydrological conditions at the replanting site. If replanting within the work area is infeasible due to slope steepness or other physical constraints, replacement trees may be planted at an alternate location along the stream corridor. Trees shall be replaced by December 31 of the year impacts occur in a location that is not subject to future maintenance or construction work. Permittee shall contact DFG a minimum of 30 days prior to replanting work for review and written approval of the replanting site.

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- 3.3 <u>Re-vegetation Survivorship</u>. To ensure a successful re-vegetation effort, all plants shall be monitored and maintained as necessary for eight (8) years. The following success criteria shall apply:
 - All plantings shall have a minimum of 80% survival at the end of 8 years.
 - Vegetation cover shall consist of no more than 10% non-native species.
 - If the survival and/or cover requirements are not meeting these goals, Permittee is responsible for replacement planting, additional watering, weeding, invasive exotic eradication, or any other practice, to achieve these requirements. Replacement plants shall be monitored with the same survival and growth requirements for eight years after planting.
- 3.4 <u>Re-vegetation Monitoring</u>. Re-vegetation monitoring shall be conducted annually for a period of eight (8) years to determine whether these goals have been met. If the survival and/or cover requirements are not projected to meet these goals, based on annual monitoring, Permittee is responsible for replacement planting, additional watering, weeding, invasive exotic eradication, or any other practice(s) that would to achieve these requirements. Additional watering, if utilized, shall only occur as necessary for up to two years after initial planting.
- 3.5 <u>Vegetation Replacement.</u> All exposed/disturbed areas and access points draining to the stream zone and left barren of vegetation following maintenance activities shall be re-vegetated with native plants or seeded with a blend of erosion control grass seeds and locally native wildflowers. Non-native grass species shall not exceed 25% of the total seed mix by count, and all nonnative grass seed shall be sterile (i.e. incapable of reproducing). All other areas of disturbed soil which drain towards the stream channel shall be seeded with native erosion control grass seeds. Re-vegetation shall be completed immediately (within two weeks) after construction activities cease. Seed shall be covered with broadcast straw, jute netting, coconut fiber blanket or a similar erosion control blanket/mulch. Erosion control blankets with monofilament or woven plastic strands shall not be used.

4. Reporting Measures

Permittee shall meet each reporting requirement described below.

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4.1 <u>Notification of Proposed Activities</u>. Permittee shall provide DFG written notification of proposed routine maintenance activities to be performed in the upcoming year by March 15 each year. Notification reports shall describe the project location, general topography, hydrological features, vegetative cover within 50 feet of the work area, length and width of impact area, and a detailed description of proposed modifications to the banks and/or channel. Reports shall be submitted to DFG regardless of whether work is proposed.

DFG shall append annual notification reports of proposed maintenance activities to this Agreement. For streamlined tracking, Permittee shall label annual notification reports according to the following convention: Exhibit C-[year] (e.g. Exhibit C-2013, Exhibit C-2014).

- 4.2 <u>Additional Sites</u>. Permittee may notify DFG of work at additional sites (in addition to the sites as stated in Project Location) if the proposed work fits the definition of routine maintenance, as specified in the Project Description. Work at additional sites may be submitted as described above.
- 4.3 <u>Annual Reports for Completed Projects</u>. On an annual basis, Permittee shall provide DFG written notification of maintenance projects completed. Annual reports shall include the project identification (site name and location), a brief project description, and the appropriate fee from the current DFG Streambed Alteration Agreement Fee Schedule for work completed under this Agreement based upon the number of projects completed in the reporting period. The annual report is due on <u>December 15</u> of each year. A report shall be submitted to DFG regardless of whether work was completed. DFG may terminate this Agreement if reports and fees are not submitted by this deadline.
- 4.4 <u>Bird Survey Methods and Results.</u> Prior to commencement of project activities the Permittee shall submit to DFG a report containing the bird survey methods and results of the survey. Refer to Notification Number 1600-2012-0173-R3 when submitting the report to the DFG.
- 4.5 <u>CRLF Survey Methods and Results.</u> Prior to commencement of project activities the Permittee shall submit to DFG a report containing the CRLF survey methods and results of the survey. Refer to Notification Number 1600-2012-0173-R3 when submitting the report to the DFG.

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- 4.6 <u>Biological Surveys</u>. If other surveys are conducted for compliance with this Agreement, the survey methods and results of the survey shall be submitted to DFG prior to commencement of work. Refer to Notification Number 1600-2012-0173-R3 when submitting the report to the DFG.
- 4.7 <u>List of Nonnative Species.</u> Permittee shall submit to DFG within two weeks of project completion, a list of location and species for any nonnative invasive species found in the Project area.
- 4.8 <u>Notification to the California Natural Diversity Database (CNDDB).</u> If any listed, rare, or special status species are detected during project surveys or on or around the project site during project activities, the Permittee shall submit CNDDB Field Survey Forms to DFG in the manner described at the CNDDB website (<u>http://www.dfg.ca.gov/biogeodata/cnddb/submitting data to cnddb.asp</u>) within 14 working days of the sightings. Copies of such submittals shall also be submitted to the DFG regional office as specified below.

CONTACT INFORMATION

Any communication that Permittee or DFG submits to the other shall be in writing and any communication or documentation shall be delivered to the address below by U.S. mail, fax, or email, or to such other address as Permittee or DFG specifies by written notice to the other.

To Permittee:

Laura Snideman City Manager City of Half Moon Bay 501 Main Street Half Moon Bay, Ca 94019 Work (650)726-8260 Fax (650) 726-8261 Iauras@hmbcity.com

To DFG:

Department of Fish and Game Bay Delta Region 7329 Silverado Trail Napa, California 94558 Attn: Lake and Streambed Alteration Program – Suzanne DeLeon Notification #1600-2012-0173-R3

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not limited to, FGC sections 2050 et seq. (threatened and endangered species), 3503 (bird nests and eggs), 3503.5 (birds of prey), 5650 (water pollution), 5652 (refuse disposal into water), 5901 (fish passage), 5937 (sufficient water for fish), and 5948 (obstruction of stream).

Nothing in the Agreement authorizes Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, to trespass.

AMENDMENT

DFG may amend the Agreement at any time during its term if DFG determines the amendment is necessary to protect an existing fish or wildlife resource.

Permittee may amend the Agreement at any time during its term, provided the amendment is mutually agreed to in writing by DFG and Permittee. To request an amendment, Permittee shall submit to DFG a completed DFG "Request to Amend Lake or Streambed Alteration" form and include with the completed form payment of the corresponding amendment fee identified in DFG's current fee schedule (see Cal. Code Regs., tit. 14, § 699.5).

TRANSFER AND ASSIGNMENT

This Agreement may not be transferred or assigned to another entity, and any purported transfer or assignment of the Agreement to another entity shall not be valid or effective, unless the transfer or assignment is requested by Permittee in writing, as specified below, and thereafter DFG approves the transfer or assignment in writing.

The transfer or assignment of the Agreement to another entity shall constitute a minor amendment, and therefore to request a transfer or assignment, Permittee shall submit to DFG a completed DFG "Request to Amend Lake or Streambed Alteration" form and include with the completed form payment of the minor amendment fee identified in DFG's current fee schedule (see Cal. Code Regs., tit. 14, § 699.5).

EXTENSIONS

In accordance with FGC section 1605(b), Permittee may request one extension of the Agreement, provided the request is made prior to the expiration of the Agreement's term. To request an extension, Permittee shall submit to DFG a completed DFG "Request to Extend Lake or Streambed Alteration" form and include with the completed form payment of the extension fee identified in DFG's current fee schedule (see Cal. Code Regs., tit. 14, § 699.5). DFG shall process the extension request in accordance with FGC 1605(b) through (e).

If Permittee fails to submit a request to extend the Agreement prior to its expiration, Permittee must submit a new notification and notification fee before beginning or continuing the project the Agreement covers (Fish & G. Code, § 1605, subd. (f)). Notification #1600-2012-0173-R3 Streambed Alteration Agreement Page 21 of 30

> Fax (707) 944-5553 sdeleon@dfg.ca.gov

LIABILITY

Permittee shall be solely liable for any violations of the Agreement, whether committed by Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents or contractors and subcontractors, to complete the project or any activity related to it that the Agreement authorizes.

This Agreement does not constitute DFG's endorsement of, or require Permittee to proceed with the project. The decision to proceed with the project is Permittee's alone.

SUSPENSION AND REVOCATION

DFG may suspend or revoke in its entirety the Agreement if it determines that Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, is not in compliance with the Agreement.

Before DFG suspends or revokes the Agreement, it shall provide Permittee written notice by certified or registered mail that it intends to suspend or revoke. The notice shall state the reason(s) for the proposed suspension or revocation, provide Permittee an opportunity to correct any deficiency before DFG suspends or revokes the Agreement, and include instructions to Permittee, if necessary, including but not limited to a directive to immediately cease the specific activity or activities that caused DFG to issue the notice.

ENFORCEMENT

Nothing in the Agreement precludes DFG from pursuing an enforcement action against Permittee instead of, or in addition to, suspending or revoking the Agreement.

Nothing in the Agreement limits or otherwise affects DFG's enforcement authority or that of its enforcement personnel.

OTHER LEGAL OBLIGATIONS

This Agreement does not relieve Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, from obtaining any other permits or authorizations that might be required under other federal, state, or local laws or regulations before beginning the project or an activity related to it.

This Agreement does not relieve Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, from complying with other applicable statutes in the FGC including, but

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EFFECTIVE DATE

The Agreement becomes effective on the date of DFG's signature, which shall be: 1) after Permittee's signature; 2) after DFG complies with all applicable requirements under the California Environmental Quality Act (CEQA); and 3) after payment of the applicable FGC section 711.4 filing fee listed at http://www.dfg.ca.gov/habcon/ceqa/ceqa changes.html.

TERM

This Agreement shall expire on **December 31, 2016**, unless it is terminated or extended before then. All provisions in the Agreement shall remain in force throughout its term. Permittee shall remain responsible for implementing any provisions specified herein to protect fish and wildlife resources after the Agreement expires or is terminated, as FGC section 1605(a)(2) requires.

EXHIBITS

The documents listed below are included as exhibits to the Agreement and incorporated herein by reference.

- A. Definition of Terms
- B. Authorized Activities
- C. Annual Notifications of Proposed Work (reserved for future exhibits)

AUTHORITY

If the person signing the Agreement (signatory) is doing so as a representative of Permittee, the signatory hereby acknowledges that he or she is doing so on Permittee's behalf and represents and warrants that he or she has the authority to legally bind Permittee to the provisions herein.

AUTHORIZATION

This Agreement authorizes only the project described herein. If Permittee begins or completes a project different from the project the Agreement authorizes, Permittee may be subject to civil or criminal prosecution for failing to notify DFG in accordance with FGC section 1602.

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CONCURRENCE

The undersigned accepts and agrees to comply with all provisions contained herein.

FOR CITY OF HALF MOON BAY

Laura Snideman Permittee Date

Date

FOR DEPARTMENT OF FISH AND GAME

Craig J. Weightman Acting Environmental Program Manager

Prepared by: Suzanne DeLeon Environmental Scientist

Date Sent: December 22, 2012

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EXHIBIT A DEFINITION OF TERMS As used herein and for purposes of the Agreement

<u>Best management practices (BMPs):</u> management techniques or activities for stormwater management, pollution prevention and other management objectives. The term BMP is most commonly used in reference to the objectives of the federal Clean Water Act. BMPs may include structural techniques, such as physical stormwater control features, or non-structural techniques, such as public outreach.

<u>Bioengineering:</u> Bioengineering is the combination of biological, mechanical, and ecological concepts to control erosion and stabilize soil through the use of vegetation or a combination of it and construction materials. Both living and nonliving plants can be used. Nonliving plants are used as construction materials, similar to engineered materials. Planted vegetation controls erosion and serves as good wildlife and fisheries habitat in riparian systems.

<u>Channel reach</u>: a section of a stream defined by uniform habitat features, such as a particular type of bed substrate, geomorphologic channel characteristics, and riparian vegetation. In urban environments, reaches may be defined by upstream and downstream barriers, such as bridge footings or weirs.

Concrete-lined channel: flood control channels with concrete sides and bottom.

<u>Debris</u>: non-living vegetative or woody matter, trash, concrete rubble, etc. This definition does not include living vegetation.

<u>Drainage</u>: an open earthen channel modified for drainage or flood control purposes. The modified drainage can flow into an unmodified drainage which has somewhat uniform habitat features and a somewhat defined bank and bed. These drainagees occur mostly from the edge of the urban environment flowing toward the Coastside Trail and ocean. Drainages and ditches are terms that are interchangeable.

Emergency project: is defined in the State Fish and Game Code, section 1600.

Heavy equipment: any equipment used that is larger than a pick-up truck.

<u>Natural channel</u>: a stream or watercourse that has not been modified by human acts such as lining the channel with cement, or creating an artificial channel for drainage or flood control. A natural channel may have in it erosion control structures, culverts or other minor modifications.

<u>Project</u>: a routine maintenance activity performed by Permittee during a given year. Each annual activity shall be construed as one project for fee purposes. A project does not include minor debris removal such as minor tree trimming, removing a shopping cart or a bag of garbage.

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<u>Reasonable dispersal distance</u>: the distance from a particular location, such as a CNDDB occurrence location or a critical habitat location, that a given species would be expected to disperse for mating, breeding, foraging, nesting, and other activities. The reasonable dispersal distance can be determined on a species-by-species level based on current scientific literature. For example, CNDDB occurrences of California red-legged frog in a given creek indicate a high likelihood that this species also occurs downstream within the same creek system because flows provide easy downstream dispersal. As another example, current literature indicates that California tiger salamanders are commonly found in upland habitat within a 1.3-mile radius of breeding ponds.

<u>Special-status species</u>: any species identified as a candidate or sensitive species in local or regional plans, policies or regulations, or by DFG or the U.S. Fish and Wildlife Service. Plants on Lists 1A, 1B, or 2, published by the California Native Plant Society, are also considered special-status species for the purposes of this Agreement.

<u>Structure</u>: storm drain outfalls, culverts, revetments, bank protection, energy dissipaters, grade structures, sediment basins, diversion structures, trash racks, utility line crossings, bridge piers.

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Mitigation Monitoring Program for the Citywide Drainage Ditch Maintenance Project City of Half Moon Bay, San Mateo County, California

City File No. PDP-19-13

State Clearinghouse No. 2013-08-2031

Prepared for:



City of Half Moon Bay Planning Department 501 Main Street Half Moon Bay, CA 94019

Contact: Carol Hamilton, Senior Planner

Prepared by:

SWCA Environmental Consultants 60 Stone Pine Rd, Suite 201 Half Moon Bay, Ca 94019

Contact: Jason Wiener, Project Manager



November 15, 2013

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ental Item				Monitoring and Reporting Pro			Completion Status
Environm Checklist	Impact Summary	Mitigation Measure	Applicable Project Locations	Monitoring and Reporting Actions	Implementation Schedule	Responsible Agency/Party	Completion Status (if Complete enter date)
	JUALITY AND GREEN	HOUSE GASES					
<u>AIR C</u> 3a-3g	UALITY AND GREEN Construction emissions of particulates or criteria pollutants.	 HOUSE GASES The project will implement the Bay Area Air Quality Management District's Standard Construction Mitigation. MM AQ-1 - During Construction Activities the following shall be implemented. 1) All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day or as necessary to prevent visible airborne dust. 2) All haul trucks transporting soil, sand, or other loose material off-site shall be covered. All visible mud or dirt track-out onto adjacent public roads shall be removed using power vacuum street sweepers at least once per day. 3) All vehicle speeds on unpaved roads shall be limited to 15 mph. 4) Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). 5) All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. 	All	1) Include requirement on any project plans and/or specifications. 2) Contractor or crew to conduct inspection during construction to ensure compliance.	During construction	City of Half Moon Bay Planning Department	
		6) Post a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours.					
BIOL	OGICAL RESOURCES		1				1
4a, 4b, and 4e	Impacts to Coastal Resource Areas (CRAs) including sensitive species and habitats.	MM BiO-1 - Disturbance to vegetation and CRAs should be the minimum necessary to complete the Project activities, provided there is no feasible alternative. The minimum amount of disturbance to vegetation is defined as the least amount required to access the Project locations, to restore or maintain normal stream flow, to prevent potential flooding, and for control of weeds and grasses on channel banks and access roads. Prior to all Project activities, a qualified biologist shall designate the work area and any staging areas as well as delineate areas that should be avoided. Areas that would be identified to avoid include wild strawberry populations, special-status plant species, and California Coastal Commission (CCC) wetlands adjacent to the Project locations. A qualified biologist is herein defined as an individual who has a minimum of 5-years of academic training and professional experience in biological sciences or a related field as it pertains to the Project. The biologist must be able to recognize species that may be present within the work area including the special status species which have the potential to occur, be familiar with the habits, habitats, and behaviors of those species and be able to differentiate between these species and similar allies. In order to conduct pre-construction surveys the qualified biologist should have a minimum of two years of experience conducting surverys for each species. Within a minimum of 30-days prior to surveys or monitoring the selected biologist(s) should be approved by California Department of Fish and Wildlife (CDFW). Access to Project locations shall be via existing access roads to the maximum extent practicable. Heavy equipment (anything larger than a pickup truck, other track equipment, or heavy equipment such as a bobcat) should be positioned on existing access route, prior to Project activities a qualified biologist shall delineate an approved route which minimizes impacts to vegetation as well as identifies and avoids CRAs. If CRAs ar	All	 Include maps from Appendix F of the Biological Resource Evaluation (mapping of CRAs) for field crews. Include requirements on any project plans and/or specifications. If work activities will take place near CRAs or other mapped sensitive habitat, contact a qualified biologist to designate the approved work area. Such work area will be demarcated with flagging or fencing as appropriate. Conduct a pre-construction survey and monitoring if required per MM BIO - 12, 13, 24, and/or 25. 	Pre-construction; During construction.	City of Half Moon Bay Planning Department	
4a, 4b, and 4e	Impacts to wildlife.	MM BIO-2 - If any wildlife is encountered during Project activities, said wildlife should be allowed to leave the work area unharmed. If any special-status wildlife species are observed, construction personnel should contact a qualified biologist immediately. The biologist will identify the species and determine the best course of action. Animals will be allowed to leave the work area of their own accord and without harassment. Animals should not be picked up or moved in any way.	All	 Include requirement on any project plans and/or specifications. Include requirement in environmental training to be provided to all work crews per MM BIO - 11 and 26. 	During construction	City of Half Moon Bay Planning Department	

ental Item				Monitoring and Reporting Program			Completion Status
Environme Checklist	Impact Summary	Mitigation Measure	Applicable Project Locations	Monitoring and Reporting Actions	Implementation Schedule	Responsible Agency/Party	Completion Status (if Complete enter date)
4c	Impacts to wetlands.	MM BIO-3 - Several CCC wetlands were identified adjacent to the Project locations at B-6, B-7, B- 10, C-2, C-3, C-6, and C-7. Activities proposed in these locations that could result in dredge or fill of waters of the United States could be subject to regulation under the Clean Water Act. Activities proposed in these areas must be reviewed to determine if they would be regulated by the United States Army Corps of Engineers (USACE), and a wetland delineation could be required to determine the extent of USACE jurisdiction.	B-6, B-10, C-2, C-3, C-6, and C-7.	 Include maps from Appendix F of the Biological Resource Evaluation (mapping of CCC wetlands) for field crews. If work activities are located within CCC wetlands, contact a qualified biologist to review activities and work area. No work shall occur until all necessary approvals are acquired. Include requirement on any project plans and/or specifications. 	Pre-construction; During construction.	City of Half Moon Bay Planning Department; United States Army Corps of Engineers	
4a, 4b, and 4e	Impacts to wildlife, aquatic resources, and water quality.	MM BIO-4 - No Project activities shall be conducted in a channel with water flowing or present in it to the maximum extent practicable, with the exception of emergency activities. Similarly no equipment should be operated in a flowing drainage feature unless it is necessary for emergency purposes and there is no feasible alternative, or it is necessary to construct a dewatering system to divert water flow around a work area. Additional requirements and restrictions may be required for work in an active channel or if a dam or dewatering system is required, and should be reviewed independently prior to construction.	All	 Include requirement on any project plans and/or specifications. Contractor or crew to conduct inspection during construction to ensure compliance. Adhere to MM SAA - 3 for work in an active channel and dam or dewatering system requirements. 	During construction	City of Half Moon Bay Planning Department	
4a, 4b, and 4e	Impacts to wildlife, aquatic resources, and water quality.	MM BIO-5 - Any and all spoils generated during Project activities shall be placed where they cannot enter drainage features, riparian areas or corridors, or wetlands. Spoils shall be removed from the work area and disposed of at an appropriate facility.	All	 Include requirement on any project plans and/or specifications. Contractor or crew to conduct inspection during construction to ensure compliance. Include requirement in environmental training to be provided to all work crews per MM BIO - 11 and 26. 	During construction; post construction	City of Half Moon Bay Planning Department	
4a, 4b, and 4e	Impacts to wildlife, aquatic resources, and water quality.	MM BIO-6 - During construction, to avoid erosion and downstream sedimentation, no work in or immediately adjacent to the drainage ditches should occur during the rainy season (October 31 through April 15).	All	 Include requirement on any project plans and/or specifications. Create schedule for planned maintenance activities to ensure work is not scheduled during this time period. 	During construction	City of Half Moon Bay Planning Department	
4a, 4b, and 4e	Impacts to wildlife, aquatic resources, and water quality.	MM BIO-7 - During construction, the 72-hour weather forecast shall be monitored. If there is a more than 40% chance of rain, or at the onset of unanticipated precipitation of 0.25 inch or more, all equipment should be removed or staged to avoid potential impacts, soil erosion and sediment control measures should be implemented, and Project activities should cease until after a 24 hour dry-out period if there has been more than 0.25 inch of rain.	All	 Within 3 days of proposed maintenance contractor/crew to check weather forecast and previous weather data for recent precipitation events. Include requirement on any project plans and/or specifications. Contractor or crew to monitor weather during construction to ensure compliance. Work is to cease after unanticipated precipitation events of 0.25 inches and crew is to monitor forecast until sufficient dry-out period has occurred. 	Pre-construction; During construction	City of Half Moon Bay Planning Department	

ental Item				Monitoring	and Reporting Program		Completion Status
Environme Checklist	Impact Summary	Mitigation Measure	Applicable Project Locations	Monitoring and Reporting Actions	Implementation Schedule	Responsible Agency/Party	Completion Status (if Complete enter date)
4a, 4b, and 4e	Impacts to wildlife, aquatic resources, and water quality.	MM BIO-8 - All exposed soils in the work area (resulting from Project activities) shall be stabilized immediately following the completion of work to prevent erosion. Erosion control BMPs, such as silt fences, straw hay bales, gravel or rock lined drainages, water check bars, and broadcast straw can be used. Erosion control fabrics should be biodegradable. BMPs shall be monitored during and after storm events. At no time shall silt-laden runoff be allowed to enter drainages or wetlands.	All	 Include requirement on any project plans and/or specifications. Ontractor, crew, or consultant to conduct inspection during construction to ensure compliance. If measures are identified as inadequate the City Planning Department will be notified immediately and restorative measures shall be enacted. Following inspection a report will be submitted to the City Planning Department. Implement and adhere to requirements of MM BIO-20 and MM SAA - 4 for revegetation and success criteria. 	During construction; post construction	City of Half Moon Bay Planning Department	
4a, 4b, and 4e	Impacts to wildlife and water quality.	IM BIO-9 - If Project activities result in disturbance exceeding one acre; a Stormwater Pollution Prevention Plan (SWPPP) will be required. If required prior to the start of work a notice of intent (NOI) and SWPPP should be prepared and submitted to the appropriate Regional Water Quality Control Board (RWQCB). A copy of the SWPPP should be submitted to the County for approval to show that sedimentation and erosion control measures are installed prior to any other ground-disturbing work.	All	 Include requirement on any project plans and/or specifications. If an activity or the cumulative result of activities result in one acre of ground disturbance contractor, crew, or consultant will prepare and implement a SWPPP that would include installation of, and maintenance of stormwater controls. The SWPPP must be approved by and comply with the requirement of the RWQCB. Contractor, crew, or consultant to conduct inspection and submit reports during construction to ensure compliance with any SWPPP requirements. 	Pre-construction; During construction	City of Half Moon Bay Planning Department; San Francisco Bay Regional Water Quality Control Board	
4a, 4b, and 4e	Impacts to wildlife.	MM BIO-10 - Work area activities at B-2, B-4, B-5, B-9, B-10, C-2, C-6, and C-7 should be limited to June 15 to October 31. Work at B-1, B-3, B-6, C-4, and C-5 should be limited to April 15 to October 31.	As Noted	 Include requirement on any project plans and/or specifications. Create schedule for planned maintenance activities to ensure work is not scheduled appropriately. 	During construction	City of Half Moon Bay Planning Department	
4a, 4b, and 4e	Impacts to California red-legged frog.	IMB BIO-11 - Before any construction activities begin on the Project, a qualified biologist should conduct a training session for all construction personnel. At a minimum, the training should include a description of the California red-legged frog (CRLF) and its habitat, the importance of the California red-legged frog and its habitat, the general measures that are being implemented to conserve the California red-legged frog as they relate to the Project, and the boundaries within which the Project may be accomplished. Brochures, books, and briefings may be used in the training session, provided that a qualified person is on hand to answer any questions.	All	 A qualified biologist will provide training to work crews as-needed, all trainee will sign an environmental training sign in sheet. Contractor, consultant and/or City Planning Department will maintain a master environmental training sign in sheet recording all personal trained on the project. 	Pre-construction and construction; as appropriate and necessary.	City of Half Moon Bay Planning Department	

ental Item				Monitoring and Reporting Program		Completion Status	
Environm Checklist	Impact Summary	Mitigation Measure	Applicable Project Locations	Monitoring and Reporting Actions	Implementation Schedule	Responsible Agency/Party	Completion Status (if Complete enter date)
4a, 4b, and 4e	Impacts to California red-legged frog.	MM BIO-12 - A qualified biologist should survey work areas at B-2, B-4, B-5, B-6, B-9, B-10, C-2,C-5, C-6, and C-7 within 48 hours of the planned start of activities. If California red-legged frogs, tadpoles, or eggs are found, the approved biologist should inform the City to initiate formal Endangered Species Act (ESA) consultation with the United States Fish and Wildlife Service (USFWS) if work is to go forward.	B-2, B-4, B-5, B-6, B-9, B-10, C-2, C-5, C-6, and C-7	 Survey methods will be submitted to and approved by CDFW (Bay Delta Region 7329 Silverado Trail, Napa, CA 94558, Attn: Suzanne DeLeon, Notification # 1600-2012-0173-R3) prior to commencement of surveys. The qualified biologist will be approved by CDFW (as above) within 30-days of initiating surveys. Qualified biologist will complete pre- construction surveys within 48-hrs of planned start of work activities. A survey report containing survey methods and results will be submitted to CDFW (as above) and the City Planning Department prior to the start of work. If CRLF are observed during the survey CDFW and the City Planning Department will be notified immediately and additional requirements as described in MM BIO- 12 will be required. 	Pre-construction - survey completed within 48-hours of planned work activities.	City of Half Moon Bay Planning Department; California Department of Fish and Wildlife	
4a, 4b, and 4e	Impacts to California red-legged frog.	MM BIO-13 - A qualified biologist should be present at B-2, B-4, B-5, B-6, B-9, B-10, C-2,C-5, C-6, and C-7 during all Project activities. The biologist should have the authority to halt any action that might result in impacts. If California red-legged frogs are found at any time, work actives shall stop and the approved biologist should inform the City to initiate formal ESA consultation with the USFWS. If the biologist is permitted by the USFWS and approved by the CDFW for this Project to handle California red-legged frogs, only then can the species be handle and relocated. Under no circumstances should a California red-legged frog be handled, relocated, or otherwise harmed or harassed at any time without coordination and approval from the USFWS if work is to go forward .	B-2, B-4, B-5, B-6, B-9, B-10, C-2,C-5, C-6, and C-7	 Include requirement on any project plans and/or specifications. The qualified biologist/biological monitor will be present during construction activities at the specified locations. The qualified biologist/biological monitor will submit to the City Planning Department, within 3- business days, a monitoring report documenting location(s) monitored, activities observed, and if special status species were observed or potentially impacted. 	During construction	City of Half Moon Bay Planning Department	
4a, 4b, and 4e	Impacts to wildlife.	MM BIO-14 - For control of weeds and grasses on channel banks and access roads at B-2, B-4, B-5, B-6, B-7, B-8, B-9, B-10, C-2,C-5, C-6, and C-7, vegetation shall be cut to no less than 6 inches by an articulating mower or hand tools for locations adjacent to an existing access route, and by hand tools for locations with no existing access routes. Once the ground is visible, a visual survey for California red-legged frog shall be conducted by a qualified biologist. If no individuals are found in the area, vegetation removal may continue with the qualified biologist walking in front of equipment to observe.	B-2, B-4, B-5, B-6, B-9, B-10, C-2,C-5, C-6, and C-7	 The qualified biologist/biological monitor will monitor be present for the stated activities at the specified locations. 	During construction	City of Half Moon Bay Planning Department	
4a, 4b, and 4e	Impacts to wildlife.	IMM BIO-15 - No stockpiling of vegetation shall occur at the worksite. Vegetation to the maximum extent practicable based on the equipment used should be placed directly or as quickly as feasible into a disposal container and removed from the site. Vegetation shall not be piled on the ground unless it is later disposed of under the supervision of a qualified biologist.	B-2, B-4, B-5, B-6, B-9, B-10, C-2,C-5, C-6, and C-7	 Include requirement on any project plans and/or specifications. Contractor, crew, and/or qualified biologist to conduct inspection during construction to ensure compliance. Include requirement in environmental training to be provided to all work crews per MM BIO - 11 and 26. 	During construction	City of Half Moon Bay Planning Department	
4a, 4b, and 4e	Impacts to wildlife.	MM BIO-16 - To protect potential burrows, no soil shall be stockpiled on the ground unless it is a paved surface or the area has been surveyed by a qualified biologist.	All	 Include requirement on any project plans and/or specifications. Contractor, crew, and/or qualified biologist to conduct inspection during construction to ensure compliance. Include requirement in environmental training to be provided to all work crews per MM BIO - 11 and 26. 	During construction	City of Half Moon Bay Planning Department A-2-HME	3-14-0004 Exhibit 2

ental Item			Annlinghia Drainat	Monitoring		Completion Status	
Environm Checklist	Impact Summary	Mitigation Measure	Applicable Project Locations	Monitoring and Reporting Actions	Implementation Schedule	Responsible Agency/Party	Completion Status (if Complete enter date)
4a, 4b, and 4e	Impacts to wildlife.	MM BIO-17 - During Project activities, all trash that may attract predators should be properly contained, removed, and disposed of regularly. Following construction, trash/construction debris should be removed from work areas.	All	 Include requirement on any project plans and/or specifications. Contractor or crew to conduct inspection during construction to ensure compliance. Include requirement in environmental training to be provided to all work crews per MM BIO - 11 and 26. 	During construction	City of Half Moon Bay Planning Department	
4a, 4b, and 4e	Impacts to California red-legged frog.	IMBIO-18 - To assist in excluding California red-legged frog from the work area during sediment removal or bank stabilization with large equipment, an exclusion fence should be installed around the work area prior to the commencement of construction activities. Exclusion fencing should be silt- fence type fencing or equivalent, and should not include poly mesh fencing or other similar fencing that could entrap or snag reptiles, amphibians, or other small animals. Exclusion fencing should be installed with the fence stakes placed on the side opposite of the Project location to prevent frogs from using the stakes to maneuver over the fence. Fencing should be keyed-in appropriately (at least 6-inches deep) with 10-foot long turn-around facing away from the Project location located at either end in order to redirect animals away from openings. Once fencing is in place and once daily, a qualified biologist should check the work area to confirm that sensitive species are not present before Project activities commence. The fencing should be maintained until all work has been completed. The fencing should be inspected on a daily basis by a qualified biologist, and any damaged areas should be repaired immediately upon discovery.	B-2, B-4, B-5, B-6, B-9, B-10, C-2, C-5, C-6, and C-7	 Include requirement on any project plans and/or specifications. Contractor, crew, and/or qualified biologist to conduct inspection during construction to ensure compliance. 	Pre-construction; During construction	City of Half Moon Bay Planning Department	
4	Impacts to native vegetation and habitats.	MM BIO-19 - A qualified biologist should ensure that the spread or introduction of invasive exotic plant species should be avoided to the maximum extent possible. When practicable, invasive exotic plants in work areas should be removed. Any removed exotic plants should be immediately bagged and appropriately disposed of at a permitted facility.	All	 Include requirement on any project plans and/or specifications. Contractor, crew, and/or qualified biologist to conduct inspection during construction to ensure compliance. 	During construction	City of Half Moon Bay Planning Department	
4	Impacts to habitats and aquatic resources.	MM BIO-20 - If there is significant ground disturbance, Project locations should be revegetated with an appropriate assemblage of vegetation suitable for the area. Such a plan must include but not be limited to location of the restoration, species to be used, restoration techniques, time of year the work will be done, identifiable success criteria for completion, and remedial actions if the success criteria are not achieved.	All	 Include requirement on any project plans and/or specifications. A qualified botanist or biologist will prepare and submit revegtation plans to the City Planning Department. Revegetation success and monitoring shall be completed in per MM SAA - 4. 	Post construction	City of Half Moon Bay Planning Department; California Department of Fish and Wildlife California Coastal Commission	
4a, 4b, 4c, and 4e	Impacts to wildlife and sensitive habitats.	MM BIO-21 - The number of access routes, number and size of staging areas, and the total area of the activity should be limited to the minimum necessary to complete the Project. Routes and boundaries should be clearly demarcated, and these areas should be outside of wetland areas, as feasible. Where impacts occur in these staging areas and access routes, restoration should occur as identified in measure MM BIO-20 above.	All	 Include requirement on any project plans and/or specifications. Contractor, crew, and/or qualified biologist to conduct inspection during construction to ensure compliance. 	Pre-construction; During construction; Post construction	City of Half Moon Bay Planning Department	
4	Impacts to habitats and aquatic resources.	MM BIO-22 - To control erosion during and after Project implementation, the City should implement BMPs, as identified by the appropriate RWQCB.	All	 Include requirement on any project plans and/or specifications. Contractor or crew to conduct inspection during construction to ensure compliance. 	Pre-construction; During construction	City of Half Moon Bay Planning Department	
4	23	MM BIO-23 - All fueling and maintenance of vehicles and other equipment and staging areas should occur at least 50 feet from any riparian area, riparian corridor, wetland, or other drainage feature or waterbody. The City should ensure that contamination of habitat does not occur during such operations. Prior to the onset of work, the City should ensure that there is a plan to allow a prompt and effective response to any accidental spills. All workers should be informed of the importance of preventing spills, and of the appropriate measures to take should a spill occur.	All	 Include requirement on any project plans and/or specifications. Contractor, crew, and/or qualified biologist to conduct inspection during construction to ensure compliance. Include requirement in environmental training to be provided to all work crews per MM BIO - 11 and 26. 	During construction	City of Half Moon Bay Planning Department	

ental Item				Monitoring and Reporting Program			Completion Status
Environm Checklist	Impact Summary	Mitigation Measure	Applicable Project Locations	Monitoring and Reporting Actions	Implementation Schedule	Responsible Agency/Party	Completion Status (if Complete enter date)
4a, 4b, and 4e	Impacts to San Francisco Garter Snake.	MM BIO-24 - Avoidance measures for San Francisco garter snake should be employed in all areas where construction could result in the direct take of this species. Full-time monitoring is recommended during construction at B-1, B-2, B-4, B-5, B-6, B-9, B-10, C-2, C-5, C-6, and C-7 to ensure that no unanticipated take of San Francisco garter snake occurs. The qualified biologist should be on call as needed to monitor construction activities in potential habitat and inspect exclusion fencing to ensure it remains intact throughout the duration of construction. The qualified biologist may stop work if necessary to protect San Francisco garter snake, and should notify the City as to how to proceed accordingly.	B-1, B-2, B-4, B-5, B-6, B-9, B-10, C-2, C-5, C-6, and C 7	 Include requirement on any project plans and/or specifications. The qualified biologist/biological monitor will be present during construction activities at the specified locations. The qualified biologist/biological monitor will submit to the City Planning Department, within 3- business days, a monitoring report documenting location(s) monitored, activities observed, and if special status species were observed or potentially impacted. 	During construction	City of Half Moon Bay Planning Department	
4a, 4b, and 4e	Impacts to San Francisco Garter Snake.	MM BIO-25 - A qualified biologist should conduct pre-construction surveys before any Project activities take place in potential San Francisco garter snake habitat at B-1, B-2, B-9, B-10, C-6, and C-7. Surveys should consist of walking transects while conducting visual encounter surveys in areas that will be subject to vegetation clearing, sediment removal, grading, cut and fill, or other ground- disturbing activities. If a San Francisco garter snake is observed during a survey, the USFWS, and CDFW will be notified and the San Francisco garter snake should be monitored until it leaves the area on its own, undisturbed and without harassment.		 Survey methods will be submitted to and approved by CDFW (Bay Delta Region 7329 Silverado Trail, Napa, CA 94558, Attn: Suzanne DeLeon, Notification # 1600-2012-0173-R3) prior to commencement of surveys. The qualified biologist will be approved by CDFW (as above) within 30-days of initiating surveys. Qualified biologist will complete pre- construction surveys within 48-hrs of planned start of work activities. A survey report containing survey methods and results will be submitted to CDFW (as above) and the City Planning Department prior to the start of work. J ICHLF are observed during the survey CDFW and the City Planning Department will be notified immediately and additional requirements as described in MM BIO 25 will be required. 	Pre-construction - survey completed within 48-hours of planned work activities.	City of Half Moon Bay Planning Department; California Department of Fish and Wildlife	
4a, 4b, and 4e	Impacts to San Francisco Garter Snake.	MM BIO-26 - Before any construction activities begin on a Project, a qualified biologist should conduct a training session for all construction personnel. At a minimum, the training should include a description of the San Francisco garter snake and its habitat, the importance of the San Francisco garter snake and its habitat, the general measures that are being implemented to conserve the San Francisco garter snake as they relate to the Project, and the boundaries within which the Project may be accomplished. Brochures, books, and briefings may be used in the training session provided that a qualified person is on hand to answer any questions.	All	 A qualified biologist will provide training to work crews as-needed, all trainee will sign an environmental training sign in sheet. Contractor, consultant and/or City Planning Department will maintain a master environmental training sign in sheet recording all personal trained on the project. 	Pre-construction and construction; as appropriate and necessary.	City of Half Moon Bay Planning Department	
4a, 4b, and 4e	Impacts to San Francisco Garter Snake.	IMM BIO-27 - To assist in excluding San Francisco garter snakes from the work area during sediment removal or bank stabilization with large equipment, an exclusion fence should be installed around the work area prior to the commencement of construction activities. Exclusion fencing should be silt- fence type fencing or equivalent, and should not include poly mesh fencing or other similar fencing that could entrap or snag reptiles, amphibians, or other small animals. Exclusion fencing should be installed with the fence stakes placed on the side opposite of the Project location to prevent snakes from using the stakes to maneuver over the fence. Fencing should be keyed-in appropriately (at least 6 inches deep) with 10-foot-long turnarounds facing away from the Project location at each end to redirect animals away from openings. Once fencing is in place, a qualified biologist should check the work area once daily to confirm that sensitive species are not present before Project activities commence. The fencing should be maintained until all work has been completed. The fencing should be inspected on a daily basis by a qualified biologist, and any damaged areas should be repaired immediately upon discovery.	B-1, B-2, B-4, B-5, B-6, B-9, B-10, C-2, C-5, C-6, and C 7	 Include requirement on any project plans and/or specifications. Contractor, crew, and/or qualified biologist to conduct inspection during construction to ensure compliance. 	Pre-construction; During construction	City of Half Moon Bay Planning Department	-14-0004

ental Item				Monitoring and Reporting Program		Monitoring and Report		Completion Status
Environm Checklist	Impact Summary	Mitigation Measure	Applicable Project Locations	Monitoring and Reporting Actions	Implementation Schedule	Responsible Agency/Party	Completion Status (if Complete enter date)	
4a, 4b, and 4e	Impacts to wildlife.	MM BIO-28 - Under no circumstances should a San Francisco garter snake be handled, relocated, or otherwise harmed or harassed at any time without coordination and approval from USFWS and CDFW.	All	 Include requirement on any project plans and/or specifications. Contractor, crew, and/or qualified biologist to conduct inspection during construction to ensure compliance. Include requirement in environmental training to be provided to all work crews per MM BIO - 11 and 26. 	During Construction	California Department of Fish and Wildlife; United States Fish and Wildlife Service		
4a, 4b, and 4e	Impacts to nesting migratory birds	 MM BIO-31 - If Project activities are conducted during the typical nesting bird season (February 15 through September 15), pre-construction nest surveys should be conducted in and near the Project area (within 500 feet for large raptors such as buteos, 250 feet for small raptor such as accipiters, and 100 feet for all other birds) by a qualified biologist. If nesting is identified during the pre-construction survey, the following measures should be implemented: 1) If active nest sites of bird species protected under the MBTA and/or California Fish and Wildlife Code Section 3503 are observed in the survey area, then the Project should be modified and/or delayed as necessary to avoid direct take of the identified nests, eggs, and/or young. Potential Project modifications may include the establishment of protective buffer zones (500 feet for large raptors such as buteos, 250 feet for small raptor such as accipiters, and 100 feet for all other birds) in which a qualified biologist shall monitor all Project-related activities to ensure that they do not impact the nesting activity has ceased. 2) Active nests should be documented by a qualified biologist, and a letter report should be submitted to the USFWS and CDFW documenting Project compliance with the MBTA and applicable Project mitigation measures. 	All	 Survey methods will be submitted to and approved by CDFW (Bay Delta Region 7329 Silverado Trail, Napa, CA 94558, Attn: Suzanne DeLeon, Notification # 1600-2012-0173-R3) prior to commencement of surveys. The qualified biologist will be approved by CDFW (as above) within 30-days of initiating surveys. Qualified biologist will complete pre- construction surveys within 14 days of planned start of work activities. A survey report containing survey methods and results will be submitted to CDFW (as above) and the City Planning Department within 1 week of survey. If active nests are observed during the survey CDFW and the City Planning Department will be notified immediately and additional requirements as described in MM BIO- 31 will be required. 	Pre-construction between February 15 and September 15 - survey completed no more than 14 days prior to construction. If a lapse in construction of 15 days or longer occurs at any location, another survey shall be completed prior to initiation of work.	City of Half Moon Bay Planning Department; California Department of Fish and Wildlife; United States Fish and Wildlife Service		
CULT	URAL RESOURCES				1	T		
5b	Impacts on archaeological resources.	IMM CUL-1 - If subsurface archaeological resources are encountered during maintenance activities, all work shall cease within 50 feet of the discovery and an archaeologist shall evaluate the resources to determine their significance and recommend any additional mitigation necessary to reduce potential impacts to a less than significant level, to the satisfaction of the Planning Director.	All	 Include requirement on any project plans and/or specifications. Contractor, crew, and/or qualified biologist to conduct inspection during construction to ensure compliance. Include requirement in environmental training to be provided to all work crews per MM BIO - 11 and 26. 	During construction	City of Half Moon Bay Planning Department		
5d	Impacts on human remains.	MM CUL-2 - If human remains are encountered during earth-disturbing activities, in conformance with Section 7050.5 of the Health and Safety Code and Section 5097.94 of the Public Resources Code, all in the adjacent area shall stop immediately and the San Mateo County Coroner's office shall be notified. If the remains are determined to be Native American in origin, both the Native American Heritage Commission and any identified descendants shall be notified by the coroner and recommendations for treatment solicited (CEQA Guidelines Section 15064.5; Health and Safety Code 7050.5; Public Resources Code Sections 5097.94 and5097.98).	All	 Include requirement on any project plans and/or specifications. Contractor, crew, and/or qualified biologist to conduct inspection during construction to ensure compliance. Include requirement in environmental training to be provided to all work crews per MM BIO - 11 and 26. 	During construction	City of Half Moon Bay Planning Department; San Mateo County Coroner's Office		
GEOL	OGY, SOILS, AND SE							
6b and 6f	Impacts from soil erosion and loss of topsoil or degradation of water	յծее мм եւՕ-4, мм եւՕ-5, мм եւՕ-6, мм եւՕ-7, MM BIO-8, MM BIO-9, MM BIO- 21, MM BIO-22	2, MM BIO-23, and M	M HYD-1.				
HYDF	OLOGY AND WATER	QUALITY						
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ental				Monitoring and Reporting Program			Completion Status
Environm	Impact Summary	Mitigation Measure	Applicable Project Locations	Monitoring and Reporting Actions	Implementation Schedule	Responsible Agency/Party	Completion Status (if Complete enter date)
8a and 8f	Violate water quality standards or waste discharge requirements or degrade water quality.	See MM BIO-4, MM BIO-5, MM BIO-6, MM BIO-7, MM BIO-8, MM BIO-9, MM BIO- 21, MM BIO-2:	2, and MM BIO-23.				
8a and 8f	Violate water quality standards or waste discharge requirements or degrade water quality.	 MM HYD-1 - During construction, the following San Mateo County Storm Water Pollution Best Management Practices (BMPs) shall be employed to ensure that water quality of affected drainages is maintained and no siltation of downstream waterways would occur: All maintenance activities in B and C Project location drainages shall take place in the dry season between April 1 and October 31 to minimize immediate erosion/siltation effects. Exceptions to this requirement may be provided if compelling circumstances exist (e.g., favorable weather conditions). Construction materials and waste shall be handled and disposed of properly in compliance with applicable law to prevent their contact with stormwater. Discharge of all potential pollutants, including pavement cutting wastes, paints, concrete, petroleum products, chemicals, washwater or sediments, and non-stormwater discharges to storm drains and watercourses shall be controlled and prevented. Sediment controls such as straw mulch, silt fences, sediment basins or traps and/or other measures shall be employed during construction. Tracking dirt or other materials offsite shall be avoided and offsite paved areas and sidewalks shall be cleaned regularly using dry sweeping methods. The contractor shall train and provide instruction to all employees and subcontractors regarding construction BMPs. 	All	 Include requirement on any project plans and/or specifications. Contractor or crew to conduct inspection during construction to ensure compliance. Include requirement in environmental training to be provided to all work crews per MM BIO - 11 and 26. 	Pre-construction; During construction	City of Half Moon Bay Planning Department	
NOIS	SE .						
11a and 11d	Impacts from construction related noise increases.	 MM NOI-1 - Maintenance activities shall conform to the following noise attenuation requirements: Construction activities shall be limited to between the hours of 8 a.m. and 6 p.m. weekdays, excluding holidays. All construction equipment shall use noise-reduction features (e.g., mufflers and engine shrouds) that are no less effective than those originally installed by the manufacturer. 	Ali	 Include requirement on any project plans and/or specifications. Contractor or crew to conduct inspection during construction to ensure compliance. 	During construction	City of Half Moon Bay Planning Department	
ADD	ITIONAL CALIFORNIA	DEPARTMENT OF FISH AND WILDLIFE STREAMBED ALTERATION AGREEMENT					T
	Impacts to San Francisco Dusky footed woodrat	IMM SAA-1 - A pre-construction survey for San Francisco Dusky footed woodrat (SFDW) shall be completed by a qualified biologist within 2-weeks prior to project activities. If SFDW housed are observed CDFW should be notified immediately.	B-1, B-2, B-10, C-5, C-6, and C-7	 Survey methods will be submitted to and approved by CDFW (Bay Delta Region 7329 Silverado Trail, Napa, CA 94558, Attn: Suzanne DeLeon, Notification # 1600-2012-0173-R3) prior to commencement of surveys. The qualified biologist will be approved by CDFW (as above) within 30-days of initiating surveys. Pre-construction surveys will be completed within 2-weeks of planned start of work activities. A survey report shall be submitted to CDFW and the City Planning Department containing survey methods and results prior to the start of work. If SFDW are observed during the survey CDFW and the City Planning Department should be notified immediately. 	Pre-construction	City of Half Moon Bay Planning Department; California Department of Fish and Wildlife	

ental Item				Monitoring and Reporting Program			Completion Status
Environm Checklist	Impact Summary	Mitigation Measure	Applicable Project Locations	Monitoring and Reporting Actions	Implementation Schedule	Responsible Agency/Party	Completion Status (if Complete enter date)
	Impacts to habitats and aquatic resources.	 MM SAA-2 - Annual sediment removal shall conform to the following limits: Natural channels - not to exceed 30 cubic yards, limited to 500 linear feet per stream; Engineered earthen channels and drainages - not to exceed 45 cubic yards, limited to 1,000 linear feet per stream. Removal equipment shall be staged on the road and outside bank of the drainage; Concrete-line channels - not to exceed 90 cubic yards, limited to 5,000 linear feet per channel; and Additional sediment removal around bridge footing and in culverts, storm drain outlets, trash racks/trash capture devises, and water diversion inlets - not to exceed 50 cubic yards. 	Natural Channels - B-1, B-2; Engineered earthen channels and drainages - B-3, B-4, B-5, B-6, B-9, B-10, C-1, C-2, C-3, C-4, C-5, C-6, and C-7	 Include requirement on any project plans and/or specifications. The contractor or work crew will document the quantity (cubic yards) and area (linear feet) of sediment removal at each project location and submit results to the City Planning Department. The City Planning Department will and maintain a tally based on drainage type to ensure activities do not exceed the stated limits. Annual trabals will be included in annual reporting to CDFW (MM SSA- 5). 	During construction; Post construction	City of Half Moon Bay Planning Department; California Department of Fish and Wildlife;	
	Impacts to aquatic resources and water quality.	IMM SAA-3 - In the event work is required to take place during periods when water is present in the project locations. Activities shall be isolated from flowing water. To isolate the work area, water tight coffer dams shall be constructed upstream and downstream of the work area and water diverted through a suitably sized pipe discharged downstream. Dams shall be made of non-erodible material. Dams shall be in-place and maintained throughout the work period. If dewatering is needed during dam implementation, the decrease in water surface elevation shall be controlled such that there are not increases in turbidity that would be deleterious to aquatic life (i.e. exceed background levels measured directly upstream by 50 NTUs). During dewatering a biologist shall make a reasonable effort should be made to capture and move all stranded aquatic life to the nearest adjacent body of water. Non-native aquatic species should be disposed of properly and not placed back into the drainage or other body of water and documentation of species provided to CDFW upon completion of work.	All	 Include requirement on any project plans and/or specifications. Contractor or crew to conduct inspection during construction to ensure compliance. 	Pre-construction; During construction	City of Half Moon Bay Planning Department; California Department of Fish and Wildlife;	
	Impacts to vegetation, fish and wild resources.	 MM SAA-4 - To compensate for impacts to vegetation the following measures shall be implemented: 1) If tree are removed, trees shall be replaced at the following mitigation ratios: Oaks - 6:1 ratio Native trees other than oaks - 3:1 ratio Non-native trees - 2:1 ratio 2) Replacement trees shall consist of 5-gallon saplings, stakes or other suitable stock, be native and adapted to the replanting site conditions. If planting within the work are is infeasible due to constraints, replacement trees may be planted along the same stream corridor. Trees shall be planted by December 31 of the year the impact occurred. Planting plants shall be submitted to CDFW a minimum of 30-day prior to replanting work for approval. 3) To ensure re-vegetation survivorship all plants shall be monitored and maintained for five (5) years with the following success criteria: Planting shall have a minimum 80% survival at end of 5-years. Vegetation cover shall consist of no more than 10% non-native species. If the criteria are not met, the permittee is responsible for additional planting and actions needed to achieve success (watering, weeding, etc.). 4) All exposed/disturbed areas left barren of vegetation shall be re-vegetated with native plants or seeded with a blend of erosion control grass seeds and locally native wildflowers. Non-native grass species shall not exceed 25% of seed mix by count and shall be covered with suitable erosion control materials. 	All	 Include requirement on any project plans and/or specifications. Contractor, crew, or qualified biologist will document vegetation removal at each project location. A qualified botanist or biologist will prepare and submit vegetation replacement plans as described. Replacement vegetation will be obtained from nonsite cuttings or from local nursery stock. The qualified botanist or biologist will conduct annual monitoring assessing survivorship, percent cover, and percent non-native species for each replanting site. Monitoring data will be summarized in the annual report provided to CDFW per MM SAA-6. 	During construction; Post construction	City of Half Moon Bay Planning Department; California Department of Fish and Wildlife;	
	Notification of proposed activities	MM SAA-5 - Written notification will be provided to CDFW of proposed routine maintenance activities to be performed in the upcoming year by March 15 each year. Notification shall include the project locations, description of the work area (topography, hydrology, vegetation within 50 feet of work area), and description of the proposed activities (including impact area calculations).	All	 The City Planning Department will submit the proposed activity report to CDFW (Bay Delta Region 7329 Silverado Trail, Napa, CA 94558, Attn: Suzanne DeLeon, Notification # 1600- 2012-0173-R3). Entitle report Exhibit C-[year]. 	Submit report by March 15 each year.	City of Half Moon Bay Planning Department; California Department of Fish and Wildlife;	

ental Item				Monitoring	and Reporting Program		Completion Status
Environm Checklist	Impact Summary	Mitigation Measure	Applicable Project Locations	Monitoring and Reporting Actions	Implementation Schedule	Responsible Agency/Party	Completion Status (if Complete enter date)
	Annual Reporting	MM SAA-6 - Written notification will be provided to CDFW of completed routine maintenance activities by December 15 each year. Notification shall include a report documenting the project locations, description of the completed activities (including impact area calculations), and appropriate fee calculations.	All	 The City Planning Department will submit the annual report and payment to CDFW (Bay Delta Region 7329 Silverado Trail, Napa, CA 94558, Attn: Suzanne DeLeon, Notification # 1600- 2012-0173-R3). 	Submit report and payment by December 15 each year.	City of Half Moon Bay Planning Department; California Department of Fish and Wildlife;	
	List of non-native species	MM SAA-7 - A list of non-native species observed shall be submitted to CDFW within two-week of completion of each maintenance activity with the location and list of species observed in the project area.	All	 Include requirement on any project plans and/or specifications. Contractor, crew, or qualified biologist will document non-native species at each project location during pre-activity surveys, construction monitoring, and other inspections. The list will be submitted to CDFW (Bay Delta Region 7329 Silverado Trail, Napa, CA 94558, Attn: Suzanne DeLeon, Notification # 1600-2012- 0173-R3) within 2 weeks of completion of maintenance activities. 	Post construction - within 2 weeks of completion of maintenance activities	City of Half Moon Bay Planning Department; California Department of Fish and Wildlife;	
	Notification to CNDDB	MM SAA-8 - If any listed, rare, or special-status species are detected during survey, monitoring, or inspections on or around the project sites during project activities, the permittee shall submit CNDDB Field Survey Forms to CDFW in the manner described at the CNDDB website (http://www.dfg.ca.gov/biogeodata/cnddb/submitting_data_to_cnddb.asp) within 14 working days of the sightings.	All	 Include requirement on any project plans and/or specifications. Contractor, crew, or qualified biologist will document any special status species observed at each project location during pre-activity surveys, construction monitoring, and other inspections. CNDDB Field Survey Form(s) will be submitted as described with a copy sent to CDFW (Bay Delta Region 7329 Silverado Trail, Napa, CA 94558, Attn: Suzanne DeLeon, Notification # 1600-2012-0173-R3). 	Post construction - submit within 14-working days of sighting	City of Half Moon Bay Planning Department; California Department of Fish and Wildlife;	
ADDI	TIONAL NOTIFICATIO	N		I	I		
	Coastside Landtrust	MM NOT-1 - Provide notification to Coastside Landtrust (CLT) when maintenance activities are proposed at project locations where CLT holds conservation easements.	B-3, B-4, B-5, B-6, B 7, B-10, C-1, C-2, C- 3, C-4, and C-7	1) The City Planning Department will provide notification to CLT within a minimum of 2-businees days prior to the start of work.	Pre-construction	City of Half Moon Bay Planning Department	
	California Department of Parks and Recreation	MM NOT-2 - Provide notification to California Department of Parks and Recreation (CDPR) when maintenance activities are proposed at project locations where CDPR is the owner.	B-1 and B-2	 The City Planning Department will provide notification to CDPR within a minimum of 2-businees days prior to the start of work. 	Pre-construction	City of Half Moon Bay Planning Department	

Attachment 4

RESPONSES TO COMMENTS

For the

HALF MOON BAY CITYWIDE DRAINAGE DITCH MAINTENANCE PROJECT MITIGATED NEGATIVE DECLARATION

City File No. PDP-19-13

State Clearinghouse No. 2013-08-2031

Prepared by:



City of Half Moon Bay Planning Department 501 Main Street Half Moon Bay, CA 94019

Contact: Carol Hamilton, Senior Planner

November 14, 2013

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Appendix A. Comment Letters A-H

1.0 **INTRODUCTION**

This Response to Comment Document lists the public agencies, private organizations and individuals who provided comments on the Draft Negative Declaration (MND) and Initial Study (IS) prepared for the City of Half Moon Bay's proposed Citywide Ditch Maintenance Program, provides copies of written comments received, and responds to those comments. The City of Half Moon Bay, the Lead Agency for this project, has responded to concerns and suggestions regarding the adequacy and accuracy of the Draft MND/IS.

A number of written comments submitted on the Citywide Ditch Maintenance Project and Draft MND/IS raised the same concerns. Rather than repeat responses to such comments, the City is providing Master Responses in **Subsection 3.1** below. Responses to individual comments are provided in **Subsection 3.3**.

2.0 LIST OF COMMENTERS

Letter	Commenter	Date
Α	California Department of Transportation (Caltrans)	August 16, 2013
В	Coastside Land Trust	September 1, 2013
С	California Coastal Commission	September 4, 2013
D	Deborah Ruddock	September 9, 2013
E	James Benjamin	September 9, 2013
F	California Department of Parks and Recreation	September 30, 2013
G	United States Fish and Wildlife Service	October 24, 2013
н	United States Army Corps of Engineers	November 13, 2013

3.0 **RESPONSES TO COMMENTS**

A comment number that corresponds to the letter and specific comment the response addresses identifies all responses. Master responses are organized by topic and are referenced in response to specific comments, as applicable. The comment letters are provided in Appendix A.

3.1 Master Responses

Master Responses are provided below in response to comments on the Mitigated Negative Declaration (MND)/Initial Study (IS) that are repeated more than once in the comments letters. The Master Responses are referenced, as appropriate, in response to specific comments in Section 3.2.

Master Response One: Project Clarification

Table 2 and the project description on pages 11-18 of the Biological Resource Evaluation (BRE) and the Draft Mitigated Negative Declaration (MND) and Initial Study (IS) (including Sections 1.2, 1.3, and Figure 1) have been updated to eliminate from the project maintenance of the Seymour Detention Basin (B-8) and the Magnolia Drainage (B-7), and to provide more detailed descriptions of the maintenance activities anticipated at each of the remaining project locations, including proposed staging and access, the linear feet of potential impact at each project location, and the anticipated square footage of the work area. The Draft MND and IS, (including Section 1.3 and Figure 1) and Section 1.2 of the BRE, *Project Description and Need*, have been revised to clarify that the project will include only routine maintenance activities and that performance of emergency activities has been removed from the project. Emergency activities may still be required, but will be completed separately from the project in accordance with Section 18.20.040 of the Half Moon Bay Municipal Code, as well as all other applicable regulations.

The City has also requested that the California Department of Fish and Wildlife revise the project description and location for the Stream Alteration Agreement (SSA) to eliminate routine maintenance in Seymour Detention Basin (B-8) and Magnolia Drainage (B-7) and all emergency work in the A Drainage Facilities, thereby eliminating project locations B-7, B-8, and A-1 through A-5. See letter from Laura Snideman, dated November 14, 2013 and attachments in Appendix B of the Mitigated Negative Declaration/Initial Study.

The updated project description clarifies that the intent of the Project is to maintain the project locations' historic and current uses for drainage purposes. Most of the project locations are narrow, linear, man-made or man-altered drainage features characterized by high volume, short duration flows immediately following rain events with very low base flow. Project locations are often hydrologically isolated from adjacent floodplains due to past side casting of the original drainage ditch spoils. With the exception of B-1 and B-2, vegetation within the project locations is dominated by herbaceous or shrub species with little riparian vegetation. Because the objective of the project is to maintain the features' existing and current uses and conditions, the Project will not result in further channelization or modification of channel geomorphology. Maintenance activities will be restricted to the areas immediately along and adjacent to the project locations and will not result in landscape changes or measureable changes to baseline flow rates, groundwater infiltration, upstream or upland drainage, and other hydrologic properties. Furthermore, ground disturbance is typically not anticipated as part of the Project. If areas are disturbed to bare ground inadvertently as a result of foot traffic

A-2-HMB-14-0004 Exhibit 2 Page 377 of 523 or removal of vegetation, soils will be stabilized to minimize erosion, soil loss, bank instability or other indirect impacts and areas will be re-vegetated [MM BIO-8 & -20 and Condition 3.5 of the California Department of Fish and Wildlife (CDFW) Stream Alteration Agreement (SAA)].

Master Response Two: Alternative Projects

The project analyzed in this Mitigated Negative Declaration (MND)/Initial Study (IS) consists of a program to provide routine maintenance at B and C project locations in the City of Half Moon Bay. Construction of new flood control facilities is outside the scope of the project, as is a comprehensive plan to evaluate citywide drainage issues or the adequacy of existing facilities. The current project proposes maintenance activities to maintain the current and historic use of the project locations for drainage purposes and to prevent flooding and reduce bank, culvert and roadway erosion.

The current project involves maintenance of existing drainage facilities and does not propose flood control as a new use in riparian, wetland, or other sensitive habitat areas; therefore, the LCP provision that allows new flood control uses in riparian or other sensitive areas only where there is no other alternative, does not apply. All of the drainages included in the project currently carry storm water during some period of the year; they are existing storm water and flood control facilities. No alternatives analysis is required for the proposed maintenance project; nevertheless, there is no feasible alternative to the proposed maintenance that would achieve the project objectives.

Pursuant to the California Environmental Quality Act (CEQA), an analysis of alternatives to the project that would reduce significant environmental impacts is required only in the context of an Environmental Impact Report (EIR). Based on the project description, mitigation included in the project, and substantial evidence in the record, the Initial Study concludes the project would not result in any significant environmental impact; consequently, neither an EIR nor an alternatives analysis is required.

Master Response Three: Flood Prevention

Preventing flooding and avoiding the potential exposure of people and property to flooding is an important objective of the proposed routine maintenance program. Maintenance of the project locations has not occurred for several years and resumption of routine maintenance activities is needed to avoid future flood problems. Appendix A of the Biological Resource Evaluation (BRE) includes photos of flooding or flood damage at project locations in the past three years. Flooding has not yet occurred at all of the project locations proposed for routine maintenance activities. Waiting until flooding occurs in each project location to initiate maintenance activities would not achieve the City's objective of preventing flooding.

Master Response Four: Mitigation Monitoring

The Biological Resource Evaluation contained in Appendix A of the Initial Study provides a complete analysis of the potential impacts on biological resources and the required mitigation for the proposed project in conformance with the requirements of the California Environmental Quality Act. A Mitigation Monitoring Program has been included as Appendix C of the Initial Study, indicating how the City will monitor implementation of mitigation identified in the Initial Study/Negative Declaration and included in the project.

Master Response Five: Stream Alteration Agreement

The project description in the Initial Study has been revised to clarify in Section 1.3.4 that the project includes, and will fully implement, all of the requirements of the Final Stream Alteration Agreement as approved by the California Department of Fish and Wildlife.

Master Response Six: Discretionary Approvals and the CEQA Process

The City is the lead agency for this project responsible for preparation of an environmental document that covers the whole of the project and all discretionary approvals necessary for its implementation, including the City's issuance of a Coastal Development Permit. The California Department of Fish and Wildlife (CDFW) is a responsible agency for the project, in that issuance of a Streambed Alteration Agreement (SAA)/Routine Maintenance Agreement (RMA) by the CDFW is required prior to implementation of the project. Pursuant to the California Environmental Quality Act (CEQA), completion of a final environmental document is required prior to any discretionary approvals for this project by the lead agency or any responsible agency. Approval of the SAA/RMA will indicate conformance of the proposed project, as conditioned, with the requirements of CDFW; however, pursuant to CEQA, such approval cannot occur until the environmental review process has been completed.

Master Response Seven: Hydrology

The intent of the Project is to maintain the project locations' historic and current uses for drainage purposes. Most of the project locations are narrow, linear, man-made or man-altered drainage features characterized by short duration flows immediately following rain events and very low or no base flow. Because the objective of the project is to maintain the features' existing and current uses and conditions, the project will not result in further channelization or modification of channel geomorphology. Furthermore, the project will not increase impervious surfaces or create new areas of low impermeability, and as such, will not result in increased run-off or storm water generation. Maintenance activities will be restricted to the areas immediately along and adjacent to the project locations and will not result in landscape changes or measureable changes to baseline flow rates, groundwater infiltration, upstream or upland drainage, and other hydrologic properties.

A-2-HMB-14-0004 Exhibit 2 Page 379 of 523 The project is located within the Half Moon Bay Terrace groundwater basin. Within this basin groundwater recharge areas are generally located within stream floodplains with porous soils which facilitate percolation; additional sources of inflow include contributions from lawn irrigation, rainfall recharge, subsurface inflows, stream recharge, and leakage of pipelines (San Mateo County, 1985 and Todd Engineers, 2003). Subsurface investigation within the groundwater basin show that the aquifer on average is 30 feet thick, is predominantly confined, is underlain by the Purisima Formation, and is overlain by fine-grained alluvial deposits that often form an impenetrable barrier between the hydraulic connection with the underlying aquifer. Groundwater flow in the basin is from east to west toward the Pacific Ocean. The main contributors to inflow are considered to be rainfall recharge and subsurface inflow from the upper Pilarcitos Creek valley (Todd Engineers, 2003). Most of the project locations are close to the coast where the potential for groundwater recharge is reduced due to hydraulic gradients. Additionally, as discussed above, flows within the project locations are typically flashy and may be isolated from the underlying aquifer further reducing the potential to provide a significant source of groundwater recharge.

Project locations are also often hydrologically isolated from adjacent floodplains due to past side casting of the original drainage ditch spoils. This isolation from the adjacent floodplains limits hydrologic connections with these areas and suggests that project activities would have a minimal to negligible effect on hydrologic properties associated with these areas such as groundwater recharge or increased upland drainage.

Ground disturbance that may result in erosion or sedimentation of the project locations is typically not anticipated as part of the project. If areas are disturbed to bare ground inadvertently as a result of foot traffic or removal of vegetation, soils will be stabilized to minimize erosion, soil loss, bank instability or other indirect impacts and areas will be revegetated (MM BIO 8 and 20 and Condition 3.5 of CDFW SAA).

3.2 **Responses to Individual Comments**

Following are responses to specific comments received on the Draft Initial Study/Negative Declaration. The comment letters are included in Appendix A.

Responses to Comment Letter A: California Department of Transportation

Comment Response

A.1 The Caltrans requirement for an encroachment permit for work in the State right of way is acknowledged.

Responses to Comment Letter B: Coastside Land Trust (CTE)

Comment Response

B.1 The Coastside Land Trust's (CTE) holding of conservation easements or fee title within the area proposed for routine maintenance is acknowledged.

The Draft Initial Study identifies all feasible mitigation measures necessary to reduce potential impacts of the project on the environment to a less-than-significant level. This mitigation has been included in the project and will be implemented by the City to ensure that the project does not result in significant impacts on the environment.

- B.2 The City will notify CTE of the general scope of work and work schedule for any routine maintenance within areas where the CTE holds property or conservation easements a minimum of 2 business days prior to start of the work.
- B.3 The Mitigated Negative Declaration (MND) and Initial Study (IS) have been updated (in Sections 1.2, 1.3, and 1.4.2 of the IS and throughout the document) to eliminate *B-8 Seymour Detention Basin,* from the project. Page 8, paragraph *B-8 Seymour Detention Basin,* of the Biological Resource Evaluation (BRE) has been revised to remove the reference to CTE ownership of land to the west of the basin.
- B.4 See Master Response One. The MND and IS have been updated to remove emergency work in the A Drainage features from the project (the referenced paragraph regarding the A-5 *Seymour Detention Basin* has been deleted). Page 11, paragraph A-5 Seymour Drainage, sentence 2 of the Biological Resource Evaluation (BRE) has been revised to correctly identify the trees as Monterey Cypress.
- B.5 In Section 2 of the Initial Study, the *Environmental Checklist* 11.d *Noise* has been revised to clarify that the impact is Less than Significant with Mitigation.
- B.6 The caption for Photograph 13 on page A-7 of the BRE has been revised to clarify that the rain event pictured in the photograph occurred in 2010.

Responses to Letter C: Coastal Commission Comments on the Biological Resource Evaluation

Comment Response

C.1 The descriptions provided in Sections 1.1.1 and 1.1.2 of the Biological Resource Evaluation (BRE) (pages 7- 11) and in Section 1.4 of the Initial Study (IS) follow this nomenclature, identifying the project locations as a "drainage", "ditch", "swale", or
some combination thereof. Additional descriptors are used to address the hydrologic regime and background (i.e. man-made) of the project locations. In order to provide additional clarity with respect to the use of this nomenclature, updates have been made to Table 1 on page 5 of the BRE and Table 1 of the IS to be consistent with the descriptions provided in Sections 1.1.1 and 1.1.2 of the BRE. Additional changes have been made throughout the BRE and IS where the term "drainage" was used to change this to the more generic "drainage feature" or to change the descriptive term used to be consistent with the definitions provided on page 7 of the BRE, Table 1, and the descriptions provided in Sections 1.1.1 and 1.1.2 of the BRE.

- C.2 See Master Response One. The project description in Section 1.3 of the Initial Study has been updated to eliminate emergency work in the A Drainage locations.
- C.3 The project has been updated to eliminate all work in the A Drainage locations. The "A Drainage" classification was not intended to categorize drainages by type, but rather, to denote those drainages where only emergency activities were previously proposed. Table 1 of the Initial Study and Sections 1.1.1 and 1.1.2 of the BRE provide description of the drainage features. Roosevelt Drainage (B-1) is characterized as a natural perennial drainage and the Kehoe Ditch Drainage (B-2) as a natural/modified intermittent drainage. The work proposed at these locations is restricted in order to reduce the potential for impacts and is described in the updated project description in Section 1.3 of the IS. The proposed routine maintenance will typically consist of trimming and removal (flush cutting at the base of the plant) of trees or shrubs (less than 4 inches in diameter) in or adjacent to the channel that are restricting flow or that prevent access to the channel by maintenance workers. These limited maintenance activities are proposed for the latter two drainages for the purpose of maintaining historic flows and preventing flooding of adjacent residences.
- C.4 See Master Response One. The project has been updated in Section 1.3 of the Initial Study to eliminate all work in the A Drainage features.
- C.5 A discussion of potential impacts and mitigation measures designed to avoid, minimize, and mitigate potential impacts to a less than significant level is provided in Section 4 of the BRE and throughout the IS. With implementation of the proposed mitigation measures, it is anticipated that the project will not affect listed or sensitive species and that the proposed measures are suitable for the avoidance of take. The intent of the Project is to maintain the project locations' historic and current uses for drainage purposes and will not result in a change of use or significant habitat disturbance, degradation, or conversion.

The potential for routine maintenance activities to result in direct take or indirect take through habitat modification is low. Work has been limited to the dry season

(BIO MM-6 and -10) and times when no water is present (BIO MM-4). These controlled work periods correspond to times when California red-legged frog (CRLF) and San Francisco garter snake (SFGS) have a low potential to be present within the work areas. CRLF as well as other anuran species, the SFGS prey base, rely on aquatic habitat for reproduction and primary habitat. SFGS are often associated with and found in close proximity to prey sources around suitable prey breeding and source population habitats (USFWS, 2006). Suitable SFGS prey aquatic habitats are infrequent and fragmented in the vicinity of the project locations. Seasonal wetlands suitable for supporting Pacific tree frogs (*Pseudacris regilla*) are located in the vicinity of but not within proposed work areas, and do not provide a hyrdroperiod suitable for CRLF breeding are generally located outside the proposed work areas. The project locations are typically dry during the months when work is anticipated to be performed, and as such, generally provide only temporary, low-quality CRLF or SFGS summer habitat.

Although CRLF are known to migrate and use upland areas for refuge, these migrations are temporary (often initiated by winter rains and limited to the winter wet-season), enacted only by a percentage of the population, spatially restricted, and most often occur between aquatic habitats that are required for survival (Bulger et al, 2002 and Tatarian, 2008). Similarly, SFGS upland hibernation is also common but is typically limited to winter months (USFWS, 2006) when no work is proposed. SFGS do use upland habitat for basking, however the shrub densities found in the vicinity of the project sites are much higher than those preferred (USFWS, 2006). The presence of CRLF or SFGS during the work period is anticipated to be unlikely and limited to foraging or migrating individuals.

The project typically does not include ground-disturbing activities that would impact burrows that may support special status species (CRLF or SFGS) during times of refuge or aestivation. Sediment removal will only involve removal of accumulated materials from within channels where burrows would not occur. Ground disturbance could result from in-kind culvert replacement or bank stabilization activities that will be performed on an as-needed basis. Bank stabilization would only occur following failure events to restore features to existing conditions and as such would not impact burrows or cause habitat degradation. Per the conditions of the California Department of Fish and Wildlife (CDFW) Draft Streambed Alteration Agreement (SAA), such activities would also be reviewed prior to completion to implement measures necessary to avoid take.

The project is not expected to significantly degrade existing habitat values. Most of the project locations subject to routine maintenance activities are narrow, linear, man-made drainage features characterized by high-volume, short-duration flows immediately following rain events with very low if any base flow. B-1 and B-2, also predominantly linear in geometry, are subject to slightly less flashy and more regular flows. With the exception of B-1 and B-2, vegetation at the majority of these locations is dominated by herbaceous and small shrub species. Most frequently, routine maintenance activities will consist of vegetation control (mowing) of herbaceous species that provide low-quality cover and will also reestablish during the non-work period when CRLF and SFGS are more active. As described above, the intent of the project is to maintain the current function and use of the project locations and the undertaking will not degrade current habitat quality.

Lastly, only B-8, where no work is proposed, and small portions of B-2 provide suitable CRLF breeding habitat. The routine maintenance activities proposed at B-2 will include trimming of in-channel and bankside woody vegetation (less than 4inches DBH), but will not entail complete vegetation removal or ground disturbing activities within the work area. Much of the vegetation will remain intact and continue to provide adequate cover and refuge habitat. A CDFW-approved qualified biologist or biological monitor (defined in CDFW SAA issued for the project) will be present during all work activities at B-2 to observe work activities and assure compliance with the Project Mitigation Monitoring Program (MMP) and requirements of other permits and approvals.

- C.6 The definition of riparian corridor provided in the BRE, "Riparian corridors are the areas between the limits of riparian vegetation, where limits are determined by vegetative coverage, at least fifty percent of which is comprised of a combination of the following plant species: red alder, jaumea, pickleweed, big leaf maple, narrow-leaf cattail, arroyo willow, broadleaf cattail, horsetail, creek dogwood, black cottonwood, and box elder", is nearly identical to the definition provided in the comment. The differences being the identification of specific species for riparian corridor determination versus the use of common as well as unspecified "riparian species" and the omission of California cordgrass from the suite of common riparian species. No California cordgrass was identified within the BSA. Both definitions identify riparian corridors as those areas dominated by at least 50 percent riparian species. This metric was the standard employed during the field surveys in the identification of riparian corridors. Riparian species used in the determination of riparian corridors were not limited to the species identified in the above definition but included additional species typically known to occur in riparian areas.
- C.7 The definition of "wetland" found within the Half Moon Bay Municipal Code (City Code), the Half Moon bay Local Coastal Program (LCP) and California Coastal Act of 1976 (Coastal Act) vary slightly. Within the Coastal Resource Conservation Standards, Section 18.38.020(E), of the City Code, "wetland" is defined using the United States Fish and Wildlife Service (USFWS) wetland definition. The LCP defines "wetland" per the California Coastal Commission (CCC) definition within the Coastal

Act at §30121. Based on guidance provided by the CCC in the October 5, 2011 briefing document, "Definition and Delineation of Wetlands in the Coastal Zone" the CCC provides further guidance on the definition and delineation of wetlands within the coastal zone. Per this guidance document, which uses a wetland definition similar to the USFWS, "wetlands" are defined using a "one parameter definition". The "one parameter definition" requires only a single parameter (soils, vegetation, and/or, hydrology) to establish wetland conditions.

As described in Section 2.2.5 and 3.2.4.5 of the BRE and Section 3.4.c of the IS, determination and delineation of wetlands in the Biological Study Area (BSA) was completed using the methodology described in the 1987 U.S. Army Corps of Engineers (USACE) Wetlands Delineation Manual and Regional Supplement for the Arid West to determine areas that met the one parameter wetland definition herein referred to as CCC wetlands. Since only one-parameter was required to meet the definition of a wetland rather than the three parameters required by the USACE (vegetation, soils, hydrology) the extent of wetlands delineated is far greater than the extent that would have resulted from the use of the three-parameter approach. As discussed in Section 3.2.4.5 of the BRE [Section 3.4.c of the IS] CCC wetlands were identified within the drainage features at B-1, B-2, B-6, B-9, B-10, C-2, C-3 and C-6 and in areas adjacent to B-6, B-10, C-2, C-3, C-6, and C-7. The extent of CCC wetlands is depicted in Appendix F of the BRE. The presence of an Ordinary High Water Mark (OHWM) was used to delineate the landward extent of USACE other waters jurisdiction within the BSA. An OHWM was observed along B-1, B-2, B-6, B-9, a small portion of B-10, C-2, the western portion of C-5, and C-6. The USACE would likely take jurisdiction over all or a portion of these features based on the OHWM and their eventual discharge into the Pacific Ocean. The extent of the OHWM and thus USACE jurisdiction within the project locations is depicted in Appendix F of the BRE.

Extensive soil samples were not taken during the field surveys due to the lack of hydric soil indicators found throughout the BSA and the obvious signs of hydrology and hydrophilic vegetation that formed the primary basis of the delineation. Several soil samples were taken at the upland wetland border of the CCC wetlands adjacent to B-6, B-10, C-2, and C-6, none of these soils met hydric soil requirements. Attached to this response please find the field data forms for the data points completed during the field survey. As described above, the forms may be only partially completed due the use of the one-parameter approach for wetland verification. Data forms correspond to the locations depicted on the revised maps included in Appendix B of the BRE.

The maintenance activities currently proposed by the City are constrained to the channel, channel banks and levees, the area between the channel and adjacent roadway at B-3, B-9, B-10, C-1, C-2, C-3, C-4, C-5, C-6 and C-7, and areas adjacent to B-1 and B-2 necessary for access via foot. No work is currently proposed within the

CCC wetland areas adjacent to B-6, B-10, C-2, C-3, C-6, and C-7. If work is required to be performed within these areas as part of the routine maintenance activities, the activities will be reviewed prior to commencement to determine if they would be regulated by the USACE and a three-parameter wetland delineation would be performed as necessary to determine the extent of USACE jurisdiction. Project activities will not commence without prior compliance with Sections 404 and 401 of the Clean Water Act. The City is pursuing regulatory approvals concurrent with the CEQA process.

- C.8 The language of MM BIO-1 on page 41 of the BRE and Sections 3.4.a & b of the IS have been updated to address this comment. The description of heavy equipment has been revised to include equipment such as a bobcat.
- C.9 These date ranges coincide with the timing constraints identified in the Draft Stream Alteration Agreement (SAA) issued for the Project by the California Department of Fish and Wildlife (CDFW) providing consistency between the documents. The work areas that are constrained to the June 15 to October 31 period were identified as having more suitable habitat for CRLF and SFGS and therefore a higher potential for CRLF and SFGS to be present. A start date of June 15 limits project activities to a later stage in the CRLF development process when most individuals are in the metamorph/juvenile life stages reducing the potential for impacts to the more vulnerable eggs and tadpoles. The work locations with the April 15 to October 31 date range generally contain less suitable habitat for CRLF and SFGS and as a result, have a broader work window which coincides with the dry season, thus limiting work during the rainy season when the project locations are more likely to have water present.
- C.10 The project does not anticipate significant ground disturbance as part of the routine maintenance activities. If areas are disturbed to bare ground inadvertently as a result of foot traffic or trimming of vegetation, soils will be stabilized to minimize erosion, soil loss, bank instability or other indirect impacts and areas will be revegetated (MM BIO- 8 and -20 and Condition 3.5 of CDFW SAA). Significant ground disturbance may occur during potential culvert replacement or bank stabilization/repair activities; however, these activities will be analyzed and completed on an as-needed basis typically in response to failures or dangerous situations. Re-vegetation plans for such areas with significant ground disturbance will be provided to the Coastal Commission for review.

Responses to Letter D: Deborah Ruddock

Comment Response

D.1 See Master Responses One and Seven. In order to address the significance of the impacts and the adequacy of proposed mitigation, the MND/IS and BRE were

distributed for review and comment to key permitting and regulatory agencies including CDFW, Regional Water Quality Control Board, CCC, USACE, and USFWS. Comments on the Biological Resource Evaluation were received from the CCC and USFWS and are addressed within this response document. No responses were received from the other permitting/regulatory agencies. The IS/MND and BRE include substantial discussion of the proposed impacts of the project and how, through the implementation of avoidance and minimization measures and mitigation, will be reduced to a less than significant level. A MMP has also been prepared for the project and included with this response document to further identify how mitigation measures will be implemented and reported. The City is pursuing regulatory approvals concurrent with the CEQA process, and project activities will not be performed without prior compliance with all applicable regulations.

- D.2 The updated project description in Section 1.3.4 of the Initial Study (IS) provides staging area information. Typically, staging of equipment at all project locations will occur on paved roadways. Project locations not adjacent to paved roadways will be accessed on foot with work completed with hand tools. Project activities that would require equipment to be staged outside of existing paved roads would be limited to culvert replacement and bank stabilization/repair activities. These activities will occur on an as-needed basis, typically in response to failures or dangerous situations and cannot be planned. As included in the mitigation measures, access to and staging for such activities will be reviewed prior to work to ensure that impacts are reduced to a less than significant level.
- D.3 See Master Response Seven. The requested watershed and groundwater analysis is beyond the scope of this maintenance project and CEQA analysis.
- D.4 See Master Response Seven.
- D.5 See response to Comment E.35
- D.6 See Master Response Two. The commenter's preference for a different project than is currently proposed is acknowledged and incorporated into the environmental record for the project.

The Initial Study includes a complete analysis of the potential impacts of the proposed project and identifies feasible mitigation for all potentially significant impacts; this mitigation has been included in the project. Based on substantial evidence in the record, the IS concludes that the proposed project will not result in any significant environmental impact; therefore preparation of an Environmental Impact Report is not required.

Responses to Letter E: James Benjamin

Comment Response

- E.1 See Master Response One. See responses to Comments E.12 through E.92.
- E.2 See Master Response Six. Pursuant to the requirements of the California Environmental Quality Act (CEQA), any discretionary approval for a project that is subject to CEQA review (whether the discretionary approval is by the lead agency or a responsible agency) must occur <u>after</u> the environmental review process is complete.
- E.3 & 4 See Master Responses One and Seven. The intent of the project is to maintain the project locations' historic and current uses for drainage purposes. As described in response to Comment D.1 above, the project will not result in further channelization or modification of channel geomorphology and maintenance activities are not anticipated to result in landscape changes or measureable changes to baseline flow rates, groundwater infiltration, upstream or upland drainage, and other hydrologic properties. Exposure of soils that could result in increased siltation is not anticipated during the maintenance activities; however as discussed in MM BIO-8, any exposed soils will be stabilized to minimize erosion, soil loss, bank instability, or other indirect impacts. Additional information relative to the project's potential to influence the draining of adjacent uplands, reduce groundwater recharge, increase pollutant discharge as a result of reduced bio filtration, increase siltation, influence geomorphology, and influence downstream flooding, are provided in responses to Comments D.3, D.4, E.4, and E.29.
- E. 5 & 6 See Master Response Two. The commenter's suggestion that the City explore alternative projects is noted and incorporated into the environmental record.
- E.7 See responses to Comments E.12 through E.92.
- E-8 See Master Response One.
- E-9 See Master Response Two.
- E.10 The Initial Study includes a complete analysis of the potential impacts of the proposed project and identifies feasible mitigation for all potentially significant impacts; this mitigation has been included in the project. Based on substantial evidence in the record, the IS concludes the proposed project will not result in any significant environmental impact; therefore preparation of an Environmental Impact Report is not required.

- E.11 See Master Response Two. The comment's recommendation that the City propose a different project and prepare an EIR for that project is noted and incorporated into the environmental record.
- E.12 See Master Response Six.
- E.13 The "A" designation identified those drainage features that were previously proposed for emergency clearing and clean-up activities only. See Master Response One clarifying that work in the A Drainage features (including Pilarcitos Creek) has been eliminated from the project. The "B" and "C" designations identify those drainage features that are proposed for routine maintenance. The distinction between "B" and "C" drainages is used to provide consistency with the Draft Streambed Alteration Agreement and does not distinguish proposed project activities or physical characteristics of the drainages.

The Initial Study and Draft Mitigated Negative Declaration identify feasible mitigation that has been incorporated into the project to reduce all potentially significant impacts to a less-than-significant level.

- E.14 See response to Comment E.13 and Master Response One.
- E.15 See Master Response One and Seven and response to Comment E.13.
- E.16 See Master Response One regarding clarification of the project. The comments regarding prior maintenance of Kehoe drainage are noted and incorporated into the environmental record. The proposed project does not include shot Crete lining of the Kehoe drainage or any other drainage facility.
- E.17 See Master Response One. The Initial Study and Negative Declaration identify feasible mitigation that has been included in the project to mitigate all potentially significant environmental impacts to a less-than-significant level.
- E.18 See Master Responses One and Six.
- E.19 See Master Responses Two and Three. The concern expressed in this comment that flooding has not been adequately documented to justify the proposed maintenance activities, is noted and incorporated into the environmental record.
- E.20 See Master Response Two. The concern expressed in this comment that the project may not be warranted or effective is noted and incorporated into the environmental record. Disagreement among experts regarding the need for, or benefits of, a project does not trigger the need for an Environmental Impact Report pursuant to the California Environmental Quality Act (CEQA). The text of Section 1.3 of the Initial Study (IS) and Section 1.2 of the Biological Resource

Evaluation (BRE) has been updated to reflect the lack of maintenance as a contributing factor in the current condition of the project locations.

- E.21 See Master Responses One and Two. The comments questioning the need for maintenance in specific B and C drainage features are noted and incorporated into the environmental record.
- E.22 See Master Response Two. The City will update the Local Coastal Program as appropriate.
- E.23 The Initial Study includes a complete analysis of the potential impacts of the proposed project and identifies feasible mitigation for all potentially significant impacts. This mitigation has been included in the project. Based on substantial evidence in the record, implementation of the project would not result in any significant environmental impact.
- E.24 See Master Response Two. The comment's suggestion that the proposed maintenance may not provide adequate flood capacity in all areas and the request that the City revise its project objectives is noted and incorporated into the environmental record. The comment's suggestion that warning signs or guard rails be installed to prevent vehicles from driving into overgrown ditches is noted and incorporated into the environmental record. Such measures would not achieve the City's object of maintaining positive drainage to prevent flooding.
- E.25 Mitigation has been included in the project to avoid significant impacts. See MM BIO-1, -4, -5, -6, -20 and -22, and MM HYD-1.
- E.26 See responses to Comments E.27 through E.92.
- E.27 See Master Response One for further clarification regarding the proposed maintenance activities.

Section 3-10 of the Local Coastal Program (LCP), *Performance Standards in Riparian Corridors*, begins as follows:

"Require development permitted in corridors to: (1) minimize removal of vegetation..."

MM BIO-1 limits vegetation removal to the minimum necessary, consistent with the above performance standard and with the Local Coastal Program. MM BIO-1 further specifies how this mitigation will be implemented. It defines "minimum necessary" and specifies that a qualified biologist shall monitor all project activities to ensure that impacts to vegetation are minimized. It further specifies that where no access routes exist, the biologist shall delineate approved access routes that minimize impacts to vegetation prior to project activities. It requires that the biologist designate the work area and delineate areas to be avoided, including wild strawberry populations, special-status plant species and wetlands adjacent to project locations. The proposed mitigation is consist with the LCP, and together with other mitigation included in the project, will reduce potentially significant biological impacts to a less than significant level.

- E.28 See Master Response Seven.
- E.29 See Master Responses Two and Seven. The potential to diminish biological productivity or degrade environmentally sensitive habitat area is discussed in responses to Comments C.5, E.39 and E.40.
- E.30 See Master Response Two. The preference expressed in this comment, that the City construct a new drainage channel at a different location instead of maintaining the existing Kehoe Ditch, is noted.
- E.31 See Master Response Two. This project is limited to a maintenance program. The commenter's desire for a comprehensive drainage project is noted.
- E.32 Trash removed from the drainages will not be left in the drainages; it will be disposed appropriately. See Mitigation Measure MM BIO-17.
- E. 33 See Master Response One.

There will be no tree or shrub removal in most of the drainages. Visual changes will result from mowing, removal of sediments, and trimming of adjacent trees or shrubs where growth extends into the drainage. The visual effects of this type of routine maintenance is localized and temporary, similar to the visual effect of mowing and trimming that occurs on a regular basis along the Coastside Trail and elsewhere in the City. The visual impact of this routine maintenance is not expected to be significant.

In Roosevelt and Kehoe drainages where trees and shrubs occur both adjacent to and within the drainage, maintenance activities will remove vegetation only as necessary to maintain storm water flows. The proposed routine maintenance will typically consist of trimming and removal (flush cutting at the base of the plant) of trees or shrubs (less than 4 inches in diameter) in or adjacent to the channel that are restricting storm water flows and those necessary to allow workers to access the channel. Trees and shrubs overhanging the channel will be trimmed to provide a clear space approximately six feet in height measured from the bottom of the channel. These maintenance activities are proposed for the purpose of maintaining historic flows and preventing flooding of adjacent residences and will not involve channel modification or complete clearing of instream, riparian, or upland vegetation. This approach will minimize vegetation removal, especially at the perimeter of the drainage where it is most visible. The proposed regular maintenance will minimize the amount of vegetation that will need to be removed at any one time, thereby minimizing the temporary visual change. The Initial Study correctly identifies that the proposed ditch maintenance program would not result in a significant visual impact.

- E.34 All maintenance activities will occur during the day. Emergency work has been removed from the project; consequently, no work will occur at night. Section 3.1.d of the Initial Study has been revised to clarify that the updated project will not include nighttime work.
- E.35 Project implementation would involve a three-person crew conducting maintenance activities a maximum of 25 days per year using one gas-powered truck, a small tractor (with backhoe and articulating mower) and chain saws and weed eaters. Project areas where work is anticipated are included in the updated project description in Section 1.3 of the Initial Study. Although there are no screening levels that specifically address a maintenance project, the limited equipment use is clearly below the Bay Area Air Quality Management District's (BAAQMD's) operational screening criteria for greenhouse gases which specifies that the operation of up to 56 single-family houses or a community park of up to 600 acres would not exceed the greenhouse gas significance threshold of 1,100 metric tons per year. Section 3.3.f of the Initial Study has been revised to further clarify that the proposed maintenance project would not exceed any BAAQMD screening criteria for greenhouse gases and would not result in a significant environmental impact.
- E.36 The proposed project would not result in a significant environmental impact relative to the production of greenhouse gases; therefore, mitigation, such as maintaining citywide drainages without power tools, is not required pursuant to the California Environmental Quality Act, and has not been included in the project.
- E.37 See Master Response Four and responses to Comments C.5 and E.38 through E.43.
- E.38 The Guerrero wetland drains to B-1 (Roosevelt Drainage). Maintenance activities at this location will be limited to the portion within the City easement located on the north side of the project location just west of Alameda Avenue and the culvert located under Alameda Avenue. Proposed activities will consist of trimming and removal of trees (up to 4 inches DBH) and shrubs within the channel that are restricting flow. Trees (up to 4 inches DBH) and shrubs adjacent

to the channel will be trimmed/removed only to the extent needed to provide foot access to the channel for maintenance purposes. Trees and shrubs overhanging the channel will be trimmed to provide a clear space approximately six feet in height measured from the bottom of the channel. Clearing of accumulated trash or debris blocking the culvert will be performed by hand. All work will be done with hand-held tools. Vegetation trimming/removal is expected to be minimal. A qualified biologist or biological monitor, as defined in the California Department of Fish and Wildlife (CDFW) Stream Alteration Agreement (SAA) issued for the project, will be present during all work activities at B-1 to observe work activities, and as necessary for restoration and documentation of vegetation removal. The intent of these activities is to maintain current flow conditions and reduce the potential for flooding. The culvert under Alameda Avenue is the main structure controlling flow rates downstream of the wetland area (and as such backflow and residence time). No changes to the size or design of the culvert are proposed as part of this project and as such the hydrology of this wetland should not be affected.

The Caltrans mitigation wetland is located adjacent to B-2 (Kehoe Ditch) and Pilarcitos Creek. The extent of Coastal Resource Areas (CRAs) as defined at Section 18.38.020 of the City Code which includes sensitive habitat areas is described in Section 3.2.4 - 3.2.4.6 of the BRE and includes description of these project locations as being environmentally sensitive habitats with the potential to support California red-legged frog (CRLF) and San Francisco garter snake (SFGS). Additionally, the extent of CRAs (not including sensitive habitat areas) is depicted spatially in Appendix F of the BRE and includes this area.

E.39 With implementation of the proposed mitigation measures it is anticipated that the project will not adversely affect listed or sensitive species and that the proposed measures are suitable for the avoidance of take. The proposed preconstruction surveys and full-time monitoring (MM BIO-12, -13, -24, and -25) are derived from the conditions of the Draft Stream Alteration Agreement (SAA) issued for the project by the California Department of Fish and Wildlife (CDFW) to avoid impacts to California red-legged frog (CRLF) and San Francisco garter snake (SFGS). The potential for CRLF and SFGS to be present at the project locations as well as the potential for impacts is discussed in Response C.5 and summarized below.

In order to avoid impacts to the aquatic life stages of California red-legged frog (CRLF) work has been limited to the dry season and conditions when no water is present at the project locations (MM BIO-6 and -10). Furthermore, only small portions of B-2 provide even marginally suitable CRLF breeding habitat. The routine maintenance activities proposed at B-2 will include trimming of inchannel and backside woody vegetation (less than 4-inches DBH), but will not entail complete vegetation removal or ground disturbing activities within the

work area. Much of the vegetation will remain intact and continue to provide adequate cover and refuge habitat. A qualified biologist or biological monitor (defined in CDFW SAA issued for the project) will be present at B-2 to observe work activities and assure compliance with the project Mitigation Monitoring Program (MMP) and requirements of other permits and approvals. As discussed in response to Comment C.5, the potential for aquatic life stages (eggs and tadpoles) of CRLF to be present at other project locations is low due to the lack of breeding habitat.

With the exception of B-1, portions of B-2, and very isolated portions of C-6, the project locations in which routine maintenance activities are proposed are typically dry during the designated work period. Although CRLF are known to migrate and use upland areas for refuge, these migrations are temporary (often initiated by winter rains and limited to the winter wet-season), enacted only by a percentage of the population, spatially restricted, and most often occur between aquatic habitats that are required for survival (Bulger et al, 2002 and Tatarian, 2008). Similarly, SFGS upland hibernation is also common but is typically limited to winter months (USFWS, 2006) when no work is proposed. SFGS do use upland habitat for basking, however the shrub densities found in the vicinity of the project sites are much higher than those preferred (USFWS, 2006). The project locations are typically dry during the months when work is anticipated to be performed, and as such, generally provide low quality summer habitat. Impacts to burrows, which may support special status species, will be minimal or negligible due to the lack of planned ground disturbing activities. The project will not involve removal of stream banks or drainage re-shaping; vegetation removal will be primarily limited to the mowing of herbaceous vegetation and the trimming or removal of woody vegetation, which will leave root systems intact, and not impact burrows.

Sediment removal activities will be restricted to the removal of accumulated sediments only to create positive drainage; sediment removal below the natural channel bottom or banks is not part of this Project. The only locations where sediment removal is proposed with a moderate potential for CRLF to be present (based on drainage characteristics, vegetation, and proximity to potential breeding locations) are B-9 and C-6. As discussed above, in addition to seasonal restrictions several other avoidance, minimization, and mitigation measures will be enacted including worker training, preconstruction surveys, construction monitoring, and vegetation replacement to eliminate potentially adversely effects to listed or sensitive species. In addition, the City is pursuing regulatory approvals concurrent with the CEQA process, and Project activities will not be performed without prior compliance with all applicable regulations.

E.40 As described above in response to Comment E.39, with the implementation of the proposed mitigation measures it is anticipated that the project will not

adversely affect listed or sensitive species and that the proposed measures are suitable for the avoidance of take. Similarly, the project is not anticipated to result in indirect take through habitat degradation and is expected to have negligible impacts to California red-legged frog (CRLF) breeding habitat. Only small portions of B-2 provide even marginally suitable CRLF breeding habitat. The potential for impacts at B-2 is discussed above in response to Comment E.39.

As discussed in the BRE, there is the potential for California red-legged frog (CRLF) or San Francisco garter snake (SFGS) to occupy several of the other project locations. As discussed in response to Comment C.5, the presence of CRLF or SFGS is anticipated to be unlikely during the work period due to poor habitat quality and will be limited to foraging or migrating individuals. The project does not propose any activities that would result in channel realignment to more linear dimensions, nor will the project result in the elimination of pool and riffle habitat. Furthermore, the removal of large woody debris is similarly unlikely or will be very minimal. Most of the project locations subject to routine maintenance activities are currently narrow, linear, man-made drainage features characterized by high-volume, short-duration flows immediately following rain events with very low base flow.

B-1 and B-2, also predominantly linear in geometry, are subject to more regular year-round or near year-round hydrologic regimes. With the exception of B-1 and B-2, vegetation at the majority of these locations is dominated by herbaceous and small shrub species. Due to the type of vegetation, flows, and channel morphology present, the accumulation of large woody debris at the project locations is unlikely and was generally not observed during the site visits. Removal of any woody debris at B-1 and B-2 will be restricted to material that poses an imminent flooding risk and will be completed, by hand or with hand tools, under the supervision of a qualified biologist or biological monitor. With the exception of B-1 and B-2, where such areas will not be impacted, the presence of pools and riffle habitat was not observed at the project locations during the site visit and will thus not be impacted. Most frequently, routine maintenance activities will consist of vegetation control (mowing) of herbaceous species that provide low-quality cover and will also reestablish during the nonwork period when CRLF are more active. No permanent disturbance or conversion of habitat is proposed as part of the project.

E.41 The project description in Section 1.2 of the BRE and in Section 1.3.1 of the Initial Study has been updated to better reflect the intent of the project to maintain the project locations' historic and current uses for drainage purposes. It is noted that urbanization, development, channelization, clearing, and other land use changes can have negative effects on lentic systems. As described in response to Comment E.40 above, most of the project locations are narrow, linear, man-

made drainage features characterized by high-volume, short-duration flows immediately following rain events, with very low base flow. Project locations are often hydrologically isolated from adjacent floodplains due to past side casting of the original drainage ditch spoils. With the exception of B-1 and B-2, vegetation within project work locations is dominated by herbaceous or shrub species with little riparian vegetation. Because root systems will be left intact and ground disturbance avoided, the project will not result in further channelization or modification of channel geomorphology. Maintenance activities will be restricted to the areas immediately along and adjacent to the project locations and will not cause landscape changes or measureable changes to baseline flow rates, groundwater infiltration, upstream or upland drainage, and other hydrologic properties. A Mitigation and Monitoring Program (MMP) has been prepared for the project and is included with this response document to further identify how mitigation measures will be implemented and compliance reported. Furthermore, the City is pursuing regulatory approvals concurrent with the CEQA process, and project activities will not be performed without prior compliance with all applicable regulations.

- E.42 Please see response to Comment C.7 above. Please note that no routine maintenance activities are proposed within areas identified as critical habitat for threatened or endangered species as determined by the United States Fish and Wildlife Service (USFWS). No activity at any project location will be performed without prior compliance with the Clean Water Act. Furthermore, the City is pursuing regulatory approvals concurrent with the CEQA process, and project activities will not be performed without prior compliance with all applicable regulations.
- E.43 See Master Response One. As discussed in responses to Comments C.5, E.39, and E.40, work within Kehoe Ditch (project location B-2) is limited to trimming of in-channel and bank side woody vegetation (less than 4-inches DBH), and will not include ground disturbance within the work area. If areas are disturbed to bare ground inadvertently as a result of foot traffic or trimming of vegetation, soils will be stabilized to minimize erosion, soil loss, bank instability or other indirect impacts and areas will be re-vegetated (MM BIO-8 and -20 and Condition 3.5 of California Department of Fish and Wildlife (CDFW) Stream Alteration Agreement (SAA). Furthermore, project activities have been limited to the dry season (MM BIO-6 and -10) and times when no water is present (MM BIO-4) which are outside the migratory timeframes when Coho or steelhead would have the potential to be present within this downstream portion of Pilarcitos Creek (CDFG, 2004 and CDFG, 2007). Based on the activities proposed at this location and the implementation of mitigation measures, the project is not anticipated to result in increases in turbidity or sedimentation, and as a result will have a less than significant impact on potential habitat for Coho or steelhead.

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- E.44 See Master Response One.
- E.45 See Master Response One.
- E.46 See Master Response Two. The current project does not propose to change the use of these drainage features; it proposes maintenance activities in the B and C project locations to maintain the current and historic use of the project locations for drainage purposes and to prevent flooding. Removal of vegetation is limited to the minimum necessary to achieve the project objectives (see response to Comment 38). There is no feasible alternative to maintenance of the B and C project locations. The Initial Study has been revised in Section 3.4.d to further clarify conformance with Chapter 18.37 of the Municipal Code in regard to preservation of riparian vegetation. The comment suggesting relocation of the Kehoe Drainage is noted. Relocating the Kehoe Drainage is not a feasible alternative to routine maintenance of the project locations.
- E.47 Comment noted.
- E.48 See Master Responses Two and Three. Constructing new flood control facilities is not a feasible alternative to maintaining existing drainage features. The Initial Study and Negative Declaration provide a full assessment of the potential project impacts, identify feasible mitigation to reduce potentially significant environmental impacts to a less-than-significant level, and incorporate this mitigation into the project in conformance with the requirements of the California Environmental Quality Act.
- E.49 See Master Response Two.
- E.50 See Master Response Two.
- E.51 The Initial Study identifies the sensitive habitat areas, riparian areas/corridors, and wetlands within the project study area, and identifies feasible mitigation for potential impacts to these resources in conformance with the requirements of the California Environmental Quality Act (CEQA). The City will update the Local Coastal Program as appropriate.
- E.52 See response to Comment E.51.
- E.53 See Master Response Two.
- E.54 See Master Response Two. The project does not propose construction of storm water runoff facilities; consequently, a use permit for the construction of such facilities is not required pursuant to Section 18.38.80 of the Half Moon Bay Municipal Code. The project locations proposed for maintenance are existing

storm water and flood control facilities. The Initial Study and Negative Declaration provide a full assessment of the potential project impacts on sensitive habitats and identify feasible mitigation to reduce potentially significant impacts to a less-than-significant level; this mitigation has been incorporated into the project in conformance with the requirements of the CEQA.

- E.55 See Master Response One and response to Comment E.27. Minimizing disturbance of vegetation is one of numerous mitigations identified by the Initial Study and incorporated into the project to reduce the potential impacts in sensitive habitat areas to a less than significant level.
- E.56 The Initial Study and Draft Negative Declaration were circulated to the U.S. Fish and Wildlife Service and the California Department of Fish and Wildlife (DFW). A Draft Stream Alteration Agreement/Routine Maintenance Agreement (RMA) prepared for the proposed project by California DFW is included as Appendix B of the Initial Study. The City is pursuing regulatory approvals concurrent with the CEQA process, and project activities will not be performed without prior compliance with all applicable regulations.
- E.57 See Master Responses Five and Six.
- E.58 See Master Response Four. Mitigation measure MM BIO-20 requires revegetation of areas subject to significant ground disturbance and identifies the required components of a re-vegetation plan. The Draft Stream Alteration Agreement includes Compensatory Measures 3.1 through 3.8, which specify standards for implementation and monitoring of re-vegetation. The mitigation and requirements of the Draft Stream Alteration Agreement have been included in the project. The Planning Director will make a recommendation regarding the project prior to consideration of the Coastal Development Permit by the Planning Commission.
- E.59 The Initial Study (IS) identifies, and the project includes, extensive mitigation to ensure that removal of vegetation and sediments within the B and C project locations does not result in significant water quality impacts (see MM BIO-4 through -10, -20, -21, -22, and -23 and MM HYD-1). Section 1.3.1 identifies the equipment that will be used in maintenance operations. MM BIO-23 provides specific limitations on fueling or maintenance activities. As clarified in Section 1.3 of the IS, equipment will, with limited exceptions, be staged on paved roads. Based on mitigation included in the project, the project would not result in a significant water quality impact.

- E.60 Please see responses to Comments E.39 and E.40 above which address the potential to impact the California red-legged frog (CRLF) and the habitat components described above.
- E.61 The extent of United States Army Corps of Engineers (USACE) jurisdiction is discussed in response to Comment C.7. Furthermore, as discussed in response to Comment C.7 and throughout this response document, the City is pursuing regulatory approvals concurrent with the CEQA process, and project activities will not be performed without prior compliance with all applicable regulations. Additionally, as described in Master Response Two and responses to Comments E.54, E.56 and E.58, the project is consistent with LCP/LUP and implementing ordinances of the City.
- E.62 Policy 3-12 of the Local Coastal Program identifies "Permitted Uses in Buffer Zones." The project does not propose new uses within buffer zones. See Master Response Two.

Policy 3-10 (a) identifies performance standards for Riparian Corridors. The project will conform to the referenced Performance Standard a.9 ("maintain natural vegetative buffer areas that protect riparian habitats") by also conforming to Performance Standard a.1 ("minimize removal of existing vegetation"). See response to Comment E.33 for further clarification regarding vegetation removal in the Kehoe and Roosevelt drainage features.

- E.63 See Master Response Four.
- E.64 See Master Response One.
- E.65 See responses to Comments C.7 and E.61. See Mitigation Measure MM BIO-5 and Condition 2.43 of the Draft Stream Alteration Agreement, *Disposal of Invasive Plant Material.* See Master Responses Four and Five.
- E.66 There is no feasible alternative to the proposed removal of sediment in selected B and C project locations to maintain positive drainage and prevent flooding. Constructing new drainages is not a feasible alternative to maintaining the existing project locations. The Initial Study identifies feasible mitigations, including BIO MM-4 through-9, that have been included in the project to reduce the potential impact of sediment removal and other project activities on wildlife habitats to a less than significant level. The project, as proposed, is consistent with Coastal Act Policy 30233.
- E.67 See Master Response Four.
- E.68 See response to Comment 58.

- E.69 See Master Responses One and Four. See response to Comment E.2. The project currently does not anticipate greater than one-acre of ground disturbance that would require preparation of a SWPPP.
- E.70 See Master Response Four.
- E.71 Comment noted.
- E.72 The City will update the Local Coastal Program as appropriate.
- E.73 See Master Response Two.
- E.74 Comment noted. The Biological Resource Evaluation (BRE) provides an assessment and mapping of Coastal Resource Areas within the project study area, including habitat supporting listed species. See response to Comment 72.
- E.75 See response to Comments 79 and 80.
- E.76 See response to Comment 72.
- E.77 See Master Response Two.
- E.78 The project does not include trail development.
- E.79 See responses to Comments E.39 and E.40 that adequately address the potential to impact the California red-legged frog (CRLF) and the habitat components described in this comment.
- E.80 As discussed in responses to Comments C.5, E.39, and E.40, with the implementation of the proposed mitigation measures it is anticipated that the project will not adversely affect listed or sensitive species. The proposed measures are suitable for the avoidance of take, and impacts through habitat degradation will be less than significant. The project will not result in permanent disturbance, change in land use, or the loss of bed, bank, or upland habitat that would affect the preservation of rare and endangered species habitats. Additionally, as described in several responses in this document (Master Response Two and responses to Comments E.54, E.56, E. 58), the project is consistent with LCP/LUP and implementing ordinances of the City.
- E.81 Comment noted.
- E.82 Comment noted.

- E.83 See Master Response One. Pilarcitos Creek is an A drainage feature. The A drainage features are no longer included in the project.
- E.84 Avoidance and Mitigation Measure 2.43 of the Draft Streambed Alteration Agreement (SAA) specifies that invasive plant material removed during work activities shall be bagged and appropriately incinerated or disposed of in a landfill or permitted composting facility. All measures specified in the Draft SAA have been incorporated into the project. Mitigation measure MM BIO-19, which has been included in the project, specifies, "Any removed exotic plants should be immediately bagged and appropriately disposed of at a permitted facility."
- E.85 See Master Response Six and response to Comment E.43.
- E.86 The effect of urbanization on storm water runoff is not the subject of the current analysis. The project includes routine removal of vegetation and sediments from existing drainages to maintain their capacity to carry storm water and prevent flooding. See response to Comment 29.
- E.87 See Master Response Seven and responses to Comments E.3 & 4 and E.29. The project is consistent with the Local Coastal Program. See responses to Comments 88 through 92.
- E.88 The proposed routine maintenance project is intended to prevent flooding and minimize erosion and does not include new development. Based on the Initial Study, numerous mitigations have been included in the project to ensure that it does not result in significant environmental impacts. The project conforms to Coastal Act Policy 30253.
- E.89 The proposed routine maintenance involves the maintenance of existing drainage features to prevent flooding and thereby protect people and property and does not include channelization, dams or substantial alteration of rivers or streams. There is no feasible alternative to maintaining the project locations. The project conforms to Coastal Act Policy 30236.
- E.90 See Master Response Two. The comment that the City should reassess flood and erosion management on a broad scale prior to maintaining existing drainages is noted.
- E.91 The project is consistent with the Local Coastal Program and with the requirements of the Zoning Code. The Initial Study accurately concludes that the project will not result in a significant environmental impact based on substantial evidence in the record, including extensive mitigation that has been incorporated into the project.

- E.92 See responses to comments E-1 through E-91. The Initial Study provides a complete analysis of the potentially significant environmental impacts associated with the proposed project and identifies feasible mitigation to reduce those impacts to a less-than-significant level. This feasible mitigation has been included in the project. The Draft Initial Study and Negative Declaration conform to the requirements of the California Environmental Quality Act.
- E.93 The attachments to Comment Letter E are acknowledged.

Responses to Comment Letter F: California Department of Parks and Recreation

 F-1 See Master Response One regarding the updated project description and Master Response Seven regarding hydrology.
 The City will provide notice of the proposed routine maintenance within B-1, Roosevelt Creek, and B-2, Kehoe Ditch Drainage, to ensure agreement for any work performed within State Park Property.

Responses to Comment Letter G on the Biological Resource Evaluation: United States Fish and Wildlife Service

G-1 As discussed in responses to Comments C.5, E.39, and E.40, with implementation of the proposed mitigation measures it is anticipated that the project will not adversely affect listed or sensitive species, the proposed measures are suitable for the avoidance of take, and impacts through habitat degradation will be less than significant. In addition, in order to assure consistency with all applicable requirements, the City is pursuing regulatory approvals concurrent with the CEQA process, and project activities will not be performed without prior compliance with all applicable regulations, including but not limited to the Endangered Species Act of 1973.

Responses to Comment Letter H on the Biological Resource Evaluation: United States Army Corps of Engineers (USACE)

H-1 See response to Comment C-7. The City is pursuing regulatory approvals concurrent with the CEQA process. Project activities will be reviewed prior to commencement to determine if they would be regulated by the USACE. Project activities will not commence without prior compliance with Sections 404 and 401 of the Clean Water Act.

References:

Bulger, B. John, Scott Jr, J. Norman, Seymour, B. Richard. 2002. Terrestrial activity and conservation of adult California red-legged frogs *Rana aurora draytonii* in coastal forests and grasslands. Biological Conservation 110 (2003) 85-95.

CDFG. 2004. Recovery Strategy for California Coho Salmon, Report to the California Fish and Game Commission.

CDFG. 2007. California Steelhead Fishing Report-Restoration Car, A Report to the Legislature. Fisheries Branch, Sacramento.

San Mateo County Planning and Building Department. 1985. San Mateo County General Plan, Chapter 1: Vegetative, Water, Fish & Wildlife Resources.

Tatarian, J Patricia. 2008. Movement Patterns of California Red-Legged Frogs (Rana draytonii) in an Inland California Environment. Herpetological Conservation and Biology 3(2):155-169.

Todd Engineers. 2003. Lower Pilarcitos Creek Groundwater Basin Study. Coastside County Water District, Half Moon Bay, California.

USFWS. 2006. San Francisco Garter Snake (Thamnophis sirtalis tetrataenia) 5-year Review: Summary and Evaluation. Sacramento, California: U.S. Fish and Wildlife Service, Sacramento Field Office.

Appendix A: Comments Letters

- Letter A: California Department of Transportation (Caltrans)
- Letter B: Coastside Land Trust
- Letter C: California Coastal Commission
- Letter D: Deborah Ruddock
- Letter E: James Benjamin
- Letter F: California Department of Parks and Recreation
- Letter G: United States Fish and Wildlife Service
- Letter H: United States Army Corps of Engineers

DEPARTMENT OF TRANSPORTATION

EDMUND C BROWN Jr., Gurenor



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August 16, 2013

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> SMGen082 SCH # 2013082031

Ms. Carol Hamilton City of Half Moon Bay Planning Department 501 Main Street Half Moon Bay, CA 94019

Dear Ms. Carol Hamilton:

Citywide Drainage Ditch Maintenance Project - Mitigated Negative Declaration

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the above project. The following comments are based on the Mitigated Negative Declaration. As lead agency, the City of Half Moon Bay is responsible for all project mitigation, including any needed improvements to state highways.

Encroachment Permit - Work that encroaches onto the state right of way (ROW) requires an A.1 encroachment permit that is issued by Caltrans. To apply, a completed encroachment permit application, environmental documentation, and five (5) sets of plans clearly indicating the state ROW must be submitted to: Office of Permits, California Department of Transportation, District 4, P.O. 23660, Oakland, CA 94623-0660. Traffic-related mitigation measures should be incorporated into the construction plans during the encroachment permit process. See the website link below for more information. http://www.dot.ca.gov/hq/traffops/developserv/permits/

Please feel free to call or email Sandra Finegan at (510) 622-1644 or sandra finegan@dot.ca.gov with any questions regarding this letter.

Sincerely,

ERIK ALM, AICP **District Branch Chief** Local Development - Intergovernmental Review

c: State Clearinghouse

"Caltrans improves mobility across California"

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LAND IRHST

Partiation Stream PO Box 1275 Pall Mercelling CA marty mark arfait 26 Stream

September 1, 2013

Carol Hamilton, Senior Planner City of Half Moon Bay Planning Department 501 Main Street Half Moon Bay, CA 94019

Subject: Draft Initial Study and Mitigated Negative Declaration Citywide Drainage Ditch Maintenance Project

Dear Carol,

The Coastside Land Trust (CLT) holds Conservation Easements (CE) and fee title parcels in several of the areas that are included in the draft Citywide Drainage Ditch Maintenance Project. The CEs are specific that the properties are to remain as open space and the sensitive riparian habitats protected. The fee title parcels are held and managed in keeping with CLT's mission "The Coastside Land Trust is dedicated to the preservation, protection and enhancement of the open space environment including the natural, scenic, recreational, cultural, historical, and agricultural resources of Half Moon Bay and the San Mateo County coast for present and future generations."

The areas in the Draft document where CLT holds CEs and fee title are:

A-1 Frenchman Creek A-3 Pilarcitos Creek A-4 Arroyo Leon Creek A-5 Seymour Drainage

B.1

B-3 Kelly Drainage
B-4 Miramontes Drainage
B-5 Central Drainage
B-6 Myrtle Street Bubble-up
B-7 Magnolia Drainage
B-10 Redondo Beach Road

C-1 Railroad Avenue C-2 Poplar Street C-3 Railroad Avenue C-4 Grove Street C-7 Redondo Beach Road

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www.coostsidelandrost.org

While CLT understands the intention of this project is to prevent flooding, it is our request that the City strive to cause minimum impact on the sensitive habitat with the intention to protect the habitat while preventing flooding.

In the interest of community relations CLT is requesting that we be notified when any work is planned in the areas noted above. Notification should include a description of planned work and time line. We understand that there will be occasion(s) when emergency work will be needed. In these cases we request notification after the emergency work has been completed.

In reading the City's document I found a few minor errors: Page 13 B-8 Seymour Detention Basin. POST is the owner of the parcel to the south of the Detention Basin. We do not know who the owner(s) are to the west.

Page 16 A-4 Seymour Drainage

B.2

B.3

B.4

B.5

B.6

The trees are Monterey Cypress not Monterey Pine.

Environmental Checklist 11. Noise

d. Both Less Than Significant Impact With Mitigation, and No Impact are checked.

Additionally, in the Biological Resource Evaluation: Page A-7. Photograph 13. The date is different on photo than in the text.

Thank you for considering our requests and I look forward to hearing your response.

Sincerely, Alambulan

Jo Chamberlain Executive Director

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LETTER C

EDMUND G. BROWN, JR., Governor

STATE OF CALIFORNIA - NATURAL RESOURCES AGENCY

CALIFORNIA COASTAL C CENTRAL COAST AND NORTH CENTRAL COAST 725 FRONT STREET, SUITE 300 SANTA CRUZ, CA 95060 PHONE: (831) 427-4863 FAX: (831) 427-4877	DISTRICT OFFICES	
WEB: WWW.COASTAL.CA.GOV	RECEINED SEG-2 SO13	September 4, 2013
Bruce Ambo Planning Director City of Half Moon Bay 501 Main Street	GUL OF HALL NOON BAT	5-11-15

Subject: Biological Resource Evaluation for the Citywide Drainage Ditch Maintenance Project, Half Moon Bay, CA

Dear Mr. Ambo:

Half Moon Bay, CA

94109

Thank you for the opportunity to comment on the Biological Resource Evaluation for the Citywide Drainage Ditch Maintenance Project proposed for Half Moon Bay, CA. The need for this drainage ditch maintenance project arose because after several years without regular maintenance, the City's drainages have been subject to sediment deposition, overgrown vegetation and accumulation of litter and debris deposits causing deterioration of their structural and functioning integrity. According to the report, the proposed project includes the performance of routine maintenance activities at 17 drainage features, as well as as-needed emergency clearing and cleanup activities at an additional five drainage features located in public rights-of-way within the jurisdictional limits of the City.

Coastal Commission's Senior Staff Biologist, Dr. John Dixon, assessed the Biological Resource Evaluation to evaluate the adequacy of the analysis and to weigh in on the project description, project impacts and mitigation measures proposed. Dr. Dixon's comments and concerns are addressed below:

- The report initially states that the ditch maintenance project will apply to "drainages," "ditches," and "swales" and specifically defines these terms. However, after the initial reference to these terms, the report then refers to every project location as a "drainage." Please differentiate between the affected project locations by categorizing them as a "drainage," a "ditch," or a "swale."
- The report (page 11) states that "Due to several years without regular maintenance and runoff from adjacent agricultural and urbanized land uses, the Project locations have been subject to sediment deposition, overgrown vegetation, and the accumulation of litter and debris deposits causing general deterioration of their structural and functioning integrity. As a result, the drainage features and adjacent areas have been subject to flooding, major erosion events, infrastructure deterioration, and potential public safety hazards." Please

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C.1

C.2

Citywide Drainage Ditch Maintenance Project Bio Evaluation Comment Letter September 4, 2013 Page 2

> provide documented proof of such problems before any maintenance activities are allowed in A Zone or the "primarily natural or unaltered channel" drainages.

- Roosevelt drainage and Kehoe Ditch drainage are both natural features that have been impacted by development. Kehoe ditch drains to Pilarcitos Creek. According to Dr. Dixon, both of these features should be considered "A Zone." They are qualitatively different from the rest of the B Zone drainages and should not be subject to the routine maintenance activities allowed in the B Zone drainages.
- On page 13 where emergency clearing and cleanup activities are discussed, the report states that the City will enact "removal of woody or herbaceous plants, fallen trees, or trunks and limbs lodged into the bed or bank resulting in non-emergency streamflow restrictions at A-1, A-3, A-4. Removal will be completed with equipment staged landward of the top of bank using winch and cable." Because such streamflow restrictions will exist in different iterations at different times and since woody debris performs a habitat function, this provision should be removed. Since this type of streamflow restriction is an almost constantly present condition that also creates habitat, this provision would justify a too frequent disturbance to habitat that may be beneficial to the biological resources present.
- Page 32 of the report states "the City prohibits 'any land use and/or development which would have significant adverse impacts on sensitive habitat areas' (City of Half Moon Bay 1993). The proposed Project activities are necessary to maintain existing stormwater runoff and flood control facilities to protect existing infrastructure and eliminate potentially hazardous situations. The Project does not include any permanent habitat loss, and is not expected to have significant impacts to sensitive habitat areas." While "permanent habitat loss" can be indicative of "significant adverse impacts," it is not necessarily the only indicator. Please expound on other adverse habitat impacts such as loss of species or degraded habitat value.

The definition proffered for riparian corridor (page 34) is too narrow and is not the correct basis for mapping. Please re-map the riparian vegetation utilizing the definition contained on page 42 of the LUP, Chapter 3.

LUP Chapter 3, page 42:

Riparian vegetation can be distinguished from adjacent upland vegetation as it forms a visually distinct and structurally separate linear plant assemblage along the shoreline of waterways. Vegetation shall be considered to be riparian if at least 50% of the cover in an area is made up of riparian species. The following are species commonly found in San Mateo County riparian areas: (1) California cordgrass, (2) Red alder, (3) Jaumea, (4) Pickleweed, (5) Big leaf maple, (6) Narrowleaf cattail, (7) Arroyo willow, (8) Broadleaf cattail, (9) Horsetail, (10) Creek dogwood, (11) Black cottonwood, and (12) Box elder.

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C.4

C.5

C.6

Citywide Drainage Ditch Maintenance Project Bio Evaluation Comment Letter September 4, 2013 Page 3

• According to the evaluation on page 35, "areas were considered wetlands if the assemblage of plants present was dominated by hydrophytic species. Dominance was determined visually based on the FAC Neutral test (USACE 2008)." Wetlands should be determined using the standard methods of the ACOE 1987 Wetland Delineation Manual and the Regional Supplement for the Arid West for field indicators of vegetation, hydric soils, and wetland hydrology. In the same vein, please provide the wetland delineations that were done for this report, including copies of the original data sheets filled out in the field.

- Page 38 states that, "heavy equipment (anything larger than a pickup truck) should be positioned on existing access roads above the top of bank." Though, a bobcat is smaller than a pickup truck, a bobcat should still be classified as heavy equipment.
 - BIO/mm-10 on page 40 states, "work area activities at A-1, A-3, A-4, A-5, B-2, B-4, B-5, B-7, B-8, B-9, B-10, C-2, C-6, and C-7 should be limited to June 15 to October 31. Work at B-1, B-3, B-6, C-4, and C-5 should be limited to April 15 to October 31." Please provide the scientific rationale for the dates ranges chosen for these particular work areas.
 - BIO/mm-20 states, "if there is significant ground disturbance, project locations should be revegetated with an appropriate assemblage of vegetation suitable for the area. Such a plan must include but not be limited to location of the restoration, species to be used, restoration techniques, time of year the work will be done, identifiable success criteria for completion, and remedial actions if the success criteria are not achieved." Please provide assurance that the Coastal Commission staff will receive such revegetation "plans," for our review and comments, when they are deemed necessary.

If you have questions about any of the suggestions or comments above, please contact our biologist, Dr. John Dixon at 707-826-8950 or at <u>john.dixon@coastal.ca.gov</u>. If you have any questions regarding these comments or wish to discuss the project further, please contact me at 415-597-5894.

Sincerely,

C.7

C.9

C.10

14126

Stephanie Rexing, Goastal Planner

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LETTER D

Ms. Carol Hamilton, Senior Planner Half Moon Bay Planning Department City Hall 501 Main Street Half Moon Bay, CA 94019

September 9, 2013

Subj: Comments on draft Initial Study and Mitigated Negative Declaration for PDP-19-13, Coastal Development Permit and Stream Alteration Agreement

Dear Ms. Hamilton:

D.2

D.3

Thank you for the opportunity to comment on the draft Initial Study and Mitigated Negative Declaration (IS/MND) for the city-wide drainage maintenance project.

The draft IS/MND is not complete because the project is not described in sufficient detail to allow the impacts of the project to be adequately analyzed (PRC 21177).

D.1 Project Description: The document fails to adequately and clearly identify, show and quantify (e.g., acreage data, total linear feet, grading quantities and depths, number of plants, etc.) the <u>direct</u> and <u>indirect</u> project impact areas, including but not limited to the drainage channels and banks; natural floodplains and associated uplands and regulatory setbacks; channel discharge areas including beaches and coastal waters; areas adjacent to road accessways; and staging areas for proposed activities. Without this data and the ability to access it at the front end, the City and permitting agencies cannot adequately assess the significance of project impacts and determine whether project mitigations/mitigation ratios are sufficient to reduce these impacts below a level of significance. The IS/MND should include narrative and graphics clearly showing direct and indirect project impact areas for each of the drainages proposed to be covered by the project and associated quantities as described above.

The document fails to identify, show and describe construction/maintenance staging areas and backup areas that may need to be used in the event of storms, flooding, etc., render primary areas unusable.

The IS/MND also needs to assess and discuss whether and how proposed project activities may impact functioning of a particular watershed or groundwater basin. Neither the biological assessment nor the IS/MND mention that these drainages are part of watershed ecosystems and connected to groundwater basins. The IS/MND should include figures/maps and narrative showing and describing the relationship between the drainages and their respective watersheds and underlying groundwater basins and quantify the area drained by the channels.

The IS/MND fails to assess how increased flow velocities as the result of proposed activities including
 culverts may impact groundwater discharge, channel bed and bank integrity, sediment load, and
 channel discharge areas (beaches, dunes, cliffs, etc.) and potentially result in the need for additional

A-2-HMB-14-0004 Exhibit 2 Page 411 of 523 maintenance and infrastructure/hardscaping and associated impacts to human and natural environments.

The IS/MND fails to meet the California Environmental Quality Act's fair argument test in its inadequate assessment of the project's greenhouse gas emissions. The document merely states that GHG emissions will be less than significant without providing any supporting scientific data. Absence of thresholds of significance for construction activities as rationalized in the IS/MND does not relieve the City of its duty to analyze GHG impacts based on sound evidence and to identify adequate mitigations based on this evidence.

The City should be undertaking an Environmental Impact Report (EIR) for this project rather than a Mitigated Negative Declaration. Without more quantitative data as described above, it is very possible there will be significant unidentified impacts from the project as proposed. Also, California Environmental Quality Act (CEQA) Guidelines call for EIRs to be prepared for projects in areas of "regional and statewide significance". The Half Moon Bay Coastside including the project areas qualifies as an area of regional and statewide significance. The area is located entirely within the state's coastal zone, possesses coastal draining watersheds, and lies adjacent to a federal marine sanctuary. It is served by two state highways, coastal SR 1 and SR 92. It supports regional and destination coastal tourism and high-value nursery crops and field agriculture; and shelters numerous state and federally listed species of plants and animals. An EIR would involve assessment of a range of alternatives to the project as currently described, including wetland and riparian restoration, as well as multi-benefit projects that would fall under the rubric of integrated regional water management, for which funds may be available via existing and proposed state water bonds. This approach treats the drainages and the water flow as valued resources to be used for public benefit. An EIR process would also want to include discussion of the contributions to the "drainage problem" of surrounding development and development standards. Alternatives might surface that deal with these sources instead of or in addition to the proposed activities, including restrictions on activities that contribute runoff (lawn watering) and standards that prioritize low-impact design for stormwater capture.

Thanks again for the opportunity to comment.

Sincerely,

Deborah Ruddock 367 Metzgar Street Half Moon Bay, CA 94019 <u>Deborah.ruddock@gmail.com</u> (650) 533-7497

> A-2-HMB-14-0004 Exhibit 2 Page 412 of 523

D.5

DELIVERED BY HAND

CITY CLERK - HMB 2013 SEP -9 PK 4+ 15

Ms. Carol Hamilton, Senior Planner Half Moon Bay Planning Department City Hall 501 Main Street Half Moon Bay, CA 94019

September 9, 2013

Subj: Comments on draft Initial Study and Mitigated Negative Declaration for PDP-19-13, Coastal Development Permit and Stream Alteration Agreement

Dear Ms. Hamilton:

Thank you for the public notice of the City of Half Moon Bay's intent to adopt a mitigated negative declaration for the maintenance activities at twenty-two drainages within the City limits, and for welcoming public comment on the draft Initial Study and Mitigated Negative Declaration (IS/MND).

The draft IS/MND is not complete because the project is not described in sufficient detail to allow the impacts of the project to be adequately analyzed (PRC 21177). It also omits relevant facts and expert opinions known to the City which would recast many of the items in the CEQA checklist currently marked as less-than-significant or not significant to instead be potentially significant and unmitigated, including impacts that trigger mandatory findings of significance. However, the draft IS/MND and substantive evidence presented in this letter, attachments, and documents incorporated into the record by reference contain enough information to conclude that the project could have potentially significant adverse impacts even after considering the proposed mitigations. This includes substantial evidence that more than meets the very low threshold for requiring and EIR under the fair argument standard (Guidelines 15064).

I appreciate the City's interest in repairing existing and preventing future erosion damage and reducing flood hazards on the drainages that pass through our City, and the recognition that non-native invasive vegetation not only contributes to these problems, but also degrades the biological productivity of the project area. I also applaud the recognition that such development requires a coastal development permit (CDP) and associated CEQA analysis, and will require discretionary approvals such as a Lake or Streambed Alteration Agreement, some instances of which are also known as a Routine Maintenance Agreement (RMA). When the project is more fully described it should be clear whether Clean Water Act waste discharge requirements, Section 401 or 404 certifications, incidental take permits or other approvals from state and federal regulatory agencies are also required. Such regulatory conformance requires consultation and potential project modifications, and therefore to conform with *Sundstrom* such regulatory approvals should be a precondition to receiving a CEQA clearance for the project, rather than a post-CEQA clearance condition attached to an approved CDP.

The comments that follow this introductory letter describe significant deficiencies in the IS/MND analysis of vaguely-defined and potentially very destructive work in or adjacent to at least twenty-three riparian areas, wetlands and/or habits some of which contain or support rare, endangered, unique or especially valuable species of animals or plants, not all of which are identified in the draft IS/MND. No evidence is

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E.2

E.3

& E.4

LETTER E

PDP-19-13 IS/MND comments to C. Hamilton, September 9, 2013

provided to support the claim of no potentially significant hydrologic impacts such as draining of adjacent uplands, reduced groundwater recharge, increased pollutant discharge as a result of reduced biofiltration, or increasing siltation during storm flows following maintenance. No evidence is provided to support the claim of no potentially significant geomorphological impacts such channel incision, down-cutting and bank instability upstream, downstream, upland, on and adjacent to the project site that are not considered or mitigated. Potential flooding downstream of the maintenance sites and associated impacts are similarly not considered.

The City might achieve benefits of better storm water management more cost-effectively by trading off the size of the area to be covered with the type of development to be authorized. For a suitably circumscribed area and project combination, the City may more clearly specify project objectives and activities, more completely assess potentially significant adverse effects and more effectively identify actions that would mitigate those effects to a less-than-significant level, enabling the use of a MND.

• At the extreme of maximum area, permissible projects would likely be limited to those that restore, and/or enhance of the biologic productivity of sensitive habitat. The projects could provide meaningful flood and erosion hazard mitigation as a side effect. These projects would buoy Half Moon Bay's reputation as an environmentally-conscious city, and might be supported by grants and volunteer labor from the community. I applaud the draft IS/MND's recognition of the damaging effect of exotic invasives on the biologic productivity of our streams. Once the role that channelization plays in creating and worsening such infestations, and in causing erosion and downstream flooding, is recognized, I hope the City will revise the project to reverse these destructive and archaic practices where they currently exist, and will prevent them as a condition of future development.

Such permissible projects might include removing trash and exotic invasive species (e.g., Cape ivy and ice plant) by hand (i.e., no motorized tools). Some exotic invasives are highly flammable during drought, and removing them would protect adjacent people and development from wildland fires while promoting the health of fire-adapted native species like willow. Such projects would need to be designed and timed to avoid take of protected species; to minimize if not avoid disturbance of wet stream flows; to accommodate varied riparian habitat such as riffles and pools, to impose standards for allowing the removal of large woody debris (LWD) only when it threatens long-term stream stability; to insure proper disposal and avoid reintroducing cut or uprooted exotic invasive plants; to stabilize and revegetate disturbed soils and restore native habitat; to prevent subsequent rain and high-flow conditions from causing erosion in entry paths and upstream, treated and downstream drainage areas; and to incorporate monitoring and reporting. If multiple similar projects are reasonably foreseeable, the CEQA document associated with such a project would need to consider their cumulative impacts of all such projects.

Where adjacent land uses permit, such projects might include replacing channelized drainage reaches with well-designed, sinuous, lower-gradient watercourses capable of supporting stabilizing riparian vegetation and sediment loads. Once established, these restored drainages would adapt to changing stream flow conditions with little or no intervention, and could be bounded by berms to create a floodplain to protect adjacent development that may be at high risk today (and would remain at high risk even if the project as proposed in the draft IS/MND is carried out).

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LETTER E

PDP-19-13 IS/MND comments to C. Hamilton, September 9, 2013 Page 3 • At the other end of the spectrum are extremely intensive projects such as dredging, bank stabilization, bed or bank vegetation removal. the description of such a project should be very specific about location and current condition, the specific activity to be undertaken, and any biological, geomorphological, on- and offsite (e.g., upland, downstream, upstream) impacts, restoration and other physical mitigation, and timely monitoring and reporting. This will allow the public to assess of whether the project is feasible, whether potentially significant impacts are E.6 indeed mitigated to a less-than-significant level, and with adequate and timely project and postproject mitigation monitoring and reporting that is promptly available to the public. Between these two extremes is the possibility of a project that is dramatically reduced in scope to focus, for example, on most of the areas that were the subject of a lapsed 2004 Routine Maintenance Agreement (RMA) between the City and the California Department of Fish and Game.¹ Habitat or fluvial information that has been subsequently learned may alter the area that could be covered by a new RMA. Whatever the City decides, please review the revised description of project activities for consistency with state and federal statutes and regulations and local policies and implementing ordinances that concern coastal hazards and control development within sensitive habitats, including riparian areas and wetlands and the habitat of listed species, including but not limited to the Clean Water Act, the Coastal Act, the California Fish and Game Code, Water Code, and the state and federal Endangered Species Act, and the E.7 City of Half Moon Bay's general plan, including its certified Local Coastal Program / Land Use Plan (LCP/LUP) policies, and the LCP/LUP's implementing ordinances. The applicant has not and cannot provide evidence to support findings that the project described by the draft IS/MND is consistent with these development constraints. More than one section of the draft IS/MND checklist should reflect these conflicts. Section 18.20.040 of the City of Half Moon Bay municipal code prescribes procedures for expedited but temporary authorization of emergency development, and for obtaining an after-the-fact CDP using normal E.8 processes to cover the emergency development. The pre-approval of such emergency development proposed in the draft IS/MND does not conform to 18.20.040, and should be deleted from the project. Many of the drainages in the project area are habitats containing or supporting endangered species such as the San Francisco garter snake (SFGS) or federally threatened and unique species such as the California red-legged frog. The uses permitted in the habitats of these animals do not include flood control or storm E.9 water runoff facilities. However, restoration projects restore natural vegetation, stream sinuosity and varied in-stream habitat, when buffered from incompatible uses can also provide dramatic and costeffective erosion and flood control. I hope that the City will consider revising its project objectives accordingly in these areas. For the above reasons, there is no evidence for the draft IS/MND to conclude that the project cannot or would not impose direct and indirect significant environmental impacts, including the reduction of habitat for fish or wildlife species, and potentially causing indirect substantial adverse impacts on human beings. These are criteria for mandatory findings of significance. The checklist contents and discussion should be E.10 modified to acknowledge the above impacts, and to conclude that an EIR rather than an MND is the appropriate CEQA document to prepare for this project, if it is to be pursued in its present form.

¹ 1602 Lake and Streambed Alteration Agreement, Notification Number 1600-2003-5156-3, October 5, 2004.

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In drainages which do not contain or support listed species, if the City chooses to re-scope the area to be maintained and the revises the types of maintenance to be performed, the cost of an EIR and agency consultations are modest compared to the cost of nearly any substantial project, and would provide insurance against costs associated with violations of state and/or federal law. It might also avoid damages and other expenses that might arise from a negligently designed stormwater drainage system which takes private property. For a subproject comprising significant maintenance work in riparian areas, wetlands or other environmentally sensitive habitat areas, the public ought to be able to enter into a thoughtful discussion of design alternatives, including benefit and risk tradeoffs associated with each alternative, initial and ongoing costs, potential sources of funding, and the mitigation of adverse impacts. For such a project, an EIR is the right way to go.

The balance of this letter provides more detailed comments on the draft IS/MND. In its revision of the project and draft IS/MND, I hope the City will adopt a modern understanding of stream maintenance techniques that assigns value to a more self-regulating, sinuous riparian habitat with LWD, pools, riffles, off-stream pools to buffer flashy storm flows, and much lower maintenance costs.

The goal of these comments is not to deter the City from protecting our drainages and the citizens that could be threatened by flooding from heavy – say, 25-year or 100-year – storm flows; it is to ensure that the work is well planned and successful, conforms to our laws and protects our habitat from the unintended consequences of myopic projects. For a conforming and effective project, I would be thrilled to lend my support.

If you have any questions concerning these comments or would like to discuss them, I may be reached at <u>jamben@pacbell.net</u> or the address below. Please add me to the list of persons to be notified of CEQA or other actions concerning this project. Again, thank you for the opportunity to comment on this IS/MND.

Sincerely seen en

E.11

James Benjamin 400 Pilarcitos Avenne Half Moon Bay, CA 94019-1475

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Comment on the draft IS/MND Table of Contents

E.12 Until it has been approved, the draft RMA and drafts of other regulatory approvals are not evidence of consistency with any regulations. Please include these documents in the TOC and draft IS/MND, but <u>only</u> after they are in force.

Section 1.1 (page 5) states

E.15

The Project includes the performance of routine maintenance activities at 17 drainage features (B and C zones) as well as as-need[ed] emergency clearing and cleanup activities at an additional five drainage features (A Zones) located in public right-of-way within the jurisdictional limits of the City of Half Moon Bay...

E.13 Please clarify the distinctions between A, B, and C zones. It does not appear to be based on public ownership. Portions of Pilarcitos Creek riparian corridor (classified as "A") between Main and State Route 1 are in private ownership, for example. In a 2003 letter to the Department of Fish and Game, The City's then-Public Works Director identified several of these areas as located not within public rights-of-way, or even in areas where the City has a drainage easement.² The City as applicant is proposing work in areas that are far downstream from existing development other than the Coastal Trail, for which the threat of damage by flooding has not been adequately analyzed to justify the potentially significant impacts projects element such as bank vegetation removal or dredging.

E.14 The definitions also do not appear to be based on the "naturalness" of the stream. For example, there are natural qualities in "B" drainages such as the Guerrero Ave wetlands leading into the sinuous Roosevelt drainage (acknowledged in the caption of the IS/MND's Photograph 9 on page A-5 of Appendix A, and more visible in a Google map image³ than in the ESRI 2010 photo used in Figure B-6 of the Appendix A of the IS/MND); and the Kehoe drainage, the sinuous features of which appear in a 1941 map⁴, and whose lower drainage is clear in maps drawn in the 1860s⁵. "Naturalness" would be a moot distinction, since the LCP/LUP policies controlling development in and near riparian areas do not distinguish between natural and artificial drainages.⁶

If they are classified based on the intensity of the work which the applicant intends to perform, then once the specific location, the objectives, and actions to be taken are identified in adequate detail, then the onand offsite potential adverse impacts of each maintenance action can be considered, and the projects can be classified accordingly. As will be detailed in comments on the checklist, the draft IS/MND analysis does not adequately consider potential impacts such as take through degradation of habitat and habitat buffers; loss of waters in upstream wetlands and riparian areas; loss of pools, riffles and other varied riparian habitat; damage to wetlands, riparian areas and other habitat supporting or contain listed species; channel incision, bank destabilization and head-cutting, reduced ground water recharge, lowered water table, and flanking erosion. The project does not consider offsite risks, i.e., downstream aggravation of

² Letter from Paul Nagengast to Serge Glushkoff, December 19, 2003.

³ See http://goo.gl/maps/F6PYu, last viewed September 8, 2013.

⁴ Half Moon Bay Quadrangle, War Department US Army Corps of Engineers, 1941.

⁵ Pilarcitos Lagoon Habitat Enhancement Feasibility Study, San Mateo County Resources Conservation District, San Mateo County, California, May 2009, Figure 13 (1861 and 1863 U.S. Coast Survey Maps).

⁶ City of Half Moon Bay Local Coastal Program Land Use Plan (1993) page 42.
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flood, upstream and downstream erosion, draining of upbank lands, and the risks of habitat degradation associated with these offsite impacts. These risks cannot be assessed without a precise description of the project location and scope, the conditions justifying the proposed action, careful hydraulic and soils analysis of effects, and the mitigations which will address those unknown risks.

In 2008 the City proposed maintenance projects in the Kehoe drainage without sufficient analysis and/or mitigations, and decided to withdraw the project after some of the potentially significant impacts were called to the City's attention.⁷ The present project is more vaguely worded, covers a much larger area with much less biological and geomorphological analysis, and contains very little hydrological or LCP consistency analysis. As worded it might be construed to permit, for example, another attempt at the unsuccessful 1997 shotcrete lining of a channelized portion of the Kehoe drainage⁸, even though the City neither sought nor received CEQA clearance or a coastal development permit for that work.

Section 1.2 (page 5) states in pertinent part:

The project site is located in the City of Half Moon Bay, San Mateo County, California. The project consists of the performance of routine maintenance activities at 17 drainage features and as-needed emergency clearing and cleanup activities at an additional 5 drainages, the locations of which are shown in Figure 1 and further described in Table 1.

If the description is indicating that all reaches of all 22 drainages will be affected by the project, this is clear, but the potential unmitigated impacts of "routine maintenance" across so much sensitive habitat, unmitigated (if fact, intended) exposure of downstream lands to flooding and exposure of lands along the drainages to erosion, surely leads to the rational conclusion that the project is not consistent with the use of a MND. Alternatively, if maintenance is planned only for specific portions of the drainages, then the project description is too vague. If planned maintenance will be at specific locations but those locations have not yet been identified, then the claim that the project will have potential significant environment effects depends on resolving location uncertainties, or providing evidence to support a dubious claim that no individually or cumulative "routine maintenance" as described in draft IS/MND section 1.3.2 could have a significant adverse effect on the environment. Uncertainties such as the effects on soil stability, erosion, sediment transport, and flooding of downslope properties were at the core of *Sundstrom v*. *County of Mendocino* (1988) 202 Cal. App. 3d 296 in which the court held that the initial study and negative declaration were invalid for lack of a comprehensive environmental review. An initial study that relies on a future study to determine if there are potentially significant effects is considered a failure to comply with CEQA.

As defined in the Public Resources Code, an emergency⁹ is unexpected, and so it is unrealistic to expect emergency actions to be adequately analyzed and permitted in advance. Accordingly, 18.20.040 authorizes the Planning Director to grant a temporary permit for the emergency work, to be followed by

E.16

E.17

⁷ Letter from S. White re PDP-072-06 Kehoe Ditch Stabilization Project, July 9, 2008.

⁸ Resolution No. C-11-98, Notice of Completion for the Kehoe Drainage Emergency Repair Project, approved January 20, 1998.

⁹ "Emergency" means a sudden, <u>unexpected</u> occurrence, involving a clear and imminent danger, demanding immediate action to prevent or mitigate loss of, or damage to, life, health, property, or essential public services. "Emergency" includes such occurrences as fire, flood, earthquake, or other soil or geologic movements, as well as such occurrences as riot, accident or sabotage. PRC 21060.3 [Underline added.]

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E.18 (cont)

E.19

(1) prompt written public notice to the Planning Commission and, within three days, to the Coastal Commission; and (2) no later than 60 days from the issuance of the emergency permit, either an application for an after-the-fact CDP or removal of the development and restoration of pre-emergency conditions restored. As a result, it is neither necessary nor feasible to include emergency activities in this project. To comply with this implementing ordinance of the LCP/LUP, please remove the emergency activities discussed in section 1.3.3 from the project.

Section 1.3.1 (page 5) states

Due to several years without regular maintenance and runoff from adjacent agricultural and urbanized land uses, the Project locations have been subject to sediment deposition, overgrown vegetation, and the accumulation of litter and debris deposits causing general deterioration of their structural and functioning integrity. As a result, the drainage features and adjacent areas have been subject to flooding, major erosion events, infrastructure deterioration, and potential public safety hazards.

Setting aside the inscrutably-vague "potential public safety hazard" – what is it, and what is the costbenefit-risk tradeoff of actions to mitigate this undefined hazard? – the size of the project area is not consistent with the evidence flood and erosion damage associated with a lack of "routine maintenance." "Photographs depicting flooding and infrastructure deterioration" consist of three photographs (which will be addressed shortly) from limited reaches of three of the seventeen drainages which would be subject to such maintenance, and no evidence from the five drainages that would be subjected to emergency clearing and clean-up activities.

For the three instances of infrastructure damage provided, the claim that it is caused by a lack of "routine maintenance" is the unsupported opinion of the author, not fact. On the contrary they could be the result of poorly-designed maintenance at, or upstream, or from the site of damage,¹⁰ or other development:

The impacts of individual or cumulative human activities may be subtle and may commence slowly but can result in dramatic rapid changes in morphology, sediment production, and deposition with time once critical geomorphic stability thresholds are exceeded.¹¹

E.20

and

In degrading streams, widening often follows incision of the channel when the increase height and steepness of the banks cause them to become unstable. Bank failures can cause very rapid widening under these circumstances.¹²

The Kehoe drainage illustrates the extent to which draft IS/MND statement is unsupportable, even when made about a specific area, let alone in the present more general use. In the Kehoe drainage, erosion clearly preceded the cessation of ditch maintenance. A 1978 description of this drainage states

¹⁰ Riley, A. L. (2003), A Primer on Stream and River Protection for the Regulator and Program Manager, Technical Reference Circular W.D. 02 - #1, San Francisco Bay Region, California Regional Water Quality Control Board, Oakland, CA, pages 56-58.

¹¹ MacArthur, Robert C. et al., "Overview of Sedimentation Engineering," Chapter 1, Sedimentation Engineering: Processes, Measurements, Modeling and Practice, Marcelo H. García, ed., 5 ¹² Pizzuto, James E., "Streambank Erosion and River Width Adjustment," Chapter 7, Sedimentation

Engineering: Processes, Measurements, Modeling and Practice, Marcelo H. Garcia, ed., 387

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The downstream side of the 5 x 3 RCP [Reinforced Concrete Box] culvet is Kehoe Ditch having a bottom width of approximately 4', unlined and well defined throughout its length.¹³

A 1987 survey of the same drainage describes it as

a narrow drainage ditch (ten foot average width)... which has been dredged to a depth of six to eight feet...¹⁴

In the nine years between the 1978 Storm Drainage report and the 1987 Earth Metrics, Inc. survey, the width of the drainage grew from 4' to an average of 10'. A 2005 biological assessment of the same drainage described the stream as being 10-15 feet in width,¹⁵ suggesting that deterioration was not caused by the cessation operations such as those proposed in this draft IS/MND. Erosion processes are difficult to predict, and such causality assertions should be removed from any future IS/MND or EIR if they cannot be justified. If alternative arguments are presented to support the claim, then both points of view should be presented and trigger an EIR under the fair argument doctrine.

Section 1.3.1 concludes:

Photographs depicting flooding and infrastructure deterioration are provided in the Biological Rresource Evaluation for Citywide Drainage Ditch Maintenance (Appendix A).

The photographs in Appendix A are summarized in Table 1. The photographs offer scant evidence to support such expansive routine maintenance, and substantial evidence supporting the restrictions that would limit such development. In the fifteen photos, there is one instance of culvert sedimentation (Photo 2), one instance of standing water on saturated open land (Photo 13, top of page A-7), a photo of a damaged road shoulder (Photo 13 [sic], bottom of page A-7), and erosion around a "bubble-up" in a passive recreation area well west of all roads and neighborhoods (Photo 14, page A-8). Evidence of the need for repair is **boldfaced and underscored** in the following table.

E.21

E.20

Photo #, location	Photographic evidence	In 2004 RMA
Photo 1, page A-1 (pdf p59)	A vegetated swale on Magnolia Street (C-5). The swale has developed a slightly sinuous riparian appearance. The required capacity to avoid nuisance flooding, the bioremediation value of the swales vegetation in absorbing runoff pollutants and alternatives to control flow using upland holding areas are not discussed.	Y

Table 1. Summary of Appendix A Photographs

¹³ City of Half Moon Bay Master Storm Drainage Report, January 1978, Municipal Consulting Services, discussion of Grandview – Kehoe Watershed.

¹⁴ Letter from D. Mullen, Earth Metrics, Inc. to W. Crowell, President, Inwood Corp, September 8, 1987, page 1. ¹⁵ Busnardo, Max, Sewer Authority Mid-Coastside Biotic Constraints Assessment for A.P.N. 048-240-040, J.P.N.

^{048-024-240-04 (}H. T. Harvey & Associates Project # 2573-01), attachment to letter to John Foley, Sewer Authority Mid-Coastside dated October 13, 2005.

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Photo #, location	Photographic evidence	In 2004 RMA
Photo 2, page A-1 (pdf p59)	<u>A sediment-filled culvert</u> on Redondo Beach Road (C-7). No one would dispute the City's authority to clear the culvert, but the problem reflects unstable sediment transport, which should be resolved rather than being cleared only to refill.	¥
Photo 3, page A-2 (pdf p60)	A swale on the south side of Redondo Beach Road (B-10). The claim of injuries and damage caused by the drainage being difficult to view is unsupported by facts. Even if supported, visibility could be achieved with less impact installing reflective marker posts, or guardrails if warranted.	Y
Photo 4, page A-2 (pdf p60)	A swale on the north side of Poplar Road (C-2). The comments concerning photo 3 apply here as well.	Y
Photo 5, page A-3 (pdf p61)	The Miramontes Drainage (B-4), habitat for CRLF. There is no suggestion this riparian area is in need of maintenance, and none should be permitted.	N
Photo 6, page A-3 (pdf p61)	Redondo Beach Road (C-7) [also the subject of Photo 2]: A roadside depression lacking drainage characteristics. If it does not contain a bed or bank, it would have been considered non-jurisdictional when the DFG considered Redondo Beach Road as part of the application which yielded the 2004 RMA. However, the DFG considered drainages adjacent to Redondo Beach road to be jurisdictional. ¹⁶	Y
Photo 7, page A-4 (pdf p62)	Southern end of Railroad Avenue (C-3). This section of Railroad Avenue is further south than the area covered by the previously-mentioned 2004 RMA; there is no evidence that it has ever been the subject of any RMA. No evidence has been presented of a flood or erosion concern to justify including this area in the project. The Coastside Land Trust owns a conservation easement along the length of the Ocean Shore Railroad Right-of-Way from Kelly Avenue south to Seymour Street. ¹⁷ A google maps photo ¹⁸ is strongly suggestive of wetlands in the photographed area. Ditching an area adjacent to a wetland has the potential to lower the water level in the wetland, which would be a significant adverse impact.	N
Photo 8, page A-4 pdf p62)	Myrtle Street intermittent stream leading to Bubble-Up (B-6), no evidence of flood or erosion risks to development.	N
hoto 9, age A-5 odf p63)	Roosevelt drainage confirmed as a natural perennial drainage. No evidence of flooding or erosion damage.	N

¹⁶ List of City Maintained Ditches in Public Rights-of-Way, Results of a Lake or Streambed Alteration Agreement Notification Review, Notification Number: R3-1600-2003-5156-3, March 11, 2004. ¹⁷ http://www.coastsidelandtrust.org/protectingthecoast/oursuccesses.html viewed Sept. 3, 2013. ¹⁸ http://goo.gl/maps/4s2R6, last viewed September 8, 2013.

(cont.)

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Photo #, location	Photographic evidence	In 2004 RMA
Photo 10, page A-5 (pdf p63)	Confirmation that Redondo Beach road swale (B-2) is adjacent to a sensitive habitat area containing a wild strawberry. Such sites are protected from projects with adverse impacts in or adjacent to the ESHA under LCP Policy 3-36. No evidence of damage from flooding or erosion.	N
Photo 11, page A-6 (pdf p64)	Seymour basin (B-8). A listed species ESHA, no evidence of flood or erosion damage.	N
Photo 12, page A-6 (pdf p64)	Seasonal wetlands adjacent to Wavecrest Road (C-6). Another sensitive coastal resource with no evidence of flood or erosion damage.	N
Photo 13, page A-7 (upper) (pdf p65)	A photo marked 12/19/2010, 7:52am showing a portion of saturated open land adjacent to the C-5 Magnolia Street drainage. The caption claims that vegetation and sediment deposits can result in severe flooding, but there is no evidence of sediment levels, water flows, or any evidence of street or other flooding. Standing water on open land does not justify a project of this magnitude, nor does it explain the biological and hydrological (aquifer, wetland, downstream) impacts of accelerating the drainage of water off this property underneath 2 nd Ave. and adjacent to development south of Magnolia St. before emptying into open space west of the Railroad Right-of-Way. The draft IS/MND does not discuss the impact on the stand of Eucalyptus on the south side of Magnolia Street behind and to the left of the photographer shown in a Google Maps photo. ¹⁹	Y
Photo 13, page A-7 (lower) (pdf p65)	An <u>eroded shoulder</u> on a portion of Wavecrest Road (C-6). As seen in a recent <u>this</u> Google Maps image ²⁰ , both sides of Wavecrest Road have deteriorated, but relative contributions of upland drainage, south-to-north sheet flow, heavy on-shoulder traffic and road construction should be well understood and documented to ensure that the proposed maintenance is feasible and in the public interest.	Y
Photo 14, page A-8 (pdf p66)	As shown in Figure B-9, the terminating Myrtle Street bubble-up (B-6) is in the middle of field well west of the western-most subdivision and road, in an areas designated in the LCP as a passive recreation area, and at the end of an intermittent stream through the riparian area shown in Photo 8. The photo shows the unsurprising fact that <u>flanking erosion has occurred</u> . But there is no evidence justifying a blank check for ongoing maintenance of the bubble-up, let alone the rest of riparian area B-6 when, for example, it might be sufficient to repair the bubble up and surround it with rocks to gradually dissipate the energy of high flows during storm.	N

Evidence from specific segments of only three drainages (C-6, C-7 and B-6) out of the twenty-two named in the draft IS show a need for maintenance. The rightmost column of Table 1 shows that these segments

E.21 (cont.)

 <u>http://goo.gl/maps/FwcZO</u>, last viewed September 8, 2013.
 <u>http://goo.gl/maps/r9X7S</u>, last viewed September 8, 2013.

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were all in the lapsed 2004 RMA. Table 2 compares the twenty-two drainages included in this draft IS/MIND with all drainages that were part of the 2004 RMA.

The riparian areas and wetlands are all environmentally sensitive habitat areas and sensitive coastal resources under the City's LCP and its implementing ordinances, and the biological resource evaluation confirms that several of these drainages, wetlands and/or adjacent areas should join Pilarcitos Creek, Frenchman's Creek, the Kehoe Watercourse and the Caltrans Mitigation wetland is confirmed habitat containing or support listed species, and should be so designated in the LCP's Habitat Areas & Water Resources Overlay and map of coastal resource areas described in Zoning Ordinances chapter 18.38.020.

Table 2. 2004 SAA reach vs. proposed project reach

Index	Name	2004 RMA status	Reach of proposed maintenance ²¹
A-1	Etetichman's Creek		Festern Oite linit to the Oriential The it
A-2	Cabrillo Property Drainage		100' north of western end of Terrace Ave. extending 200 feet southwest
A-3	Pilarcitos Creek		East City limit to the Coastside Trail
A-4	Arroyo Leon Creek		Miramontes Street Bridge
A-5	Seymour Drainage		Railroad Ave. ROW to Coastside Trail
B-1	Roosevelt Drainage (NB, drains Guerrero wetlands, not Roosevelt Blvd!) key ESHA for Pullman ESHA?		Alemeda Ave to Coastside Trail
B-2	Kehoe Ditch Drainage	RMA addition rejected ²²	SR1 to Coastside Trail
B-3	Kelly Drainage	NJ Ocean to Balboa ²³	Railroad Ave to Coastside Trail, south side
B-4	Miramontes Drainage		Railroad Ave to Coastside Trail
B-5	Central Drainage		Railroad Ave to Coastside Trail
B-6	Myrtle Street Bubble-Up		Railroad Ave to Coastside Trail
B-7	Magnolia Drainage		1st Ave to Railroad Ave ROW
B-8	Seymour Detention Basin		Basin near southern end of Seymour St.
B-9	Seymour Drainage		SR 1 to Coastside Trail, south side
B-10	Redondo Beach Road	RR Ave. to Florence Ave ²⁴	RR Ave ROW to Coastside Trail, both sides
C-1	W of Railroad Ave.	Spruce to Poplar ⁴	Spruce to Poplar
C-2	Poplar Street	1 st Ave to Poplar Beach ⁴	RR Ave to Coastside Trail
C-3	W of Railroad Ave.		Metzger to Grove - (includes CLT land)
C-4	Grove St.		south side, west of 1st St to Railroad Ave.
C-5	Magnolia Street	3^{rd} Ave -1^{st} Ave and Main to Arleen Way ⁴	SR 1 to First Ave.

²¹ IS MND Citywide Drainage Ditch Maintenance Project, Table 1, page 7.

²³ Result of a Lake or Streambed Alteration Agreement Notification Review, R3-1600-2003-5156-3, Mar. 11, 2004.

²⁴ 1602 Lake and Streambed Alteration Agreement, Notification Number 1600-2003-5156-3, October 5, 2004.

²² A request from previous public works and planning department staff to include B-6 Kehoe Watercourse in the previous RMA with much less draconian actions, was explicitly rejected – and that was before the area was confirmed to contain CRLF and contain or support SFGS.Letter Nagengast to Glushkoff dated October 27, 2004; rejected by phone February 10, 2005.

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C-6	Wavecrest Road	SR1 to Smith Field	SRI to Smith Field, north side of WC Road
C-7	Redondo Beach Rd	RR Ave to Florence Ave ⁴	RR Ave to Coastside Trail

This is not to suggest that there are no risks of flooding or erosion in any reach of the seventeen drainages encompassed by project that is the subject of this draft IS/MND. However, the "routine maintenance" practices mentioned and not explicitly stated but permitted in this draft IS/MND should be the subject of much more careful analysis and risk evaluation, and the work, risks and mitigations should be more explicit. Practices rooted in an antiquated understanding of erosion processes pose the significant risk of continued or even accelerated degradation.

The next paragraph outlines the project objectives (page 8):

Routine maintenance activities at B and C Zones will be performed to restore drainage features to their originally constructed conditions to maintain water transport capacity; maintain the integrity of existing flood control and sediment detention structures; minimize potentially hazardous situations such as flooding bank, culvert and roadway erosion, and improve visibility of drainage features (a public safety issues).

These objectives tacitly assume that all B and C drainages are initially artificial, and were designed with a well-defined drainage capacity throughout each drainages watershed. This assumption is unjustified for many of the drainages, and unsupported in the draft IS/MND. The objectives also imply that maintaining existing flood control structures is adequate, when the existing capacity of some drainages are known to be inadequate for flows from moderate storm events.²⁵ Even for those cases in which the drainage is artificial and designed to a specific capacity, the draft IS/MND objective turns a blind eye to significant adverse effects that could occur when a flow of water from upslope watersheds is expedited into and down channelized conveyances into natural downslope drainages. Some of these drainages offer restoration opportunities to stabilize streambeds and banks, provide adequate floodplains for 25-year or larger storm events, recharge ground waters and enrich habitat. Please identify such locations and revise the project objectives to include such restoration work where it is possible.

A lower impact and more effective way to improve visibility of drainage features adjacent to roadways (presumably, the low visibility of drainages not adjacent to roadway do not pose a public safety issue) is to install warning signs and reflectors or reflective bollards, or to install guardrails if warranted. This would have the added benefit of compatibility with section 30253 of the Coastal Act, which is adopted in Chapter 3 of the LCP/LUP. The channel incision that can result from fast flows in drainages with removed vegetation may be seen in the deep ditches on the shoulder of Verde Road to the south of Half Moon Bay.

The City seeks approval for an arsenal methods for addressing flooding and erosion is not limited, but even the typical activities and equipment listed can cause significant damage in a riparian area:

Routine maintenance activities will typically include sediment removal to clear channel obstructions and maintain pre-existing flow conditions, vegetation management, repair of existing bank protection, in-kind culvert replacement and removal of non-native vegetation. The

F.23

²⁵ M. Sharma, Pullman, Kehoe and Seymour drainage analysis, agenda report to City Council, December 16, 2008.

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equipment required for routine maintenance activities will typically consiste of either one or a combination of the following: backhoe, loader, dump truck, hand mower, articulating mower, and powered and manual hand tools (weedeater, chainsaw).²⁶

Many of maintenance activities are further described in section 1.3.2 activities do not conform to the policies of the City's certified LCP/LUP and related zoning ordinances. These are discussed in comments on the checklist section of the draft IS/MND, the next section of this comment letter.

Comments on the Checklist

The entries on the checklist must be explained to indicate that evidence exists to support the entries, including the page or pages where the information is found (Guidelines 15063(d)(3)). The checklist does not contain this information. In addition, not all evidence that should have in the record has been considered in analyzing environmental effects (Guidelines 15063(f)) resulting in the distorted checklist conclusions.

The discussion for many items in the checklist contains several some repeated themes. This letter comment on them once here rather than commenting in each section containing the theme of concern. The Kehoe drainage will be used to illustrate the issues; but these concerns generalize to other drainages for which maintenance is proposed.

[Vegetation removal, area of activity, etc.] will be limited to the minimum <u>necessary</u> and is not expected to result in significant [impacts]...²⁷ [Underline added]

The draft IS/MND defines "necessary" in terms of restoring "B" and "C" drainages an unstated (and in the case of drainages that started with naturally evolving streams, non-existing) design capacity. Without these numbers it is impossible to know how much work will be done, and therefore the City cannot present evidence to support findings that impacts of this work will not substantially impact views, aggravate erosion, degrade habitat, increase stream turbidity, etc.

Equally important is that checklist discussion does not consider the offsite effects that will result from this work. The project objective is to expedite the movement of the water through the maintenance site, which gives rise to the most fundamental CEQA questions:

- (1) What is the evidence to support findings that the proposed maintenance will not have significant adverse impacts such as drying of upstream soils, degrading habitats and impair groundwater recharge? The City Council has more than once authorized the assignment of a priority water permit to a residence suffering from a failed well, so recharge matters. The drainages to be maintained play an increasingly important role in groundwater recharge, since development has reduced the fraction of our watersheds that can absorb water, and has increased sheet flow that ultimately ends up in these drainages.
- (2) What is the evidence to support findings that the proposed maintenance will not aggravate flood risk in downstream areas, expose up-bank areas to erosion, threaten downstream structures and
- E.29

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²⁶ IS MND Citywide Drainage Ditch Maintenance Project, page 8.

²⁷ Draft IS/MND Citywide Drainage Ditch Maintenance Project, MM-BIO-1, MM-BIO-21, Section 3.1 (Aesthetics).

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residents, and diminish biological productivity and degrade environmentally sensitive habitat areas by, for example, flooding up-bank burrows used as refuge by protected species?

To make the point more clearly, the 1978 storm drainage report describes the Grandview-Kehoe Watershed drainage after development altered the blue-line stream passing through this watershed. It meandering WSW across what is now known as Landstra parcel before arriving just south of the approximate midpoint of Kehoe Avenue, turning west and continuing in its current course.²⁸ The design capacity of the natural portion of the stream is an oxymoron. But the design capacity of channelized portion parallel to the eastern half of the Kehoe may not achieve the project goals. According to a1967 U.S. Soil Conservation Service report on Grandview-Terrace Flood Control:

Runoff water from approximately a 550 acre watershed concentrates in the westerly end of the Grandview Terrace subdivision causing flooding in the streets and yards of subdivision homes.²⁹

Even at that time, a citizens' letter to the Half Moon Bay City Council stated "The Casa Del Mar development to the west of Grandview is also somewhat prone to profuse waters during the winter months."³⁰ If residents were already concerned about the capacity of the Kehoe drainage, why should we believe that erosion and flood risks will be mitigated by restoring that capacity, especially with the additional storm drainage from forty years of new development passing more quickly through lined channels?

In light of the habitat constraints that will be discussed later, a more feasible project (i.e., that could achieve this projects goals) would be to relocate the drainage southward onto publicly-owned land with no development potential to recreate a natively vegetated, sinuous riparian corridor with off-stream pools to buffer flashy storm flows, a much wider floodplain and berms to protect Casa del Mar and the road to the wastewater treatment plant from large storms.

Moreover, the engineering estimates for the watersheds feeding each of the drainages require review. In a December 2008 report to the City Council, the City Engineer used a 1978 estimate of the acreage draining into the Kehoe drainage.³¹ That 1978 estimate was based on a map of the Kehoe watershed which was bounded on the southwest by the road to the SAM wastewater treatment plant, now known as Bev Cunha's Country Road.³² In September of 2010 a culvert was installed under Bev Cunha's Country Road which drains water from lands south of Bev Cunha's Country Road into a swale and ultimately into the Kehoe drainage, thus adding new watershed to this drainage. A similar culvert appears to have been previously installed under the same road further west. After analyzing current conditions, projects such as removing these questionable additions to the Kehoe watershed may contribute to mitigating flood risks

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²⁸ War Department US Army Corps of Engineers, 1941, op. cit.

²⁹ Grandview Terrace Flood Control, Half Moon Bay U.S. Soil Conservation Service, 1967, as quoted in the City of Half Moon Bay 1978 Master Storm Drainage Report.

³⁰ Letter to the Half Moon Bay City Council, October 9, 1973 as quoted in the 1978 Master Storm Drainage Report

³¹ M. Sharma, Agenda Report, Item 13, Counsel of the City of Half Moon Bay, December 16, 2008.

³² Master Storm Drainage Report, City of Half Moon Bay, 1978, Existing Tributaries, Sheet 11-C.

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posed by large storm events and the insidious threat of erosion. Similar analysis should be performed on all drainages included in the permit. Such analysis is absent from the draft IS/MND.

When specific maintenance actions are proposed, careful quantitative analysis should include measures of the affected drainage's cross section and surface area (at least from the project site downstream to the mouth of the drainage), the results of runs of HEC2 or successor software that can justify Q and stage, and identify the 100-year high-water level (or whatever level the City intends to set as its protection objective when the draft IS/MND refers to the goal "to prevent potential flooding"). Without this information, the project is too vague to be analyzed for feasibility or many significant adverse impacts.

The following comments apply to specific sections of the Environmental Checklist in Section 2 and corresponding discussion in Section 3.

1. Aesthetics.

The discussion of 1.a) states "The proposed work would also remove trash and debris and avoid potentially greater changes in the appearances of the drainage due to flooding." To comply with clean water regulations and respect common, modern norms condemning the pollution of the ocean, please clarify that trash would be collected and transported to an appropriate disposal facility, rather than anticipating that the cleared drainage will push the trash into larger waterways and eventually the Pacific Ocean, as was explicitly envisioned in the 2009 Kehoe Cleaning Project.³³

The discussion of 1.c) states the project "may result in periodic changes to the appearance of drainages due to vegetation trimming and/or removal, but is not expected to degrade the visual character of the site and surrounding area." This statement is unsupported by facts.

E.33 On the contrary, work which is well within the scope of the proposed project occurred in the unpermitted Kehoe Cleaning Project, which removed willow, uprooted cattail, destroyed blackberry and other native vegetation, and left cuttings of Cape ivy to root on the newly-exposed ground. As a result, the infestation of cape ivy is accelerated, and without intervention will be a permanent change in the appearance of this drainage. Please define thresholds of significance for appearance based on the quality of riparian vegetation, and provide mitigations to ensure that the riparian vegetation is not degraded.

This discussion of 1.d) states "The proposed maintenance and emergency clearing and clean-up activities at existing drainages in Half Moon Bay would occur primarily during daylight hours..." If the emergency clearing and clean-up activities are removed from the project as discussed earlier, please explain what activities would need to take place at night.

3. Air Quality and Greenhouse Gases

The central argument of the discussion is that the project will contribute a negligible amount of greenhouse gases (GHG) to the region, and therefore its impact can only be insignificant. However, the

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³³ "By keeping the drainage areas cleaned of debris and brush, the trash and other debris will not block waterways and <u>put this material into the ocean</u>." [Underline added] excerpt from 'Narrative on how project will meet all legislatively mandated objectives' attachment to Kehoe Ditch Cleaning Sponsor Agreement between California Conservation Corps and City of Half Moon Bay, January 7, 2009.

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millions of small projects that occur in our region result in a cumulative GHG emission that we are required under AB 32 to reduce to 1990 levels by the year 2020, and 80% below 1990 levels by 2050. We will not get there with this sort of thinking.

The qualitative description imposes no limit on the project activities that will produce GHGs; we learn what tools might be expected to be part of a planned project, that it might involve three persons using a dump truck, a back hoe, a mower, and some power tools over a period of one to two days. How many hours would the equipment run during this time? At what rate does the listed equipment produce GHG? How many such projects does the City expect to undertake during the year? How large an area of vegetation does the applicant expect to remove during a typical project, and how much is expected to grow back before the project is repeated. The lead agency in CEQA analysis of project is required to make a good-faith effort to "describe, calculate, or estimate" GHG emissions that will result from the project. (Guidelines 15064.4).

While some elements of the project (e.g., transporting workers to the site) will in most cases involve GHGs, the City should consider revising the project to cut some GHG emission and to preserve GHG absorption where possible, e.g., by remove offending vegetation by hand. This would allow GHG-absorbing native plants that absorb rainfall, shield underlying soils from being scoured by rain and do not block stream flow to flourish, while stream-blocking, habitat-damaging broad-leaf exotic invasives like Cape ivy could be held in check or reduced, preventing the long-term suffocation the drainage's native fauna, and the attendant loss of GHG consuming plants like willows.

Presented with such the challenge of achieving conservation goals without power tools, forces like the Conservation Corps would begin to find more revolutionary approaches to their tasks. If projects were planned to provide a role for volunteers (e.g., civic organizations, conservation organizations, neighbors), we could achieve much more focused results. Half Moon Bay could show other cities the way to make a big GHG reduction by making many small GHG reductions in the myriad projects that we perform.

4. Biological Resources

The draft IS/MND states that impact on the biological resources of the drainages in the project area will be less than significant because of the imposition of many mitigating conditions. Unfortunately, the biological analysis does not describe all sensitive habitats which the City knows or should know are contained in the study area. The discussion and mitigations do not recognize the significant adverse impacts on habitat supporting or containing protected species through habitat degradation, regardless of whether the protected species is present during construction. The mitigations wording (e.g., when necessary or feasible or practicable, or possible) allows the performance actual, physical mitigations to circumvented based on subjective assessments after the receipt of CEQA clearance and regulatory permits.

Missing habitats. A map depicting known biological resources within the City of Half Moon Bay was provided by the Public Works Director to the California Department of Fish and Game as part of the City's application for the lapsed 2004 RMA³⁴. In addition to comparing the study areas to that map to

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³⁴ Letter of Half Moon Bay Public Works Director Paul Nagengast to Dept. of Fish and Game Wildlife Biologist Serge Glushkoff, Oct. 3, 2003.

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identify resources which should be discussed, please revise the biological assessments and the draft IS/MND consider the following habitats:

• The Guerrero wetlands. Although it may be outside the project areas's 200-foot buffer, this wetland is drained by one of the drainages that would be subjected to routine maintenance. Accelerating the transport of water from this area could have the potentially significant effect of reducing the length of time the wetland is inundated, altering its plant communities and otherwise degrading its habitat value.

The Caltrans mitigation wetlands (adjacent to Pilarcitos Creek and just south of the SAM plant) the Kehoe drainage and nearby Landstra parcel.³⁵ The City has committed to using its best efforts to update Water Resources and Sensitive Habitats Overlay of the LCP/LUP and the Coastal Resource Area map of sensitive habitat areas the Municipal Code chapter 18.38 to include these areas as containing or supporting CRLF and SFGS.³⁶ The draft IS/MND biological report of Appendix A did not discuss the Caltrans mitigation wetlands or the Landstra parcel. Although they are within the study areas buffers, the study should make clear that they are environmentally sensitive habitats in their own right.

Impact to protected species by incidental direct take. A theme in more than one of the biological mitigations is for a biologist to survey areas that will be subjected to "routine maintenance" for specimens of the protected species, and allow the work to take place if none are found shortly before or during the construction. The proposed mitigation does not account for the fact that such species are unlikely to be located through the proposed survey, even if present. The San Francisco garter snake is extraordinarily secretive37 and no method of surveying them has been approved. The USFWS-recognized surveys for California red-legged frog require extensive searches over a long period, and not finding them is not considered evidence that they are not present. Aquatic life stages of CRLF would be obscured from view by emergent vegetation, and all stages can hide in pools, placing them at elevated risk of been trampled or otherwise harmed during the proposed drainage reshaping activities. Both species can take refuge hard-tofind bank side burrows abandoned by rodents and other mammals, even when the channel is not flowing. Since project activities include but are not limited to removing stream and bank vegetation, and even dredging drainage bottoms and removing stream banks themselves, there is no reasonable basis to conclude that the proposed project will not result in direct take, a mandatory finding of significance necessitating incidental take permits from the US Fish and Wildlife Service and, when possible, the California Department of Fish and Wildlife.38

Impact to protected species and indirect take through degradation of habitat. Even if the protected species are in fact not present at the time and place of construction, the project is insufficiently conditioned to conclude that the habitat value to the species will not be diminished through degradation of habitat. For example, CRLF and SFGS make ephemeral use of their habitat. As suggested by the draft IS/MND, the

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³⁵Busnardo, Max, "Sewer Authority Mid-Coastside Biotic Constraints Assessment for A.P.N.048-240-040, J.P.N. 048-024-240-04 (H. T. Harvey & Associates Project # 2573-01), letter to John Foley, Sewer Authority Mid-Coastside dated October 13, 2005.

³⁶ James Lawrence Benjamin and Zoya Dorry Benjamin v. City of Half Moon Bay, San Mateo County Case No. CIV 494372, Settlement Agreement, August 22, 2012, page 5-6.

³⁷ U. S. Fish and Wildlife Service, 1985. Recovery Plan for the San Francisco Garter Snake (Thamnophis sirtalis tetrataenia). U.S. Fish and Wildlife Service, Portland, Oregon

³⁸ The California Department of Fish and Wildlife does not issue incidental take permits for SFGS.

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CRLF survival strategy is resilient to extirpation in any limited reach because the area can be readily recolonized by individuals dispersing from elsewhere in the corridor, or from corridors hundreds or thousands of yards away. Therefore, even if the animals are presumed to be absent at the time of the project, removal of emergent vegetation such as cattail, even outside of breeding season deprives future generations of breeding CRLF the plants they use to brace their egg sacs. The removal of large woody debris, elimination of pools and riffles, cutting of in-stream willows, and reduction or elimination of bankside vegetation as part of channel alignment to linear dimensions deprives the species of foraging and refuge habitat, exposing them to predation. The SFGS follows its prey species, and is adversely impacted whenever its preferred prey, the CRLF is impacted.³⁹ As described, the project has the potential to degrade the quality of the habitat to which the species return. This constitutes a take⁴⁰ and should trigger consultation to determine whether the project could be revised to allow the issuance of incidental take permits.

In the case of the Kehoe drainage, the City had been advised by the U.S. Fish and Wildlife service that removal of vegetation would likely have adverse effects on CRLF and SFGS.⁴¹

Offsite adverse impacts. The project described in the draft IS/MND can have adverse effects far from the project site. Stream scientists have described the potential for adverse impacts from stream disturbances:

The source of a property owner's stream or river problem may be on their own property, a nearby neighbor's or miles away in the watershed. The measures taken to address the stream problem could make things better or worse for nearby neighbors. The isolated, uncoordinated project could use [stream-stabilizing principles but] could be over-powered by something such as a new stormwater culvert installed up stream. The first consideration is that if the stream stabilization project stable width and depth dimensions, and carefully matches the stream sinuosity, channel slope and valley slope, the stream will be more resilient to future impacts on the site. The stream should have a better defense from any erosional headcuts moving upstream which may enter the restored section. Likewise if stream meandering is traveling in a down stream direction towards the restored section which already has a stream length in balance with the valley, and a stream shape conducive to efficient sediment transport, the channel has a better chance of maintaining a stable condition. In other words, the resiliency of the site to defend against and recover from current, future or distant watershed disturbance is increased.⁴²

Sometimes the observer sees the stream in the earlier stages of vegetation losses, in which trees and shrubs are falling over and becoming uprooted[...] Channel disturbances can be so dramatic that they lead to the inability of native plant species to establish permanent residency on the channel banks. These disturbances can include the introduction of extremely flashy flood flows because of watershed development, <u>clearing</u>, grazing, faming of logging operations. These disturbed conditions can create the environments that favor invasive exotic species to move in or the channel may remain with very little permanent vegetative cover. [Underline added]⁴³

and

⁴⁰ The removal of vegetation which disrupts normal behavior patterns which include, but are not limited to, breeding, feeding or sheltering are considered harm, which is considered take under the Endangered Species Act of 1973, as modified. Section 9(a)(1) of the ESA and Federal regulations pursuant to section 4(d) of the ESA.

³⁹ M. Jennings, deposition by the City of Half Moon Bay, August 1, 2011.

⁴¹ Email from US FWS L. Triffleman City of Half Moon Bay Planner K. Marx, November 6, 2007.

⁴² Riley, A. L. (2003), op. cit., page 53.

⁴³ Ibid., pages 36,37.

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Human activities such as urbanization, <u>channelization</u> and other land uses contribute to accelerated erosion... Many of the adverse consequences of development can be avoided through careful planning or mitigated through land-use adjustments. Others will require direct intervention using erosion control measures. An increasing appreciation for the environmental value of our stream systems has led to a revival of old methods and the development of new techniques that not only provide erosion control but also restore or enhance the aquatic and riparian environment.⁴⁴ [Underline added]

The fallen trees and/or loss of healthy vegetated banks is exactly what has occurred on and downstream of channelized portions of the Kehoe drainage, and could potentially result from the vegetation disturbances on other drainages within the scope of the project.

As proposed, the project lacks adequate conditions to maintain, monitor and if necessary, intervene to restore a stable drainage on and off the project site, including the recovery of native vegetation and the restriction of non-native vegetation, and avoid indirect take. No consultations have resulted in opinions issued by the U.S. Fish and Wildlife Service and the California Department of Fish and Wildlife stating that the project with mitigations would result in no take.

Therefore, checklist items 4(a) and 4(b) should be revised to reflect a potentially significant impact.

MM BIO-3 states

Several CCC wetlands were identified adjacent to the Project locations at B-6, B-7, B-10, C-2, C-3, C-6, and C-7. Activities proposed in these locations that could result in dredge or fill of waters of the United States could be subject to regulation under the Clean Water Act. Activities proposed in these areas must be reviewed to determine if they would be regulated by the USACE, and a wetland delineation could be required to determine the extent of USACE jurisdiction.

Pilarcitos and Frenchman's Creek are known to be waters of the United States and subject to the Clean Water Act. The Kehoe Drainage was delineated nine years ago and found to be Waters of the United States as well.⁴⁵ Pullman, Seymour and other drainages may also be considered Waters of the United States. *Sundstrom* precludes the use of mitigations based on post-approval assessments, and so all drainages in the project area would need to be delineated.

A U.S. Army Corps of Engineers Section 404 permit would be necessary for any project that disturbs the creek bed below the ordinary high water or any area designated as wetlands, particularly a project that is likely to destroy or adversely modify the critical habitat of threatened or endangered species, which affect more than one tenth acre, or which occurs within the 100 year floodplain which would exclude the use of a nationwide permit (33 C.F.R. 320.1(c), 33 C.F.R. 330. 65 Fed. Reg. 12818)

The proposed project clearly authorizes disturbances in Waters of the United States below the ordinary high water mark of creeks, in wetlands, affects more than one tenth of an acre, and occurs within the 100 year floodplain of the drainages. Absent a CWA Section 404 permit issued by the US ACE the imposes mitigations to prevent adverse effects, <u>checklist item 4(c) should be changed to reflect potentially significant impacts.</u>

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⁴⁴ Fischenich, J. C. and Allen, H. (1999). Stream Management, ERDC/EL SR-W-00-1, U.S. Army Engineer Research and Development Center, Waterways Experiment Station, Vicksburg, MS, page 2.

⁴⁵ Letter from Mark Cassady, Essex Environmental to Don Dakins, City of Half Moon Bay, November 8, 2004.

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The National Marine Fisheries Service (NMFS) has identified Pilarcitos Creek as critical habitat for steelhead and Coho salmon.⁴⁶ A study of Pilarcitos Creek shortly after the Kehoe Cleaning Project "routine maintenance" activities were performed in the Kehoe drainage found that the tributary had caused increased turbidity and sedimentation in Pilarcitos Creek, degrading the habitat that these endangered anadromous fish use to move between fresh and ocean waters.

E.43

[L]ower Pilarcitos Creek does experience site-specific sources of pollution, primarily from the drainage ditch that routes runoff away from the development immediately to the northeast of the creek (west of Highway 1) ... These sources have an especially significant impact on water quality within the backwater channel (former creek channel) to the east of the existing Pilarcitos Creek channel (see below). Addressing these point sources of pollution would likely significantly improve water quality in the lower creek.⁴⁷

In its present form, the project does not sufficiently restrict project activities, document baseline stream conditions at or downstream from project sites, or impose quantitative mitigation and monitoring standards to ensure that soils exposed during maintenance will not be subject to erosion that produces significant turbidity and sedimentation in these habitats during subsequent wet periods.

Additionally, the biological assessment does not consider the CRLF breeding habitat at the Caltrans mitigation wetland. The breeding colony of CRLF is documented in the California Natural Diversity Database (CNDDB).⁴⁸ Since the project would authorize a broad range of emergency cleanup and clearing on Pilarcitos Creek, the activities could result in adverse impacts on this CRLF breeding habitat including but not limited to trampling, loss of vegetation, introduction of invasive exotic or predator species and other direct impacts from staging, or cleanup in or adjacent to the site; or introduction of toxic materials from bank destabilization at the site of an old city landfills on the adjacent Scopesi parcel. Unless the emergency portion of the project is removed, emergency project-related traffic on rainy nights would pose a significant risk of mortality to dispersing CRLF crossing the Bev Cunha's Country Road (which receives very little traffic at night). Former Half Moon Bay Mayor Ferreira recounts reaching the road on such an evening when he represented the City on the board of the Sewer Authority Mid-Coastside, and having to travel very carefully to avoid large numbers of dispersing CRLF.⁴⁹

Until additional conditions are imposed to prevent project-related development in or adjacent to the Caltrans mitigation wetland or upstream Pilarcitos Creek clearing and clean-up activities from adversely affecting this wildlife nursery or adjacent CRLF dispersal, and until project activities are conditioned to prevent soils exposed by project activity being washed by into Pilarcitos Creek and its tributaries subsequent rain resulting in turbidity and sedimentation in Pilarcitos Creek, <u>checklist item 4(d) should be changed to reflect potentially significant impacts</u>.

One of the most disturbing oversights in the checklist is the statement in checklist item 4(e) that with included mitigations, the project has a less-than-significant conflict with local policies or ordinances protecting the biological resources.

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⁴⁶ Federal Register, Vol. 70, No. 170, pages52488,52563, September 2, 2005.

⁴⁷ San Mateo County Resource Conservation District, op. cit., Appendix A, page 25.

⁴⁸ California Natural Diversity Database, observation reported by Richard Vonarb, February 11, 2000.

⁴⁹ M. Ferreira, pers. comm., August 14, 2013.

First, the IS/MND overlooks the protection given to biological resources by section 18.20.040 of the Half Moon Bay Municipal Code, part of the implementing ordinance of the LCP/LUP. Section 18.20.040 acknowledges that emergencies requiring immediate development to avoid or mitigate damage do occur in the coastal zone, and prescribes a method of quickly obtaining a temporary emergency permit based on the facts at the time the emergency occurs, and then requires the agency or individual performing the emergency development to either obtain a CDP through the normal process or restore the site of emergency development to pre-emergency conditions. The subsequent permit may impose additional conditions that protect or restore the biological productivity of the site, or of other areas that are or could be adversely impacted by the emergency activity. The project analyzed in the draft IS/MND flies in the face of section 18.20.040 by providing a blank check for unknown emergency activities with no subsequent review of effectiveness or impact. This is more than enough reason to conclude the project "conflicts with local ordinances protecting biological resources" and so the checklist item 4(e) should be revised to reflect these potentially significant impacts. But it is not the only inconsistency.

The draft IS/MND's argument that the project is compatible with Chapter 18.37 of the Half Moon Bay Municipal Code is brief:

Section 18.37 requires that "significant plant communities" be preserved wherever feasible. Such communities are defined as riparian vegetation along stream banks and water bodies, notable tree stands, and unique species (e.g., California wild strawberry located on bluffs). The proposed Project activities are necessary to maintain existing stormwater runoff and flood control facilities to protect existing infrastructure and eliminate potentially hazardous situations. There is no feasible alternative to the proposed Project, and as such the Project is consistent with the permitted uses in riparian corridors and riparian buffer zones as well as wetlands and wetland buffer zones. The Project will not result in any permanent impacts to wetland sor wetland buffer zones. The Project does have the potential to result in minimal impacts to wetland vegetation, channel morphology, and hydrology. Implementation of mitigations <u>MM-BIO 1 through 31 would mitigate these impacts and ensure that the Project is consistent with development standards</u> for riparian corridors and riparian buffer zones (and therefore wetlands) identified in the Municipal Code. The impact would be less than significant with mitigation. [Underline added]

The first section of underlined text claims that drainages in the project are "stormwater runoff and flood control facilities." The City's express intent to operate the existing drainages to control the transmission of water through activities such the present project would make them Public Works within the meaning of section 30114 of the Public Resources Code. But this characterization was explicitly rejected for the both channelized and unchannelized sections of the Kehoe drainage in *Benjamin v. City of Half Moon Bay.*⁵⁰ Except for artificial materials lining the pipes passing under a roadway or concrete-lined ditches along roadways, and the artificial construction at the end of the Myrtle Street bubble-up, there is no basis to distinguish the other drainages in the project area as "stormwater runoff and flood control facilities." Moreover, the City or any other applicant for such a facility is not excused from adhering to other coastal resource protection policies and ordinances.

The policy also states that pipelines and stormwater runoff facilities can only be permitted when no feasible or practicable alternative exist. To the extent that the City project seeks to redefine the drainages in Table 1 as stormwater runoff facilities, the City should explain why no feasible or practicable alternative exists. For example, the Landstra parcel to the south of the existing Kehoe drainage is in

⁵⁰ James Lawrence Benjamin and Zoya Dorry Benjamin v. City of Half Moon Bay, San Mateo County Case No. CIV 494372,Statement of Decision filed Sept 23, 2011, Page 3.

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public ownership, and could be used to restore the channelized portion of the drainage to a more sinuous course. The City can and should pursue this alternative.

Some of other drainages run through PUD areas without certified Specific Plans. When considering proposed specific plans for development within such PUD areas, for, the City should require the allocation of adequate land be dedicated as stormwater runoff capacity to handle such flows without flooding, bank instability, erosion, sedimentation or in or downstream from the PUD area, or head-cutting or other adverse effect upstream from the PUD area.

The second underlined section asserts that for the drainages included in the project, there is no feasible alternative. This is opinion of the author, supported by the three photos in Appendix A of Appendix A [sic] of the draft IS/MND which show erosion or sedimentation. It seems reasonable that a maintenance project is necessary to clear the sediment-filled culvert in Photograph 2. However, erosion at the western terminating structure of the Myrtle Street bubble-up Photograph 14 could be alternately achieved with little or no impact to the rest of the drainage by adding energy-dissipating structures adjacent to the outflow. The shoulder of Wavecrest Road is eroded in a limited area shown in the second Photograph 13, and while some removal of vegetation may be needed, the draft IS/MND needs a more complete discussion of the possible reasons for erosion including, for example, required capacity, the construction of the road, and the possibility that the property on the other side of the street may be imposing excessive sheet flow because no swale is present there. Without adequate investigation, it is not reasonable to conclude that there are no alternatives. Without adequate investigation, it is also not reasonable to conclude that there would be no significant adverse impacts from such routine maintenance activities either downstream or nearby the maintenance site (for example, removing vegetation could result in deepened the channels that could imperil the road bed or cause a loss of water content in adjacent lands during drier conditions). The cases presented in the three photographs do not generalize to support findings of the necessity for maintenance activities elsewhere in their respective drainages. They provide no support at all to the contention that there are no alternatives to routine maintenance in any of the other fourteen "B" and "C" drainages, and no support at all to the proposed emergency clearing and clean-up activities proposed for the three "A" drainages. Consequently, the draft IS/MND fails to acknowledge that the other drainages and other reaches of these three drainages may be excluded from the project. dispatching the claim that there are no alternatives to this proposal.

The third underlined section asserts that the 31 biology-related mitigations are sure to cause the project to be consistent with the development standards of Chapter 18.37 of the Half Moon Bay Municipal Code. As explained in the last paragraph, the potential destruction of riparian vegetation cannot be dismissed as consistent with development standards because there are no alternatives, and so the proposed project as mitigated must be analyzed for significant impacts. As noted earlier, experts recognize that stream alteration projects place riparian plant communities at risk, and the proposed mitigations do not adequately address those risks. More specific issues associated with the mitigations will be addressed subsequently, since the same claim is made with respect to consistency with Chapter 18.38 of the Half Moon Bay Municipal Code.

The analysis of compatibility with chapter 18.38 of the City's Municipal Code is similarly brief:

Section 18.38 requires any proposed project within 100 feet of a "sensitive habitat area" to prepare a biological report. Sensitive habitat is defined as sand dunes, marine habitats, sea cliffs, riparian areas,

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wetlands, rocky intertidal zones, coastal scrub, and habitats supporting rare and endangered species defined by the State Fish and Game Commission. The proposed project would involve work within 100 feet of a sensitive habitat area and SWCA Environmental Consultants had prepared a Biological Resource Evaluation (Appendix A) to assess potential project impacts and identify feasible mitigation as identified in MM BI0-1 through 31. The biology report prepared for the project is consistent with the requirements of the Municipal Code.

Policy 3-5(a) also requires the submission of a biologic report to assess the possibility of significant impacts, and to recommend feasible mitigation measures. Thank you for providing the biological report in Appendix A of the draft IS/MND which presumably is intended to address both zoning and LCP/LUP policy requirements. Unfortunately, the draft IS/MND's discussion of compatibility with 18.38 does not extend to the many other sections which restrict development in sensitive habitat areas including the riparian areas and wetlands where this project is to occur. Even with the proposed mitigations, the project is not consistent with 18.38. Moreover, there is very little discussion of conformance with the policies of Chapter 3 of the LCP/LUP, and even with the recommended mitigations the project unfortunately does not conform with several of those policies. For more efficient comment on checklist item 4(e), zoning ordinance concerns are accompanied by LCP/LUP policies involving similar but not necessarily identical concerns:

No update to Coastal Resource Area Map. In pertinent part, section 020 of 18.38 states:

18.38.020 Coastal Resource Areas. The Planning Director shall prepare and maintain maps of all designated Coastal Resource Areas within the City. Coastal Resource Areas are defined as follows:

A. Sensitive Habitat Areas. Areas in which plant or animal life or their habitats are either rare or especially valuable, and/or as designated on the Habitat Areas or Water Resources Overlay Map. Areas considered to be sensitive habitat are listed below.

	Sensitive Habitat (in pertinent part)
4.	Riparian Areas
5.	Wetlands, coastal tidelands and marshes, lakes and ponds and adjacent shore habitats
6.	Coastal and off-shore areas containing breeding and/or nesting sites or used by migratory and resident water- associated birds for resting and feeding
8.	Habitats containing or supporting unique species or any rare and endangered species defined by the State Fish and Game Commission

B. Riparian Area and Corridor. Any area of land bordering a perennial or intermittent stream or their tributaries, or around a lake or other body of fresh water, including its banks and land at least up to the highest point of an obvious channel or enclosure of a body of water. Riparian Corridors are the areas between the limits of riparian vegetation, where the limits are determined by vegetative coverage, at least 50% of which is comprised of a combination of the following plant species: red alder, jaumea, pickleweed, big leaf maple, narrow-leaf cattail, arroyo willow, broadleaf cattail, horsetail, creek dogwood, black cottonwood, and box elder. These areas and corridors are sensitive habitats requiring protection. Manmade irrigation ponds having over 2,500 square feet of surface area are exempt.

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	[skipping irrelevant material]	
E.51 (cont)	E. Wetlands. As defined by the US Fish and Wildlife Service, a wetland is an area where the water table is at, near, or above the land surface long enough to bring about the formation of hydric soils or to support the growth of plants which are normally found to grow in water or we ground. Such wetlands can include mud flats (barren of vegetation), marshes, and swamps. Such wetlands can be either fresh or saltwater, along streams (riparian), in tidally influenced areas (near the ocean and usually below extreme high water of spring tides), marginal to lakes, ponds and man-made impoundments. Wetlands do not include areas in which normal rainfall years are permanently submerged (streams, lakes, ponds, and impoundments), nor marine or estuarine areas below externe low water of spring tides, nor vernally wet areas where the soil is not hydric	et ch , re
	The biological report in Appendix A recognizes many (but not all) of the sensitive habitat areas within the project area, but there is no condition of the project to require that they be added to the m of 18.38.020 which identifies such areas, and to distinguish riparian areas, wetlands, and "habitats containing or supporting unique species or any rare and endangered species defined by the State Fis and Game Commission." To comply with this section of the zoning ordinance, please condition the project on completing such an update.	ap h
	No revision of the LCP/LUP Habitat Areas and Water Resources Overlay	
	3-21 Designation of Habitats of Rare and Endangered Species	
	In the event the habitat of a rare and endangered species is found to exist within the City, revise the Habitat Areas and Water Resources Overlay to show the location of such habitat. Any habitat so designated shall be subject to Policies 3-22 through 3-31.	
*	The biological report confirms that the habitat of rare and endangered species has been found, and yet the project does not contain any update of the LCP/LUP's Habitat Areas and Water Resources Overlay.	e
E.52	Riparian areas (including riparian corridors and wetlands) are also identified as sensitive habitat in LCP Policy 3-1. The delineation of these areas on the referenced coastal resource map and LCP/LUP sensitive habitat and water resources overlay are basic safeguards to ensure that future projects take note of and conform to policy and ordinance controlling development in such areas. To comply with this policy, please include a condition it revise it accordingly.	2
	Whether or not the maps are current, the project must comply with the several sections of Chapter 18.38 associated with the sensitive habitat areas and the several policies associated with the LCP/LUP sensitive habitats:	2
	Flood control not a permitted use in riparian areas or riparian huffer zones without evidence supporting finding of no alternatives. In pertinent part, section 075 of chapter 18.38 states:	
	18.38.075 Riparian Corridors and Buffer Zones	
E.53	[skipping relevant material not central to the comment]	
	B. No Alternative Permitted Uses. The following are permitted uses where no feasible or practical alternative exists.	

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- 2. Flood control projects where no other method for protecting existing structures in the flood plain is feasible and where such protection is necessary for public safety or to protect existing development.
- 4. Pipelines and storm water runoff facilities.

This ordinance reflects the language in LCP/LUP Policy 3-9(b). The draft IS/MND does not make the case that no other methods for protecting existing structures in the flood plain is feasible or that there is no feasible or practicable alterative to developing a "storm water runoff facility" with the riparian corridors; it just states the finding without explanation. Making this case requires, for each drainage, specifying what existing structures or public safety threat is being resolved by the project, and why it cannot be resolved in any other way. This involves a meaningful review of alternatives, which is the subject of an EIR, not a MND. However, even if such analysis were to establish that no feasible alternative existed, the applicant is not excused from conforming with all other zoning ordinances and LCP/LUP policies protecting the coastal resources, and other statutes and regulations protecting habitat in and adjacent to riparian corridors.

If channelization is contemplated as part of any "routine maintenance" it must also conform with Coastal Act policy 30236 which is adopted by the LCP/LUP. Channelization cannot be used to create storm water runoff facilities.

Permitted uses in wetlands are listed in section 080 of Chapter 18.38 of the Municipal Code. The list does not include flood control projects, and requires a use permit for storm water runoff facilities. The approval of a storm water runoff facility does not excuse the applicant from compliance with other ordinances, policies, regulations and statutes protecting habitat in and adjacent to wetlands.

In particular:

...

LCP/LUP policy 3-3 Protection of Sensitive Habitats

- (a) Prohibit any land use and/or development which would have significant adverse impacts on sensitive habitat areas
- (b) Development in areas adjacent to sensitive habitats shall be sited and designed to prevent impacts that could significantly degrade the environmentally sensitive habitats. All uses shall be compatible with the maintenance of biologic productivity of such areas.

LCP/LUP Policy 3-4 Permitted Uses

- (a) Permit only resource-dependent or other uses which will not have a significant adverse impact in sensitive habitats.
- (b) In all sensitive habitats, require that all permitted uses comply with U. S. Fish and Wildlife and State Department of Fish and Game regulations

The draft IS/MND states that conditioning the project with mitigations such a MM BIO-1, the impact will on sensitive habitats will be less than significant.

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(cont)

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	PDP-19-13 IS/MND comments to C. Hamilton, September 9, 2013	Page 26
E.55 (cont)	MM BIO-1 Disturbance to vegetation and CRAs should be the minimum necessar the Project activities, provided there is no feasible alternative. The minimum amou disturbance to vegetation is define as the least amount required to access the Project restore or maintain normal streamflow, to prevent potential flooding, and for contro- grasses on channel banks and access roads.	y to complete int of ct locations, to ol of weeds and
	Getting rid of noxious, invasive exotics weeds (e.g., Cape ivy, ice plant) in riparian areas is applauded. Conditions (e.g., double-bagging) should be added to avoid inadvertent re-infes however. In other cases, grasses such as <i>Juncus</i> spp. belong on the channel banks. Instead of controlled, they should be encouraged as part of a native assemblage of plants. MM BIO-1 disturbances which would have significant adverse impacts on sensitive habitat areas, so los the minimum necessary to complete the Project activities, which does not conform with LC policies 3-3, 3-4(a) and, in riparian corridors, the performance standard of LCP/LUP Policy	s to be tation, of being permits ng as they are P/LUP 3-10.
[LCP/LUP Policy 3-10 Performance Standard in Riparian Corridors	
E.56	 (a) Require development permitted in corridors to: (1) minimize removal of v minimize land exposure during construction and use temporary vegetation or m protect critical areas, (3) minimize erosion, sedimentation, and runoff by approp grading and replanting modified areas, (7) prevent depletion of groundwater s substantial interference with surface and subsurface waterfows, (9) maintain vegetation buffer areas that protect riparian habitats, and (10) minimize alteration streams. 	egetation, (2) ulching to priately supplies and natural on of natural
	With respect to the requirements of LCP/LUP Policy 3-4(b): the U. S. Fish and Wildlife Ser communicates their opinion that projects conform to their regulations protecting listed species including indirect take caused by harm through degrading of habitat, by issuing opinions con likelihood of adverse effects on listed species. Since the draft IS/MND acknowledges that the disturb habitats containing or supporting listed species, the US FWS (and the CA DFW) sho consulted to determine whether or not that project as mitigated conforms to their regulations. IS/MND contains no evidence of such consultation, an no opinion letter is provided.	vice es from take, icerning the e project will uld be . The
E.57	An approved RMA would indicate conformance with some, but not all of the Department of Wildlife's regulations. The draft RMA included as Appendix B to the IS/MND has not been in force, and is not evidence of conformance with any regulations. Lacking evidence that the would not cause potentially significant adverse impacts and lacking evidence that the project the regulations of the U.S. Fish and Wildlife Service and the State Department of Fish and Grandings of compatibility with these policies cannot be made.	Fish and agreed, is not project conforms to ame,
	In addition, the project lacks mitigation and monitoring, and assessment of the feasibility of p wholly restoring damaged habitat(s) as required by LCP Policy 3-5:	artially or
E 58	LCP-LUP Policy 3-5 Permit Conditions	
2.00	(a) Require all applicants to prepare a biologic report by a qualified professional sele by the applicant and the City to be submitted prior to development review. The re determine if significant impacts on the sensitive habitats may occur, and recommended	cted jointly port will end the most
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	PDP-19-13 IS/MND comments to C. Hamilton, September 9, 2013 Page 2	7
E.58 (cont)	 feasible mitigations measures if impacts may occur. The report shall consider both any identified sensitive habitats and areas adjacent. Recommended uses and intensities shall be dependent on such resources, and shall be sited and designed to prevent impacts which would significantly degrade areas adjacent to the habitats. The City and the applicant shall jointly develop an appropriate program to evaluate the adequacy of any mitigation measures imposed. (b) When applicable, require as a condition of permit approval the restoration of damaged habitat(s) when, in the judgment of the Planning Director, restoration is partially or whether 	
E.59	feasible. [Underline added] The project poses the risk of unmitigated significant adverse impacts in the sensitive habitats. The draft IS/MND acknowledges the potentially significant impacts include removal of [native] vegetation, disturbance of soils and consequent erosion, causing sediment transport within drainage features and associated habitats, which in turn could affect water quality due to the potential for pollutants to be discharged into adjacent soils and surface waterbodies. The project could also involve the use, fueling and storage of heavy equipment onsite. Soil and building materials, including asphalt and road base, has the potential to enter the drainage features, cause an increase in suspended sediments, result in sedimentation of aquatic habitat, and introduce compounds that could potentially be toxic to aquatic organisms.	
E.60	To mitigate these impacts, the project cites several mitigations, but they leave the habitat and adjacent areas exposed to significant impacts. The shortcomings of MM BIO-1 have already been discussed. MM BIO-2 If any wildlife is encountered during Project activities, said wildlife should be allowed to leave the work area unharmed. If any special-status wildlife species are observed, construction personnel should contact a qualified biologist immediately. The biologist will identify the species and determine the best course of action. Animals will be allowed to leave the work area of their own accord and without harassment. Animals should not be picked up or moved in any way. While MM BIO-2 demonstrates honorable compassion for encountered unlisted animal species, it does not obligate or even authorize the biologist to halt the project, particularly if he or she recognizes that the project will degrade the habitat or otherwise cause the take of a listed animal. No CNDDB report of listed species encounters is required, and the City is not obligated to add newly discovered habitat containing or supporting listed species to its maps, or revise the project to conform to policies applying to habitat identified to contain or support a listed species as required by LCP/LUP Policies 3-21 or 3-32. No monitoring and public reporting of violations of conditions are required, in violation of LCP/LUP Policy 3-5(a) requirements to permit mitigation adequacy to be assessed.	
E.61	 MM BIO-3 Several CCC wetlands were identified adjacent to the Project locations at B-6, B-7, B-10, C-2, C-3, C-6, and C-7. Activities proposed in these locations that could result in dredge or fill of waters of the United States could be subject to regulation under the Clean Water Act. Activities proposed in these areas must be reviewed to determine if they would be regulated by the USACE, and a wetland delineation could be required to determine the extent of USACE jurisdiction. [Underline added] MM BIO-3 is a mitigation that depends on future consultation, which is not consistent with Sundstrom. Even if the mitigation is revised to perform USACE jurisdiction delineations of wetlands prior to approval, the mitigation does not apply to the project's riparian areas which are also subject to the provisions of the Section 404 of the Clean Water Act. As proposed, the project is not consistent with the 	

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performance standards of 18.38.070 on development wetlands.

project standards of LCP/LUP Policy 3-10 and Municipal Code 18.38.070(C) that pertain to removal of vegetation below the ordinary high water mark, and dredging of drainage beds; maintenance of natural vegetation buffer areas, and minimizing alteration of natural streams. 18.38.080(C) imposes the

The project does not require access routes for staff and equipment to conform to performance standards required by LCP/LUP Policy 3-12 in buffer areas for sensitive habitats, including conformance to natural

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Exhibit 2

topography, provisions to keep runoff and sedimentation from exceeding pre-development levels, preventing discharge of toxic substances into the riparian corridor, and the previously mentioned performance standards required by LCP/LUP Policy 3-10(a)(9) to maintain natural vegetation buffer areas that protect riparian habitats. In the case of the Pilarcitos Creek and Kehoe Drainages, the study areas buffer zones include undiscussed sensitive habitat, and care should be taken in revising or implementing the project to ensure that there is no confusion in the enforcement of protection for all sensitive habitats. Again, the project does not conform to policy 3-5(b) in that it does not require monitoring and reporting to confirm the mitigations are successful in avoiding impacts, repair any damage caused by the project in violation of performance standards, and to modify the mitigation and monitoring conditions to avoid future deviations from these performance standards. No Project activities shall be conducted in a channel with water flowing or present in it to MMBI0-4 the maximum extent practicable, with the exception of emergency activities. Similarly no equipment should be operated in a flowing drainage feature unless it is necessary for emergency purposes and there is no feasible alternative, or it is necessary to construct a dewatering system to divert water flow around a work area. Additional requirements and restrictions may be required for work in an active channel or if a dam or dewatering system is required, and should be reviewed independently prior to construction. Most of MM BIO-4 is predicated on the assumption that the project permits emergency work, which violates 18.20.040 which requires that emergency permits obtained when the emergency is imminent, and a regular CDP is obtained retrospectively. Mitigations for non-emergency work in an active channel should be analyzed and appropriate mitigation and monitoring conditions imposed prior to permit approval, or the project fails to conform with Sundstrom. If a non-emergency project is insufficiently defined to know when such in-stream work is required, then the project should be the subject of its own CDP, and reviewed separately when the information is available. MMBI0-5 Any and all spoils generated during Project activities shall be placed where they cannot enter drainage features, riparian areas or corridors, or wetlands. Spoils shall be removed from the work area and disposed of at an appropriate facility. Projects which remove spoils from riparian areas and wetlands are subject to the certification requirements of Section 404 and 401 of the Clean Water Act. The conditions to be imposed on the project to satisfy Clean Water Act certifications should be identified as a mitigation that requires monitoring and reporting of project conformance, and contingencies in the event of violations. Please impose appropriate special provisions (e.g., double bagging) for disposal of spoils which may containing exotic invasive species. Dredging and spoils disposal is also constrained by Coastal Act policy 30233 which is adopted in the LCP/LUP and states, in pertinent part: A-2-HMB-14-0004 Page 440 of 523 546

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- (b) Dredging and spoils disposal shall be planned and carried out to avoid significant disruption to marine and wildlife habitats and water circulation...
- (c) In addition to the other provisions of this section, diking, filling, or dredging in existing estuaries and wetlands shall maintain or enhance the functional capacity of the wetland or estuary

The draft IS/MND would allow dredging as necessary to achieve project goals of restoring stream flow, etc., even if it significantly disrupts wildlife habitat and water circulation (e.g., eliminates pools and vegetation areas used for foraging and refuge by listed species, or removes native vegetation without protecting exposed soils from infestation by invasive exotic vegetation. In its current form, findings of consistency with 30233 cannot be made.

MM BIO-6 During construction, to avoid crosion and downstream sedimentation, no work in or immediately adjacent to the drainage ditches should occur during the rainy season (October 15 through April 15).

MM BIO-7 During construction, the 72-hour weather forecast shall be monitored. If there is a more than 40% chance of rain, or at the onset of unanticipated precipitation of 0.25 inch or more, all equipment should be removed or staged to avoid potential impacts, soil erosion and sediment control measures should be implemented, and Project activities should cease until after a 24 hour dry-out period if there has been more than 0.25 inch of rain.

Thank you for incorporating mitigations that address the risk of erosion during construction as a result of rain. Conditions should also requir post-construction monitoring to ensure protection from erosion while vegetation in the sensitive habitat and buffer area is restored. To reduce the risk of adverse impacts from mistakes in scheduling routine activity, these scheduling restrictions should be integrated with scheduling restrictions that mitigate the risk of significant adverse impacts to listed species.

MM BI0-8 All exposed soils in the work area (resulting from Project activities) shall be stabilized immediately following the completion of work to prevent erosion. Erosion control BMPs, such as silt fences, straw hay bales, gravel or rock lined drainages, water check bars, and broadcast straw can be used. Erosion control fabrics should be biodegradable. BMPs shall be monitored during and after storm events. At no time shall silt-laden runoff be allowed to enter drainages or wetlands.

The stabilization methods given in MM BIO-8 do not conform to LCP/LUP policies requiring the restoration of native vegetation, nor does it conform to Coastal Act 30231 (adopted in the LCP/LUP) which states in pertinent part

> The biological productivity and the quality of coastal waters, streams, wetlands...shall be maintained and, where feasible, restored through, among other means, ... controlling runoff, ... maintaining natural vegetation buffer areas that protect riparian haibtats, and minimizing alteration of natural streams.

If the stabilization methods of MM BIO-8 are temporary, please clarify the duration of the temporary stabilization, and the requirement that the project area be stabilized using native vegetation, that exotic invasive vegetation in the disturbed area will be removed during the restoration period, and that stabilization methods must not adversely effect listed species contained or supported by the habitat in which the project takes place. Please add mitigation monitoring and timely reporting so that the public can track conformance.

If Project activities result in disturbance exceeding one acre; a Stormwater Pollution MM BIO-9 Prevention Plan (SWPPP) will be required. If required prior to the start of work, a notice of intent (NOI) and SWPPP should be prepared and submitted to the appropriate Regional Water Quality Control Board

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F 00	(RWQCB). A copy of the SWPPP should be submitted to the County for approval to show that sedimentation and erosion control measures are installed prior to any other ground-disturbing work.
(cont)	CEQA analysis cannot be piecemeal, and mitigations which require post-clearance assessment are not consistent with <i>Sunstrom</i> . The area covered by the drainages should be calculated now, and if the total area in which disturbances can occur is greater than the one-acre threshold, which appears to be the case, obtaining approval of a SWPPP along with any 401 Certification and Waste Discharge Requirements (WDR) resulting from any flood control work occurring above the ordinary high water mark. Like the SAA, obtaining such clearances should be a pre-condition of this permit.
E.70	Please incorporate monitoring and reporting conditions that assess the effectiveness of the above mitigations by studying channel morphology and sedimentation before and after the project. Habitat conditions should be documented and assessed at the project location, at flanking locations, and at upstream and downstream locations that could be adverse affected by the project.
E.71	In addition to the general requirements for development in riparian areas, wetlands and their buffer areas, the LCP/LUP contains additional policies and corresponding zoning ordinances controlling projects in the habitat of listed species. The Local Coastal Program provides protection for habitat of plants and animals identified in the LCP as endangered, which includes the San Francisco Garter Snake (SFGS), which illustrate concerns that are applicable to other rare or endangered species with habitat on the site.
	PROTECTION OF SPECIAL-STATUS SPECIES
	No evidence has been presented to support the claim that the project as mitigated is consistent with LCP Policies. On the contrary, the project in its current form clearly conflicts with the following local policies and ordinances protecting biological resources.
E.72	 3-21 <u>Designation of Habitats of Rare and Endangered Species</u> (a) In the event the habitat of a rare and endangered species is found to exist within the City, revise the Habitat Areas and Water Resources Overlay to show the location of such habitat. Any habitat so designated shall be subject to Policies 3-22 through 3-31.
	The draft IS/MND notes habitat containing the endangered SFGS (B-7 Magnolia Drainage, B-8 Seymour Detention Basin, B-9 Seymour Drainage, B-10 Redondo Beach Road, C-6 Wavecrest Road and C-7 Redondo Beach Road). ⁵¹ Some others drainages in (e.g., A-3 Pilarcitos Creek, B-2 Kehoe drainage, Caltrans mitigation wetland) are also known to contain or support SFGS, and I appreciate that the draft IS/MND revised the discussion of biological resources to reflect some of these habitats. The life stages of these animals also requires uplands, which should be considered endangered species habitat even though it may be described as a study buffer zone in the draft IS/MND. Consultations with the U. S. Fish and Wildlife to satisfy Policy 3-4(b) can confirm that the list of known habitat containing or supporting SFGS and other endangered species within the project area is complete.
	The project does not include a component to update the Habitat Areas and Water Resources Overlay that reflects the assessed rare and endangered species habitat based on all available information. Please add a component to the project to update the Habitat Areas and Water Resources Overlay.

⁵¹ Appendix A, Drainage Routine Maintenance Biological Resource Evaluation, page 25.

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PDP-19-13 IS/MND comments to C. Hamilton, September 9, 2013 3-22 Permitted Uses (b) Permit only the following uses: (1) education and research, (2) hunting, fishing, pedestrian and equestrian trails that have no adverse impact on the species or its habitat, and (3) fish and wildlife management to restore damaged habitats and to protect and encourage the survival of rare and endangered species. Flood control facilities and storm water runoff facilities are not a permitted use. However, projects which restore damaged habitats and protect and encourage the survival or rare and endangered species might improve the flood plain and the habitat's resilience to flooding, and control erosion as a side effect. Please revise the project to include a permissible use in habitats containing or supporting SFGS and other endangered species. **3-23 Permit Conditions** (c) Require prior to permit issuance, that a qualified biologist prepare a report which defines the requirements of rare and endangered organisms. At minimum, require the report to discuss: (1) animal food, water, nesting or denning sites and reproduction, predation and migration requirements, (2) plants' life histories and soils, climate, and geographic requirements, (3) a map depicting the locations of plants or animals and/or their habitats, (4) any development must not impact the functional capacity of the habitat, and (5) recommend mitigation if development is permitted within or adjacent to identified habitats. The provision of maps identifying habitat supporting or containing endangered species at each project area will assist project teams in planning their access to the drainage or wetland, and how the project can enhance the site's value to the endangered species, while avoid interfering with the subject species' use of other species (e.g., SFGS use CRLF as prey). 3-24 Preservation of Critical Habitats (d) Require preservation of all habitats of rare and endangered species using the policies of this Plan and other implementing ordinances of the City. The project does not include a plan to preserve habitat by compensating for any loss of bed, bank or upland habitat, which should be developed in consultation with the U.S. Fish and Wildlife Service. In

In addition, the Local Coastal Program provides protection for habitat of plants and animals identified in the LCP as unique species, which includes the CRLF, and protection of the local population of CRLF is explicitly identified as an issue to be addressed by the LCP/LUP)52. Appendix A of the draft IS/MND has identified habitat containing or supporting the CRLF at several project drainages (B-3 Kelly Drainage, B-4 Miramontes Drainage, B-5 Central Drainage, B-6 Myrtle Street Bubble-Up, B-7 Magnolia Drainage, B-8 Seymour Detention Basin, B-9 Seymour Drainage, B-10 Redondo Beach Road, C-1 Railroad Avenue, C-2 Poplar Street, C-6 Wavecrest Road and C-7 Redondo Beach Road).53 In addition, riparian areas and nearby uplands of A-1 Frenchman's Creek, A-3 Pilarcitos Creek, and B-2 Kehoe Drainage are

particular, the loss of habitat for CRLF is a reduction of habitat for SFGS that prey on CRLF.

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⁵² LCP/LUP, pages 59, 63.

⁵³ Appendix A. Drainage Routine Maintenance Biological Resource Evaluation, page 25.

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known to be habitat supporting or containing CRLF.⁵⁴ (Again, thank you for revising the draft IS/MND to include some of the areas that were omitted from Appendix A.) The life stages of these animals also requires upland aestivation and dispersal habitat, which should be considered habitat of the unique and federally-threatened CRLF, even though it may be described as a study buffer zone in the draft IS/MND. Consultations with the U. S. Fish and Wildlife to satisfy Policy 3-4(b) can confirm that the list of known habitat containing or supporting SFGS and other endangered species in the study area is complete.

CRLF is also a Species of Special Concern [SSC] by the California Department of Fish and Wildlife. According to the California Department of Fish and Game,

SSCs should be considered during the environmental review process. The California Environmental Quality Act (CEQA; California Public Resources Code §§ 21000-21177) requires State agencies, local governments, and special districts to evaluate and disclose impacts from "projects" in the State. Section 15380 of the CEQA Guidelines clearly indicates that species of special concern should be included in an analysis of project impacts if they can be shown to meet the criteria of sensitivity outlined therein.

Sections 15063 and 15065 of the CEQA Guidelines, which address how an impact is identified as significant, are particularly relevant to SSCs. Project-level impacts to listed (rare, threatened, or endangered species) species are generally considered significant thus requiring lead agencies to prepare an Environmental Impact Report to fully analyze and evaluate the impacts. In assigning "impact significance" to populations of non-listed species, analysts usually consider factors such as population-level effects, proportion of the taxon's range affected by a project, regional effects, and impacts to habitat features.⁵⁵

Appendix A notes several species of special concern which occur in the study area, and other assessments that include some of the study areas have found others, including for example the yellow warbier.⁵⁶

Therefore, in assessing project conformance with local policies, the draft IS/MIND must consider all LCP policies that address land use in CRLF habitat and buffer areas surrounding CRLF habitat, including the following:

3-32 Designation of Habitats of Unique Species

(e) In the event the habitat of a unique species is found to exist within the City, revise the Habitat Areas and Water Resources Overlay to show the location of such habitat. Any habitat so designated shall be subject to Policies 3-33 through 3-36.

The plan does not include a component to revise the Habitat Areas and Water Resources Overlay that reflects the confirmed presence of rare and endangered species habitat on this parcel. Please include one, as well as a component to update the zoning ordinance's coastal resource maps, in the revised project.

- 3-33 Permitted Uses
- (f) Permit only the following uses: (1) education and research, (2) hunting, fishing, pedestrian and equestrian trails that have no adverse impact on the species or its habitat, and (3) fish and wildlife management to the degree specified by existing governmental regulations.

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⁵⁴ http://www.dfg.ca.gov/biogeodata/cnddb/pdfs/TEAnimals.pdf, last viewed September 8, 2013.

^{s5} http://www.dfg.ca.gov/wildlife/nongame/ssc/ , last viewed September 8, 2013.

⁵⁶ Busnardo (2005), op. cit., page 6.

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E.77 (cont)

E.78

Flood control facilities and storm water runoff facilities are not a permitted use. However, restoration may qualify as a fish and wildlife management projects encouraged by federal, state and local regulation, including the LCP/LUP-adopted Coastal Act 30231 which restores the quality of streams and wetlands; LCP/LUP Policy 3-5(b) requiring projects in or adjacent to sensitive habitat areas to restore damaged habitats when feasible; LCP/LUP Policy 3-6 prioritizing funding for restoration biologically significant and endangered habitat, Policy 3-35 requiring the City to use LCP/LUP policies to preserve rare and endangered species habitats, and implementing ordinance 18.01.010(H) expressing the intent and purpose of the ordinance to "protect, conserve, and, where possible, restore natural environmental resources within the City." Such projects could, as a side effect, improve the flood plain and the habitat's resilience to flooding and reduce erosion.

Trail development in or adjacent to CRLF habitat degrades the habits³⁷ and is therefore not an option for this project. Please revise the project objective to include a permitted use in CRLF habitats.

- 3-34 Permit Conditions
- (g) Require, as a condition of permit approval, that a qualified biologist prepare a report which defines the requirements of a unique organism. At a minimum, require the report to discuss: (1) animal food, water, nesting or denning sites and reproduction, predation, and migration requirements, and (2) plants' life histories and soils, climate, and geographic requirements.

E.79 The draft IS/MND does not reconcile project's channel-regularizing activities with the value of lowhanging branches overhanging the stream, varied in-stream habitat such as riffles and pools, the sensitivity of the species to stream temperature and microfauna supported by native vs. invasive exotic vegetation, pools, slowly moving water, aestivation holes and emergent vegetation to the life cycle of CRLF, and consequently understates the impact that the project's design and maintenance activities, particularly with motorized tools, would have on the habitat of the CRLF. Please revise the draft IS/MND accordingly.

3-35 Preservation of Habitats

(h) Require preservation of all rare and endangered species habitats using the policies of this Plan and implementing ordinances of the City.

The project is inconsistent with this policy in that it allows such habitat to be damaged in the service of achieving the project objectives of providing access to drainages and wetlands and restoring water conveyance capacity. The plan does not preserve habitat by requiring restoration of any lost bed, bank or upland habitat. As mentioned at the beginning of this long review of biological resources, the project does not acknowledge the significant impact of indirect take, harm and reduced biological productivity from the degrading of habitat. MM BIO-10 through MM BIO-31 all have value, but do not reduce the impact of habitat degradation to less-than-significant, and cannot resolve the just-described policy conflicts.

These clear conflicts with LCP/LUP and related zoning ordinance policies would result in reduction and degradation of habitat for rare and endangered and unique species, and the associated mandatory findings of significance, are not consistent with the selection "Less Than Significant with Mitigation

⁵⁷ U. S. Fish and Wildlife Service 2000, op. clt., page 33.

PDP-19-13 IS/MND comments to C. Hamilton, September 9, 2013

Page 34

Incorporation." The correct choice for checklist item 4.e) is "Potentially Significant Impact." (PRC 21803; Guidelines 15065).

6. Geology, Soils, and Seismicity

In explaining the conclusion that there will be no impacts for most of the items in this section of the checklist, the draft IS/MND discussion restates "Maintenance of work on B and C drainages will include stabilization/bank repair at locations that are no longer functional to prevent flooding and erosion. No impact would occur."

The Regional Water Board's Watershed Management Initiative identifies major non-point source problems in the San Francisco Bay Region as:

- 1. Elimination of natural channels, including loss of wetlands, wildlife, fisheries and riparian habitat
- 2. Increased sedimentation due to construction activities and land clearing
- 3. <u>Unmitigated changes in hydrology that upset the geomorphic equilibrium of streams, causing destabilization and erosion of channels, and more frequent flooding</u>
- 4. Increased pollutant loads associated with urban activities
- 5. Impairment of fish habitat from water diversions and fish passage barriers due to the construction of in-channel reservoirs and diversion structures, the sedimentation of channels, and the removal of vegetation
- 6. Increased pollutant loads associated with agricultural activity. [Underline added]

Would the project:

(b) Result in substantial soil erosion or loss of topsoil?

There was a reason for the drainage to be unable to prevent flooding and erosion, and it typically involves a sediment transport equation that is out of balance. In an area water speed, sinuosity, gradient, etc., repairs that do not change the out-of-balance elements of the drainage will not prevent substantial erosion; they will simply provide more soils to be eroded. If hardscape is imposed on the drainage, substantial erosion may be expected at one or more sites where the energy is reflected, much as the creation of the jetty at Pillar Point has caused an undisputed change in the rates of erosion and deposition on the bluffs and beaches in our area.

The loss of sediment at upstream locations and buildup of sediment at downstream locations could create instabilities, and aggravate erosion.

7. Hazards and Hazardous Materials

"Would the project:

(d) Be located on a site which is included on a list of hazardous materials lists compiled pursuant to Government Code Section 65962.5?

Is answered "No impact." Yet a project on the banks of Pilarcitos Creek just upstream of the Caltrans mitigation pond could be on Class 1, Class 2 and Class 3 soils that are part of an old landfill, a portion of

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E.83

PDP-19-13 IS/MND comments to C. Hamilton, September 9, 2013

(cont)

E.84

F.83

Page 35

which remain on the Scopesi property.⁵⁸ Please condition any project with planning based on a list of such locations near drainages, and develop plans to mitigate the risk of adverse impacts if projects are necessary at these sites, or if necessary projects could be reasonably anticipated to create scour at these sites.

(h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?"

is answered "No Impact." Most of the native vegetation in our area is well-adapted to fire, and the risk to people and structures of wildland fire even adjacent to natively-vegetated drainages is modest. In drainages that are extensively infested with the invasive exotic Cape ivy, however the risk may higher because the Cape ivy burns hotter than native vegetation.⁵⁹ Under the current mitigations, the project may include cutting vegetation on banks – indeed, removing the banks, and is not required to remove cuttings of Cape ivy from the riparian corridor. Because Cape ivy roots more quickly than native plants, the project has the effect of intensifying infestations of Cape ivy, thereby may increase risks associated with wildland fires. To mitigate this risk, please impose an additional mitigation requiring the cuttings of Cape ivy and other invasive exotics to be removed from the project site using appropriate protocols such as double-bagging, and disposed of at an appropriate off-site facility.

8. Hydrology and Water Quality

Would the project:

(f) Otherwise substantially degrade water quality?

Some risks of degrading water quality were discussed in conjunction with the sedimentation and turbidity observed in Pilarcitos Creek shortly after the 2009 Kehoe Cleaning project which involved activities that were well within the actions proposed in the draft IS/MND.⁶⁰ Toxic materials could enter the water in conjunction with the above-described landfill adjacent to Pilarcitos Creek containing hazard materials. Based on these facts, the correct answer for this item is "potentially significant."

These checklist concerns should not be dismissed without an answer based on the soils and hydraulic analysis of evidence, starting with the insight gained on the Kehoe Cleaning Project.

(i) Expose people or structures to significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?

The projects goal is to expedite the flow of water from upstream areas to downstream areas, notwithstanding the fact that our basin (in water drainage terms) as become developed, and making more surfaces impermeable.

E.86

⁵⁸ Coastal Development Permit CDP-01-96 to allow remediation of old landfill and restoration of riparian vegetation, Planning Commission staff report, May 23, 1996, page 1 and Exhibit A.

⁵⁹ Mark Jennings, deposition by City of Half Moon Bay, August 1, 2011.

⁶⁰ San Mateo County Resource Conservation District, op. cit., Appendix A, page 25.

PDP-19-13 IS/MND comments to C. Hamilton, September 9, 2013

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Peak discharges of storm flow are usually increased when a basin become urbanized. Not only does the infiltration of rainfall decrease, but lag time or the time response of runoff to precipitation is usually decreased, as increasingly large percentages of the basin are made impervious and as drainage channels are lined, paved, or replaced by pipe. The net result is usually a greater concentration of storm runoff in a channel and greater peak flows. In short, rapid drainage may cause upland properties to experience a 10-year storm event as a 5-year flood event, while the same rapid drainage may cause low-lying properties receiving those flows to experience the same 10-year storm as a 20-year flood event.

The argument that maintaining 40-year old channelized drainage designs in a basin of flasher storm flows will not expose (downstream) people or structures to significant risk from flooding does not wash. A more careful analysis (and likely better design objective then a return to the 70's) is needed before this question may be answered in any way except "potentially significant."

9. Land Use

Would the project:

(b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environment effect?

The immediately previous comment about Part 8.i) of the CEQA checklist concerning exposure of people or structures to flood risks underscores the problem of a lack for evidence to support a finding that the project complies with coastal hazard policies. More specifically, there is no evidence to back up the checklist discussion claims of consistency with.

Coastal Act Policy 30253

New development shall: (1) minimize risks to life and property in areas of high geologic, flood and fire hazard; (2) assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter the natural landforms along bluffs and cliffs.

and Coastal Act Policy 30236

Channelizations, dams, or other substantial alterations of rivers and streams shall incorporate the best mitigation measures feasible, and be limited to (1) necessary water supply projects, (2) flood control projects where no other method for protecting existing structures in the flood plain is feasible and where such protection is necessary for public safety or to protect existing development, or (3) development where the primary function is the improvement of fish and wildlife babitats.

In addition, Chapter 4 of the LCP motivates policies to specifically address surface drainage and local flooding:

Extensive runoff from the coastal hills results in drainage problems where natural contours, swailes and gullies, or channelized areas are unable to handle runoff concentration and protect existing developed areas (e.g., Grandview and Newport Terrace subdivisions). The need for improved drainage represents the opportunity to establish; (1) planning measures which regulate the pattern and

(cont)

E.86

E.87

E.89

E.90

	PDP-19-13 IS/MND comments to C. Hamilton, September 9, 2013	Page 37
E.90 (cont)	location of new development, and (2) development practices which promote on-site surface runoff.	infiltration of
	which motivates LCP/LUP Policy 4-8	
	No new permitted development shall cause or contribute to flood hazards	
	and LCP/LUP Policy 4-9	
	All development shall be designed and constructed to prevent increases in runoff the natural drainage courses. Flows from graded areas shall be kept to an absolute minin exceeding the normal rate of erosion and runoff from that of the undeveloped land. So outfalls, gutters, and conduit discharge shall be dissipated.	at would erode num, not Storm water
	The stated goal of draft IS/MND is to prevent flooding and erosion, of course. But when to support the argument the best way to manage our flood and erosion risks is to maintai capacity that was designed for a much less urbanized 1970s Half Moon Bay upland, and from improved understandings our water management for many purposes other than stor conveyance?	e is the reasoning in a channelized does not benefit rmwater
E.91	This is in addition the long list of incompatibilities with the LCP/LUP's sensitive coastal in Chapter 3, and the corresponding in Chapters 18.20, 18.37 and 18.38 of the zoning or were the subject of extensive comment in section 4(e) of the CEQA checklist.	resource policies dinance, which
	LCP/LUP Policy 1-2 requires the policy which is the most protective of coastal resources precedence when policies overlap, and LCP/LUP Policy 1-4 requires that development n standards set forth in all applicable Land Use Plan policies. Similarly, Section 18.01.020 Code prohibits land uses and structures that do not conform with the rest of Title 18.	s to take neets the of the Municipal
	These clear conflicts with LCP/LUP and related zoning ordinance policies force the answ checklist 9(b) to "potentially significiant."	ver to CEQA
	17. Mandatory Findings of Significance	
	The preceding pages reflect a concern based on substantial evidence that the project, whi benefits, could or would impose significant environmental impacts, including degradation of an endangered species, and potentially causing substantial adverse impacts on human l both criteria for mandatory findings of significance. The checklist should be adjusted to r realities. The open questions concerning Greenhouse Gases might be addressed, but this l the potentially significant impacts in Biological Resources, Geology and Soils, Hazards, J Water Quality, Land Use and Planning that are individually and cumulatively indisputabl to address without substantial revisions to the project.	le having real n of the habitat beings. These are eflect these etter documents Hydrology and e and impossible
	A negative declaration may only be prepared when no substantial evidence exists, in light record, that the project may have a significant environmental effect. (PRC 21080(c), Guid A mitigated negative declaration may not be used if any substantial evidence indicates the with mitigations may still have a significant effect (PRC 21064.5, Guidelines 15070). If, a the initial study, the lead agency determines that there is substantial evidence that any asp project, either individually or cumulatively, may cause a significant effect on the environment of the environment of the environment of the environment of the environment of the environment of the environment of the environment of the environment of the environment of the envi	t of the whole lelines 15070). at the project after preparing ect of the nent, regardless
		A-2-HMB-14-000 Exhibit

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E.92 (cont) of whether the overall effect of the project is adverse or beneficial, it must either prepare an EIR, use a previously prepared EIR that adequately analyzes the project at hand, or use one of CEQA's allowable tiering methods to determine which of the project's effects have been adequately examined in an earlier EIR or negative declaration. (PRC 21080(d), 21082.2(d); Guidelines 15063(b)(1)).

The substantial evidence of potentially significant impacts more than meets the very low threshold for the requirement of EIR preparation established by the fair argument standard, which states that if there is conflicting evidence on the record regarding the potential for significant effects, then the Lead Agency is still required to prepare an EIR (Guidelines 15064).

E.93

STATE OF CALIFORNIA THE RESOURCE: JENCY DEPARTMENT OF FISH AND GAME CENTRAL COAST REGION (707) 944-5520 Mailing address: POST OFFICE BOX 47 YOUNTVILLE, CALIFORNIA 94596 Strivet address: 7320 SILVERADO TRAIL NAPA, CALIFORNIA 94556



March 11, 2004

Notification Number: R3-1600-2003-5156-3

Peul T. Nagencast City of Half Moon Bay Public Works Department 501 Main Street Half Moon Bay, CA 94019

Dear Mr. Nagencast:

Results of a Lake or Streambed Alteration Agreement Notification Review

The Department of Fish and Game (DF(f) has received your signed project description for a Streambed Alteration Agreement, and has field reviewed the list of sites you are proposing for routine maintenance. The possibility of substantial impacts from this project as described for the following sites is unlikely under Section 1600 *et seq.* of the Fish and Game Code.

Poplar Street - Main Street to Fourth Avenue Sccond Avenue - Granelli Avenue to end Kelly Avenue - Ocean Avenue to Balboa Boulevard Belleville Boulevard - Ralston Avenue to St. James Avenue Santa Rosa Avenue - Alameda Avenue to end Guerrero Avenue - Alameda Avenue to end San Pablo Avenue - Alameda Avenue to end Pullman Avenue - Roosevelt Boulevard to one block south of Washington Boulevard Alameda Avenue - Roosevelt Boulevard to one block south of Washington Boulevard Naples Avenue - Roosevelt Boulevard to one block south of Washington Boulevard

All of the remaining sites in the original notification are jurisdictional and will be included in the streambed alteration agreement. Mr. Glushkoff, Environmental Scientist, will also review the additional sites you informed the Department about on December 22, 2003, to determine if they are jurisdictional.

RETAIN A COPY OF THIS LETTER AND YOUR ATTACHED NOTIFICATION PACKAGE AT THE WORK SITE AND PROVIDE TO DEPARTMENT REPRESENTATIVE IF REQUESTED.

If you have any questions please contact Serge Glushkoff, Environmental Scientist, at SGlushkoff@dfg.ca.gov or (707) 944-5597.

Sincerely,

Robert W. Floerke Regional Manager Central Coast Region

Enclosure: Notification Number 1600-2003-5156-3

cc: Dav : Johnston Warden Kavanagh

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ATTACHMENT B (See attached Map 1: Routine maintenance activity sites)

- 1. Redondo Beach Road Railroad Avo, to Florence Ave.
- 2. Wavecrest Road Highway One to Smith Field
- 3. Magnolia Street Third Ave. to First Ave., Main Street to Arleen Way
- 4. Poplar Street -- First Ave. to Poplar Beach
- 5. Railroad Ave. Spruce Street to Poplar Ave.

E.93 (cont)

> Page 11 of 11 Date prepared: September 9, 2006

Operator's initials

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E.93 (cont) CITY OF HALF MGON BAY

City Hall, 501 Main Street Half Moon Bay, CA 94019

Reeved 10-28-04

October 27, 2004

Serge Glushkoff Streambed Alteration Program California Department of Fish and Game P.O. Box 47 Yountville, CA 94599 2/10/5: SPOKE TO PAUL N., REFIDE MAN'T FIT TO PAUL -POPULU SBARDATELY BILK TO FILE

Subject: Kehoe Ditch Fish and Game Routine Maintenance Agreements

Dear Serge:

Enclosed is a request to include Kehoe Ditch as part of the Routine Maintenance Agreement Number 1600-2003-5156-3. This ditch has been visited by Mr. Dave Johnson of your office. It is located south of Kehoe Avenue and between Highway 1 and Pilarcitos Creek in the City of Half Moon Bay. Enclosed is a location map.

Kehoe Ditch is part of the application for a City Coastal Development Permit requested by me for the water conveyance facilities that were included as part of the aforementioned Fish & Game Routine Maintenance Agreement.

If you have any questions, please contact me at (650) 726-8265.

Sincerely. Paul T. Nagendas

Public Works Director/City Engineer

Enc: Kehoe Ditch Location Map
Major General Anthony L. Jackson, USMC (Ret), Director

Edmund G. Brown Jr., Governor



State of California • Natural Resources Agency

DEPARTMENT OF PARKS AND RECREATION Santa Cruz District San Mateo Coast Sector 95 Kelly Avenue, Half Moon Bay, CA 94019 (650) 726-8819

September 30, 2013

Carol Hamilton Senior Planner City of Half Moon Bay 501 Main Street Half Moon Bay, CA 94019

Subject: File No. PDP-19-13 Routine Ditch Maintenance Half Moon Bay

Dear Ms. Hamilton,

Thank you for the opportunity to review the draft Mitigated Negative Declaration and Initial Study for the proposed Routine Ditch Maintenance project throughout Half Moon Bay. We realize that the public comment period for the draft documents has concluded. We would like to submit the following comments for you to consider as you develop the proposed project.

The following identified drainages are within State Park property:

- A-1: Frenchman's Creek
- A-3: Pilarcitos Creek
- B-1: Roosevelt Creek
- B-2: Kehoe Ditch Drainage

For each of these drainages, the project limits extend to the Coastal Trail (for A-3 Pilarcitos Creek, the limit is described as the western intersection with the Coastal Trail). As the City develops specific project plans, please contact our office so that we can prepare a formal agreement for any work to be performed within State Park Property.

The Initial Study states that the proposed project will have no impact on existing drainage patterns, and would not increase the rate or amount of surface runoff, or exceed the capacity of existing storm water drainage systems (Hydrology and Water Quality questions 8c, 8d, and 8e). We would appreciate receiving engineering information that demonstrates that the proposed project would not have impacts on the lower downstream channels, including the portions of the drainage facilities on State Park property.

If you would like any additional information, please contact me at (650) 726-8819.

Sincerely,

Paul Keel State Park Superintendent

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F.1

PLANNING DEPT

OCT 2 8 2013



United States Department of the Interior

FISH AND WILDLIFE SERVICE Sacramento Fish and Wildlife Office 2800 Cottage Way, Room W-2605 Sacramento, California 95825-1846 U.S. FISH & WILDLIFE SERVICE

LETTER G

In Reply Refer To: 08ESMF00-2013-TA-0642

OCT 2 4 2013

Bruce Ambo Planning Manager 501 Main Street Half Moon Bay, California 94019

Subject: Comments on Biological Resource Evaluation for the Citywide Drainage Ditch Maintenance Project, Half Moon Bay, San Mateo County, California

Dear Mr. Ambo,

G.1

This correspondence is in response to your July 3, 2013, memo requesting comments from the U.S. Fish and Wildlife Service (Service) on the July 3, 2013, *Biological Resource Evaluation for the Citywide Drainage Ditch Maintenance Project, Half Mon Bay, San Mateo County, California* (Creek Maintenance Plan). Based on our review of the document, we are concerned about the the potential effects of the proposed Citywide Drainage Ditch Maintenance Project (project) on the federally threatened California red-legged frog (*Rana draytonii*) and the endangered San Francisco garter snake (*Thamnophis sirtalis tetrataenia*). This letter is issued under the authority of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.)(Act).

The purpose of the project is described within the Creek Maintenance Plan as: "to restore drainage features to their originally constructed conditions to maintain water transport capacity; maintain the integrity of existing flood and sediment control structures; minimize potentially hazardous situations such as flooding, bank, culvert, and roadway erosion. and improve visibility of drainage features." Maintenance activities used to achieve the project goal include sediment removal, vegetation trimming and removal, bank protection repair, culvert replacement, and removal of non-native vegetation. Equipment required for this work includes backhoes, dump trucks, mowers, power hand tools (chainsaws and weed trimmers), and manual hand tools.

The Service is concerned that there is a likelihood for presence of the California redlegged frog and San Francisco garter snake within the footprint of the Creek Maintenance Plan:

Mr. Bruce Ambo

G.1

(cont)

- Both the California red-legged frog and San Francisco garter snake are known to occur within the project area and within dispersal distance of several drainages in the project area.
- Suitable habitat for both species is present throughout Half Moon Bay and surrounding properties.
- There are documented breeding ponds for the California red-legged frog within Half Moon Bay and surrounding properties.
- There is a lack of survey data for much of the suitable habitat for both species within the project footprint and surrounding areas.

Given the above facts, it is reasonable for the Service to consider that most drainages identified in the Creek Maintenance Plan are occupied by both the California red-legged frog and San Francisco garter snake.

Due to the likelihood of presence for the California red-legged frog, the San Francisco garter snake, and suitable habitat for both species, the Service has determined it is likely that implementation of the Creek Maintenance Plan will result in take of juvenile and adults of both species, in the form of death, harm, and/or harassment.

Section 9 of the Act prohibits the take of any federally listed animal species by any person subject to the jurisdiction of the United States. Within the Act, take is defined as "...to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." Harm has been further defined to include habitat destruction when it injures or kills a listed species by interfering with essential behavioral patterns, such as breeding, foraging, or resting. To harass has been defined as "to intentionally or negligently, through act or omission, create the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavior patterns such as breeding, feeding, and sheltering." Thus, not only are the California redlegged frog and San Francisco garter snake protected from such activities as collecting and hunting, but also from actions that cause their death or injury through damage or destruction of their habitat. The term "person" is defined as "...an individual, corporation, partnership, trust, association, or any other private entity; or any officer, employee, agent, department, or instrumentality of the federal government, of any state, municipality, or political subdivision of a state, or any other entity subject to the jurisdiction of the United States."

Take incidental to an otherwise lawful activity may be authorized by one of two procedures. If a federal agency is involved with the permitting, funding, or carrying out of the project and a listed species is going to be adversely affected, then initiation of formal consultation between that agency and the Service pursuant to section 7 of the Act is required. Such consultation could result in a biological opinion addressing the anticipated effects of the project to the listed species and may authorize a limited level of incidental take. If a federal agency is not involved in the project, and federally listed species may be taken as part of the project, then an incidental take permit pursuant to section 10(a)(1)(B) of the Act should be obtained. The Service may issue such a permit

A-2-HMB-14-0004 Exhibit 2 Page 456 of 523 Mr. Bruce Ambo

G.1 (cont) 3

upon completion of a satisfactory conservation plan for the listed species that would be taken by the project.

The Service recommends that the City enter into discussions with the Service, the U.S. Army Corps of Engineers, the California Department of Fish and Wildlife, and the California Coastal Commission to discuss ways to implement the Creek Maintenance Plan without violation of the Act, the California Endangered Species Act, and other Federal and State regulations.

The Service looks forward to assisting the City of Half Moon Bay with achieving its project goal in a manner compliant with the Act. If you have any questions regarding this correspondence, please contact Dan Cordova (<u>Dan Cordova@fws.gov</u>) or Coast Bay Forest Foothills Division Chief, Ryan Olah (<u>Ryan Olah@fws.gov</u>) at (916) 414-6600.

Sincerely,

Mayo Olt

Eric Tattersall Deputy Assistant Field Supervisor

cc:

Suzanne Deleon, California Department of Fish and Wildlife Cameron Johnson, U.S. Army Corps of Engineers Karen Geisler, California Coastal Commission

> A-2-HMB-14-0004 Exhibit 2 Page 457 of 523



DEPARTMENT OF THE ARMY SAN FRANCISCO DISTRICT, U.S. ARMY CORPS OF ENGINEERS 1455 MARKET STREET SAN FRANCISCO, CALIFORNIA 94103-1398

NOV 082013

LETTER H PLANNING DEPT NOV 1 3 2013 RECEIVED

REPLY TO ATTENTION OF

Regulatory Division

SUBJECT: File Number 2013-00279-S

Bruce Ambo, Planning Manager Carol Hamilton, Senior Planner City of Half Moon Bay Planning Department 501 Main Street Half Moon Bay, California 94109

Dear Mr. Ambo and Ms. Hamilton:

This letter is written in response to your request for comments on the *Biological Resource Evaluation for the Citywide Drainage Ditch Maintenance Project, City of Half Moon Bay, CA* (BRA) and the *Draft Mitigated Negative Declaration* (MND) for the Citywide Drainage Ditch Maintenance Project (Project) as described in the notices from the City of Half Moon Bay dated July 3, 2013 and September 18, 2013, and received by our office on October 7, 2013. Your project is located in 22 drainage features in the City of Half Moon Bay in San Mateo County, California. Since this activity may involve sediment removal, bank protection, and other water related activities and, therefore, impact a water of the U.S., the Corps of Engineers will need to review those portions of your project.

All proposed work and/or structures extending bayward or seaward of the line on shore reached by: (1) mean high water (MHW) in tidal waters, or (2) ordinary high water in non-tidal waters designated as navigable waters of the United States, must be authorized by the Corps of Engineers pursuant to Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. Section 403). Additionally, all work and structures proposed in unfilled portions of the interior of diked areas below former MHW must be authorized under Section 10 of the same statute.

All proposed discharges of dredged or fill material into waters of the United States must be authorized by the Corps of Engineers (Corps) pursuant to Section 404 of the Clean Water Act (CWA) (33 U.S.C. Section 1344). Waters of the United States generally include tidal waters, lakes, ponds, rivers, streams (including intermittent streams), and wetlands.

Your proposed work appears to be within our jurisdiction and a permit may be required for your project. Application for Corps authorization should be made to this office using the application form in the enclosed pamphlet. To avoid delays it is essential that you enter the File Number at the top of this letter into Item No. 1 of the application. The application must include

H-1



plans showing the location, extent and character of the proposed activity, prepared in accordance with the requirements contained in this pamphlet. You should note, in planning your project, that upon receipt of a properly completed application and plans, it may be necessary for the Corps to advertise the proposed work by issuing a Public Notice for a period of 30 days.

The Project as described in the BRA and MND includes "routine maintenance activities," which are generally defined as periodic activities necessary to maintain the water transport capacity of streams, channels and flood control channels, and the structural and functioning integrity of existing flood control and sediment detention structures on or affecting streams. Routine maintenance activities include sediment, silt, trash and debris removal to clear channel obstructions, vegetation management, repair of existing bank protection, and removal of non-native vegetation.

Because the Project involves repeat activities that are substantially similar in nature, development of a Regional General Permit may be determined by the Corps to be appropriate. A Regional General Permit is a Department of the Army authorization that is issued on a regional basis for a category or categories of activities when those activities are substantially similar in nature and cause only minimal individual and cumulative environmental impacts. Your completed application will enable us to determine the most appropriate permitting mechanism for the Project.

1-1

Due to the large and increasing demand for project jurisdiction determinations and permit evaluations, the San Francisco District must quickly screen applications for accurate information to aid us in making decisions about jurisdiction and permitting. If such information is not included, applicants can anticipate delays.

A jurisdictional survey should be illustrated on a scaled topographic map or site plan. When this document is forwarded with the application, the Corps staff will validate and authenticate the limits of Corps jurisdiction. While it is not necessary to confirm all boundary points, the Corps will verify the jurisdictional boundary along one or more transects and may visit random intermediate points. If wetlands comprise a portion of the Corps jurisdiction on your property, the 1987 Corps Wetland Delineation Manual with amendments should be used to identify the limits of our jurisdiction. Contact the Corps representative identified below for current guidance regarding wetland jurisdictional delineation requirements. (The Corps Wetland Delination Manual - Technical Report Y-87-1, Document #ADA 176 734, can be obtained from NTIS, Attn: Order Dept., Springfield, VA 22161. The cost is \$26.00 plus \$3.00 shipping and handling. For more information call (703) 487-4650).

Corps staff will do the jurisdictional mapping, if you so choose. But due to the current project backlog, it may take several months to complete the necessary field work. Many consultants now offer expertise in Corps jurisdictional and permitting requirements, including alternative analysis. It is generally prudent to involve such expertise when developing plans for activities that may require a Corps permit. It is also prudent to check the consultant's references and demonstrated expertise.



The Corps also suggests that you contact the appropriate Regional Water Quality Control Board office to ensure they review your project relative to their permitting requirements for activities that may impact aquatic resources.

Should you have any questions regarding this matter, please call Lisa Mangione of our Regulatory Division at (415) 503-6763. Please address all correspondence to the Regulatory Division and refer to the File Number at the head of this letter.

Sincerely,

Katerine Jalacet Hane M. Hicks, Chief

Regulatory Division

Enclosures

Copy Furnished:

CA RWQCB, Oakland, CA

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BUSINESS OF THE PLANNING COMMISSION OF THE CITY OF HALF MOON BAY

STAFF REPORT

For the meeting of:	November 26, 2013
TO:	Planning Commission
FROM:	Carol Hamilton, Senior Planner
TITLE:	PDP-019-13 - Coastal Development Permit for the Citywide Drainage Ditch Maintenance Project

RECOMMENDATION

Find the Mitigated Negative Declaration and Initial Study complete and in conformance with the California Environmental Quality Act, and approve PDP-019-13, an application for a Coastal Development Permit for the Citywide Drainage Ditch Maintenance Project, based upon the Findings and Evidence contained in Exhibit A of the Draft Resolution, and subject to the Conditions of Approval contained in Exhibit B.

PROJECT SUMMARY

- Applicant/Owner: City of Half Moon Bay Department of Public Works 501 Main Street Half Moon Bay, CA 94019
- Requested Permits: Coastal Development Permit
- LCP and Zoning: Various
- CEQA Status: Final Draft Mitigated Negative Declaration and Initial Study
- Right of Appeal: Any aggrieved person may appeal the decision of the Planning Commission to the City Council within ten (10) working days of the date of the decision. The site is located within the Coastal Appeal Zone; therefore the City's final decision may be appealed to the California Coastal Commission.

BACKGROUND

City maintenance of drainage features in Half Moon Bay has not occurred since 2009. A fiveyear Lake and Streambed Alteration Agreement (SAA) approved by the California Department of Fish and Wildlife (CDFW) in 2004 for routine maintenance of a limited number of drainages expired in 2009. Several years without regular maintenance, as well as runoff from adjacent agricultural and urbanized land uses, has contributed to sedimentation of the project locations, overgrown vegetation, and the accumulation of litter and debris deposits that has furthered the general deterioration of their structural and functioning integrity. The City is now pursuing a new Lake and Streambed Alteration Agreement concurrently with this Coastal Development Permit to allow resumption of routine maintenance at 15 separate drainage locations citywide. A copy of the Draft Lake and Streambed Alteration Agreement prepared by CDFW is provided in Appendix B of the Final Draft Mitigated Negative Declaration (MND)/Initial Study (IS).

The original SAA application proposed routine maintenance at 17 project locations and emergency clearing at an additional 5 project locations. A complete list of the project locations, as revised, is contained Table 1 below. Following public circulation of the Draft Negative Declaration, the City revised the project to eliminate two of the project locations where routine maintenance was previously proposed (B-7, Magnolia Drainage and B-8, Seymour Detention Basin) and all of the "A" project locations where emergency clearing and cleaning was proposed. Any future routine maintenance activities at B-7 or B-8 will be addressed through a separate permit process. Emergency activities may still be required, but will be completed separately from this project, in full accordance with Section 18.20.040 of the Half Moon Bay Municipal Code, as well as other applicable regulations. The proposed revisions to the SAA are included in Appendix B of the Final Draft MND/IS.

The City is actively pursuing other regulatory approvals concurrent with the Coastal Development Permit process. Project activities will be reviewed prior to commencement to determine if they would be regulated by the U.S. Army Corps of Engineers. The project will not be implemented without prior compliance with Sections 404 and 401 of the Clean Water Act and all other applicable requirements.

Site and Surrounding Property

The 15 drainage facilities proposed for maintenance are located in the public rights of way in Half Moon Bay. Figure 1 indicates the general location of each of the project locations. Table 1 provides more specific information regarding each project location and a brief description of the drainage feature. Most of the project locations are narrow, linear, man-made, or man-altered drainage features, ten of which are located adjacent to a paved roadway. With the exception of Roosevelt Drainage (B-1) and Kehoe Ditch Drainage (B-2), vegetation within the project locations is dominated by herbaceous or shrub species with little riparian vegetation. Most of the drainages are bordered by residential development; however, Miramontes Drainage (B-4), Central Drainage (B-5), Myrtle Street Bubble-Up (B-6), Redondo Beach Road (B-10), and Wavecrest Road (C-6) are surrounded by open space or predominately non-residential uses.

Project Location	Location Description	Drainage Feature Description	
B-1 Roosevelt Drainage	Alameda Ave. to Coastside Trail	Natural perennial creek	
B-2 Kehoe Ditch	Hwy. 1 to Coastside Trail	Natural/modified intermittent	
Drainage		drainage	
B-3 Kelly Drainage	S/S Kelly Ave., Railroad Ave. ROW to	Man-made ephemeral swale	
	Coastside Trail		
B-4 Miramontes	Railroad Avenue to Coastside Trail	Man-made ephemeral ditch	
Drainage			
B-5 Central Drainage	Railroad Avenue to Coastside Trail	Man-made ephemeral ditch	
B-6 Myrtle St. Bubble-	Railroad Avenue to Coastside Trail	Man-made ephemeral ditch	
Up			
B-9 Seymour Drainage	S/S Seymour, Hwy. 1 to Coastside Trail	Man-made ephemeral	
		ditch/swale	
B-10 Redondo Beach Rd.	Both/S Redondo Beach Rd., Railroad Ave.	Series of man-made ephemeral	
	ROW to Coastside Trail	ditches/swales/depressions	
C-1 Railroad Ave.	W/S Railroad Ave., Spruce to Poplar Sts.	Man-made ephemeral swale	
C-2 Poplar St.	Both/S Poplar St., Railroad Ave. to	Man-made intermittent ditch	
	Coastside Trail		
C-3 Railroad Ave.	W/S Railroad Ave, Metzger to Grove Sts.	Man-made ephemeral swale	
C-4 Grove St.	S/S Grove St., west of First St. to Railroad	Man-made ephemeral swale	
	Ave.		
C-5 Magnolia Street	Hwy. 1 to First Ave.	Man-made ephemeral	
		ditch/swale	
C-6 Wavecrest Rd.	N/S Wavecrest Rd., Hwy. 1 to Smith Field	Man-made intermittent ditch	
C-7 Redondo Beach Rd.	Both/S Redondo Beach Rd., Hwy 1 to the	Series of man-made ephemeral	
	Railroad Ave. ROW	ditches/swales/depressions	

Table 1. Project Locations

Project Description

As described in the Draft Lake and Streambed Alteration Agreement (Appendix B of the MND/IS) the City-wide Drainage Ditch Maintenance Project proposes maintenance activities at the 15 project locations. The proposed maintenance activities include the following:

- a) <u>Removal of trash and debris (not including silt or sediment) from the drainage features</u> as well as from around pilings, culverts, and structure footings (i.e., bridges, walkways, <u>other structural crossings</u>). Removal of trash and vegetation from pilings, piers, and culverts will be limited to material that has flowed down the drainage feature and piled up or been trapped in front of the structure and would impede flow leading to potential flooding upstream. All trash and debris removal activities will be completed by hand or with hand tools.
- b) <u>Control of weeds, grasses, and ruderal vegetation on channel banks and access roads</u>. Where the Project locations are adjacent to an existing road, vegetation will be mowed

using an articulating mower. Project locations not adjacent to existing roads vegetation control will be performed using hand tools. Mowing will be limited to the channel, channel banks and levees, and the area between the channel and adjacent roadway at B-3, B-9, B-10, C-1, C-2, C-3, C-4, C-5, C-6 and C-7. Small tree seedling/saplings may be cut incidental to these vegetation control activities. Goat grazing may be used in suitable locations for control of weeds, grasses and ruderal vegetation in place of hand tools or mowing.

- c) <u>Removal of herbaceous and emergent wetland plants from the channel that are</u> restricting capacity and causing erosion or flooding.
- d) <u>Removal of accumulated debris and sediment in man-made drainage features down to the originally constructed flow line</u>. The flow line will be determined by a straight line elevation between the bottoms of the nearest upstream and downstream culverts. Where the original flow line is unclear, removal will be limited to sediment that can be clearly identified as accumulated. Where the project locations are adjacent to an existing road, debris and sediment will be removed using a backhoe, loader, or excavator. For Project locations not adjacent to existing roads, debris and sediment removal will be performed using hand tools to the maximum extent practicable. Removal of woody or herbaceous plants, fallen trees, or trunks and limbs lodged into the bed or bank resulting in non-emergency stream flow restrictions will be completed with equipment staged landward of the top of bank typically using a winch and cable.
- e) <u>Removal of trees and shrubs less than 4 inches in diameter (measured at 48 inches above grade) below the ordinary high water mark (OHWM) that are restricting flow capacity and causing erosion or flooding</u>. For purposes of this project, tree removal is defined as cutting the tree flush with surrounding grade and removing the above-grade portion of the tree, leaving below-ground roots in place.
- f) <u>In-kind replacement of culverts and other storm water management structures that are</u> <u>no longer functional</u>. Replacement will be limited to the same material and footprint as the existing structure.
- g) <u>Bank stabilization/bank repair of locations that are no longer functional and create the</u> <u>potential for flooding or erosion</u>. Bank stabilization/repair shall be completed in-kind with the same material and same footprint as the existing bank. Exceptions to in-kind replacement will be where proposed stabilization/repair would enhance the quality of the habitat while providing the same level of erosion and flood protection.
- h) <u>Trimming and removal of the minimum amount of vegetation necessary to allow</u> <u>suitable access to perform activities required to restore normal flow levels</u>.



If any species subject to the Endangered Species Act is identified within a Project location during pre-work surveys or during maintenance activities, work within that project location will be postponed/cease until such time as a program is developed to operate within the requirements of the Endangered Species Act.

Not all of the above activities will occur at every location. The Initial Study, transmitted to the Planning Commission under separate cover, provides a more detailed description of the maintenance activities anticipated at each project location. Vegetation management and debris and sediment removal will occur on a routine basis; in-kind culvert replacement or bank stabilization will occur as needed. Project implementation would involve a three-person crew conducting maintenance activities a maximum of 25 days per year using one truck, a small tractor (with backhoe and articulating mower) and chain saws and weed eaters.

ANALYSIS

The primary issues for this project are conformance with the Local Coastal Program, conformance with Title 18 of the Municipal Code (Zoning Ordinance), and conformance with the California Environmental Quality Act. These issues are discussed below.

Conformance with the Zoning Code and Local Coastal Program

Biological Resources

Chapter 18.38 of the Zoning Code provides direction for the preparation of biology reports and Initial Studies. A Biological Resource Evaluation was prepared for the project by SWCA Environmental Consultants in conformance with the requirements of Zoning Code Section 18.38.035. That report, Appendix A of the Initial Study, was circulated for a 45-day review to the applicable resources agencies, including the California Department of Fish and Wildlife, the U.S. Fish and Wildlife Service, the U.S. Army Corps of Engineers, and the California Coastal Commission. An Initial Study was prepared for the project which evaluated the potential impacts of the project on coastal resource areas and sensitive habitat, identified mitigation to avoid significant impacts on coastal resource areas and sensitive habitats, and determined that the proposed maintenance program conforms to the Local Coastal Program and the requirements of Zoning Code Chapter 18.38.

Both the Zoning Code (Chapter 18.38) and the Local Coastal Program (LCP) (Chapter 3) provide permitted uses and performance standards for new uses and development in riparian corridors, wetlands and sensitive habitats, including habitats of rare and endangered species. The project proposes maintenance of existing storm water drainage facilities; as such, it does not introduce new uses that require a use conformance or alternatives analysis. The proposed maintenance project does meet the definition of "development"; however, unlike most development, the proposed activities seek to maintain the current and historic function of existing public facilities and thereby mitigate potential flooding impacts.

The project has been carefully designed to conform to the performance standards in Section 18.38.070 of the Zoning Code for development in riparian corridors, riparian buffer zones, wetlands and sensitive habitats, which standards mirror those of the LCP. Extensive mitigation identified in the Mitigated Negative Declaration (MND) and Initial Study (IS) and Avoidance and Minimization Measures (AMMs) specified in the Draft Lake and Streambed Alteration Agreement (SAA) provide for minimization of vegetation removal and maintenance of natural vegetation buffer areas; minimization of erosion or sedimentation during and after construction; inclusion of Best Management Practices to avoid water quality impacts; revegetation with native species where appropriate; avoidance of significant impacts on sensitive habitat areas or areas adjacent to sensitive habitat areas; avoidance of impacts on unique or endangered species; and avoidance of impacts on native and anadromous fish, all in conformance with the Zoning Code and LCP. Based on the SAA and mitigation included in the project, the MND/IS conclude that the project with implementation of the AMMs will not result in any significant environmental impact.

Visual Resources

Chapter 7 of the Local Coastal Program provides general policy language regarding the protection of ocean views and views along Highway 1 and access routes to the beach and streams. Chapter 18.37 of the Zoning Code provides more detailed guidance for development in regard to protection of visual resources, including Scenic Corridors (Highway 1 Corridor and Scenic Coastal Access Routes), Significant Plant Communities (riparian vegetation), and Planned Development Areas. Table 2 identifies the visual resources applicable to each project location.

		Highway One	Scenic Beach	Riparian	Planned
	Project Location	Corridor	Access Routes	Vegetation	Development
B-1	Roosevelt Drainage			Х	
B-2	Kehoe Ditch Drainage	Х		Х	
B-3	Kelly Drainage		Х		
B-4	Miramontes Drainage				
B-5	Central Drainage				Х
B-6	Myrtle Street Bubble-Up				Х
B-9	Seymour Drainage	Х			Х
B-10	Redondo Beach Road		Х		Х
C-1	Railroad Avenue				
C-2	Poplar Street				Х
C-3	Railroad Avenue				Х
C-4	Grove Avenue				
C-5	Magnolia Street	Х			
C-6	Wavecrest Road	Х			Х
C-7	Redondo Beach Road	Х	Х		Х

Table 2. Visual Resources

The Scenic Corridor Standards of Zoning Code Section 18.37.030 specify that removal of vegetation from existing beach access road rights-of-way is prohibited except as required for reasons of safety and that new development may not significantly obscure, detract from, or

negatively affect the quality of broad ocean views. The proposed maintenance of drainages along Kelly Avenue and Redondo Beach Road, which are designated Scenic Beach Access Routes, is required to prevent safety hazards associated with flooding and erosion of these roadways. Maintenance activities at most of the project locations that extend to the Highway 1 Corridor or which abut Scenic Beach Access Routes, do not involve tree removal, but are generally limited to mowing, removal of sediments, and trimming of adjacent trees or shrubs where growth extends into the drainage. The visual effects of this type of routine maintenance is localized and temporary, similar to the visual effect of mowing and trimming that occurs on a regular basis along the Coastside Trail and elsewhere in the City. At Kehoe Ditch Drainage, where maintenance activities will include both trimming and removal of trees or shrubs (less than 4 inches in diameter) that are blocking storm water flows or worker access to the channel, the visual effects are not expected to detract from or affect the quality of broad ocean views from Highway 1. The proposed trimming and removal of vegetation will not block ocean views, and the change in views associated with vegetation management at the Highway 1 end of the ditch is likely to be minimal in that existing vegetation is relatively sparse at this location.

The guidelines of Chapter 18.37 for preservation of Significant Plant Communities, including riparian vegetation, require preparation of a biology report, evaluation through the environmental review process, and implementation of the requirements of Chapter 18.38. As discussed in the Biology section of this report, these requirements have been addressed in the project design and environmental review process. The guidelines also indicate that development should be sited so as not to disturb or intrude upon riparian vegetation unless there is no feasible alternative, and that replacement vegetation should be required to mitigate any adverse effects of removal of riparian vegetation. The proposed trimming and removal of riparian vegetation at the Roosevelt and Kehoe Drainages will be limited to the minimum necessary to achieve the project objectives; however, there is no feasible alternative to the vegetation management proposed as part of the maintenance of these drainage locations. Riparian vegetation that is trimmed or removed (flush cut at existing grade) from within or adjacent to the channel will not be replanted; such vegetation will grow back and require additional maintenance at regular intervals. The Initial Study concludes that this vegetation management will not result in significant adverse impacts. The proposed project includes mitigation that provides for mulching and re-vegetation of areas that have been significantly disturbed due to foot traffic or other maintenance to avoid significant adverse impacts.

Provisions in Chapter 18.37 regarding protection of visual resources in Planned Development Areas focus on new structures and infrastructure. These provisions are not applicable to the maintenance activities proposed at project locations within the Planned Development Areas.

Based on the above analysis, staff concludes that the proposed project is consistent with the Local Coastal Program and the Zoning Code.

Conformance with the California Environmental Quality Act (CEQA)

An Initial Study (IS) and Draft Mitigated Negative Declaration (MND) were prepared for the project in conformance with the requirements of CEQA, and the Draft MND/IS were circulated to the State Clearinghouse and to the U.S Fish and Wildlife Service and the U.S. Army Corps of Engineers for a 30-day public review. Staff considered and responded to comments received on the Draft MND/IS from eight individuals and organizations. These responses and a Final Draft MND/Initial Study were provided to the Planning Commission under separate cover along with a Mitigation Monitoring Program and are available for review on the City's website at http://www.half-moon-

<u>bay.ca.us/index.php?option=com_content&view=article&id=99&Itemid=110</u>. After transmittal of the Final Draft MND/IS, staff corrected a typographical error in Table 1 of the Initial Study and Biological Resource Evaluation regarding the location of C-7, Redondo Beach Drainage. A corrected Table 1 has been included as Attachment 2 of this report.

COMMUNITY OUTREACH

A notice of the public hearing for this project was published in the San Mateo Times and was posted at the project locations citywide. The Draft MND/IS and Biological Resource Evaluation have been available for public review on the City's website since August 9, 2013. Staff has responded to comments on the Draft MND/IS from members of the public and has notified those who commented that responses are available for review on the City's website. Staff has been available to discuss the project with interested members of the public. Email communications regarding the project from a resident who lives adjacent to the Roosevelt Drainage are provided as Attachment 3.

CONCLUSION

Based on the above analysis, staff concludes that the proposed Citywide Drainage Ditch Maintenance Project conforms to the Local Coastal Program and the Zoning Code and is in conformance with the requirements of the California Environmental Quality Act (CEQA). Staff recommends certification of the Draft Negative Declaration as complete and in conformance with CEQA and has prepared recommended findings and conditions for approval of the project (Exhibits A and B of the proposed Resolution for Approval). The Planning Commission will need to determine if it concurs with the analyses set forth in the findings and whether the conditions are appropriate and adequate for approval.

ATTACHMENT 1:	Resolution of Approval with Findings (Exhibit A) and Conditions (Exhibit B)
ATTACHMENT 2:	Revised Table 1 of the Draft Mitigated Negative Declaration/Initial Study and
	the Biological Resource Evaluation
ATTACHMENT 3:	Emails from Mary Baker Taft, dated November 19 and 21, 201

ATTACHMENT 1 PLANNING COMMISSION RESOLUTION P-___-13 RESOLUTION FOR APPROVAL PDP-019-13

Coastal Development Permit for a City-Wide Drainage Ditch Maintenance Project to provide routine maintenance at fifteen drainage locations in Half Moon Bay.

WHEREAS, an application was submitted requesting approval a Coastal Development Permit for a City-Wide Drainage Ditch Maintenance Project to provide routine maintenance at fifteen drainage locations in Half Moon Bay; and

WHEREAS, the procedures for processing the application have been followed as required by law; and

WHEREAS, the Planning Commission conducted a duly noticed public hearing on November 26, 2013, at which time all those desiring to be heard on the matter were given an opportunity to be heard; and

WHEREAS, the Planning Commission considered all written and oral testimony presented for its consideration; and

WHEREAS, the Planning Commission has determined that the proposed Mitigated Negative Declaration and Initial Study are complete and in conformance with the California Environmental Quality Act; and

WHEREAS, the Planning Commission has made the required findings for approval of the project, set forth in Exhibit A to this resolution;

NOW, THEREFORE, BE IT RESOLVED that, based upon the Findings in Exhibit A and subject to the Conditions of Approval contained in Exhibit B, the Planning Commission adopts the Mitigated Negative Declaration and Mitigation Monitoring Program for application PDP-019-13;

BE IT FURTHER RESOLVED that, based upon the Findings in Exhibit A and subject to the Conditions of Approval contained in Exhibit B, the Planning Commission approves application PDP-019-13.

PASSED AND ADOPTED by the City of Half Moon Bay Planning Commission at a duly noticed public hearing held on November 26, 2013, by the following vote:

AYES, NOES, ABSENT, ABSTAIN,

APPROVED:

ATTEST:

Phil Rosenblatt, Chair

Bruce Ambo, Planning Director

A-2-HMB-14-0004 Exhibit 2 Page 470 of 523

EXHIBIT A FINDINGS AND EVIDENCE PDP-019-13

Coastal Development Permit for a City-Wide Drainage Ditch Maintenance Project to provide routine maintenance at fifteen drainage locations in Half Moon Bay.

The required Coastal Development Permit for this project may be approved or conditionally approved only after the approving authority has made the following findings.

1. Local Coastal Program – The development as proposed or as modified by conditions, conforms to the Local Coastal Program.

Planning Commission Evidence: A Biological Resource Evaluation was prepared for the project by SWCA Environmental Consultants. That report, Appendix A of the Initial Study, was circulated for a 45-day review to the applicable resources agencies, including the California Department of Fish and Wildlife, the U.S. Fish and Wildlife Service, the U.S. Army Corps of Engineers, and the California Coastal Commission. An Initial Study was prepared for the project which evaluated the potential impacts of the project on coastal resource areas and sensitive habitat, identified mitigation to avoid significant impacts on coastal resource areas and sensitive habitats, and determined that the proposed maintenance program conforms to the Local Coastal Program.

The Local Coastal Program (LCP) (Chapter 3) provides permitted uses and performance standards for new uses and development in riparian corridors, wetlands and sensitive habitats, including habitats of rare and endangered species. The project proposes maintenance of existing storm water drainage facilities; as such, it does not introduce new uses that require a use conformance or alternatives analysis. The proposed maintenance project does meet the definition of "development;" however, unlike most development, the proposed activities seek to maintain the current and historic function of existing public facilities and thereby mitigate potential flooding impacts.

The proposed maintenance project has been carefully designed to conform to the performance standards for development in riparian corridors, riparian buffer zones, wetlands and sensitive habitats. Extensive mitigation identified in the Mitigated Negative Declaration (MND) and Initial Study (IS) and Avoidance and Minimization Measures specified in the Draft Lake and Streambed Alteration Agreement (SAA) provide for minimization of vegetation removal and maintenance of natural vegetation buffer areas; minimization of erosion or sedimentation during and after construction; inclusion of Best Management Practices to avoid water quality impacts; re-vegetation with native species where appropriate; avoidance of significant impacts on sensitive habitat areas or areas adjacent to sensitive habitat areas; avoidance of impacts on unique or endangered species; and avoidance of impacts on native and anadromous fish, all in conformance with the LCP.

The proposed maintenance of drainages along Kelly Avenue and Redondo Beach Road, which are designated Scenic Beach Access Routes, is required to prevent safety hazards associated with flooding and erosion of these roadways. Maintenance activities at most of the project locations that extend to the Highway 1 Corridor or which abut Scenic Beach Access Routes do not involve tree removal, but are generally limited to mowing, removal of sediments, and trimming of adjacent trees or shrubs where growth extends into the drainage. The visual effects of this type of routine maintenance is localized and temporary, similar to the visual effect of mowing and trimming that occurs on a regular basis along the Coastside Trail and elsewhere in the City. At the Kehoe Ditch Drainage where maintenance activities will include both trimming and removal of trees or shrubs (less than 4 inches in diameter) that are blocking storm water flows or worker access to the channel, the visual effects are not expected to detract from or affect the quality of broad ocean views from Highway 1. The proposed trimming and removal of vegetation will not block ocean views, and the change in views associated with vegetation management at the Highway 1 end of the ditch is likely to be minimal in that existing vegetation is relatively sparse at this location.

The proposed trimming and removal of riparian vegetation at the Roosevelt and Kehoe Drainages will be limited to the minimum necessary to achieve the project objectives; however, there is no feasible alternative to the vegetation management proposed as part of the maintenance of these drainage locations that will achieve the project objectives of avoiding flooding, erosion, and the general deterioration of the drainage facilities' structural and functioning integrity. Riparian vegetation that is trimmed or removed (flush cut at existing grade) from within or adjacent to the channel will not be replanted; such vegetation will grow back and require additional maintenance at regular intervals. The Initial Study concludes that this vegetation management will not result in significant adverse impacts. The proposed project includes mitigation that provides for mulching and revegetation of areas that have been significantly disturbed due to foot traffic or other maintenance to avoid significant adverse impacts.

Coastal Act 30244: Where development would adversely impact archaeological or paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required.

Compliance: The project involves only minor excavation of sediment deposits and debris and is not expected to result in impacts on archaeological or paleontological resources. Mitigation has been included in the project to ensure that if subsurface cultural resources are unexpectedly encountered, that work will cease until the resource has been evaluated by a qualified archaeologist and additional mitigation identified as necessary to reduce potentially significant impacts to a less than significant level.

Coastal Act 30250: New residential, commercial or industrial development except as otherwise provided in this division, shall be located within, contiguous with, or in close proximity to, existing developed areas able to accommodate it, in other areas with adequate

public services and where it will not have significant adverse effects, either individually or cumulatively, on coastal resources.

Compliance: The project consists of a city-wide drainage ditch maintenance project and does not involve new residential, commercial or industrial development or require new services.

Policy 7-4: Utilities shall continue to be placed underground in all new developments.

Compliance: The project consists of a city-wide drainage ditch maintenance project and does not require new utilities and communication facilities.

2. Growth Management System – *The development is consistent with the annual population limitation system established in the Land Use Plan and Zoning Ordinance.*

Planning Commission Evidence: The project does not propose new residential development.

3. Zoning Provisions – The development is consistent with the use limitations and property development standards of the PUD (Planned Unit Development) District as well as the other requirements of the Zoning Ordinance.

Planning Commission Evidence: Chapter 18.38 of the Zoning Code provides direction for the preparation of biology reports and Initial Studies. A Biological Resource Evaluation was prepared for the project by SWCA Environmental Consultants in conformance with the requirements of Zoning Code Section 18.38.035. That report, Appendix A of the Initial Study, was circulated for a 45-day review to the applicable resources agencies, including the California Department of Fish and Wildlife, the U.S. Fish and Wildlife Service, the U.S. Army Corps of Engineers, and the California Coastal Commission. An Initial Study was prepared for the project which evaluated the potential impacts of the project on coastal resource areas and sensitive habitat, identified mitigation to avoid significant impacts on coastal resource areas and sensitive habitats, and determined that the proposed maintenance program conforms to the Local Coastal Program and the requirements of Zoning Code Chapter 18.38.

Zoning Code Chapter 18.38 provides permitted uses and performance standards for new uses and development in riparian corridors, wetlands and sensitive habitats, including habitats of rare and endangered species. The project proposes maintenance of existing storm water drainage facilities; as such, it does not introduce new uses that require a use conformance or alternatives analysis. The proposed maintenance project does meet the broad definition of "development" contained in the Zoning Code; however, the proposed activities seek to maintain the current and historic function of existing public facilities and thereby mitigate potential flooding impacts. The proposed activities do not involve changes to existing land uses or property development in the "traditional" sense.

The proposed maintenance project has been carefully designed to conform to the performance standards in Section 18.38.070 of the Zoning Code for development in riparian corridors, riparian buffer zones, wetlands and sensitive habitats, which standards mirror those of LCP. Extensive mitigation identified in the Mitigated Negative Declaration (MND) and Initial Study (IS) and Avoidance and Minimization Measures specified in the Draft Lake and Streambed Alteration Agreement (SAA) provide for minimization of vegetation removal and maintenance of natural vegetation buffer areas; minimization of erosion or sedimentation during and after construction; inclusion of Best Management Practices to avoid water quality impacts; re-vegetation with native species where appropriate; avoidance of significant impacts on sensitive habitat areas or areas adjacent to sensitive habitat areas; avoidance of impacts on unique or endangered species; and avoidance of impacts on native and anadromous fish, all in conformance with the Zoning Code.

The Scenic Corridor Standards of Zoning Code Section 18.37.030 specify that removal of vegetation from existing beach access road rights-of-way is prohibited except as required for reasons of safety and that new development may not significantly obscure, detract from, or negatively affect the quality of broad ocean views. The proposed maintenance of drainages along Kelly Avenue and Redondo Beach Road, which are designated Scenic Beach Access Routes, is required to prevent safety hazards associated with flooding and erosion of these roadways. Maintenance activities at most of the project locations that extend to the Highway One Corridor or which abut Scenic Beach Access Routes do not involve tree removal, but are generally limited to mowing, removal of sediments, and trimming of adjacent trees or shrubs where growth extends into the drainage. The visual effect of this type of routine maintenance is localized and temporary, similar to the visual effect of mowing and trimming that occurs on a regular basis along the Coastside Trail and elsewhere in the City. At the Kehoe Ditch Drainage where maintenance activities will include both trimming and removal of trees or shrubs (less than 4 inches in diameter) that are blocking storm water flows or worker access to the channel, the visual effects are not expected to detract from or affect the quality of broad ocean views from Highway One. The proposed trimming and removal of vegetation will not block ocean views and the change in views associated with vegetation management at the Highway 1 end of the ditch is likely to be minimal in that existing vegetation is relatively sparse at this location.

The guidelines of Zoning Code Chapter 18.37 indicate that development should be sited so as not to disturb or intrude upon riparian vegetation unless there is no feasible alternative, and that replacement vegetation should be required to mitigate any adverse effects of removal of riparian vegetation. The proposed trimming and removal of riparian vegetation at the Roosevelt and Kehoe Drainages will be limited to the minimum necessary to achieve the project objectives; however, there is no feasible alternative to the vegetation management proposed as part of the maintenance of these drainage locations that will achieve the project objectives of avoiding flooding, erosion and the general deterioration of the drainage facilities' structural and functioning integrity. Riparian vegetation that is trimmed or removed (flush cut at existing grade) from within or adjacent to the channel will not be replanted; such vegetation will grow back and require additional maintenance at regular intervals. The Initial Study concludes that this vegetation management will not result in significant adverse impacts. The proposed project includes mitigation that provides for mulching and re-vegetation of areas that have been significantly disturbed due to foot traffic or other maintenance to avoid significant adverse impacts.

4. Adequate Services – Evidence has been submitted with the permit application that the proposed development will be provided with adequate services and infrastructure at the time of occupancy in a manner that is consistent with the Local Coastal Program.

Planning Commission Evidence: The project consists of a city-wide drainage ditch maintenance project and does not involve new development that will require new services or infrastructure.

5. California Coastal Act – Any development to be located between the sea and the first public road parallel to the sea conforms with the public access and public recreation policies of Chapter 3 of the California Coastal Act.

Planning Commission Evidence: The proposed project is located between the sea and the first public road parallel to the sea. The proposed project will not restrict or otherwise adversely affect public coastal access or public coastal recreational opportunities because it involves the routine maintenance of existing drainage facilities.

6. Environmental Review Findings – The project is consistent with CEQA guidelines and will not have a significant effect on the environment.

Planning Commission Evidence: A Biological Resource Evaluation and a Mitigated Negative Declaration(MND) and Initial Study (IS) have been prepared for the project that identify mitigation to reduce all potentially significant environmental Impacts of the project to a less than significant level in conformance with the requirements of the Environmental Quality Act. This mitigation has been included in the project and a Mitigation Monitoring Program has been prepared for the project to verify implementation of all project mitigation. The Biological Resource evaluation was circulated to the resource agencies for a 45-day review period. The Initial Study (IS) and Draft Mitigated Negative Declaration (MND) were circulated to the State Clearinghouse and to the U.S Fish and Wildlife Service and the U.S. Army Corps of Engineers for a 30-day public review. Staff independently reviewed the proposed Mitigated Negative Declaration and Initial Study and exercised control and direction over the CEQA process. Staff considered and responded to comments received on the Draft MND/IS and made those responses available, along with the MND/IS on the City's website.

EXHIBIT B CONDITIONS OF APPROVAL PDP-019-13

Coastal Development Permit for a City-Wide Drainage Ditch Maintenance Project to provide routine maintenance at fifteen drainage locations in Half Moon Bay.

Authorization: Approval of this permit authorizes a Coastal Development Permit for a City-Wide Drainage Ditch Maintenance Project to provide routine maintenance at fifteen drainage locations in Half Moon Bay in conformance with the Final Lake and Streambed Alteration Agreement issued by the California Department of Fish and Wildlife and the conditions of approval of this permit.

A. Requirements for Project Implementation

- 1. <u>CONFORMANCE WITH REGULATORY REQUIREMENTS</u>. The proposed maintenance activities shall be implemented in full conformance with the Final Lake and Streambed Alteration Agreement (SAA) issued by the California Department of Fish and Wildlife and with the requirements of all applicable resource agencies to the satisfaction of the Director of Planning. (Planning)
- 2. <u>IMPLEMENTATION OF MITIGATION.</u> The proposed maintenance activities shall be implemented in full conformance with each and every mitigation measure identified in the Final Mitigated Draft Negative Declaration and the project shall be implemented in conformance with the Mitigation Monitoring Program. (Planning)

B. Validity and Expiration of Permits

- 1. <u>EFFECTIVE DATE</u>. The Coastal Development Permit and Use Permit shall take effect after final local action and 10 working days after receipt of the Notice of Final Action by the Coastal Commission, if no appeal is filed during that time. If such an appeal is filed, the Permit shall take effect 10 business days after approval by the Coastal Commission. The applicant/owner shall submit a signed copy of these conditions of approval to the Planning Department prior to implementation of the project. (Planning)
- 2. <u>ACCURACY OF APPLICATION MATERIALS</u>. The applicant shall be responsible for the completeness and accuracy of all forms and material submitted for this application. Any errors or discrepancies found therein may be grounds for the revocation or modification of this permit and/or any other City approvals. (Planning)
- 3. <u>EXPIRATION</u>. The Coastal Development Permit shall expire one year from its date of approval if implementation of the maintenance program has not begun during that time.
- 4. <u>PERMIT RUNS WITH THE LAND</u>. The Coastal Development Permit runs with the land and the rights and obligations hereunder, including the responsibility to comply with conditions

of approval, shall be binding upon successors in interest in the real property unless or until such permits are expressly abandoned.

OWNER'S/PERMITTEE'S CERTIFICATION:

I have read and understand and hereby accept and agree to implement the foregoing conditions of approval of the Coastal Development Permit.

OWNER(S) / APPLICANT(S):

(Signature)

(Date)

Public Correspondence

Regarding Coastal Development Permit File No.PDP-019-13

City of Half Moon Bay January 8, 2014

> A-2-HMB-14-0004 Exhibit 2 Page 478 of 523

A-2-HMB-14-0004 Exhibit 2 Page 479 of 523

From:	MaryVicki&Ray <taftr@comcast.net></taftr@comcast.net>	
Sent:	Thursday, December 26, 2013 9:25 AM	
То:	Carol Hamilton	
Cc:	MaryVicki&Ray	
Subject:	Fwd: Roosevelt creek property damage	

> Dear Carol,

>

> Due to lack of maintenance, the Roosevelt creek water is blocked and can not flow freely to the ocean. The Roosevelt creek blockage causes erosion along the creek and causes the water to back up onto Naples Ave. The creek bank that runs along my home is eroding, eventually jeopardizing my fence & then the house's foundation. The quickly rising water in the street leave us stranded and leaves mud & could damage our cars.

>

> In most years, the front of my home on 2911 Naples Avenue will flood a few times a year. When the weather service issues a small creek flood warning for San Mateo county, the street will flood. The water comes up quickly.

> Whenever it floods we need to move our cars to avoid engine damage. Usually, I try to move the cars before a storm to avoid getting caught up in rising water. My neighbors alway move their cars (Edward & Joan Andre).

>

> A city employee always comes in a track to check out the creek, so someone in the city of Half Moon Bay is aware of the ongoing flooding. The city employee told me that because the creek is blocked the water cannot flow freely the ocean & the water back up onto Naples Ave.

>

> The flood waters always bring some mud but sometimes there Is inches of mud! Once, city employees came to clear the street And once, the water company employees, who was working in the Miramar area cleared the mud. Once my husband and my neighbor an I spent all day filling a wheel barrel over and over again. Of course, these days I don't think I couldn't physically manage it.

>

> Years ago in the mid Nineties, my family contacted the city of Half Moon Bay and the Fish & Game office requested a permit to reinforce the creek bank. The creek bank is eroding and we will eventually lose our home. Over the years more water is being diverted down Roosevelt creek and no maintenance is conducted to allow this water to clearly flow to the ocean and to avoid erosion. The Taft family was not given a permit to reinforce the bank and we were told to plant ginger plants along the bank.

>

> My neighbors lost a good portion of the creek bank along the side of their home two years ago. They have tried to take action to prevent further erosion due to the water that shoots out of the pipe under Alameda Street like a fire hose. The large pipe under the Alameda street is filled with debris.

>

> I have been told by state & city employees that there has never been a property damage caused by Roosevelt creek. These are hard working conscientious employees. I have no idea how to reverse this inaccurate belief.

>

>

> I was thrilled when I read that the blocked creek would be cleared. I realize resources are limited and law suits loom. But, when the water rise and the mud rushes in I think I am a fool not to sell this house before it falls into the creek.

> I love my home but I am not allowed to clear the creek even if I could afford it. I would appreciate any actions the city officials or California Coastal Commission can take to save my home.

> Mary Baker Taft

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November 26, 2013

RE: PDP-019-13 – Coastal Development Permit for maintenance of various drainages within the City of Half Moon Bay, CA

My name is Walter Sensing. My wife, Paulette, and I reside at 439 Kehoe Avenue in Half Moon Bay. I'm here tonight to say a few words regarding the proposed PDP-019-13 – Coastal Development Permit for routine maintenance of various drainages in the City of Half Moon Bay.

When I first heard of an effort to put all of the city's drainages under one city-wide plan, I was concerned that a one-size-fits-all approach was being proposed. After having made an initial reading of the plan, I can see that an effort has been made to categorize each of the drainages and, where appropriate, separate plans were developed to address special circumstances. Overall, I think a great job was done with the organization and documentation.

However, while I cannot comment about the completeness of this report for all of the drainages, I do not see this as a sustainable solution with respect specifically to the Kehoe Ditch. As an interim solution to address potential flooding risks of Kehoe Ditch, it has some merits and some potential issues. Improper maintenance could exacerbate an already existing erosion problem. So, the proverbial devil is in the details as to just what level of maintenance will be performed and what its impact might ultimately be. I think it needs to be more about trying to find the right balance between maintenance that is required to prevent flooding weighed against too much maintenance that might worsen the erosion problem.

In conclusion, I and several of my neighbors think it is negligent for the City not to do something to maintain the Kehoe Ditch even if it is only a modest effort to remove invasive species such as Cape Ivy, trash and debris that could potentially create a dam and flood our backyards and homes. Unfortunately, this is not a solution to our major issue which is the lack of sustainability of the Kehoe Ditch.

Thank you for listening!

Walter Sensing 439 Kehoe Avenue Half Moon Bay, CA 94019 whsensing@gmail.com

A-2-HMB-14-0004 Exhibit 2 Page 481 of 523 James Benjamin 400 Pilarcitos Avenue Half Moon Bay 94019-1475

November 26, 2013

City of Half Moon Bay Planning Commission 501 Main St. Half Moon Bay, CA 94019

Subject: PDP-019-13

Dear Chair Rosenblatt, Vice Chair Conroy and Commissioners Deman, Jonsson and Roman:

I appreciate staff's recent revision of the referenced project to reflect the fact that Half Moon Bay's Local Coastal Program (LCP) does not permit emergency projects to be approved in advance, and to remove some of the drainages from the project. Unfortunately, many other previously raised concerns of inconsistency with the LCP, with its implementing ordinance and with CEQA have not been resolved. These concerns include but are not limited to:

- The reframing of the project's CEQA objective as maintaining historic or continuing flows cannot obscure the fact that the projects constitute development. Inasmuch as all drainages carry storm water and contribute to flood control, the LCP restrictions on flood control or storm water runoff projects in habitats for protected species apply to <u>all</u> such projects.
- The claim that this project's vaguely-defined actions are necessary throughout entire riparian areas and that there are no alternatives is not justified. Every CEQA project has a "no project" alternative.
- The City now claims that no evidence of flooding on the subject drainages is needed to justify potentially destructive activities that are within the scope of this project. If no additional evidence or information is needed, the City should be able to identify specific activities that will be performed at specific locations to resolve specific problems.
- There is still no analysis of the potential for erosion, downstream flooding, habitat degradation and loss or other adverse impacts resulting from the project disturbances. The claims that a six-foot high trail along drainages or the removal of large woody debris could have not potentially significant adverse impact are illogical and unjustifiable.
- The response to comments about exotic invasives permits an invasive to be cut or uprooted without being removed from the project area, allowing rooting or dispersal.
- The claim that no EIR is required notwithstanding conflicting evidence-based expert opinion of significant adverse impacts flies in the face of CEQA's "fair argument" test.
- The U.S. Fish and Wildlife Service has expressed concern that the project will violate the U.S. Endangered Species Act, and urged the City to consult with regulatory agencies.

There is no evidence of such consultations have taken place. Well-justified requests from the California Coastal Commission further limiting the project area and the scope of activities have been rejected, and State Park's request for additional information has not been honored.

In reality, the only certain effect of this project would be to inoculate the City from being held accountable under the LCP and Coastal Act for its activities in or near ESHAs. These areas are sensitive, disturbing them can have significant adverse consequences for people and nature, and vague descriptions of work in or near them should not receive a rubber stamp of conformance.

I respectfully request significant revisions in the project to focus it in areas where there actually a demonstrated need for maintenance, that adequate protections, including site-specific project descriptions be based on careful planning and risk mitigation; that project site, upstream and downstream baseline conditions be documented, and monitored for changes during and after the project for erosion, sedimentation, loss of native vegetation or other impacts; that such events be reported and additional mitigations be required to address these concerns; and that opportunities for habitat restoration and enhancement be identified and implemented as part of the project.

In addition, the project violates the settlement agreement approved by the City Council and executed on August 22, 2012 by the City Manager, in that PDP-019-13 includes the Kehoe Watercourse (and the Landstra parcel as a potential staging area). Paragraph D.5 of the referenced settlement agreement commits the City to use its best efforts and reasonable diligence to amend both the Habitat Areas and Water Resources Overlay of the Local Coastal Program and the Coastal Resource Area maps of Municipal Code section 18.38.020 to designate these and another identified area as Environmentally Sensitive Habitat Areas and Sensitive Habitat Areas, respectively, supporting or containing rare, endangered, threatened and unique species, and as riparian or wetland areas. Pending the completion of these processes, the City is committed not to process or accept as complete for purposes of processing any coastal development permit for these areas.

I own and live on a stream-side parcel subject to a shockingly large flow during rare heavy-storm events, so I can assure you that I appreciate the City's desire to prevent flooding. But CEQA, the Coastal Act and the LCP place the burden for demonstrating legal conformance on the applicant, and that burden cannot be carried for the proposed project. Without careful study and implementation, this cure could easily be far worse than the problem it is intended to resolve.

Thank you for your consideration of these and my earlier comments. I look forward to your deliberations.

Sincerely, James Benjamin

A-2-HMB-14-0004 Exhibit 2 Page 483 of 523 aforementioned process, City shall not process or accept as complete for purposes of processing any coastal development permit for any Protected Area, except for: (1) the retroactive CDP required by Paragraph 3 and (2) development that is expressly permitted pursuant to Half Moon Bay Municipal Code section 18.38.085.

- (b) Alternatively, City may elect to conduct a protocol level survey of such Protected Area in full compliance with the accepted protocol for CRLF (attached hereto as Exhibit B) as to whether the Protected Area supports or contains CRLF. Since no written protocol for SFGS currently exists, a finding that a Protected Area contains or supports CRLF shall be presumed indicative of the fact that Protected Area also contains or supports SFGS. The survey shall be limited to such Protected Area, shall include a map clearly delineating all sensitive habitat areas (as defined in LCP Policy 3-1 and Half Moon Bay Municipal Code Section 18.38.020.A) within the confines of such Protected Area, and shall be performed by a biologist selected in the manner specified by Paragraph 3, above. Upon completion of the survey and mapping required by this Paragraph, the City shall use its best efforts and reasonable diligence to process to successful adoption, including compliance with all notice and hearing requirements of the Half Moon Bay Municipal Code, an amendment to the LCP amending both (1) the Habitat Areas and Water Resources Overlay of the City's Local Coastal Program and (2) the Coastal Resource Area maps of Municipal Code section 18.38.020 in accordance with Half Moon Bay Municipal Code section 18.38.025 to designate such Protected Area as Environmentally Sensitive Habitat Areas and Sensitive Habitat Areas, respectively, supporting or containing rare, endangered, threatened and unique species, and as riparian or wetland areas in such maps unless such surveys establish by clear and convincing evidence that such Protected Area does not contain or support any protected species or otherwise meet the LCP definition of ESHA. Pending completion of the aforementioned process, City shall not process or accept as complete for purposes of processing any coastal development permit for such Protected Area, except for: (1) the retroactive CDP required by Paragraph 3 and (2) development that is expressly permitted pursuant to Half Moon Bay Municipal Code Section 18.38.085.
- (c) If the City makes the election specified under subparagraph 5(b) above, and the survey is not completed in full compliance with subparagraph 5(b) by December 31, 2013, City shall perform all actions specified in subparagraph 5(a), above.
- 6. Using its best efforts and reasonable diligence, the City will conduct and process to completion street vacation proceedings in accordance with the requirements of the California Streets and Highways Code for the unimproved portion of the Pilarcitos Avenue street right of way commencing on the southern terminus of Casa Del Mar Drive and extending southeast along the entire length of Pilarcitos Avenue (as highlighted in red on the attached St. John Subdivision Unit No. 3 Map attached hereto as Exhibit C and hereby incorporated by reference) and extending therefrom in a southeasterly direction to the southern edge of the Sewer Authority Mid-Coastside (formerly Landstra) parcel (the

ER

A-2-HMB-14-0004 Exhibit 2 Page 484 of 523 techniques, planting specifications, appropriate timing of restoration planting, monitoring and success criteria, adaptive management strategies, and remedial actions if the success criteria are not achieved.

- (e) In the event that the Parties are unable to timely reach agreement on selection of a biological consultant under paragraph 3(a), above, then this subparagraph shall apply, and each Party shall, within thirty (30) days of the Effective Date, select a biological consultant of their choosing who, in turn, will be instructed to, within forty-five (45) days of their selection, mutually select a qualified biologist or firm to prepare the biological report. If no biologist has been selected after ninety (90) days of the Effective Date, either party may petition the court to select one.
- 4. City acknowledges that the following areas have been identified as habitat supporting or containing rare, endangered, threatened or unique species in the March and August 2005 studies by Essex Environmental, the March 2007 study by Rana Creek Habitat Restoration, the February 12, 2008 report from Nomad Ecology, and the October 2005 report by H.T. Harvey & Associates:
 - (a) the Kehoe Watercourse (also as a riparian area and corridor); and
 - (b) Caltrans mitigation project site (also as a wetland).

In addition, the City acknowledges that the following has been identified as likely habitat supporting or containing rare, endangered, threatened or unique species the October 2005 report by H.T. Harvey & Associates:

(c) the vacant Sewer Authority Mid-Coastside parcel located immediately south of the Kehoe watercourse (APN 048-240-040, commonly known as the "Landstra Parcel").

The areas identified in Subparagraphs (a) through (c) are hereinafter collectively referred to as the "Protected Area."

- 5. As material consideration to Plaintiffs under this Agreement, City agrees for each Protected Area:
 - (a) To use its best efforts and reasonable diligence to process to successful adoption, including compliance with all notice and hearing requirements of the Half Moon Bay Municipal Code, an amendment to the LCP amending both (1) the Habitat Areas and Water Resources Overlay of the City's Local Coastal Program in accordance with LCP Policies 3-21 and 3-32 and (2) the Coastal Resource Area maps of Municipal Code section 18.38.020 in accordance with Half Moon Bay Municipal Code section 18.38.025 designating such Protected Area as Environmentally Sensitive Habitat Areas and Sensitive Habitat Areas, respectively, supporting or containing rare, endangered, threatened and unique species, and as riparian or wetland areas. Pending completion of the

12

From: Sent: To: Subject: edwardandre@comcast.net Monday, November 25, 2013 3:05 PM Carol Hamilton Roosevelt Drainage Ditch

Carol:

To follow up on our conversation of 11-25-2013:

My name is Edward (wife - Joan) Andre and reside at 2909 Naples Avenue, HMB, just one house removed from the Roosevelt Drainage ditch.

As you know, every time there is moderate to heavy rain in this area, the drainage creek overflows and floods this last block of Naples Avenue, due, at various times, to an excessive amount of water trying to drain into a small. inadequate and crumbling drainage ditch which normally flows to the ocean. It is this ditch which is partly the subject of your meeting.

Obviously the ENTIRE ditch must be cleaned out and otherwise maintained in order to allow these waters to reach the ocean withiout further flooding or erosion of the streambed. This must include the culvert under Highway One, the streambed up to and including the culvert under the Coastal Trail bike path, and the remaining streambed that finally reaches the ocean.

It is my understanding that there is some misunderstanding as to whose responsibility or jurisdiction this would be: the City of Half Moon Bay, State Beaches, or Fish and Game or ???, meaning that it is possible that one jurisdiction might keep one section of the streambed clear

of debris, while the other jurisdiction might not clear their section, thus defeating the whole purpose of the drainage ditch to begin with!

In short, it is obvious that whatever jurisdictions are involved must work together to solve this long recurring problem.

My suggestion is to contact HMB State Beach Ranger Superintendent Paul Keel at 650-726-8817. He is and has been an invaluable asset to the State Park System and would certainly be more than willing to cooperate with your office in this matter.

Thank you for your time and consideration.

Sincerely,

Edward (Bud) Andre 2909 Naples Avenue Half Moon Bay, CA 94019 ph: 650-726-5684

> A-2-HMB-14-0004 Exhibit 2 Page 486 of 523

1

From: Sent: To: Cc: Subject: MaryVicki&Ray <taftr@comcast.net> Wednesday, November 20, 2013 7:33 AM MaryVicki&Ray Carol Hamilton Re: Roosevelt Drainage_Maintenance Project Location

Carol, I forgot to include my name & address.

Mary Baker Taft 2911 Naples Ave. Half Moon Bay 650/726-2278

Thanks again for your efforts.

On Nov 19, 2013, at 12:14 PM, MaryVicki&Ray <<u>taftr@comcast.net</u>> wrote:

Thanks Carol. I am extremely grateful that the city leaders are taking action to revolve the deterioration of the Roosevelt creek bank which jeopardizes our homes. This has been a concern for my family for many years since there has been virtual no maintenance on the creek. I appreciate the courage of the planning commission member to move forward on this project. I also appreciate the efforts of every city employee who has worked on this project.

The large pipes under the walking path and under Alameda are currently filled with debris and soil preventing proper drainage to the ocean.

The picture you sent does not appear to include work the large drainage pipe that runs under the walking path. Since this pipe is currently clogged, the water is forced up the creek to our homes and streets. Will this pipe be cleaned out?

Thanks for your help.

On Nov 18, 2013, at 10:29 AM, Carol Hamilton wrote:

Mary-

See attached photo of the area of Roosevelt Creek proposed for maintenance. Let me know if you have questions.

Best regards-

Carol Hamilton Senior Planner Phone: (650) 712-5836

A-2-HMB-14-0004 Exhibit 2 Page 487 of 523

From: Sent: To: Subject: MaryVicki&Ray <taftr@comcast.net> Thursday, November 21, 2013 7:29 AM Carol Hamilton Fwd: Roosevelt Drainage_Maintenance Project Location

Morning,

There are so pictures taken last December. One Picture is taken before I moved the car to higher water to avoid damage as the water continued to rise. They just give you an idea of the water and the mud.

Naturally, I hope the Planning Commission would want the city representatives to work with the state to clean out the pipe under the walking path to stop further creek erosion.

Thanks Carol.

Mary



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A-2-HMB-14-0004 Exhibit 2 Page 490 of 523



Begin forwarded message:

From: MaryVicki&Ray <<u>taftr@comcast.net</u>> Date: November 20, 2013 12:21:20 PM PST To: Carol Hamilton <<u>CHamilton@hmbcity.com</u>> Subject: Re: Roosevelt Drainage_Maintenance Project Location

Thanks for getting back to me Carol. And thank you for explaining the issue. I understand.

The work the city will be doing to clear a path to a **blocked pipe** seems like a total waste. If the pipe under the walking trail is not cleared the water will not flow to the ocean but will come back up the creek as $\frac{14,4004}{14,4004}$ s

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does. I am surprised that the city wouldn't step forward to communicate with the State representatives. I do not think my input to the state would hold any weight. But, thanks for the suggestion.

Take care.

Mary

On Nov 20, 2013, at 11:46 AM, Carol Hamilton wrote:

Thank-you, Mary. I will send your email to the Planning Commission. I have communicated your concern regarding the culvert under the Coastside Trail to our maintenance supervisor. Since that property is owned by the State, the City will not be able to provide maintenance of the culvert. I can send you the contact information for the state parks folks – I may have an email. You could address your concern to them. I should be able to do that tomorrow. As you may have seen from the sign, the Planning Commission hearing on this maintenance project is on Tuesday, November 26 at 7:00 PM and you are welcome to attend and address the Commission directly.

Best regards-

Carol Hamilton

Senior Planner Phone: (650) 712-5836 Email: <u>chamilton@hmbcity.com</u>

<image001.jpg> City of Half Moon Bay 501 Main Street Half Moon Bay, CA 94019 www.hmbcity.com

From: MaryVicki&Ray [mailto:taftr@comcast.net]
Sent: Wednesday, November 20, 2013 7:33 AM
To: MaryVicki&Ray
Cc: Carol Hamilton
Subject: Re: Roosevelt Drainage_Maintenance Project Location

Carol, I forgot to include my name & address.

Mary Baker Taft 2911 Naples Ave. Half Moon Bay 650/726-2278

Thanks again for your efforts.

A-2-HMB-14-0004 Exhibit 2 Page 492 of 523

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The picture you sent does not appear to include work the large drainage pipe that runs under the walking path. Since this pipe is currently clogged, the water is forced up the creek to our homes and streets. Will this pipe be cleaned out?

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On Nov 18, 2013, at 10:29 AM, Carol Hamilton wrote:

Mary-

See attached photo of the area of Roosevelt Creek proposed for maintenance. Let me know if you have questions.

Best regards-

Carol Hamilton

Senior Planner Phone: (650) 712-5836 Email: <u>chamilton@hmbcity.com</u>

<image001.jpg>

City of Half Moon Bay 501 Main Street Half Moon Bay, CA 94019 www.hmbcity.com

<Roosevelt Drainage.pdf>

A-2-HMB-14-0004 Exhibit 2 Page 493 of 523 STATE OF CALIFORNIA - NATURAL RESOURCES AGENCY

Attachment 7

EDMUND G. BROWN, JR., Governor

CALIFORNIA COASTAL COMMISSION

ek.

NORTH CENTRAL COAST DISTRICT OFFICES 45 FREMONT STREET, SUITE 2000 SAN FRANCISCO, CA 94105 PHONE: (415) 904-5260 FAX: (415) 904-5400 WEB: WWW.COASTAL.CA.GOV



December 10, 2013

Bruce Ambo Interim Planning Director City of Half Moon Bay 501 Main Street Half Moon Bay, CA 94109

• ?

Subject: Interagency Review of City-wide Drainage Ditch Maintenance Project and Retroactive Coastal Development Permit for the Kehoe Drainage, Half Moon Bay, CA

Dear Mr. Ambo:

Thank you for arranging and hosting the meeting on December 3, 2013 between the relevant resource agencies and the City in order to discuss two pending City of Half Moon Bay projects, the City-wide drainage maintenance project and the retroactive Coastal Development Permit for the 2009 removal of vegetation within the Kehoe Drainage. It was very informative and helpful and we appreciate the City of Half Moon Bay Staff taking the time to clarify the project particulars.

With regard to the City-wide drainage maintenance project, approved by the City's Planning Commission on November 26, 2013, Coastal Commission Staff expressed concerns about retaining natural drainages such as Kehoe Ditch and Roosevelt Ditch in the City's maintenance program. While the work proposed in other drainages consists of minor trimming and/or mowing in man-made drainages, the work proposed in Kehoe and Roosevelt consists of more involved removal of both native and non-native trees and shrubs from both adjacent to, and within, the drainage channels. Removing the two natural drainages from the City-wide program may facilitate the Commisson's review of the project, were it to be appealed to the Coastal Commission, so that the City may proceed with the more minor maintenance aspects proposed in the other City ditches.

Commission Staff also raised concerns regarding the approval of the Kehoe Drainage retroactive Coastal Development Permit (CDP), which is on appeal to, and scheduled to be heard by, the Planning Commission on December 10, 2013. Commission Staff expressed concern that the City approved the retroactive CDP with no proposed mitigation for the work that was previously done in the drainage in 2009, without benefit of a CDP. Commission Staff, and Staff from California Department of Fish and Wildlife and United States Fish and Wildlife Service, expressed the need for mitigation for a project of this type and offered suggestions as to what type of mitigation would be appropriate for the type of work that was done. Please consider

> A-2-HMB-14-0004 Exhibit 2 Page 494 of 523

City-wide Drainage Ditch Maintenance Project and Retroactive Coastal Development Permit for the Kehoe Drainage December 9, 2013 Page 2

adding some type of mitigation to the retroactive CDP when hearing this appeal in order to properly mitigate for the work that was previously done.

Please let me know if you have further questions or concerns.

Sincerely,

Stephanie Rexing, Coastal Planner

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Response to Appeal

Of Coastal Development Permit and Mitigated Negative Declaration File No. PDP-019-13

City of Half Moon Bay 1/8/2014

Response to Appeal of Coastal Development Permit and Mitigated Negative Declaration for Routine Maintenance of 15 Drainage Features in Half Moon Bay (File No. PDP-019-13)

Attachment 8 – Response to Appeal (File No. PDP-019-13) Page 1 of 11

INTRODUCTION

This Response to Appeal addresses the comments filed by James Benjamin on December 6, 2013 in an appeal of the Planning Commission decision to approve a Coastal Development Permit and adopt a Mitigated Negative Declaration for routine maintenance of 15 drainage features in the City of Half Moon Bay. This document provides responses to each of 15 numbered sections in Mr. Benjamin's appeal (Attachment 2 of the Appeal Agenda Report, dated January 21, 2014). Where issues raised in the appeal were previously addressed in the Responses to Comments on the Mitigated Negative Declaration (MND)/Initial Study (IS) dated November 14, 2013, the current response will reference the prior response. These prior responses, located in Attachment 4 of the Appeal Agenda Report, will be referenced as "Responses to MND Comments".

Response to Appeal Comment 1

Staff is recommending that the City Council remove the Roosevelt Drainage (B-1) and the Kehoe Drainage (B-2) from the current Coastal Development Permit (CDP).

The Initial Study (IS) provides a complete analysis of the potential project impacts and identifies mitigation that has been included in the project to reduce potentially significant environmental impacts to a less-than-significant level. The Mitigated Negative Declaration (MND) correctly identifies that the project would not result in any significant environmental impact.

Significant ground disturbance requiring re-vegetation is not anticipated as part of the project. As discussed in the Responses to MND Comments (see Master Response One and responses to Comments C.5, C.10, E.39, E.41, E.43, and E.58), areas that are disturbed to bare ground will be stabilized to minimize erosion, soil loss, bank instability or other indirect impacts and will be revegetated. Mitigation measures (MM BIO 8, MM BIO 20, and MM SAA-4) included within the Project Mitigation and Monitoring Program (MMP) identify the implementation and reporting requirements for stabilization and revegetation, including vegetation replacement ratios, performance criteria, monitoring, and approval of revegetation plans by the California Department of Fish and Wildlife. Additionally, as discussed in the Response to MND Comment C.10, if significant ground disturbance occurs as part of the project, revegetation plans for such areas will be circulated to the Coastal Commission for review. The Mitigation Monitoring Program (MMP) has been revised to clarify that "significant ground disturbance" means ground disturbance of greater than 0.1 acre of bare ground. This clarification has been amended to the MMP as MM NOT 3. The revised MMP is included as Appendix A of this document.

Attachment 8 – Response to Appeal (File No. PDP-019-13) Page 2 of 11

Response to Appeal Comment 2

MND Comment C.5 specifically requested additional discussion of the project's potential to have other adverse habitat impacts, such as loss of species or degraded habitat value. The extent, suitability, quality, and potential for occupancy of habitat areas in the vicinity of the project is adequately described within the project documents. The response to MND Comment C.5, as well as several other responses within the November 14, 2013 Responses to MND Comments document (see responses to Comments E. 39 and E.40) and Section 4 of the Biological Resource Evaluation (BRE), provide adequate discussion of the project's potential to directly and indirectly impact sensitive species and their habitats, including assessment of the potential to impact species from habitat degradation citing relevant documents and current peer reviewed literature as the basis for the evaluation. The conclusion drawn by these assessments is that impacts to rare or listed species through direct loss of species or indirect loss through habitat degradation will be less-than-significant or less-than-significant with mitigation.

The Initial Study/Mitigated Negative Declaration (IS/MND), BRE, and November 14, 2013 Responses to MND Comments, acknowledge that ground disturbance is not the only potential project related disturbance and address the potential of the overall project to impact the environment with the conclusion that impacts will be less than significant or less than significant with mitigation. The IS/MND and BRE define the extent, nature, and limitations of the proposed maintenance activities. Impacts to vegetation associated with the project will be temporary and will not result in permanent loss of streamside vegetation as all temporarily disturbed bankside areas will be restored. The project description does not propose the creation of trails. Mitigation has been included in the project to ensure the spread of invasive exotics will be minimized. During project implementation, invasive exotics will be identified prior to maintenance activities and when removed, will be immediately bagged and disposed of appropriately.

Please note that the 13 project locations recommended for approval in the current CDP consist of linear, man-made drainage ditches, swales, and roadside depressions with earthen substrates characterized by flashy short-duration flows and do not support varied in-stream habitats such as pools, riffles, meanders, oxbows, in-stream wetland complexes, or large woody debris. With the implementation of the numerous proposed mitigation measures it is anticipated that the project will not affect listed or sensitive species, result in significant impacts to their habitats, or result in significant habitat degradation.

See response to MND Comment E.85 which addresses the concern that work activities may result in degradation of water quality and more specifically that work at B-2 Kehoe Ditch

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Drainage may result in the discharge of toxic materials. To further ensure that potential impacts to water quality are less than significant, several mitigation measures have been included involving temporal work restrictions limiting activities to periods when no water is present and implementation of best management practices to control and manage spoils and erosion (Mitigation Measures MM BIO 4-9, MM BIO 20, MM BIO 22-23, and MM HYD 1).

Response to Appeal Comment 3

Comment C.6 requested the remapping of riparian corridors identified in the BRE utilizing the definition on page 42 of the City of Half Moon Bay Land Use Plan, Chapter 3 (LUP). As discussed in the November 14, 2013 response to that MND comment, riparian corridors were mapped using this definition, the definition of riparian corridor provided in Section 18.38.020 of the Zoning Ordinance, and using riparian plant species in addition to those identified within this definition, resulting in a more robust and expansive mapping. Remapping was not necessary because the original mapping substantially conformed to the methodology requested in MND Comment C-6.

MND Comment C.7 requested that wetlands be delineated per the United States Army Corps of Engineers (USACE) standard methodology and requested the delineation and data forms completed as part of the BRE. As discussed in the November 14, 2013 response, wetlands were delineated based on the mapping requirements of Section 18.38.35 of the Zoning Ordinance using the wetland definition identified within the Zoning Ordinance, the LUP, California Coastal Act of 1976, and based on guidance provided by the CCC in the October 5, 2011 briefing document, "Definition and Delineation of Wetlands in the Coastal Zone." Determination and field verification of wetlands was completed using the methodology described in the 1987 (USACE) Wetlands Delineation Manual and Regional Supplement for the Arid West. Data forms requested were provided as Attachment B of the Biological Resource Evaluation (BRE) included as part of the Final Draft MND/IS. The delineation completed as part of the BRE is discussed in Section 2.2.5 and Section 3.2.4.5 of the report and depicted in Appendix F. (The BRE is included in Attachment 3 of the Appeal Agenda Report, dated January 21, 2014.)

MND Comment C.8 requested that the description of heavy equipment be updated. As discussed in the November 14, 2013 response, the IS/MND and BRE were updated to address this request.

The extents of riparian areas are discussed in Sections 3.2.4.1.3 and 3.2.4.2 and are depicted in Appendix F of the BRE. As discussed in the November 14, 2013 responses to MND Comments D.2 and E.59, equipment will typically be staged on adjacent paved roadways. Project locations not adjacent to paved roadways will be accessed on foot with work completed with hand tools. Project activities that would require equipment to be staged outside of existing paved roads

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would normally be limited to culvert replacement and bank stabilization/repair activities. These activities will occur on an as-needed basis in response to failures or dangerous situations and cannot be planned. Mitigation measures (MM BIO 1, MM BIO 21, MM BIO 23, and MM SAA 2) have been included such that access to, and staging for such activities will be reviewed prior to work to ensure that impacts are reduced to a less-than-significant level.

The project will not result in significant downstream impacts from flooding, erosion, or sedimentation. The project locations recommended for inclusion in the current CDP consist of man-made drainage ditches, swales, and roadside depressions with linear short flow-lengths that generally function to drain small localized watershed areas. Most of the project locations have no upstream component draining only adjacent city streets, other developed areas, and immediately adjacent undeveloped areas (B-3, B-4, B-5, B-6, B-9, B-10, C-1, C-2, C-3, C-4, and C-7). Project locations C-5 and C-6 receive drainage from larger watershed areas located east of Highway 1 that is culverted under Highway 1. None of the areas downstream of the project are significantly developed; these areas generally consist of undeveloped coastal terrace and bluff areas adjacent to the Pacific Ocean. All of the project locations drain directly to beach areas adjacent to the Pacific Ocean or to downstream ephemeral/intermittent man-made drainage features that similarly discharge to beach areas adjacent to the Pacific Ocean. Additional detail regarding downstream drainage is discussed in Section 1.2 of the BRE.

The proposed project activities will be conducted to ameliorate localized flooding and will not result in significant changes to the baseline conditions typically used to calculate flooding, create run-off hydrographs, or determine erosion such as curve numbers or time or concentration values based on guidance described in the United States Department of Agricultural (USDA) publication, "Urban Hydrology for Small Watersheds, TR-55" (a standard guidance document for calculating storm water runoff, discharge, and required floodwater reservoirs). Due to the location, existing linearity and channelization, and insignificant changes to hydrologic properties, impacts to downstream or adjacent sensitive areas are not anticipated to result from the project.

On December 3, 2013, the City held an inter-agency meeting to discuss the project. California Coastal Commission staff in attendance did not indicate any inadequacy or concerns with respect to the responses provided in the "Responses to Comments for the Half Moon Bay Drainage Ditch Maintenance Project, Mitigated Negative Declaration," dated November 14, 2013.

Response to Appeal Comment 4

As mandated by Zoning Ordinance Section 13.38.050(A)4, the project has been designed and has incorporated mitigation measures to ensure consistency with U.S Fish and Wildlife Service

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(USFWS) and California Department of Fish and Wildlife (CDFW) regulations. As discussed in Master Response Six of the November 14, 2013 Responses to MND Comments document, a Lake and Streambed Alteration Agreement (SAA) from CDFW is required for the project. A draft of the SSA has been issued and is currently in the process of being finalized. The City, as lead agency, is responsible for compliance with the California Environmental Quality Act (CEQA) and the CDFW permit cannot be finalized before the environmental document is complete.

An inter-agency meeting with staff from USFWS, CDFW, CCC, and USACE was held on December 3, 2013 to discuss the project and permitting options. Based on the guidance received at this meeting and as discussed in the November 14, 2013 Responses to MND Comments document, the City will pursue regulatory approvals concurrent with this approval process, and project activities will not be performed without prior compliance with all applicable regulations. Any and all conditions required as part of additional approvals will be implemented in addition to the requirements of the Mitigation Monitoring Program (MMP) for the proposed CDP.

Response to Appeal Comment 5

Maintenance of existing storm water facilities does not constitute a new use pursuant to the LCP. Maintenance is needed to prevent flooding and maintain the historic function of these facilities in conveying storm water. The 13 drainages that staff is recommending be included in the current Coastal Development Permit are all man-made drainages constructed expressly for the purpose of conveying water. Ten of these drainages are roadside ditches. The City has conducted a detailed analysis of the potential impacts of the proposed maintenance, has incorporated extensive mitigation into the project, and will comply with all requirements of the applicable resource agencies prior to implementing the project.

The California Environmental Quality Act (CEQA) requires an alternatives analysis only in the context of an Environmental Impact Report (EIR). The Mitigated Negative Declaration (MND) for the current project concludes that the project will not result in any significant environmental impact; therefore, neither an EIR nor an alternatives analysis is required pursuant to CEQA.

Response to Appeal Comment 6

Table 2 and the project descriptions in Section 1.2 of the BRE, Sections 1.2 and 1.3 of the IS/MND, and the November 14, 2013 Responses to MND Comments document provide adequate description of the proposed maintenance activities, proposed staging and access routes, approximate work areas, anticipated equipment to be used, anticipated frequency of activities, and limitations on proposed work activities and work areas. Based on the nature of the proposed maintenance program, it is impossible to quantify all project activities that may

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occur over the duration of the project. The City has identified the range of activities that will be completed under this program and has included numerous mitigation measures to achieve project goals and ensure that potential impacts are less-than-significant or less-than-significant with mitigation.

The potential for the project to result in hydrologic or geomorphic impacts is addressed in Section 8 of the IS/MND, Master Response Seven and Response to MND Comments D.3, E. 3 & 4, E.28, and E.41 provided in the November 14, 2013 Responses to MND Comments document, and above in the Response to Appeal Comment 3. In summary, the project will not result in further channelization or modification of channel geomorphology and is not anticipated to result in landscape changes that may significantly alter hydrologic properties (baseline flow rates, groundwater infiltration, upstream or upland drainage, flooding, or erosion).

Existing baseline conditions including general hydrologic conditions, vegetative communities present, and geomorphic/jurisdictional boundaries (top of bank [identified as riparian area/CDFW jurisdiction when no riparian vegetation is present], riparian area, riparian corridor, Ordinary High Water Mark [OHWM], and CCC wetlands) of the project locations are provided in Section 1.1.2, Section 3.2.1/Appendix E, and Appendix F of the BRE, respectively.

The proposed activities at project locations B-10 and C- 7 (Redondo Beach Road) were included in the IS/MND prepared for the project and were determined to have less than significant impacts. The assertion that the project would result in potentially destructive projects at these locations is unsubstantiated.

The IS/MND, BRE, as well as several responses of the November 14, 2013 Responses to MND Comments document assess the potential to impact biological resources and address the project's consistency with policies of the Coastal Act and Local Coastal Program. These assessments concluded that the project would not have significant impacts to biological resources. The project includes mitigation measures to ensure biological productivity is maintained or remediated through avoiding impacts to special status species, their habitats, and other rare or significant habitats as well as providing restoration of disturbed areas.

The Project's compliance with Zoning Ordinance Section 18.38.050(A)(6) is addressed in Section 3.2.4 and Section 4 of the BRE, which provides a description of coastal resource areas present and the project's consistency with the applicable use and development standards. Additional documentation and review of the project's compliance with the Coastal Act, Local Coastal Program, and the Zoning Ordinance (including Section 18.38.050(A)(6)) is provided in Master Response Two and response to MND Comments E.27, E.46, and E.54.

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Response to Appeal Comment 7

As discussed in Response to Appeal Comment 2 above, the IS/MND, BRE, and November 14, 2013 Responses to MND Comments acknowledge that ground disturbance is not the only potential project disturbance and address the potential of the overall project to impact the environment with the conclusion that impacts will be less-than-significant or less-than-significant with mitigation. These documents provide a complete analysis of the potential impacts and the mitigation necessary to reduce these impacts to a less-than-significant level and provide adequate description of project consistency with the policies of the Coastal Act and Local Coastal Program.

The project description in Section 1.2 of the BRE, Sections 1.2 and 1.3 of the IS/MND, and the November 14, 2013 Responses to MND Comments detail the proposed maintenance activities, proposed staging and access routes, approximate work areas, anticipated equipment to be used, anticipated frequency of activities, and limitations on proposed work activities and work areas. The project does not propose to harden banks, increase the flow of water into natural drainages, or leave cut invasive species in habitats, and will not transfer flood risk between parcels. The potential to result in habitat degradation, as discussed in Response to Appeal Comment 2 above, has been determined to be less-than-significant and numerous mitigation measures have been included to ensure that potential impacts to environmental resources such as rare or listed species, habitats supporting rare or listed species, vegetation, and other sensitive resources are avoided, minimized, and mitigated.

Concerns regarding potential impacts to channel geomorphology are addressed in the November 14, 2013 Responses to MND Comments document (Master Response Seven and Responses to MND Comments D.3, E. 3 & 4, E.28, and E.41) as well as within this response document (see responses to Appeal Comments 3 and 6).

Response to Appeal Comment 8

Per Section 1.3.5 of the IS/MND, all measures of the Lake and Streambed Alteration Agreement (SAA) have been incorporated into the project. Condition A.1 of the CDP Draft Conditions of Approval (Attachment 1 of the Appeal Staff Report) requires that the CDP be implemented in full conformance with the SAA. Furthermore, Condition 3.5 of the SAA has specifically been incorporated into the Mitigation Monitoring Program as MM SAA 4. MM SAA 4 requires that all replacement vegetation consist of locally sourced native species adapted to the replanting site conditions. Planting plans must be prepared by a qualified botanist or biologist and are required to be approved by CDFW and, as described in Response to Appeal Comment 2 above,

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may also be reviewed by the California Coastal Commission (CCC). Replacement trees will be provided at a replacement ratio of greater than 1:1, assuring that biological productivity is not only remediated but enhanced through additional planting. Impacts to herbaceous and shrub dominated habitats are required to be planted with locally-sourced native plants or seeded with a blend of grass seed and local native wildflowers. Performance criteria ensuring restoration of biological productivity will be assessed annually to ensure successful mitigation and will include survivorship, percent cover, and invasive species cover limitations. The City will implement all actions needed to ensure performance criteria are met.

Response to Appeal Comment 9

As described throughout this response document as well as the IS/MND, BRE, and November 14, 2013 Response to MND Comments document, extensive review of the project's potential to impact the environment concludes that impacts will be less-than-significant or less-thansignificant with mitigation. Furthermore, these documents provide adequate description of the project's consistency with the policies of the Coastal Act and Local Coastal Program. The project description in Section 1.2 of the BRE, Sections 1.2 and 1.3 of the IS/MND and November 14, 2013 Response to MND Comments document, detail the proposed maintenance activities, proposed staging and access routes, approximate work areas, anticipated equipment to be used, anticipated frequency of activities, and limitations on proposed work activities and work areas. The project does not propose to harden banks, increase the flow of water into natural drainages, leave cut invasive species in habitats, and will not transfer flood risk between parcels. The potential to result in habitat degradation, as discussed in Response to Appeal Comment 2 above, has been determined to be less-than-significant and numerous mitigation measures have been included to ensure that potential impacts to environmental resources such as rare or listed species, habitats supporting rare or listed species, vegetation, and other sensitive resources are avoided, minimized, and mitigated.

Concerns regarding potential impacts to channel geomorphology are addressed in the November 14, 2013 Responses to MND Comments document (Master Response Seven and Responses to MND Comments D.3, E. 3 & 4, E.28, and E.41) as well as within this response document (see Responses to Appeal Comments 3 and 6).

Response to Appeal Comment 10

A Mitigation Monitoring Program (MMP) has been prepared for the project. The MMP details the mitigation measures to be implemented, where each measure is required, specific monitoring and reporting actions, the phase of the Project in which the measure is required, and the agency/party responsible. As discussed in response to Appeal Comment 3 above, it is impossible to quantify and identify the exact location of all project activities that may occur Attachment 8 – Response to Appeal (File No. PDP-019-13) Page 9 of 11

over the duration of the project. As such, the project includes mitigation measures designed to ensure that any potential impacts are less-than-significant or less-than-significant with mitigation.

The Project's compliance with Zoning Ordinance Section 18.38.050(B)(4, 5, and 6) is addressed in Section 3.2.4 and Section 4 of the BRE, which provide a description of coastal resource areas present, the project's consistency with the applicable use and development standards, and measures implemented to avoid, minimize, and mitigate impacts. Additional documentation and review of the project's compliance with the Coastal Act, Local Coastal Program, and Zoning Ordinance (including these Sections) is provided in the IS and in Master Response Two and responses to MND Comments E.27, E.46, and E.54 of the November 14, 2013 Reponses to MND Comments document.

Response to Appeal Comment 11

As described in Response to Appeal Comment 6 above, existing baseline conditions including hydrological conditions, vegetative communities present, and geomorphic/regulatory location data are provided in Section 1.1.2, Section 3.2.1/Appendix E, and Appendix F of the BRE, respectively. Impacts from erosion or sedimentation, such as head-cutting, channel incision, or other impacts to adjacent hydrologically or biologically connected areas are not anticipated or will be less-than-significant (see Responses to Appeal Comments 3 and 6).

A cumulative impacts assessment is provided in Section 17 of the IS/MND. As described in this section, the project would not result in a significant cumulative impact.

A description of the project's potential impacts related to geology, soils, and seismicity is provided in Section 6 of the IS/MND. As described in this Section, the impacts related to geology, soils, and seismicity are either less-than-significant or less-than-significant with mitigation. As required by Zoning Ordinance Section 18.38.050(A)(5), the proposed project activities are not anticipated to affect the stability or structural integrity of the project locations or create or contribute significantly to erosion. Project activities will generally involve vegetation management activities such as mowing and minor vegetation trimming. Where sediment removal is required, quantities to be removed will be minimal and limited to the amount necessary to restore locations to existing conditions of positive flow as detailed in the project documents; no removal of material from channel banks or material below the existing flow line is permitted. Project activities may include activities that improve stability or structural integrity at certain project locations where existing culverts or other infrastructure that is damaged or not functioning will be replaced. Significant ground disturbance that would result in erosion and downstream sedimentation is not anticipated as part of the project. If areas are disturbed to bare ground inadvertently as a result of foot traffic or removal of

vegetation, soils will be stabilized to minimize erosion, soil loss, bank instability or other indirect impacts and areas will be restored. Vegetation management and sediment removal may have the potential to result in marginally higher flow velocities at the project locations; however such changes taken in consideration with existing flow regimes, contributing watershed areas, channel morphology and hydrologic conditions, are expected to result in insignificant changes in sediment transport and erosion.

Response to Appeal Comment 12

Habitat of rare and endangered species can be difficult to accurately map due to changing species ranges, evolving understanding of species habitat requirements, ever-changing population dynamics, local or regional behavioral or life history differences, lack of existing population data, and the inherent differences between documented occupied habitat and potentially suitable habitat. Zoning Ordinance Section 18.38.020 and the LCP require that the City maintain maps of all designated coastal resource areas within the City, a requirement that does not apply to individual projects. As discussed in the November 14, 2013 comment response document, the City will update the LCP and associated mapping as appropriate to fulfill this requirement.

For the purpose of this project and to satisfy the mapping requirements of Zoning Ordinance Section 18.38.035, the Biological Resource Evaluation (BRE) included a review of documented occurrences of rare or listed species in the vicinity of the project locations and an assessment of the potential for each project location to support rare or listed species (Section 3.2.2). Additionally the BRE included an assessment of vegetative communities present at each project location and the potential of these community types to provide habitat for rare or listed species (Section 3.2.1). Mapping of the project locations and vegetative communities is included as Appendix E of the BRE.

The BRE and November 14, 2013 Responses to MND Comments document, specifically MND Comments C.5, E.39, and E.40, provide adequate discussion of the extent, suitability, quality, and potential for occupancy of habitat areas in the vicinity of the project locations including analysis of not only breeding habitat but upland and foraging habitat and other life stage habitats. The conclusions drawn from these assessments are that impacts to listed species or their habitats will be less-than-significant or less-than-significant with mitigation.

Response to Appeal Comment 13

The City maintenance crew has assisted in designing a project that addresses maintenance they have identified as necessary to ensure the proper function of drainage facilities and to prevent flooding. The BRE provided photos of flooding and other maintenance needs at specific

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locations. Residents of Naples Avenue have provided written testimony and photo documentation of flooding of Roosevelt Drainage. The appellant's concern that maintenance is not needed is noted.

Response to Appeal Comment 14

As discussed in Master Response Seven of the November 14, 2013 Responses to MND Comments document, project locations are also often hydrologically isolated from adjacent uplands or floodplains. This isolation limits hydrologic connections with these areas and suggests that project activities would have a minimal to negligible effect on hydrologic properties associated with these areas such as groundwater recharge or increased upland drainage. Appendix B of this Response to Appeal document provides evidence of side-casting or other circumstances that contribute to isolating project locations B-3, B-6, B-9, B-10, C-1, C-2, C-3, C-4, C-5, and C-6 from adjacent uplands or floodplains. Project location C-7 consists of a series of roadside depressions typically located at the toe-of-slope of adjacent upland berms and the paved portion of Redondo Beach Road and similarly does not provide significant biological habitat, contribute to biological productivity, contribute significantly to groundwater, or have an adjacent floodplain. Project locations B-4 and B-5 consist of vegetated swales located within the coastal terrace between the Coastside Trail and adjacent development to the east. The drainage areas of these features are extremely limited and they effectively do not have adjacent floodplains. Project activities at these locations are anticipated to be extremely minimal limited to vegetation management and minor sediment removal completed by hand and will not impact groundwater recharge or adjacent hydrologic conditions.

Response to Appeal Comment 15

The appellant has not made a fair argument on the basis of substantial evidence in the record that the project may have a significant adverse impact on the environment. The expert testimony cited by the appellant addressed a different project or consisted of general statements by experts who have no knowledge of, or involvement with, the specific project, the project locations or the proposed mitigation addressed in this MND/IS. As mandated by Zoning Ordinance Section 13.38.050(A)4, the project has incorporated mitigation measures to ensure consistency with U.S Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife (CDFW) regulations. Staff has responded to the all comments of the applicable resource agencies. Neither the California Coastal Commission, nor the U.S. Fish and Wildlife Service have requested the preparation of an Environmental Impact Report. The Mitigated Negative Declaration and Initial Study provide a full and adequate environmental analysis of the project in conformance with the requirements of the California Environmental Quality Act.

Mitigation Monitoring Program for the Citywide Drainage Ditch Maintenance Project City of Half Moon Bay, San Mateo County, California

City File No. PDP-19-13

State Clearinghouse No. 2013-08-2031

Prepared for:



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Contact: Carol Hamilton, Senior Planner

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Contact: Jason Wiener, Project Manager



November 15, 2013 Revised January 6, 2014

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n al				Monitoring and Reporting Program			Completion Status
Environment Checklist Ite	Impact Summary	Mitigation Measure	Applicable Project Locations	Monitoring and Reporting Actions	Implementation Schedule	Responsible Agency/Party	Completion Status (if Complete enter date)
AIR QUA	LITY AND GREENHO	USE GASES		1			
3a-3g	Construction emissions of particulates or criteria pollutants.	 The project will implement the Bay Area Air Quality Management District's Standard Construction Mitigation. MM AQ-1 - During Construction Activities the following shall be implemented. 1) All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day or as necessary to prevent visible airborne dust. 2) All haul trucks transporting soil, sand, or other loose material off-site shall be covered. All visible mud or dirt track-out ont ond accent public roads shall be removed using power vacuum street sweepers at least once per day. 3) All vehicle speeds on unpaved roads shall be limited to 15 mph. 4) Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). 5) All construction equipment shall be maintained and properly tuned in accordance with manufacturer's 	All	 Include requirement on any project plans and/or specifications. Ontractor or crew to conduct inspection during construction to ensure compliance. 	During construction	City of Half Moon Bay Planning Department	
		specifications. 6) Post a publicly visible sign with the telephone number and person to contact at the lead agency regarding dust complaints. This person shall respond and take corrective action within 48 hours.					
BIOLOG	ICAL RESOURCES	UN DIO 1 - Dicturbance to versisting and CDAs should be the minimum assessments assessed to Brain the Brain the	All	1) Include mane from American Electric	Pro construction: During	City of Holf Mora Day Dia	
and 4e	Inipatis to Cotasti Resource Areas (CRAs) including sensitive species and habitats.	In order to bacterize to registration and only allowing the minimum incomes of the provided there is no teasible alternative. The minimum amount of disturbance to vegetation is defined as the least amount required to access the Project locations, to restore or maintain normal stream flow, to prevent potential flooding, and for control of weeds and grasses on channel banks and access roads. Prior to all Project activities, a qualified biologist shall designate the work area and any staging areas as well as delineate areas that should be avoided. Areas that would be divinities, a qualified biologist shall designate the work area and any staging areas as well as delineate areas that should be avoided. Areas that would be divinities, a qualified biologist shall designate the work area and any staging areas as well as delineate areas that should be avoided. Areas that would be divinities, a qualified biologist shall commission (CCC) wetlands adjacent to the Project locations. A qualified biologist access or a related field as an individual who has a minimum of 5-years of academic training and professional experience in biologist provided there are an including the species that may be present within the work area including the species had bable to differentiate between these species and similar allies. In order to conduct pre-construction surveys the qualified biologist should have a minimum of success roads to the maximum extent practicable. Heavy equipment (anything larger than a pickup truck, other track equipment, or heavy equipment such as a boodcat) should have one existing access roule, pick to bank? If a consisting access roule, pick to be experience as well as delineate an approved route which minimizes impacts to vegetation as well as identifies and avoids GRAs. If CRAs are identified along the access route a qualified biologist shall monitor all Project activities a qualified biologist biol dates to vegetation as well as identifies and avoids GRAs. If CRAs are identified along the access route a qualified	Ait	 1) Include maps non-piperlaw to the Biological Resource Evaluation (mapping of CRAs) for field crews. 2) Include requirements on any project plans and/or specifications. 3) If work activities will take place near CRAs or other mapped sensitive habitat, contact a qualified biologist to designate the approved work area. Such work area will be demarcated with flagging or fencing as appropriate. 4) Conduct a pre-construction survey and monitoring if required per MM BIO - 12, 13, 24, and/or 25. 	construction.	Department	
4a, 4b, and 4e	Impacts to wildlife.	MM BIO-2 - If any wildlife is encountered during Project activities, said wildlife should be allowed to leave the work area unharmed. If any special-status wildlife species are observed, construction personnel should contact a qualified biologist immediately. The biologist will definitly the species and determine the best course of action. Animals will be allowed to leave the work area of their own accord and without harassment. Animals should not be picked up or moved in any way.	All	1) Include requirement on any project plans and/or specifications. 2) Include requirement in environmental training to be provided to all work crews per MM BIO - 11 and 26.	During construction	City of Half Moon Bay Planning Department	
4c	Impacts to wetlands.	MM BIO-3 - Several CCC wetlands were identified adjacent to the Project locations at B-6, B-7, B-10, C-2, C-3, C-6, and C-7. Activities proposed in these locations that could result in dredge or fill of waters of the United States could be subject to regulation under the Clean Water Act. Activities proposed in these areas must be reviewed to determine if they would be regulated by the United States Army Corps of Engineers (USACE), and a wetland delineation could be required to determine the extent of USACE jurisdiction.	B-6, B-10, C-2, C-3, C-6, and C-7.	 Include maps from Appendix F of the Biological Resource Evaluation (mapping of CCC wetlands) for field crews. If work activities are located within CCC wetlands, contact a qualified biologist to review activities and work area. No work shall occur until all necessary approvals are acquired. Include requirement on any project plans and/or specifications. 	Pre-construction; During construction.	City of Half Moon Bay Planning Department; United States Army Corps of Engineers	
4a, 4b, and 4e	Impacts to wildlife, aquatic resources, and water quality.	MM BIO-4 - No Project activities shall be conducted in a channel with water flowing or present in it to the maximum extent practicable, with the exception of emergency activities. Similarly no equipment should be operated in a flowing drainage feature unless it is necessary for emergency purposes and there is no feasible alternative, or it is necessary to construct a dewatering system to divert water flow around a work area. Additional requirements and restrictions may be required for work in an active channel or if a dam or dewatering system is required, and should be reviewed independently prior to construction.	All	 Include requirement on any project plans and/or specifications. Ontractor or crew to conduct inspection during construction to ensure compliance. Adhere to MM SAA - 3 for work in an active channel and dam or dewatering system requirements. 	During construction	City of Half Moon Bay Planning Department A-2-HM	B-14-0004

a a				Monitoring and Reporting Program		Completion Status
Environment Checklist Ite	Impact Summary	Mitigation Measure	Applicable Project Locations	Monitoring and Reporting Actions Implementation Schedule	Responsible Agency/Party	Completion Status (if Complete enter date)
4a, 4b, and 4e	Impacts to wildlife, aquatic resources, and water quality.	MM BIO-5 - Any and all spoils generated during Project activities shall be placed where they cannot enter drainage features, riparian areas or corridors, or wetlands. Spoils shall be removed from the work area and disposed of at an appropriate facility.	All	Include requirement on any project plans and/or specifications. 2) Contractor or crew to conduct inspection during construction to ensure compliance. J) Include requirement in environmental training to be provided to all work crews per MM BIO - 11 and 26. Contractor and the second	2ity of Half Moon Bay Planning Department	
4a, 4b, and 4e	Impacts to wildlife, aquatic resources, and water quality.	MM BIO-6 - During construction, to avoid erosion and downstream sedimentation, no work in or immediately adjacent to the drainage ditches should occur during the rainy season (October 31 through April 15).	All	Include requirement on any project plans During construction C and/or specifications. C Create schedule for planned maintenance activities to ensure work is not scheduled during this time period. C	2ity of Half Moon Bay Planning Department	
4a, 4b, and 4e	Impacts to wildlife, aquatic resources, and water quality.	MM BIO-7 - During construction, the 72-hour weather forecast shall be monitored. If there is a more than 40% chance of rain, or a the onset of unanticipated precipitation of 0.25 inch or more, all equipment should be removed or staged to avoid potential impacts, soil erosion and sediment control measures should be implemented, and Project activities should cease until after a 24 hour dry-out period if there has been more than 0.25 inch of rain.	All	 Within 3 days of proposed maintenance contractor/crew to check weather forecast and previous weather data for recent precipitation events. Include requirement on any project plans and/or specifications. Contractor or crew to monitor weather during construction to ensure compliance. Work is to cease after unanticipated precipitation events of 0.25 inches and crew is to monitor forecast until sufficient dry-out period has occurred. 	3ity of Half Moon Bay Planning Jepartment	
4a, 4b, and 4e	Impacts to wildlife, aquatic resources, and water quality.	MM BIO-8 - All exposed soils in the work area (resulting from Project activities) shall be stabilized immediately following the completion of work to prevent erosion. Erosion control BMPs, such as silt fences, straw hay bales, gravel or rock lined drainages, water check bars, and broadcast straw can be used. Erosion control fabrics should be biodegradable. BMPs shall be monitored during and after storm events. At no time shall silt-laden runoff be allowed to enter drainages or wetlands. All BMPs shall be removed once area is stabilized and there is no risk of further erosion (biodegradable materials may be left as needed).	All	1) Include requirement on any project plans and/or specifications. Construction; post 2) Contractor, crew, or consultant to conduct inspection during construction to ensure compliance. If measures are identified as inadequate the City Planning Department will be notified immediately and restorative measures shall be enacted. Following inspection a report will be submitted to the City Planning Department. 3) Implement and adhere to requirements of MM BIO - 20 and MM SAA - 4 for revegetation and success criteria.	2ity of Half Moon Bay Planning Department	
4a, 4b, and 4e	Impacts to wildlife and water quality.	MM BIO-9 - If Project activities result in disturbance exceeding one acre; a Stormwater Pollution Prevention Plan (SWPPP) will be required. If required prior to the start of work a notice of intent (NOI) and SWPPP should be prepared and submitted to the appropriate Regional Water Quality Control Board (RWQCB). A copy of the SWPPP should be submitted to the County for approval to show that sedimentation and erosion control measures are installed prior to any other ground-disturbing work.	All	1) Include requirement on any project plans and/or specifications. Pre-construction; During construction Construction 2) If an activity or the cumulative result of activities result in one acre of ground disturbance contractor, crew, or consultant will prepare and implement a SWPPP that would include installation of, and maintenance of stormwater controls. The SWPPP must be approved by and comply with the requirement of the RWQCB. Sontractor, crew, or consultant inspection and submit reports during construction to ensure compliance with any SWPPP requirements.	Jity of Half Moon Bay Planning Department; San Francisco Bay Regional Nater Quality Control Board	
4a, 4b, and 4e	Impacts to wildlife.	MM BIO-10 - Work area activities at B-2, B-4, B-5, B-9, B-10, C-2, C-6, and C-7 should be limited to June 15 to October 31. Work at B-1, B-3, B-6, C-4, and C-5 should be limited to April 15 to October 31.	As Noted	1) Include requirement on any project plans During construction C and/or specifications. D D 2) Create schedule for planned maintenance activities to ensure work is not scheduled appropriately. D D	City of Half Moon Bay Planning Department	
4a, 4b, and 4e	Impacts to California red-legged frog.	MM BIO-11 - Before any construction activities begin on the Project, a qualified biologist should conduct a training session for all construction personnel. At a minimum, the training should include a description of the California red- legged frog (CRLF) and its habitat, the importance of the California red-legged frog and its habitat, the general measures that are being implemented to conserve the California red-legged frog and they relate to the Project, and the boundaries within which the Project may be accomplished. Brochures, books, and briefings may be used in the training session, provided that a qualified person is on hand to answer any questions.	All	1) A qualified biologist will provide training to work crews as-needed, all trainee will sign an environmental training sign in sheet. Pre-construction and construction; as appropriate D and necessary. 2) Contractor, consultant and/or City Planning Department will maintain a master environmental training sign in sheet recording all personal trained on the project. Pre-construction and construction; as appropriate D and necessary.	Sity of Half Moon Bay Planning Department	2 14 0004
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Environment Checklist Ite	Impact Summary	Mitigation Measure	Applicable Project Locations	Monitoring and Reporting Actions	Implementation Schedule	Responsible Agency/Party	Completion Status (if Complete enter date)
4a, 4b, and 4e	Impacts to California red-legged frog.	IMM BIO-12 - A qualified biologist should survey work areas at B-2, B-4, B-5, B-6, B-9, B-10, C-2, C-5, C-6, and C-7 within 48 hours of the planned start of activities. If California red-legged frogs, tadpoles, or eggs are found, the approved biologist should inform the City to initiate formal Endangered Species Act (ESA) consultation with the United States Fish and Wildlife Service (USFWS) if work is to go forward.	B-2, B-4, B-5, B-6, B-9, B- 10, C-2,C-5, C-6, and C-7	1) Survey methods will be submitted to and approved by CDFW (Bay Delta Region 7329 Silverado Trail, Napa, CA 94558, Attn: Suzanne DeLeon, Notification # 1600-2012- 0173-R3) prior to commencement of surveys. 2) The qualified biologist will be approved by CDFW (as above) within 30-days of initiating surveys. 3) Qualified biologist will complete pre- construction surveys within 48-hrs of planned start of work activities. A survey report containing survey methods and results will be submitted to CDFW (as above) and the Ctiy Planning Department prior to the start of work. 4) If CRLF are observed during the survey CDFW and the City Planning Department will be notified immediately and additional requirements as described in MM BIO-12 will be required.	Pre-construction - survey completed within 48-hours of planned work activities.	City of Half Moon Bay Planning Department; California Department of Fish and Wildlife	
4a, 4b, and 4e	Impacts to California red-legged frog.	MM BIO-13 - A qualified biologist should be present at B-2, B-4, B-5, B-6, B-9, B-10, C-2,C-5, C-6, and C-7 during all Project activities. The biologist should have the authority to halt any action that might result in impacts. If California red-legged frogs are found at any time, work actives shall stop and the approved biologist should inform the City to initiate formal ESA consultation with the USFWS. If the biologist is permitted by the USFWS and approved by the CDFW for this Project to handle California red-legged frogs, only then can the species be handle and relocated. Under no circumstances should a California red-legged frog be handled, relocated, or otherwise harmed or harassed at any time without coordination and approval from the USFWS if work is to go forward.	B-2, B-4, B-5, B-6, B-9, B- 10, C-2,C-5, C-6, and C-7	 Include requirement on any project plans and/or specifications. The qualified biologist/biological monitor will be present during construction activities at the specified locations. The qualified biologist/biological monitor will submit to the City Planning Department, within 3-business days, a monitoring report documenting location(s) monitored, activities observed, and if special status species were observed or potentially impacted. 	During construction	City of Half Moon Bay Planning Department	
4a, 4b, and 4e	Impacts to wildlife.	MM BIO-14 - For control of weeds and grasses on channel banks and access roads at B-2, B-4, B-5, B-6, B-7, B-8, B- 9, B-10, C-2, C-5, C-6, and C-7, vegetation shall be cut to no less than 6 inches by an articulating mower or hand tools for locations adjacent to an existing access route, and by hand tools for locations with no existing access routes. Once the ground is visible, a visual survey for California red-legged frog shall be conducted by a qualified biologist. If no individuals are found in the area, vegetation removal may continue with the qualified biologist walking in front of equipment to observe.	B-2, B-4, B-5, B-6, B-9, B- 10, C-2,C-5, C-6, and C-7	 The qualified biologist/biological monitor will monitor be present for the stated activities at the specified locations. 	During construction	City of Half Moon Bay Planning Department	
4a, 4b, and 4e	Impacts to wildlife.	MM BIO-15 - No stockpiling of vegetation shall occur at the worksite. Vegetation to the maximum extent practicable based on the equipment used should be placed directly or as quickly as feasible into a disposal container and removed from the site. Vegetation shall not be piled on the ground unless it is later disposed of under the supervision of a qualified biologist.	B-2, B-4, B-5, B-6, B-9, B- 10, C-2,C-5, C-6, and C-7	 Include requirement on any project plans and/or specifications. Contractor, crew, and/or qualified biologist to conduct inspection during construction to ensure compliance. Include requirement in environmental training to be provided to all work crews per MM BIO - 11 and 26. 	During construction	City of Half Moon Bay Planning Department	
4a, 4b, and 4e	Impacts to wildlife.	MM BIO-16 - To protect potential burrows, no soil shall be stockpiled on the ground unless it is a paved surface or the area has been surveyed by a qualified biologist.	All	 Include requirement on any project plans and/or specifications. Contractor, crew, and/or qualified biologist to conduct inspection during construction to ensure compliance. Include requirement in environmental training to be provided to all work crews per MM BIO - 11 and 26. 	During construction	City of Half Moon Bay Planning Department	
4a, 4b, and 4e	Impacts to wildlife.	IMM BIO-17 - During Project activities, all trash that may attract predators should be properly contained, removed, and disposed of regularly. Following construction, trash/construction debris should be removed from work areas.	All	 Include requirement on any project plans and/or specifications. Contractor or crew to conduct inspection during construction to ensure compliance. Include requirement in environmental training to be provided to all work crews per MM BIO - 11 and 26. 	During construction	City of Half Moon Bay Planning Department	

				Monitoring and Reporting Program			Completion Status	
Environment	Impact Summary	Mitigation Measure	Applicable Project Locations	Monitoring and Reporting Actions	Implementation Schedule	Responsible Agency/Party	Completion Status (if Complete enter date)	
4a, 41 and 4	, Impacts to California e red-legged frog.	MM BIO-16 - To assist in excluding California red-legged frog from the work area during sediment removal or bank stabilization with large equipment, an exclusion fence should be installed around the work area prior to the commencement of construction activities. Exclusion fencing should be silt-lence type fencing or equivalent, and should not include poly mesh fencing or other similar fencing that could entrap or snag replikes, amphibians, or other small animals. Exclusion fencing should be installed with the fence stakes placed on the side opposite of the Project location to prevent frogs from using the stakes to maneuver over the fence. Fencing should be keyed-in appropriately (at least 6-inches deep) with 10-foot long turn-around facing away from the Project location located at either end in order to redirect animals away from openings. Once fencing is in place and once daily, a qualified biologist should check the work area to confirm that sensitive species are not present before Project activities commence. The fencing should be maintained until all work has been completed. The fencing should be inspected on a daily basis by a qualified biologist, and any damaged areas should be repaired immediately upon discovery.	B-2, B-4, B-5, B-6, B-9, B- 10, C-2,C-5, C-6, and C-7	 Include requirement on any project plans and/or specifications. Ontractor, crew, and/or qualified biologist to conduct inspection during construction to ensure compliance. 	Pre-construction; During construction	City of Half Moon Bay Planning Department		
4	Impacts to native vegetation and habitats.	MM BIO-19 - A qualified biologist should ensure that the spread or introduction of invasive exotic plant species should be avoided to the maximum extent possible. When practicable, invasive exotic plants in work areas should be removed. Any removed exotic plants should be immediately bagged and appropriately disposed of at a permitted facility.	All	 Include requirement on any project plans and/or specifications. Contractor, crew, and/or qualified biologist to conduct inspection during construction to ensure compliance. 	During construction	City of Half Moon Bay Planning Department		
4	Impacts to habitats and aquatic resources.	MM BIO-20 - If there is significant ground disturbance, Project locations should be revegetated with an appropriate assemblage of vegetation suitable for the area. Such a plan must include but not be limited to location of the restoration, species to be used, restoration techniques, time of year the work will be done, identifiable success criteria for completion, and remedial actions if the success criteria are not achieved.	All	 Include requirement on any project plans and/or specifications. A qualified botanist or biologist will prepare and submit revegtation plans to the City Planning Department. Revegetation success and monitoring shall be completed in per MM SAA - 4. 	Post construction	City of Half Moon Bay Planning Department; California Department of Fish and Wildlife California Coastal Commission		
4a, 41 4c, ar 4e	 Impacts to wildlife and sensitive habitats. 	MM BIO-21 - The number of access routes, number and size of staging areas, and the total area of the activity should be limited to the minimum necessary to complete the Project. Routes and boundaries should be clearly demarcated, and these areas should be outside of wetland areas, as feasible. Where impacts occur in these staging areas and access routes, restoration should occur as identified in measure MM BIO-20 above.	All	 Include requirement on any project plans and/or specifications. Contractor, crew, and/or qualified biologist to conduct inspection during construction to ensure compliance. 	Pre-construction; During construction; Post construction	City of Half Moon Bay Planning Department		
4	Impacts to habitats and aquatic resources.	MM BIO-22 - To control erosion during and after Project implementation, the City should implement BMPs, as identified by the appropriate RWQCB.	All	 Include requirement on any project plans and/or specifications. Contractor or crew to conduct inspection during construction to ensure compliance. 	Pre-construction; During construction	City of Half Moon Bay Planning Department		
4	23	MM BIO-23 - All fueling and maintenance of vehicles and other equipment and staging areas should occur at least 50 feet from any riparian area, riparian corridor, wetland, or other drainage feature or waterbody. The City should ensure that contamination of habitat does not occur during such operations. Prior to the onset of work, the City should ensure that there is a plan to allow a prompt and effective response to any accidental spills. All workers should be informed of the importance of preventing spills, and of the appropriate measures to take should a spill occur.	All	 Include requirement on any project plans and/or specifications. Ontractor, crew, and/or qualified biologist to conduct inspection during construction to ensure compliance. Include requirement in environmental training to be provided to all work crews per MM BIO - 11 and 26. 	During construction	City of Half Moon Bay Planning Department		
4a, 41 and 4	, Impacts to San Francisco Garter Snake.	MM BIO-24 - Avoidance measures for San Francisco garter snake should be employed in all areas where construction could result in the direct take of this species. Full-time monitoring is recommended during construction a B-1, B-2, B-4, B-5, B-6, B-9, B-10, C-2, C-5, C-6, and C-7 to ensure that no unanticipated take of San Francisco garter snake occurs. The qualified biologist should be on call as needed to monitor construction activities in potential habitat and inspect exclusion fencing to ensure it remains intact throughout the duration of construction. The qualified biologist may sope work it necessary to protect San Francisco garter snake, and should notify the City as to how to proceed accordingly.	B-1, B-2, B-4, B-5, B-6, B- 9, B-10, C-2, C-5, C-6, and C-7	 Include requirement on any project plans and/or specifications. The qualified biologist/biological monitor will be present during construction activities at the specified locations. The qualified biologist/biological monitor will submit to the City Planning Department, within 3-business days, a monitoring report documenting location(s) monitored, activities observed, and if special status species were observed or potentially impacted. 	During construction	City of Half Moon Bay Planning Department		

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4a, 4b, and 4e	Impacts to San Francisco Garter Snake.	MM BIO-25 - A qualified biologist should conduct pre-construction surveys before any Project activities take place in potential San Francisco garter snake habitat at B-1, B-2, B-9, B-10, C-6, and C-7. Surveys should consist of walking transects while conducting visual encounter surveys in areas that will be subject to vegetation clearing, sediment removal, grading, cut and fill, or other ground-disturbing activities. If a San Francisco garter snake is observed during a survey, the USFWS, and CDFW will be notified and the San Francisco garter snake should be monitored until it leaves the area on its own, undisturbed and without harassment.		 Survey methods will be submitted to and approved by CDFW (Bay Delta Region 7329 Silverado Trail, Napa, CA 94558, Attn: Suzanne DeLeon, Notification # 1600-2012- 0173-R3) prior to commencement of surveys. The qualified biologist will be approved by CDFW (as above) within 30-days of initiating surveys. Qualified biologist will complete pre- construction surveys within 48-hrs of planned start of work activities. A survey report containing survey methods and results will be submitted to CDFW (as above) and the City Planning Department prior to the start of work. QEFU (as observed during the survey CDFW and the City Planning Department will be notified immediately and additional requirements as described in MM BIO-25 will be required. 	Pre-construction - survey completed within 48-hours of planned work activities.	City of Half Moon Bay Planning Department; California Department of Fish and Wildlife	
4a, 4b, and 4e	Impacts to San Francisco Garter Snake.	MM BIO-26 - Before any construction activities begin on a Project, a qualified biologist should conduct a training session for all construction personnel. At a minimum, the training should include a description of the San Francisco garter snake and its habitat, the importance of the San Francisco garter snake and its habitat, the general measures that are being implemented to conserve the San Francisco garter snake as they relate to the Project, and the boundaries within which the Project may be accomplished. Brochures, books, and briefings may be used in the training session provided that a qualified person is on hand to answer any questions.	All	 A qualified biologist will provide training to work crews as-needed, all trainee will sign an environmental training sign in sheet. Contractor, consultant and/or City Planning Department will maintain a master environmental training sign in sheet recording all personal trained on the project. 	Pre-construction and construction; as appropriate and necessary.	City of Half Moon Bay Planning Department	
4a, 4b, and 4e	Impacts to San Francisco Garter Snake.	MM BI0-27 - To assist in excluding San Francisco garter snakes from the work area during sediment removal or bank stabilization with large equipment, an exclusion fence should be installed around the work area prior to the commencement of construction activities. Exclusion fencing should be sitt-fence type fencing or equivalent, and should not include poly mesh fencing or other similar fencing that could entrap or snag reptiles, amphibians, or other small animals. Exclusion fencing should be installed with the fence stakes placed on the side opposite of the Project location to prevent snakes from using the stakes to maneuver over the fence. Fencing should be keyed-in appropriately (at least 6 inches deep) with 10-foot-long turnarounds facing away from the Project location at each end to redirect animals away from openings. Once fencing is in place, a qualified biologist should check the work area once daily to confirm that sensitive species are not present before Project activities commence. The fencing should be maintained until all work has been completed. The fencing should be preceded on a daily basis by a qualified biologist, and any damaged areas should be repaired immediately upon discovery.	B-1, B-2, B-4, B-5, B-6, B- 9, B-10, C-2, C-5, C-6, and C-7	 Include requirement on any project plans and/or specifications. Contractor, crew, and/or qualified biologist to conduct inspection during construction to ensure compliance. 	Pre-construction; During construction	City of Half Moon Bay Planning Department	
4a, 4b, and 4e	Impacts to wildlife.	MM BIO-28 - Under no circumstances should a San Francisco garter snake be handled, relocated, or otherwise harmed or harassed at any time without coordination and approval from USFWS and CDFW.	All	 Include requirement on any project plans and/or specifications. Contractor, crew, and/or qualified biologist to conduct inspection during construction to ensure compliance. Include requirement in environmental training to be provided to all work crews per MM BIO - 11 and 26. 	During Construction	California Department of Fish and Wildlife; United States Fish and Wildlife Service	
4a, 4b, and 4e	Impacts to nesting migratory birds	 MM BIO-31 - If Project activities are conducted during the typical nesting bird season (February 15 through September 15), pre-construction nest surveys should be conducted in and near the Project area (within 500 feet for large raptors such as buccipates, and 100 feet for all other birds) by a qualified biologist. If nesting is identified during the pre-construction survey, the following measures should be implemented: 1) If active nest sites of bird species protected under the MBTA and/or California Fish and Wildlife Code Section 3503 are observed in the survey area, then the Project should be modified and/or delayed as necessary to avoid direct take of the identified nests, eggs, and/or young. Potential Project modifications may include the establishment of protective buffer zones (500 feet for large raptors such as bucces, 250 feet for small raptor such as accipiters, and 100 feet for all other birds) in which a qualified biologist shall monitor all Project-related activities to ensure that the ydo not impact nesting birds. Monitoring shall continue through work activities until the biologist has determined that the nesting activity has ceased. 2) Active nests should be documented by a qualified biologist, and a letter report should be submitted to the USFWS and CDFW documenting Project compliance with the MBTA and applicable Project mitigation measures. 	All	 Survey methods will be submitted to and approved by CDFW (Bay Delta Region 7329 Silverado Trail, Napa, CA 94558, Attn: Suzanne DeLeon, Notification # 1600-2012- 0173-R3) prior to commencement of surveys. The qualified biologist will be approved by CDFW (as above) within 30-days of initiating surveys. Qualified biologist will complete pre- construction surveys within 14 days of planned start of work activities. A survey report containing survey methods and results will be submitted to CDFW (as above) and the City Planning Department within 1 week of survey. If active nests are observed during the survey CDFW and the City Planning Department will be notified immediately and additional requirements as described in MM BIC-31 will be required. 	Pre-construction between February 15 and September 15 - survey completed no more than 14 days prior to construction. If a lapse in construction of 15 days or longer occurs at any location, another survey shall be completed prior to initiation of work.	City of Half Moon Bay Planning Department; California Department of Fish and Wildliffe; United States Fish and Wildlife Service A-2-HMI	8-14-0004 Exhibit 2

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CULTU	RAL RESOURCES						
5b	Impacts on archaeological resources.	MM CUL-1 - If subsurface archaeological resources are encountered during maintenance activities, all work shall cease within 50 feet of the discovery and an archaeologist shall evaluate the resources to determine their significance and recommend any additional mitigation necessary to reduce potential impacts to a less than significant level, to the satisfaction of the Planning Director.	All	 Include requirement on any project plans and/or specifications. Contractor, crew, and/or qualified biologist to conduct inspection during construction to ensure compliance. Include requirement in environmental training to be provided to all work crews per MM BIO - 11 and 26. 	During construction	City of Half Moon Bay Planning Department	
5d	Impacts on human remains.	MM CUL-2 - If human remains are encountered during earth-disturbing activities, in conformance with Section 7050.5 of the Health and Safety Code and Section 5097.94 of the Public Resources Code, all in the adjacent area shall stop immediately and the San Mateo County Coroner's office shall be notified. If the remains are determined to be Native American in origin, both the Native American Heritage Commission and any identified descendants shall be notified by the coroner and recommendations for treatment solicited (CEOA Guidelines Section 15064.5; Health and Safety Code 7050.5; Public Resources Code Sections 5097.94 and5097.98).	All	 Include requirement on any project plans and/or specifications. Ocntractor, crew, and/or qualified biologist to conduct inspection during construction to ensure compliance. Include requirement in environmental training to be provided to all work crews per MM BIO - 11 and 26. 	During construction	City of Half Moon Bay Planning Department; San Mateo County Coroner's Office	
GEOLO	GY, SOILS, AND SEIS	MICITY		•			
6b and 6f	Impacts from soil erosion and loss of topsoil or degradation of water quality.	See MM BIO-4, MM BIO-5, MM BIO-6, MM BIO-7, MM BIO-8, MM BIO-9, MM BIO- 21, MM BIO-22, MM BIO-23, and	MM HYD-1.				
HYDRO	LOGY AND WATER Q	UALITY					
8a and 8f	Violate water quality standards or waste discharge requirements or degrade water quality.	See MM BIO-4, MM BIO-5, MM BIO-6, MM BIO-7, MM BIO-8, MM BIO-9, MM BIO- 21, MM BIO-22, and MM BIO-23.					
8a and 8f	Violate water quality standards or waste discharge requirements or degrade water quality.	 IMM HYD-1 - During construction, the following San Mateo County Storm Water Pollution Best Management Practices (BMPs) shall be employed to ensure that water quality of affected drainages is maintained and no siltation of downstream waterways would occur: All maintenance activities in B and C Project location drainages shall take place in the dry season between April 1 and October 31 to minimize immediate erosion/siltation effects. Exceptions to this requirement may be provided if compelling circumstances exist (e.g., favorable weather conditions). Construction materials and waste shall be handled and disposed of properly in compliance with applicable law to prevent their contact with stormwater. Discharge of all potential pollutants, including pavement cutting wastes, paints, concrete, petroleum products, chemicals, washwater or sediments, and non-stormwater discharges to storm drains and watercourses shall be controlled and prevented. Sediment controls such as straw mulch, silt fences, sediment basins or traps and/or other measures shall be employed during construction. Tracking dirt or other materials offsite shall be avoided and offsite paved areas and sidewalks shall be cleaned regularly using dry sweeping methods. The contractor shall train and provide instruction to all employees and subcontractors regarding construction BMPs. 	All	 Include requirement on any project plans and/or specifications. Contractor or crew to conduct inspection during construction to ensure compliance. Include requirement in environmental training to be provided to all work crews per MM BIO - 11 and 26. 	Pre-construction; During construction	City of Half Moon Bay Planning Department	
NOISE							
11a and 11d	Impacts from construction related noise increases.	MM NOI-1 - Maintenance activities shall conform to the following noise attenuation requirements: • Construction activities shall be limited to between the hours of 8 a.m. and 6 p.m. weekdays, excluding holidays. • All construction equipment shall use noise-reduction features (e.g., mufflers and engine shrouds) that are no less effective than those originally installed by the manufacturer.	All	 Include requirement on any project plans and/or specifications. Contractor or crew to conduct inspection during construction to ensure compliance. 	During construction	City of Half Moon Bay Planning Department	

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Environment Checklist Ite	Impact Summary	Mitigation Measure	Applicable Project Locations	Monitoring and Reporting Actions	Implementation Schedule	Responsible Agency/Party	Completion Status (if Complete enter date)
ADDITIC	DAL CALIFORNIA DE Impacts to San Francisco Dusky footed woodrat	PARTMENT OF FISH AND WILDLIFE STREAMBED ALTERATION AGREEMENT IMM SAA-1 - A pre-construction survey for San Francisco Dusky footed woodrat (SFDW) shall be completed by a qualified biologist within 2-weeks prior to project activities. If SFDW housed are observed CDFW should be notified immediately.	B-1, B-2, B-10, C-5, C-6, and C-7	 Survey methods will be submitted to and approved by CDFW (Bay Delta Region 7329 Silverado Trail, Napa, CA 94558, Attn: Suzanne DeLeon, Notification # 1600-2012- 0173-R3) prior to commencement of surveys. The qualified biologist will be approved by CDFW (as above) within 30-days of initiating surveys. Pre-construction surveys will be completed within 2-weeks of planned start of work activities. A survey report shall be submitted to CDFW and the City Planning Department containing survey methods and results prior to the start of work. I SFDW are observed during the survey CDFW and the City Planning Department should be notified immediately. 	Pre-construction	City of Half Moon Bay Planning Department; California Department of Fish and Wildlife	
	Impacts to habitats and aquatic resources.	 MM SAA-2 - Annual sediment removal shall conform to the following limits: Natural channels - not to exceed 30 cubic yards, limited to 500 linear feet per stream; Engineered earthen channels and drainages - not to exceed 45 cubic yards, limited to 1,000 linear feet per stream. Removal equipment shall be staged on the road and outside bank of the drainage; Concrete-line channels - not to exceed 90 cubic yards, limited to 5,000 linear feet per channel; and Additional sediment removal around bridge footing and in culverts, storm drain outlets, trash racks/trash capture devises, and water diversion inlets - not to exceed 50 cubic yards. 	Natural Channels - B-1, B- 2; Engineered earthen channels and drainages - B-3, B-4, B-5, B-6, B-9, B- 10, C-1, C-2, C-3, C-4, C- 5, C-6, and C-7	 Include requirement on any project plans and/or specifications. The contractor or work crew will document the quantity (cubic yards) and area (linear feet) of sediment removal at each project location and submit results to the City Planning Department. The City Planning Department will and maintain a tally based on drainage type to ensure activities do not exceed the stated limits. Annual totals will be included in annual reporting to CDFW (MM SSA-5). 	During construction; Post construction	City of Half Moon Bay Planning Department; California Department of Fish and Wildlife;	
	Impacts to aquatic resources and water quality.	MM SAA-3 - In the event work is required to take place during periods when water is present in the project locations. Activities shall be isolated from flowing water. To isolate the work area, water tight coffer dams shall be constructed upstream and downstream of the work area and water diverted through a suitably sized pipe discharged downstream. Dams shall be made of non-erodible material. Dams shall be in-place and maintained throughout the work period. If dewatering is needed during dam implementation, the decrease in water surface elevation shall be controlled such that there are not increases in turbidity that would be deleterious to aquatic life (i.e. exceed background levels measured directly upstream by 50 NTUs). During dewatering a biologist shall make a reasonable effort should be made to capture and move all stranded aquatic life to the nearest adjacent body of water. Non- native aquatic species should be disposed of properly and not placed back into the drainage or other body of water and documentation of species provided to CDFW upon completion of work.	All	 Include requirement on any project plans and/or specifications. Contractor or crew to conduct inspection during construction to ensure compliance. 	Pre-construction; During construction	City of Half Moon Bay Planning Department; California Department of Fish and Wildlife;	
	Impacts to vegetation, fish and wild resources.	 NM SAA-4 - To compensate for impacts to vegetation the following measures shall be implemented: If tree are removed, trees shall be replaced at the following mitigation ratios: Oaks - 6:1 ratio Name are removed, trees shall be replaced at the following mitigation ratios: Oaks - 6:1 ratio Non-native trees often than oaks - 3:1 ratio Non-native trees shall consist of 5-gallon saplings, stakes or other suitable stock, be native and adapted to the replanting site conditions. If planting within the work are is infeasible due to constraints, replacement trees may be planted along the same stream corridor. Trees shall be planted by December 31 of the year the impact occurred. Planting plans shall be submitted to CDFW a minimum of 30-day prior to replanting work for approval. To ensure re-vegetation survivorship all plants shall be monitored and maintained for five (5) years with the following success criteria: Planting shall have a minimum 80% survival at end of 5-years. Planting shall have a minimum 80% survival at end of 5-years. Planting shall have a minimum 80% survival at end of 5-years. Planting shall have a streng, weeding, etc.). All exposed/disturbed areas left barren of vegetation shall be re-vegetated with native plants or seeded with a blend of erosion control grass seeds and locally native wildflowers. Non-native grass species shall not exceed 25% of seed mix by count and shall be sterile. Re-vegetation shall be cowred with suitable erosion control materials. 	All	 Include requirement on any project plans and/or specifications. Contractor, crew, or qualified biologist will document vegetation removal at each project location. A qualified botanist or biologist will prepare and submit vegetation replacement plans as described. Replacement vegetation will be obtained from onsite cuttings or from local nursery stock. The qualified botanist or biologist will conduct annual monitoring assessing survivorship, percent cover, and percent non- native species for each replanting site. Monitoring data will be summarized in the annual report provided to CDFW per MM SAA-6. 	During construction; Post construction	City of Half Moon Bay Planning Department; California Department of Fish and Wildlife;	

ਤ ਡ				Monitoring and Reporting Program			Completion Status	
Environment Checklist Itel	Impact Summary	Mitigation Measure	Applicable Project Locations	Monitoring and Reporting Actions	Implementation Schedule	Responsible Agency/Party	Completion Status (if Complete enter date)	
	Notification of proposed activities	MM SAA-5 - Written notification will be provided to CDFW of proposed routine maintenance activities to be performed in the upcoming year by March 15 each year. Notification shall include the project locations, description of the work area (topography, hydrology, vegetation within 50 feet of work area), and description of the proposed activities (including impact area calculations).	All	1) The City Planning Department will submit the proposed activity report to CDFW (Bay Delta Region 7329 Silverado Trail, Napa, CA 94558, Attn: Suzame DeLeon, Notification # 1600-2012-0173-R3). Entitle report Exhibit C [year].	Submit report by March 15 each year.	City of Half Moon Bay Planning Department; California Department of Fish and Wildlife;		
	Annual Reporting	MM SAA-6 - Written notification will be provided to CDFW of completed routine maintenance activities by December 15 each year. Notification shall include a report documenting the project locations, description of the completed activities (including impact area calculations), and appropriate fee calculations.	All	1) The City Planning Department will submit the annual report and payment to CDFW (Bay Delta Region 7329 Silverado Trail, Napa, CA 9458, Attr: Suzanne DeLeon, Notification # 1600-2012-0173-R3).	Submit report and payment by December 15 each year.	City of Half Moon Bay Planning Department; California Department of Fish and Wildlife;		
	List of non-native species	MM SAA-7 - A list of non-native species observed shall be submitted to CDFW within two-week of completion of each maintenance activity with the location and list of species observed in the project area.	All	 Include requirement on any project plans and/or specifications. Contractor, crew, or qualified biologist will document non-native species at each project location during pre-activity surveys, construction monitoring, and other inspections. The list will be submitted to CDFW (Bay Delta Region 7329 Silverado Trail, Napa, CA 94558, Attn: Suzanne DeLeon, Notification # 1600-2012-0173-R3) within 2 weeks of completion of maintenance activities. 	Post construction - within 2 weeks of completion of maintenance activities	City of Half Moon Bay Planning Department; California Department of Fish and Wildlife;		
	Notification to CNDDB	IMN SAA-8 - If any listed, rare, or special-status species are detected during survey, monitoring, or inspections on or around the project sites during project activities, the permittee shall submit CNDDB Field Survey Forms to CDFW in the manner described at the CNDDB website (http://www.dfg.ca.gov/biogeodata/cnddb/submitting_data_to_cnddb.asp) within 14 working days of the sightings.	Ali	 Include requirement on any project plans and/or specifications. Contractor, crew, or qualified biologist Will document any special status species observed at each project location during pre- activity surveys, construction monitoring, and other inspections. CNDDB Field Survey Form(s) will be submitted as described with a copy sent to CDFW (Bay Delta Region 7229 Silverado Trail, Napa, CA 94558, Attn: Suzanne DeLeon, Notification # 1600-2012-0173-R3). 	Post construction - submit within 14-working days of sighting	City of Half Moon Bay Planning Department; California Department of Fish and Wildlife;		
ADDITIO	NAL NOTIFICATION					1		
	Coastside Landtrust	IMM NOT-1 - Provide notification to Coastside Landrust (CLT) when maintenance activities are proposed at project locations where CLT holds conservation easements.	B-3, B-4, B-5, B-6, B-7, B 10, C-1, C-2, C-3, C-4, and C-7	1) The City Planning Department will provide notification to CLT within a minimum of 2- businees days prior to the start of work.	Pre-construction	City of Half Moon Bay Planning Department		
	California Department of Parks and Recreation	MM NOT-2 - Provide notification to California Department of Parks and Recreation (CDPR) when maintenance activities are proposed at project locations where CDPR is the owner.	B-1 and B-2	 The City Planning Department will provide notification to CDPR within a minimum of 2- businees days prior to the start of work. 	Pre-construction	City of Half Moon Bay Planning Department		
	California Coastal Commission	MM NOT-3 - Provide revegtation plans to California Coastal Commission for review for any individual disturbance greater than 0.1 acres.	All	 A qualified botanist or biologist will prepare and submit vegetation replacement plans as described. 	Post-construction	City of Half Moon Bay Planning Department		

Appendix B of Attachment 8

Appendix B

Project Location Photographs

City of Half Moon Bay January 8, 2014

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Photo 1 - Project Location B-3 Kelly Drainage. Excavated roadside swale, note side-casting to south (left identified by arrow) and elevation of roadway lower than adjacent floodplain.



Photo 2 - Project Location B-6 Myrtle Street Bubble-up. Note side-casting of excavated ditch spoils to form adjacent berm to south (identified by arrow), similar condition exist on the north bank.

Exhibit 1 – Project Location Photographs PDP-019-13 Citywide Drainage Ditch Maintenance Project A-2-HMB-14-0004 Exhibit 2 Page 518 of 523



Photo 3 - Project Location B-9 Seymour Drainage. Excavated roadside swale, although side-casting is not present note the elevation of roadway is lower than adjacent upland floodplain area.



Photo 4 - Project Location B-10 Redondo Beach Rd (north side). Excavated roadside ditch/swale, note side-casting of excavated ditch spoils to form adjacent berm to north (identified by arrow), similar condition exist on the south side or the road.

Exhibit 1 – Project Location Photographs PDP-019-13 Citywide Drainage Ditch Maintenance Project A-2-HMB-14-0004 Exhibit 2 Page 519 of 523



Photo 4 - Project Location C-1 Railroad Ave. Excavated roadside swale, minor side-casting present to west (identified by arrow) also note the elevation of roadway is lower than adjacent upland floodplain area.



Photo 5 - Project Location C-2 Poplar Street (South Side). Excavated roadside ditch/swale, minor sidecasting present to south (identified by arrow) also note the elevation of roadway is lower than adjacent floodplain area.

Exhibit 1 – Project Location Photographs PDP-019-13 Citywide Drainage Ditch Maintenance Project

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Photo 6 - Project Location C-2 Poplar Street (North Side). Excavated roadside ditch/swale, minor sidecasting present to north (identified by arrow) adjacent to paved walkway.



Photo 7 - Project Location C-3 Railroad Ave. Excavated roadside swale, note berm adjacent to project location and lack of adjacent floodplain area.

Exhibit 1 – Project Location Photographs PDP-019-13 Citywide Drainage Ditch Maintenance Project

A-2-HMB-14-0004 Exhibit 2 Page 521 of 523



Photo 7 - Project Location C-4 Grove St. Excavated roadside swale, note lack of adjacent floodplain area.



Photo 7 - Project Location C-5 Magnolia St. Excavated roadside swale, note adjacent development almost throughout project location and lack of adjacent floodplain area.

Exhibit 1 – Project Location Photographs PDP-019-13 Citywide Drainage Ditch Maintenance Project A-2-HMB-14-0004 Exhibit 2 Page 522 of 523



Photo 8 - Project Location C-6 Wavecrest Road. Excavated roadside ditch, note side-casting of excavated ditch spoils to form adjacent berm to north (identified by arrow), and elevation of roadway lower than adjacent floodplain.

CALIFORNIA COASTAL COMMISSION NORTH CENTRAL COAST DISTRICT OFFICE 725 FRONT STREET, SUITE 300 SANTA CRUZ, CA 95060-4508 VOICE AND TDD (831) 427-4863 FAX (831) 427-4877

APPEAL FROM COASTAL PERMIT DECISION OF LOCAL GOVERNMENT

Please Review Attached Appeal Information Sheet Prior To Completing This Form.

SECTION I. <u>Appellant(s)</u>

Name: James Benjamin

Mailing Address: 400 Pilarcitos Avenue

City:

Half Moon Bay

SECTION II. Decision Being Appealed

1. Name of local/port government:

City of Half Moon Bay

2. Brief description of development being appealed:

Citywide Drainage Ditch Maintenance Project

3. Development's location (street address, assessor's parcel no., cross street, etc.):

Multiple watercourses, wetlands and roadsides within the City of Half Moon Bay.

4. Description of decision being appealed (check one.):

Approval; no special conditions

Approval with special conditions:

- Denial
 - **Note:** For jurisdictions with a total LCP, denial decisions by a local government cannot be appealed unless the development is a major energy or public works project. Denial decisions by port governments are not appealable.

TO	BE COMPLETED BY COMMISSION:
APPEAL NO:	A-2-HMB-14-0004
DATE FILED:	2/6/14
DISTRICT:	North Central Gast Dist.
	A-2-HMB

2-HMB-14-0004 Exhibit 3 Page 1 of 17



FEB 0 6 2014

CALIFORNIA COASTAL COMMISSION NORTH CENTRAL COAST



Zip Code: 94019-1475

Phone: (650) 713-0186

APPEAL FROM COASTAL PERMIT DECISION OF LOCAL GOVERNMENT (Page 2)

- 5. Decision being appealed was made by (check one):
- Planning Director/Zoning Administrator
- City Council/Board of Supervisors
- Planning Commission
- □ Other

6. Date of local government's decision: January 21, 2014

7. Local government's file number (if any): PDP-019-13 (NB also described in FLAN as PDP-19-14)

SECTION III. Identification of Other Interested Persons

Give the names and addresses of the following parties. (Use additional paper as necessary.)

a. Name and mailing address of permit applicant:

City of Half Moon Bay 501 Main Street Half Moon Bay, CA 94019

- b. Names and mailing addresses as available of those who testified (either verbally or in writing) at the city/county/port hearing(s). Include other parties which you know to be interested and should receive notice of this appeal.
- (1) Mr. George Muteff 408 Redondo Beach Road Half Moon Bay, CA 94019
- (2) Ms. Lennie Roberts
 339 La Cuesta
 Portola Valley, CA 94028
- (3) Ms. Deborah Ruddock367 Metzgar St.Half Moon Bay, CA 94019
- (4) Rev. Bud AndreMs. Joan Andre2909 Naples Ave,Half Moon Bay, CA 94019

(list continues on attached page)

A-2-HMB-14-0004 Exhibit 3 Page 2 of 17
- (5) Mr. Walter Sensing
 Ms. Paulette Eisen
 439 Kehoe Ave.
 Half Moon Bay, CA 94019
- (6) Ms. Loriann Villanis
 Ms. Christina Villanis
 403 Kehoe Ave.
 Half Moon Bay, CA 94019
- (7) Ms. Margaret Harris
 421 Kehoe Ave.
 Half Moon Bay, CA 94019
- (8) Mr. Patric Jonsson431 Kehoe Ave.Half Moon Bay, CA 94019
- (9) Mr. Reto Stamm423 Kehoe Ave.Half Moon Bay, CA 94019
- (10) Ms. Jo Chamberlain
 Coastside Land Trust
 788 Main Street
 Half Moon Bay, CA 94019
- (11) Ms. Mary Baker Taft2911 Naples Ave.Half Moon Bay, CA 94019
- (12) Mr. Dan Cordova Ref: 08ESMF00-2013-TA-0642 U.S. Fish and Wildlife Service Sacramento Fish and Wildlife Office 2800 Cottage Way, Room W-2605 Sacramento, CA 95825-1846
- (13) Ms. Suzanne Deleon
 California Department of Fish and
 Wildlife
 Bay Delta Region
 P.O. Box 47
 Yountville, CA 94599

- (14) Regulatory Division
 File Number 2013-00279-S
 U.S. Army Corps of Engineers
 1455 Market Street
 San Francisco, CA 94103-1398
- Mr. William Stevens
 National Marine Fisheries Service
 777 Sonoma Avenue, Room 325
 Santa Rosa, CA 95404-4731

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APPEAL FROM COASTAL PERMIT DECISION OF LOCAL GOVERNMENT (Page 3)

SECTION IV. Reasons Supporting This Appeal

PLEASE NOTE:

- Appeals of local government coastal permit decisions are limited by a variety of factors and requirements of the Coastal Act. Please review the appeal information sheet for assistance in completing this section.
- State briefly your reasons for this appeal. Include a summary description of Local Coastal Program, Land Use Plan, or Port Master Plan policies and requirements in which you believe the project is inconsistent and the reasons the decision warrants a new hearing. (Use additional paper as necessary.)
- This need not be a complete or exhaustive statement of your reasons of appeal; however, there must be sufficient discussion for staff to determine that the appeal is allowed by law. The appellant, subsequent to filing the appeal, may submit additional information to the staff and/or Commission to support the appeal request.

On January 21, 2014 the Half Moon Bay City Council denied an appeal and upheld a modified coastal development permit (CDP) allowing the City to perform a wide variety of bank stabilization, vegetation and sediment removal in 150,658 ft² (c 3.46 acres) of habitat including riparian areas¹ and wetlands spanning 18,032 linear feet (c. 3.42 miles).² The permit that received final local approval retains thirteen of the initially proposed twenty-two drainages, fifteen of which are analyzed in the final IS/MND associated with the project.³ Appellant contends that the project violates the policies and implementing ordinance of the City of Half Moon Bay's certified Local Coastal Program (LCP) pertaining to coastal resources, coastal hazards, visual resources, and the California Environmental Quality Act (CEQA).

- The project authorizes flood control or storm water runoff development in wetlands and riparian areas comprising 48,898 ft² (c. 1.12 acres) and spanning c. 4263 linear feet (0.8 mile) of open space west of the urban development in an area known as North Wavecrest. This area provides regionally important raptor and migratory bird habitat, particularly winter raptor habitat. Its aquatic and upland areas contain or support terrestrial species protected under federal and state law. Several drainages continue beyond the study area to flow over the coastal bluffs. The project documents contain no evidence to support findings that portions of the project in the North Wavecrest area are necessary for public safety or to protect development. In fact, evidence of the need for flood control or erosion protection is provided in only three portions of the thirteen approved work areas.
- The project does not comply with the requirements of other regulatory agencies, including the U.S. Fish and Wildlife Service.
- The project permits bed and bank vegetation and sediment removal on roadside swales in other areas without evidence that the project will not dry adjacent wetlands or increase runoff subsequently reaching natural drainages by surface or subsurface flows.
- The initial study and mitigated negative declaration (IS/MND) concludes that the project with mitigations pose no potentially significant adverse impacts with respect to aesthetics; biological resources; geology, soils and

¹ Half Moon Bay's certified LCP (page 42) defines "riparian area" to include areas of land bordering a stream or lake, including its banks, whether natural and man-made, perennial and intermittent.

² SWCA Environmental Consultants, *Biological Resource Evaluation for the Citywide Drainage Ditch Maintenance Project, Half Moon Bay, San Mateo County,* November 14, 2013, Table 2, page 30. A footnote to this table states the linear and square footage refer to the area in which work is permitted, but not to the size of the impacts. No further analysis of the potentially impacted area's size is provided.

³ The City has also removed the Roosevelt (B-1) and Kehoe (B-2) watercourses from the project, but analysis of project impacts on these two watercourses remains in the approved IS/MND. The project and the IS/MND no longer contains descriptions of Frenchmans Creek, the Cabrillo Property Drainage, Pilarcitos Creek, Arroyo Leon Creek, the Seymour Drainage, the Magnelia Drainage, and the Seymour Detention Basin.

seismicity; hydrology and water quality; hazards and hazardous materials; and land use. Despite the inclusion of habitat containing or supporting protected species and the written expression of concern by the U.S. Fish and Wildlife Service (USFWS) that the project does not comply with the provisions of the U.S. Endangered Species Act, the IS/MND includes no mandatory findings of significance. Two of the drainages removed from the project remain in the IS/MND.

Emergency Work

The final biological resource evaluation introduces a list of "anticipated routine maintenance activities likely to be performed" and states "bank stabilization/repair activities will be completed at each location on an as-needed basis, and are not included in the table... for this reason"⁴ and advises

"Project activities that would require equipment to be staged outside of existing paved roads would be limited to culvert replacement and bank stabilization/repair activities. These activities will occur on an as-needed basis, typically in response to failures or dangerous situations and cannot be planned...such activities will be reviewed prior to work to ensure that impacts are reduced to a less than significant level."⁵

Since the project was revised to exclude bona fide emergency projects that are subject to the provisions of Half Moon Bay Municipal Code 18.20.040, such development should not be included in the this CDP.

Coastal Resource Protection Issues

Several of the drainages that would be subjected to development under this CDP run in Half Moon Bay's North Wavecrest Area, bordered by Kelly Avenue on the north, Redondo Beach Road on the south, and between Highway 1 and the ocean bluffs. The project area includes the Kelly (B-3), Miramontes (B-4), Central (B-5), Myrtle (B-6), Poplar (C-2) and Magnolia (B-7) drainages, several of which contain wetlands. This area is considered by Sequoia Audubon Society as the most important habitat for wintering raptors in San Mateo County, and is a short-eared owl wintering site of regional and statewide significance. The lands west of Railroad Avenue also provide habitat for nesting birds protected from take under the Migratory Bird Treaty Act.

In addition to hosting raptors, the North Wavecrest Area also contains aquatic and upland habitat known to contain or support species protected under state and federal law. The City of Half Moon Bay knew of this habitat's value to the San Francisco garter snake (SFGS) and California red-legged frog (CRLF) a decade ago during review of the subsequently abandoned Wavecrest Village Development Project.^{6,7} The boundaries of the BRE study area are also problematic because the upland areas outside of the study areas provide dispersal habitat for SFGS and CRLF, but are not mapped. As a result, project activities, including staging area activities, would be permitted within the unmapped sensitive habitat.

The City was advised in writing by the U.S. Fish and Wildlife Service (USFWS) that it considers most of the drainages in the project presented to the USFWS to be occupied by both the CRLF and SFGS, and that project is likely to result in the take of juveniles and adults of both species, which is prohibited under the federal Endangered Species Act (the Act).⁸ The letter further advises that either formal consultations pursuant to section 7 of the Act leading to a biological opinion addressing anticipated take, or an incidental take permit pursuant to section 10(a)(1)(B) of the Act is needed. Because

⁴ Op. cit., SWCA Environmental Consultants, page 13.

⁵ *Ibid*. pages 16, 17.

 ⁶ Letter from California Coastal Commission North Central Coast District Manager Chris Kern to Patrick Fitzgerald, February 10, 2004.
 ⁷ Letter from USFWS Deputy Assistant Field Supervisor Catrina Martin to Susan Craig, California Coastal Commission,

Ref. 1-1-04-TA-2261, August 20, 2004.

⁸ Letter from US Fish and Wildlife Service Deputy Assistant Field Supervisor Eric Tattersall to City of Half Moon Bay Planning Director Bruce Ambo, Ref 08ESMF00-2013-TA-0642, October 24, 2013.

neither of these actions has occurred,⁹ and because thirteen of the drainages remain in the project as upheld by the City Council, the project does not comply with USFWS regulations. Appellant respectfully disputes the City's claim that the City is entitled to deference over the USFWS and other jurisdictional regulatory agencies in determining project conformance with the requirements of regulations enforced by those agencies.

The project would permit a wide variety of maintenance activities at swales adjacent to wetlands. Some of these maintenance activities could results in dewatering of adjacent wetlands. In the response to concerns raised prior to final local action, the City asserted that sidecasting had caused a hydrologic disconnect between the swales and adjacent wetlands. Not all work area surface flows between swales and adjacent lands are isolated by sidecasting, however, and in any event dewatering can also occur by subsurface flows.

Under the project as approved, the applicant would have the discretion to alter these drainages with mechanized equipment, performing sediment removal, adding rock-lined banks, and taking other steps it sees as minimally necessary to achieve the project's goals of facilitating flood control and storm runoff. The project is conditioned to require the City to limit impacts to the minimum necessary to achieve those goals. Unfortunately, explanations of why mitigated impacts are less than significant are incomplete. For example, mitigation MM-BIO-1 will minimize removal of vegetation by limiting vegetation removal to the minimum necessary to achieve project goals. There is no explanation of why "the minimum necessary to achieve project goals" will not have a significant adverse impact. Baseline conditions for measuring water flow or erosion of downstream natural watercourses are not included; justification for the necessity of flood control projects west of neighborhoods are not included. Certified LCP policies and sections of the zoning ordinance which limit uses in the habitat of listed species are ignored.

These aspects of the approved development raise issues of conformance with many of the certified LCP's coastal resource protection policies and related zoning ordinance sections pertaining to visual resources; mapping, permitted uses in and protection of riparian areas, wetlands, habitat containing or supporting rare, endangered, threatened or unique species; uses in areas adjacent to sensitive habitat; and with policies requiring compliance with other regulatory agencies, including the USFWS. Appellant respectfully asserts that the approved development is not consistent with policies explicitly adopted in the certified LCP (including explicitly-adopted Coastal Act policies referenced below), and with corresponding sections of the certified LCP's implementing zoning ordinance, including but not limited to:

- Protection of biological productivity and quality of coastal waters, streams and wetlands, assurance that natural buffer areas will be maintained, and criteria for adequate/successful habitat maintenance and restoration (Coastal Act 30231, 30240)
- Maintenance of functional capacity of wetlands if dredged or filled (Coastal Act 30233)
- Permitting flood control projects only where needed to protect existing structures and where no alternatives exist. (Coastal Act 30236)
- Avoidance of significant disruption of habitat value in environmentally sensitive habitat areas (Coastal Act 30240)
- Protection of sensitive habitats and adjacent areas (LCP policy 3-3)
- Compliance with regulations of USFWS and other regulatory agencies (LCP policy 3-4, zoning ordinance 18.38.050)
- Conditions to restore damaged habitats where feasible. Definition of "adjacent" should include downstream sensitive areas (including coastal bluffs and cliffs) and up-bank sensitive areas such as adjacent wetlands. (LCP policy 3-5)

⁹ City staff's meeting with several regulatory agencies on December 3, 2013 has not resulted in the issuance of hiplogical opinions or incidental take permits by the USFWS.

- Explanation of what structures must be protected by project in coastal open space between urban uses and coastal trail, and justification that no other methods are feasible (LCP 3-9; zoning ordinance 18.38.075)
- Protection of riparian corridors: Minimizing erosion, protecting significant plant communities, preventing interference with subsurface flows (LCP policies 3-10 and 7-9; zoning ordinance 18.37.045, 18.38.050(B)(4,5,6))
- Addition of riparian corridors, wetlands, rare and endangered and unique species habitat (including dispersal corridors) to LCP Habitat Areas and Water Resources Overlay (LCP policies 3-21, 3-32) and to coastal resource maps (zoning ordinance 38.38.020)
- Flood control and storm water runoff facilities not a permitted use in rare and endangered, threatened and unique species habitats (LCP policies 3-22, 3-33; zoning ordinance 18.38.085, 18.38.090(B))
- Mitigate to avoid impacting functional capacity of endangered species habitat (LCP policy 3-23)
- Restrictions, planning and monitoring for preservation of rare and endangered, threatened and unique species habitats (Policies 3-24, 3-35, zoning ordinance 18.38.085(F))
- Eradication of invasive plants (zoning ordinance 18.38.090(D))
- Policies most protective of coastal resources trump other policies (e.g., listed species habitat protection vs. flood control projects permitted in riparian areas under certain circumstances) (LCP policy 1-2).
- Development must meet standards set forth in all applicable land use policies and zoning ordinance (LCP policy 1-4, zoning ordinance 18.01.020).

Coastal Hazard Issues

Moreover, although the coastal trail delimits the western limit of the development for several drainages in the work area, the drainages themselves may continue to the bluffs. No geological report for the project has been prepared (zoning ordinance 18.038.030, 18.38.045). No evidence has been provided to support findings that project activities would not contribute significantly to erosion or geologic instability of downstream coastal bluffs (adopted Coastal Act 30253 and zoning ordinance 18.38.050(A)(5)). In its response to CEQA comments, the applicant asserted that the evidence of flooding was not required to establish the necessity of the project.¹⁰ This suggests that the project actions are pre-emptive and that specific locations and activities can and should be part of the project description in order to establish that the flood control project is necessary for public safety (adopted Coastal Act 30236).

As approved, the Roosevelt and Kehoe drainages remain in the IS/MND. These are natural drainages which have been impacted by development. As presently described, the project described in the IS/MND does not comply with LCP policies and corresponding sections of the implementing ordinance which prohibit development contributing to flood hazards (LCP policy 4-8) and prevent increases in runoff to natural drainage courses (LCP policy 4-9).

CEQA-related issues

The certified LCP and implementing ordinance requires the preparation of adequate CEQA documents as a condition of CDP approval (zoning ordinance 18.38.050). Correspondence during local review included extensive commentary about vague project definition, inadequate monitoring and mitigation reporting, inaccuracy and insufficient support for the initial study checklist, selective use of evidence in the record, a failure to analyze cumulative impacts in the context of reasonably foreseeable projects, ignoring conflicting evidence in the record, thus violating the fair argument standard, and failing to acknowledge mandatory findings of significance.

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¹⁰ Response to Comments, Master Response 3.

Conclusion

Appellant acknowledges that there is a need for maintenance in portions of some of the work areas encompassed by the project, and appreciates the City's desire to mitigate flood risk. Where well-understood drainage improvements are needed at specific locations, the City should seek permits accompanied by specific description of the proposed improvement at each specific location; conditions requiring specific physical mitigations with measurable success criteria; and monitoring and reporting to ensure the project is consistent with the certified LCP.

For a perpetual project consisting of so many activities over such a large and sensitive habitat work area, the City-asregulator has not required the City-as-applicant to provide robust analysis, design and conditions, mitigations with success criteria and monitoring and reporting to ensure the mitigations are successful. Practices rooted in an antiquated understanding of erosion processes continue to pose the significant risk of continued or even accelerated erosion, degradation of riparian areas, wetlands, aquatic and upland habitat of listed species and downstream coastal cliffs. If allowed to stand, the present project would permit work that could aggravate coastal hazards and diminish biological productivity and visual resources, while shifting the burden of demonstrating these problems to concerned citizens. The project requires significant additional analysis and revision.

For the above-stated reasons, the City-approved project is inconsistent with the certified LCP and related zoning ordinances with respect to biological resources, coastal hazards, visual resources and CEQA consistency. The project warrants Coastal Commission review and further deliberations regarding these issues.

APPEAL FROM COASTAL PERMIT DECISION OF LOCAL GOVERNMENT (Page 4)

SECTION V. <u>Certification</u>

The information and facts stated above are correct to the best of my/our knowledge.

au alli signature of Appellant(s) or Authorized Agent February 6, 2014 Date:

Note: If signed by agent, appellant(s) must also sign below.

Section VI. <u>Agent Authorization</u>

I/We hereby authorize

to act as my/our representative and to bind me/us in all matters concerning this appeal.

Signature of Appellant(s)

Date: _____

A-2-HMB-14-0004 Exhibit 3 Page 9 of 17 CALIFORNIA COASTAL COMMISSION

NORTH CENTRAL COAST DISTRICT 45 FREMONT, SUITE 2000 SAN FRANCISCO, CA 94105-2219 VOICE AND TDD (415) 904-5260 FAX (415) 904-5400





February 10, 2004

Pat Fitzgerald Wavecrest Village L.L.C. 2450 South Cabrillo Highway, Ste 200 Half Moon Bay, CA 94019

SUBJECT: Wavecrest Village Project Wetland Delineation

Dear Mr. Fitzgerald:

Thank you for meeting with John Dixon and me on February 6, 2004 to discuss the wetland delineation for the Wavecrest Village Project. Although at the conclusion of our meeting Dr. Josselyn and Dr. Dixon continued to disagree about whether or not the data collected in Polygons 18 and 19 in January, February, and March of 2002 support a determination of the presence of wetlands in this area of the site, we did agree to a plan to move forward on this issue, with the intent of bringing the project back to the Commission for hearing this May. Below, I have summarized my understanding of how we agreed to proceed:

- Dr. Dixon has agreed to prepare a map indicating both the disputed and undisputed wetland and upland areas of the project site, and will provide this map with an explanatory report to Dr. Josselyn and Dr. Huffman (on behalf of the City) for their comments by March 1, 2004. Dr. Dixon will finalize his map and distribute it to all interested parties following receipt of written comments and after meeting for a technical discussion if necessary, but in no case later than March 8, 2004.
- 2. After receiving and reviewing the map described above, Wavecrest will indicate whether it wishes to conduct additional field work in an attempt to reach an agreement with staff concerning the extent of wetlands on the site.
- 3. If Wavecrest elects to conduct additional fieldwork, Drs. Josselyn, Dixon and Huffman will jointly develop a sampling plan and delineation protocols, including how specific field indicators of the three wetland parameters will be interpreted, prior to data collection. Upon completion of the fieldwork, Wavecrest will submit appropriate revisions to the wetland delineation and project plans and description that it determines are warranted (if any).
- 4. If Wavecrest decides not to conduct additional fieldwork, Wavecrest will provide updated project plans and a project description for Commission consideration based on the current delineation.
- 5. As soon as possible following receipt of the updated plans and project description (with or without a revised wetland delineation), staff will schedule the appeal for Commission hearing.

In addition, to the process outlined above, we would like to offer the following suggestion regarding one issue that we did not fully explore during our meeting:

6. Because Wavecrest has not yet submitted a wetland delineation for the area near the western half of Wavecrest Road (Central Area), it remains to be determined if Wavecrest and staff will agree about the extent of wetlands in this area of the site. As such, I urge Wavecrest to provide its delineation of this area as soon as possible so we can determine whether or not staff agrees with

A-2-HMB-14-0004 Exhibit 3 Page 10 of 17 it. This would enable Dr. Dixon to include this area in the map that he has agreed to prepare and would allow us to pursue resolution of any disagreement about the delineation of this area through the methodology and time frame outlined above.

Finally, although we generally addressed the need for Wavecrest to provide an updated project description and plans, we did not set a deadline for this submission in order to meet our goal of a May Commission hearing. Given the substantial changes to the project from the plan last reviewed by the Commission, as well as the scale and complexity of the project, it is critical that we receive a complete and detailed project description and corresponding plans for all proposed development by no later than March 29, 2004. Please provide two sets of each of the following, (all plans, elevations, and cross sections must be drawn to scale and should be provided in both large scale and reduced 8½"x11"):

- Detailed narrative project description for all proposed development, including subdivision, construction of school, Boys and Girls Club, affordable and market rate housing, retail and office space, playing fields, trails, streets, parking, drainage and other infrastructure improvements, and grading.
- Subdivision map showing the precise configuration of all proposed lots
- Site plans, floor plans, and elevations for all proposed structures
- Plans and cross sections for all proposed infrastructure improvements, including streets, parking lots, street lights, storm drains, sewer, water, and other utility lines
- Public access and parks plans for all trails, playing fields, parks, and other public facilities
- Grading, drainage, and erosion control plans
- Storm water treatment plan
- Landscape and irrigation plans

If we have not received all of these items by March 29, it is unlikely that staff will be able to complete our analysis and prepare a staff report in time for the May Commission meeting.

Please provide a written reply at your earliest convenience indicating whether or not you concur with this summary of our meeting as well as whether you agree to our suggestion regarding the Central Area wetlands and the March 29 deadline for submittal of the updated project description and plans. Please feel free to call me at (415) 904-5260 if you have any questions concerning the foregoing.

Sincerely,

Chris Kern North Central Coast District Manager

cc: Mike Josselyn Terry Huffman Bill Barrett John Bayless Dan Pincetich Jack Liebster Adam Lindgren

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T-849 P 002/004

Aug-24-04 11:00am From





F-640

IN REPLY REFER TO: 1-1-04-TA-2261

AUG 2 3 2004

CALIFORNIA COASTAL COMMISSION

· CENTRAL COAST AREA

RECEIVED

FISH AND WILDLIFE SERVICE Sacramento Fish and Wildlife Office 2800 Cottage Way, Room W-2605 Sacramento, California 95825-1846

AUG 2 0 2004

Ms. Susan Craig California Coastal Commission 725 Front Street, Suite 300 Santa Cruz, California 95060

Subject:

Wavecrest Village Development Project, Half Moon Bay, San Mateo County, California

Dear Ms. Craig:

This letter represents the U.S. Fish and Wildlife Service's (Service) initial comments on the Wavecrest Village Development Project (WVDP). Our comments are made under the authority of the Endangered Species Act of 1973, as amended (Act). On July 19, 2004, the Service received a package of information from the California Coastal Commission (CCC) on the WVDP. The package of information included: the Wavecrest Village Revised Project Description (dated June 28, 2004); biological section of the Wavecrest Village FEIR (dated 1999); numerous CCC memoranda regarding on-site wetland delineation; Special Status Species Habitat Assessment (Wetlands Research Associates, Inc., 1998); California Red-Legged Frog Site Assessment and Survey Report (Wetlands Research Associates, Inc., 1998); Assessment of Potential for Occurrence of the San Francisco Garter Snake at the North Wavecrest Project Site (Wetlands Research Associates, Inc., 1998); Wavecrest Village Raptor Survey (Wetlands Research Associates, Inc., 2001); Wintering Raptor Survey at the Wavecrest Village Project Site, Half Moon Bay, California (Wetlands Research Associates, Inc., 2002); and numerous letters from Gary Deghi to the CCC regarding raptor habitat on the project site. In addition, on July 14, 2004, Mary Hammer of my staff received an e-mail from you containing a photograph of a federally threatened California red-legged frog (Rana aurora draytonii) (red-legged frog) taken on the Wavecrest Project site on June 7, 2004, by a biologist, Chris Giorni of Tree Frog Treks. Also included in the e-mail was the California Natural Diversity Database (CNDDB) form that Mr. Giorni reported the occurrence of the red-legged frog to the California Department of Fish and Game (CDFG).

On July 29, 2004, Ms. Hammer of my staff visited the Wavecrest Project Site along with John Dixon of the CCC, Dave Johnston of CDFG, Jeff Dreier of Wetlands Research Associates, Inc., and Patrick Fitzgerald of Wavecrest Village, LLC. The purpose of the Service's visit to the site



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1-849 P 003/004 F-640

Ms. Susan Craig

was to assess the suitability of the habitat on site for the red-legged frog and the federally endangered San Francisco garter snake (*Thamnophis sirtalis tetrataenia*) (garter snake). A garter snake was documented approximately one mile from the project site along Pilarcitos Creek, near downtown Half Moon Bay, in June 2004.

The project site encompasses approximately 207 acres and is located on an uplified marine terrace between Highway 1 and the Pacific Ocean bluffs near Half Moon Bay. The site has a variety of habitats including, non-native grassland, riparian scrub/woodland, shrubland, woodland, natural and man-made wetlands, a riparian area, an irrigation ditch, and an agricultural pond. The majority of the site consists of non-native grasslands with wetlands interspersed throughout. A vegetated drainage ditch also traverses the site from the southeast corner to the northwest corner. An existing ball field is also present on the site.

The site visit revealed that the project site contains suitable upland and aquatic habitat for redlegged frogs and garter snakes. Aquatic and upland habitats are equally important habitat components for both red-legged frogs and garter snakes. Red-legged frogs and garter snakes forage in and near aquatic habitat and retreat to burrows in uplands areas to aestivate. Upland habitat also provides important dispersal habitat for both species and maintains connectivity between adjacent populations of these species. Undeveloped portions of San Mateo County, particularly sites with aquatic habitat surrounded by upland aestivation and dispersal habitat are very important sites for red-legged frogs and garter snakes.

Suitable habitat for both species is also located adjacent to the project site. An off-site pond and surrounding uplands located on the northern boundary of the project site, east of the grove of eucalyptus trees, may also provide suitable breeding, foraging, and aestivation habitat for both species. No barriers to dispersal exist between this pond and the project site. Suitable breeding, foraging, and aestivation habitat also exists in other locations off site, including an agricultural pond and surrounding open space located approximately 0.75 miles east of the project site and Arroyo Leon located approximately one mile east of the project site.

The project proponent proposes to construct 217 housing units, construct a middle school campus and associated facilities, construct a boys and girls club near the middle school, renovate the existing ball fields, restore and enhance the existing agricultural pond, improve and maintain an extensive systems of public trails to and along the bluff top, and improve existing infrastructure. Approximately 140 acres of the site would be preserved as open space including the bluff top, riparian area, and wetland areas and associated buffers.

The Service believes that implementation of the project may result in "take" of the red-legged frog and/or garter snake or habitat for these species. Red-legged frogs have been documented on-site and the site contains suitable habitat for both species. Section 9 of the Act and its implementing regulations prohibit the *take* of a federally listed wildlife species. Take is defined by the Act as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect" any such animal. Take may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sholter (50 CFR 17.3).

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Ms. Susan Craig

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Take incidental to an otherwise lawful activity may be authorized by one of two procedures:

If a Federal agency is involved with the permitting, funding, or carrying out of a project that may result in take, then that agency must engage in a *formal consultation* with the Service. During formal consultation, the Federal agency, the applicant, and the Service work together to avoid or minimize the impact on listed species and their habitat. Such consultation would result in a *biological opinion* by the Service addressing the anticipated effect of the project on listed and proposed species. The opinion may authorize a limited level of incidental take.

If no Federal agency is involved with the project, and federally listed species may be taken as part of the project, then the applicant should apply for an *incidental take permit*. The Service may issue such a permit if a satisfactory habitat conservation-plan (HCP) for the species that would be affected by the project is submitted to us. Should surveys determine that federally listed or proposed species occur in the area and are likely to be affected by the project, we recommend that the applicant work with this office and the California Department of Fish and Game to develop an HCP that minimizes the project's direct and indirect impacts to listed species and mitigates for project-related loss of habitat. The applicant should include the plan in any environmental documents filed.

In summary, the Service is concerned that the proposed project may result in "take" of red-legged frogs and/or garter snakes. The Service encourages the applicant to pursue take authorization for the project by one of the two procedures discussed above. If you have any questions regarding the Service's comments on the proposed Wavecrest Village Development Project, please contact Mary Hammer or Dan Buford of my staff at (916) 414-6625.

Sincerely,

Catrina Martin Deputy Assistant Field Supervisor

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United States Department of the Interior

FISH AND WILDLIFE SERVICE Sacramento Fish and Wildlife Office 2800 Cottage Way, Room W-2605 Sacramento, California 95825-1846



In Reply Refer To: 08ESMF00-2013-TA-0642

OCT 2 4 2013

Bruce Ambo Planning Manager 501 Main Street Half Moon Bay, California 94019

Subject: Comments on Biological Resource Evaluation for the Citywide Drainage Ditch Maintenance Project, Half Moon Bay, San Mateo County, California

Dear Mr. Ambo,

This correspondence is in response to your July 3, 2013, memo requesting comments from the U.S. Fish and Wildlife Service (Service) on the July 3, 2013, *Biological Resource Evaluation for the Citywide Drainage Ditch Maintenance Project, Half Mon Bay, San Mateo County, California* (Creek Maintenance Plan). Based on our review of the document, we are concerned about the the potential effects of the proposed Citywide Drainage Ditch Maintenance Project (project) on the federally threatened California red-legged frog (*Rana draytonii*) and the endangered San Francisco garter snake (*Thamnophis sirtalis tetrataenia*). This letter is issued under the authority of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.)(Act).

The purpose of the project is described within the Creek Maintenance Plan as: "to restore drainage features to their originally constructed conditions to maintain water transport capacity; maintain the integrity of existing flood and sediment control structures; minimize potentially hazardous situations such as flooding, bank, culvert, and roadway erosion. and improve visibility of drainage features." Maintenance activities used to achieve the project goal include sediment removal, vegetation trimming and removal, bank protection repair, culvert replacement, and removal of non-native vegetation. Equipment required for this work includes backhoes, dump trucks, mowers, power hand tools (chainsaws and weed trimmers), and manual hand tools.

The Service is concerned that there is a likelihood for presence of the California redlegged frog and San Francisco garter snake within the footprint of the Creek Maintenance Plan:

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Mr. Bruce Ambo

- Both the California red-legged frog and San Francisco garter snake are known to occur within the project area and within dispersal distance of several drainages in the project area.
- Suitable habitat for both species is present throughout Half Moon Bay and surrounding properties.
- There are documented breeding ponds for the California red-legged frog within Half Moon Bay and surrounding properties.
- There is a lack of survey data for much of the suitable habitat for both species within the project footprint and surrounding areas.

Given the above facts, it is reasonable for the Service to consider that most drainages identified in the Creek Maintenance Plan are occupied by both the California red-legged frog and San Francisco garter snake.

Due to the likelihood of presence for the California red-legged frog, the San Francisco garter snake, and suitable habitat for both species, the Service has determined it is likely that implementation of the Creek Maintenance Plan will result in take of juvenile and adults of both species, in the form of death, harm, and/or harassment.

Section 9 of the Act prohibits the take of any federally listed animal species by any person subject to the jurisdiction of the United States. Within the Act, take is defined as "...to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." Harm has been further defined to include habitat destruction when it injures or kills a listed species by interfering with essential behavioral patterns, such as breeding, foraging, or resting. To harass has been defined as "to intentionally or negligently, through act or omission, create the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavior patterns such as breeding, feeding, and sheltering." Thus, not only are the California redlegged frog and San Francisco garter snake protected from such activities as collecting and hunting, but also from actions that cause their death or injury through damage or destruction of their habitat. The term "person" is defined as "...an individual, corporation, partnership, trust, association, or any other private entity; or any officer, employee, agent, department, or instrumentality of the federal government, of any state, municipality, or political subdivision of a state, or any other entity subject to the jurisdiction of the United States."

Take incidental to an otherwise lawful activity may be authorized by one of two procedures. If a federal agency is involved with the permitting, funding, or carrying out of the project and a listed species is going to be adversely affected, then initiation of formal consultation between that agency and the Service pursuant to section 7 of the Act is required. Such consultation could result in a biological opinion addressing the anticipated effects of the project to the listed species and may authorize a limited level of incidental take. If a federal agency is not involved in the project, and federally listed species may be taken as part of the project, then an incidental take permit pursuant to section 10(a)(1)(B) of the Act should be obtained. The Service may issue such a permit

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Mr. Bruce Ambo

upon completion of a satisfactory conservation plan for the listed species that would be taken by the project.

The Service recommends that the City enter into discussions with the Service, the U.S. Army Corps of Engineers, the California Department of Fish and Wildlife, and the California Coastal Commission to discuss ways to implement the Creek Maintenance Plan without violation of the Act, the California Endangered Species Act, and other Federal and State regulations.

The Service looks forward to assisting the City of Half Moon Bay with achieving its project goal in a manner compliant with the Act. If you have any questions regarding this correspondence, please contact Dan Cordova (<u>Dan Cordova@fws.gov</u>) or Coast Bay Forest Foothills Division Chief, Ryan Olah (<u>Ryan Olah@fws.gov</u>) at (916) 414-6600.

Sincerely,

Mayor Old

Eric Tattersall Deputy Assistant Field Supervisor

CC;

Suzanne Deleon, California Department of Fish and Wildlife Cameron Johnson, U.S. Army Corps of Engineers Karen Geisler, California Coastal Commission

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LCP Policy 1-1

The City shall adopt those policies of the Coastal Act (Sections 30210 through 30264) cited herein, as the guiding policies of the Land Use Plan.

LCP Policy 1-2

Where policies within the Land Use Plan overlap or conflict, on balance, the policy which is the most protective of coastal resources shall take precedence.

LCP Policy 1-4

Prior to the issuance of any development permit required by this Plan, the City shall make the finding that the development meets the standards set forth in all applicable Land Use Plan policies.

LCP Policy 3-1 Definition of Sensitive Habitats

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Such areas include riparian areas, wetlands, sand dunes, marine habitats, sea cliffs, and habitats supporting rare, endangered, and unique species.

LCP Policy 3-3 Protection of Sensitive Habitats

(a) Prohibit any land use and/or development which would have significant adverse impacts on sensitive habitat areas.

(b) Development in areas adjacent to sensitive habitats shall be sited and designed to prevent impacts that could significantly degrade the environmentally sensitive habitats. All uses shall be compatible with the maintenance of biologic productivity of such areas.

LCP Policy 3-4 Permitted Uses

(a) Permit only resource-dependent or other uses which will not have a significant adverse impact in sensitive habitats.

(b) In all sensitive habitats, require that all permitted uses comply with U. S. Fish and Wildlife and State Department of Fish and Game regulations (zoning 18.38.050)

LCP Policy 3-5 Permit Conditions

(a) Require all applicants to prepare a biologic report by a qualified professional selected jointly by the applicant and the City to be submitted prior to development review. The report will determine if significant impacts on the sensitive habitats may occur, and recommend the most feasible mitigation measures if impacts may occur. The report shall consider both any identified sensitive habitats and areas adjacent.
Recommended uses and intensities within the habitat area shall be dependent on such resources, and shall be sited and designed to prevent impacts which would significantly degrade areas adjacent to the habitats. The City and the applicant shall jointly develop an appropriate program to evaluate the adequacy of any mitigation measures imposed.
(b) When applicable, require as a condition of permit approval the restoration of damaged habitat(s) when, in the judgment of the Planning Director, restoration is partially or wholly feasible.

LCP Policy 3-9 Permitted Uses in Riparian Corridors

(b) When no feasible or practicable alternative exists, permit the following uses: (l) stream-dependent aquaculture provided that non-stream-dependent facilities locate outside of corridor, (2) flood control projects where no other method for protecting existing structures in the flood plain is feasible and where such protection is necessary for public safety or to protect existing development, (3) bridges when supports are not in significant conflict with corridor resources, (4) pipelines and storm water runoff facilities, (5) improvement, repair or maintenance of roadways or road crossings, (6) agricultural uses, provided no existing riparian vegetation is removed, and no soil is allowed to enter stream channels.

LCP Policy 3-10 Performance Standards in Riparian Corridors

(a) Require development permitted in corridors to: (1) minimize removal of vegetation;
(2) minimize land exposure during construction and use temporary vegetation or mulching to protect critical areas; (3) minimize erosion, sedimentation, and runoff by appropriately grading and replanting modified plant species when replanting; ...and (9) maintain natural vegetation buffer areas that protect riparian habitats.

LCP Policy 3-21 Designation of Rare and Endangered Species:

In the event the habitat of a rare and endangered species is found to exist within the City, revise the Habitat Areas and Water Resources Overlay to show the location of such habitat. Any habitat so designated shall be subject to Policies 3-22 through 3-31.

LCP Policy 3-22 Permitted Uses

(a) Permit only the following uses: (1) education and research, (2) hunting, fishing, pedestrian and equestrian trails that have no adverse impact on the species or its habitat, and (3) fish and wildlife management to restore damaged habitats and to protect and encourage the survival of rare and endangered species.(b) If the critical habitat has been identified by the Federal Office of Endangered Species, permit only those uses deemed compatible by the U. S. Fish and Wildlife Service in accordance with the provisions of the Endangered Species Act of 1973, as amended.

LCP Policy 3-23 Permit Conditions

(a) Require, prior to permit issuance, that a qualified biologist prepare a report which defines the requirements of rare and endangered organisms. At minimum, require the report to discuss: (1) animal food, water, nesting or denning sites and reproduction, predation and migration requirements, (2) plants' life histories and soils, climate, and geographic requirements, (3) a map depicting the locations of plants or animals and/or their habitats, (4) any development must not impact the functional capacity of the habitat, and (5) recommend mitigation if development is permitted within or adjacent to identified habitats.

LCP Policy 3-24 Preservation of Critical Habitats

a) Require preservation of all habitats of rare and endangered species using the policies of this Plan and other implementing ordinances of the City.

LCP Policy 3-32 Designation of Habitats of Unique Species

a) In the event the habitat of a unique species is found to exist within the City, revise the Habitat Areas and Water Resources Overlay to show the location of such habitat. Any habitat so designated shall be subject to Policies 3-33 through 3-36.

LCP Policy 3-33 Permitted Uses

(a) Permit only the following uses: (1) education and research, (2) hunting, fishing, pedestrian and equestrian trails that have no adverse impact on the species or its habitat, and (3) fish and wildlife management to the degree specified by existing governmental regulations.

LCP Policy 3-34

(a) Require, as a condition of permit approval, that a qualified biologist prepare a report which defines the requirements of a unique organism. At minimum, require the report to discuss: (1) animal food, water, nesting or denning sites and reproduction, predation, and migration requirements, and (2) plants' life histories and soils, climate, and geographic requirements.

LCP Policy 3-35

(a) Require preservation of all critical habitats using the policies of this Plan and Implementing Ordinances of the City.

LCP Policy 7-9

New development shall be sited and designed so as to avoid or minimize destruction or significant alteration of significant existing plant communities identified in the General Plan (which include riparian vegetation along stream banks, and notable tree stands).

IP Section 18.01.020 Compliance Required

No land shall be used and no structure shall be constructed, enlarged, altered, moved, or used in any district as shown on the zoning district map except in conformance with the regulations established by this title.

IP Section 18.37.045

Significant plant communities including riparian vegetation along stream banks and bodies of water, notable tree stands, and unique species shall be preserved wherever possible.

IP Section 18.38.020

The planning director shall prepare and maintain maps of all designated coastal resource areas within the city.

IP Section 18.38.080.D Wetlands Buffer Zone

The minimum buffer surrounding lakes, ponds, and marshes shall be one hundred feet, measured from the high water point, except that no buffer is required for manmade ponds and reservoirs used for agriculture.

18.38.075 Riparian corridors and buffer zones.

A. Permitted Uses. Except as may be specified in this chapter, within riparian corridors, only the following uses shall be permitted:

1. Education and research.

2. Consumptive uses as provided for in the Fish and Game Code and Title 14 of the California Administrative Code.

3. Fish and wildlife management activities.

4. Trails and scenic overlooks on public land.

5. Necessary water supply projects.

6. Restoration of riparian vegetation.

B. No Alternative Permitted Uses. The following are permitted uses where no feasible or practical alternative exists.

1. Stream-dependent aquaculture provided that nonstream-dependent facilities locate outside of corridor.

2. Flood control projects where no other method for protecting existing structures in the flood plain is feasible and where such protection is necessary for public safety or to protect existing development.

3. Bridges when supports are not in significant conflict with corridor resources.

4. Pipelines and storm water runoff facilities.

5. Improvement, repair, or maintenance of roadways or road crossings.

6. Agricultural uses, provided no existing riparian vegetation is removed, and no soil is allowed to enter stream channels.

C. Standards. Development shall be designed and constructed so as to ensure that:

1. Removal of vegetation is minimized;

2. Land exposure during construction is minimized and that temporary vegetation or mulching is used to protect critical areas;

3. Erosion, sedimentation, and runoff is minimized by appropriately grading and replanting modified areas;

4. Only adapted native or noninvasive exotic plant species are used for replanting;

5. Sufficient passage is provided for native and anadromous fish as specified by the state Department of Fish and Game;

6. Any adverse effects of waste water discharges and entrainment are minimized;

7. Any depletion of groundwater supplies and substantial interference with surface and subsurface water flows are prevented;

8. Waste water reclamation is encouraged;

9. Natural vegetation buffer areas which protect riparian habitats are maintained; and

10. Any alteration of natural streams is minimized.

D. Riparian Buffer Zone. The riparian buffer zone is defined as:

1. Land on both sides of riparian corridors which extends from the "limit of riparian vegetation" fifty feet outward for perennial streams and thirty feet outward for intermittent streams; or

2. Land along both sides of riparian corridors which extends fifty feet from the bank edge for perennial streams and thirty feet from the midpoint of intermittent streams, where no riparian vegetation exists.

E. Permitted uses within riparian buffer zones include:

1. Uses permitted in riparian corridors;

2. Crop growing and grazing, provided no existing riparian vegetation is removed and no soil is allowed to enter stream channels; and

3. Timbering in "stream side corridors" as defined and controlled by state and county regulations for timber harvesting.

F. No Alternative Permitted Uses. The following are permitted uses within riparian buffer zones where no feasible alternative exists:

1. The construction of new structures on existing legal building sites, set back twenty feet from the limit of riparian vegetation, only if no other building site on the parcel exists.

2. The creation of new parcels only if the only building sites available are those within buffer area, if the proposed parcels are consistent with existing development in the area, and if the building sites are set back twenty feet from the limit of riparian vegetation, or if there is no vegetation, twenty feet from the bank edge of a perennial stream or twenty feet from the mid-point of an intermittent stream.

G. Development Standards within Riparian Buffer Zones. Development shall be designed and constructed so as to ensure that:

1. The removal of vegetation is minimized;

2. Development conforms to natural topography and that erosion potential is minimized;

3. Provisions have been made (i.e., catch basins) to keep runoff and sedimentation from exceeding predevelopment levels;

4. Native and noninvasive exotic vegetation is used for replanting, where appropriate;

5. Any discharge of toxic substances, such as fertilizers and pesticides, into the riparian corridor is prevented;

6. Vegetation in or adjacent to man-made agricultural ponds is removed if the life of the pond is endangered; and

7. Dredging in or adjacent to man-made ponds is allowed if the county resource conservation district, or any similar or successor agency or entity, certifies that siltation imperils continued use of the pond for agricultural water storage and supply. H. Findings for Development within Riparian Buffer Zones. The following findings shall be supported by the contents of the required biological report that:

1. There are special circumstances or conditions affecting the property;

2. The project is necessary for the proper design and function of some permitted or existing activity on the property;

3. The project will not be detrimental to the public welfare or injurious to other property downstream or in the area in which the project is located;

4. The project will not significantly reduce or adversely impact the sensitive habitat, or there is no feasible alternative which would be less damaging to the environment;
5. The project is in accordance with the purpose of this chapter and with the objectives of the LCP land use plan; and

6. Development on a property which has its only building site located in the buffer area maintains a twenty-foot buffer from the limit of riparian vegetation, or if no vegetation exists, a twenty-foot buffer from the bank of a perennial stream and a twentyfoot buffer from the midpoint of an intermittent stream. (1996 zoning code (part)).

IP Section 18.38.080.D Wetlands Buffer Zone

The minimum buffer surrounding lakes, ponds, and marshes shall be one hundred feet, measured from the high water point, except that no buffer is required for man-made ponds and reservoirs used for agriculture.

18.38.085 Habitats for rare and endangered species.

A. Rare and Endangered Species. The potential exists for any of the following rare and endangered species to be found within the county coastal area and therefore within the city.

1. Animals. The San Francisco garter snake, California least tern, California black rail, California brown pelican, San Bruno elfin butterfly, San Francisco tree lupine moth, Guadalupe fur seal, sea otter, California brackish water snail, globose dune beetle.

2. Plants. Rare plants known in San Mateo County are the Coast rock cress,

Davy's bush lupine, Dolores campion, Gairdner's yampah, Hickman's cinquefoil, Montara manzanita, San Francisco wallflower, and Yellow meadow foam (botanical names are listed in the city's LCP/LUP).

B. Permitted Uses. In the event that a biological report indicates the existence of any of the above species in an area, the following uses are permitted.

1. Education and research.

2. Hunting, fishing, pedestrian and equestrian trails that have no adverse impact on the species or its habitat.

3. Fish and wildlife management to restore damaged habitats and to protect and encourage the survival of rare and endangered species.

C. Permitted Uses within Critical Habitats. Within the critical habitat as identified by the Federal Office of Endangered Species, permitted uses are those which are deemed compatible by the U.S. Fish and Wildlife Service in accordance with the provisions of the Endangered Species Act of 1973, as amended.

D. Buffer Zones. The minimum buffer surrounding a habitat of a rare or endangered species shall be fifty feet.

E. Standards.

1. Animals. Specific requirements for each rare and endangered animal are listed in Chapter 3 of the local coastal program land use plan.

2. Plants. When no feasible alternative exists, development may be permitted on or within fifty feet of any rare plant population, if the site or a significant portion thereof shall be returned to a natural state to enable reestablishment of the plant, or a new site shall be

made available for the plant to inhabit and, where feasible, the plant population shall be transplanted to that site.

F. Habitat Preservation. Rare and endangered species habitats shall be preserved according to the requirements of the specific local coastal program land use plan policies tailored to each of the identified rare and endangered species and LCP/LUP implementing ordinances. (1996 zoning code (part)).

18.38.090 Habitats for unique species.

A. Unique Species. Unique species are those organisms which have scientific or historic value, few indigenous habitats, or some characteristics that draw attention or are locally uncommon.

1. Existing unique animals are: raptors (owls, hawks, eagles and vultures), the redlegged frog, sea mammals (whales, dolphins, seals, and sea lions).

2. Existing unique plants are: the California wild strawberry and Monterey pine.

B. Permitted Uses. Permitted uses include:

1. Education and research;

2. Hunting, fishing, pedestrian and equestrian trails that have no adverse impact on the species or its habitat; and

 $\overline{3}$. Fish and wildlife management to the degree specified by existing governmental regulations.

C. Critical Habitat Preservation. Development, trampling or other destructive activity which would destroy any unique plant species shall be prevented, and plants identified as being valuable shall be successfully transplanted to some other suitable site.

D. Eradication of Invasive Plants. Pampas grass, weedy thistles, French broom, Scotch broom, and other weedy plants which are identified to be destructively invasive shall be eradicated.

1. On public lands: invasive plants shall be removed from public lands by the appropriate public agencies, to the point feasible.

2. On private lands: the city shall encourage voluntary cooperation of farmers and landowners to remove invasive plants.

3. Plants sold by retail nurseries on the coast: the city shall encourage voluntary cooperation of retail nurseries to prevent the sale of brooms and pampas grass.

E. Control of Blue Gum Eucalyptus. It is not desirable to encourage wholesale removal of existing stands of blue gums, however:

1. Landowners shall be encouraged to remove blue gum seedlings to prevent the slow, natural spread of the species; and

2. The city shall not allow the planting of blue gum trees on public lands, and shall discourage private landowners from planting blue gums on private property. (1996 zoning code (part)).

LCP Policy 4-7:

In areas of flooding due to tsunamis or dam failure, no new development shall be permitted unless the applicant or subsequent study demonstrates that the hazard no longer exists or has been or will be reduced or eliminated by improvements which are consistent with the policies of this plan and that the development will not contribute to flood hazards or require the expenditure of public funds for flood control works. Where not otherwise indicated, the flood hazard zone shall be considered to be a zone defined by the measured distance of 100 feet from the centerline of the creek to both sides of the creek. Non-structural agricultural uses, trails, roads, and parking lots, may be permitted provided that such uses shall not be permitted within the area of the stream corridor.

LCP Policy 4-8:

No new permitted development shall cause or contribute to flood hazards.

LCP Policy 4-9:

All development shall be designed and constructed to prevent increases in runoff that would erode natural drainage courses. Flows from graded areas shall be kept to an absolute minimum, not exceeding the normal rate of erosion and runoff from that of the undeveloped land. Storm water outfalls, gutters, and conduit discharge shall be dissipated.

18.38.030 Required reports.

Biological, archeological and geological reports shall be required as set forth in Sections 18.38.035, 18.38.040, and 18.38.045. Required reports shall be prepared by a qualified professional selected by the city in accordance with established city procedures. Unless otherwise specified herein, all required biological, archaeological, and geological reports shall be performed by a consultant selected by the city and paid for by the applicant. A. Report Requirements. The following requirements apply to reports.

1. Reports shall identify significant impacts on identified coastal resources on the project site that would result from development of the proposed project.

2. Reports shall recommend feasible measures to mitigate any significant impacts and to protect the identified coastal resource. The adequacy of these measures shall be evaluated under a program developed jointly by the applicant and the planning director. These measures may include, but are not limited to:

a. Changes in development intensity; *b.* Siting of buildings, structures or paving; and *c.* Limitations on the timing and location of construction.

3. Reports shall contain a proposed monitoring and reporting program to ensure that development conditions imposed are adequately being carried out and that significan impacts on the coastal resources have not occurred.

4. Reports shall be reviewed by the city for consistency with this title and with the California Environmental Quality Act.

5. Reports shall be completed to the satisfaction of the planning director prior to the determination that a required development permit application is considered complete. B. Exceptions. The planning director may grant exceptions to the requirements of this chapter if he or she finds that existing studies adequately fulfill the requirements of this chapter, provided such studies were prepared by a qualified professional as a part of a previously certified final EIR in accordance with the provisions of this chapter. (1996 zoning code (part)).

18.38.045 Geological report.

A. When Required. The applicant shall submit a geological report for shoreline structures, for any structure to be built within one hundred feet of the bluff edge, any sea wall or cliffretaining structure, and projects which involve substantial alteration of waterways, and for any development in areas of known geologic hazards, including but not limited to those indicated on the LUP geologic hazards map or in any area known to contain expansive soils or to be subject to subsidence.

B. Report Contents. All geologic reports prepared pursuant to this chapter shall include an evaluation of the proposed development's adjacency to, threats from, and impacts on geologic hazards arising from seismic events, and from any other hazardous event or situation potentially affecting the particular parcel(s) on which the development is proposed, e.g., flooding, tsunami run-up, landslides, or other geologic conditions such as expansive soils and subsidence areas. The evaluation shall recommend mitigation measures to ensure the elimination or reduction of identified hazards, including, as appropriate to location or project specifics, measures to minimize erosion problems during and after construction and to ensure that development will not contribute to flood hazards. In addition to including these contents required for all geologic evaluations, the geologic reports prepared for bluff and cliff top development and for sea walls and cliff retaining structures shall include the information specified below:

1. Bluff and Cliff Top Development. This evaluation shall focus on the base, face and top of all bluffs and cliffs, where the extent of bluff top to be considered is generally fifty feet inland from the bluff edge, but may extend inland beyond fifty feet in certain instances. The evaluation shall contain the following information:

Evaluation Information

1. A study of past, present, and future cliff erosion.

2. An analysis of cliff geometry and site topography.

3. A description of geologic conditions.

4. Evidence of past or potential landslide conditions and potential effects upon development and vice versa.

5. A study of wave and tidal action as to their erosion of sea cliffs.

6. An analysis of sound and surface water conditions and variations.

7. A discussion of effects of proposed development, including siting and design of structures, landscaping, drainage, grading and impacts of construction activity on the stability of the site and adjacent area, and any other factors that might affect slope stability.

8. For any structure to be built within one hundred feet of the bluff edge, an assessment of the prospective hazard to the structure.

2. Sea Walls and Cliff-Retaining Structures. The geological report for sea wall or cliffretaining structures shall indicate that the structure will succeed in stabilizing that portion of the shoreline which is subject to severe erosion and will not aggravate erosion in other shoreline areas. (1996 zoning code (part)).

18.38.050 Environmental evaluation standards.

Projects proposed within coastal resource areas shall be evaluated in an initial study and any necessary subsequent CEQA documents according to the following general standards (in addition to those set forth in CEQA guidelines):

A. Development and land use:

1. Shall be prohibited when significant adverse impacts on coastal resource areas would occur as a result.

 Shall be sited and designed to prevent impacts that could significantly degrade adjacent sensitive habitat areas or significantly degrade areas adjacent to sensitive habitat areas.
 Shall be compatible with the maintenance of biologic productivity of any adjacent sensitive

habitat areas.

4. Shall be permitted within sensitive habitat areas only if they are resourcedependent uses or other uses which will not have any significant adverse environmental impacts, and if the uses comply with U.S. Fish and Wildlife Service and state Department of Fish and Game regulations.

5. Shall assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural land forms along bluffs and cliffs, and shall minimize risks to life and property in hazard areas.

6. Shall comply with the restrictions listed in this title for each coastal resource area, and with all other applicable sections of the city's local coastal program land use plan. B. The initial study:

1. Shall evaluate the proposed uses and development within any coastal resource areas in terms of their dependence upon the coastal resources.

2. Shall determine whether the proposed uses are sited and designed so as to prevent impacts which would significantly degrade areas adjacent to a sensitive habitat.

3. Shall review the feasibility of partial or total restoration of damaged sensitive habitat(s).

4. Shall determine whether proposed development is sited and designed so as to avoid or minimize destruction or significant alteration of significant existing plant communities identified in the general plan, including riparian vegetation and notable tree stands.

5. Shall evaluate projects to ensure the protection of riparian corridors of streams, lakes and other bodies of fresh water as designated on the habitat areas and water resources overlay, and any other riparian areas, except for man-made irrigation ponds over two thousand five hundred square feet surface area.

6. Shall evaluate the project's conformance with the restrictions listed in this title for each coastal resource area, and with all other applicable sections of the city's local coastal program land use plan. (1996 zoning code (part)).

The immediately adjacent habitat along each of these drainages is ruderal vegetation, non-native grassland, or planted eucalyptus or cypress trees. In addition, there is a small patch of willows near the Railroad Avenue drainage, a small patch of northern coastal scrub along Wavecrest Road and several patches of northern coastal scrub and northern coastal bluff scrub along Redondo Beach Road adjacent to those drainages. Seasonal wetlands occur within a few 10s of feet from three drainages (in the open spaces near Central Avenue, Myrtle Street, and Wavecrest Road). A prevalence of wetland vegetation (so-called 1-parameter or CCC wetlands) occurs within the boundaries of six of the drainages (B-6, B-9, B-10, C-2, C-3, and C-6 in Figure 1).

Maintenance activities include removing debris, mowing with a weed eater or articulating mower, removing accumulated sediment by hand or with a backhoe from the street, removing herbaceous plants and shrubs and triming trees less than 4-inch diameter at breast height (DBH) from within the channel (no tree removal is proposed), replacing failed culverts or other storm water structures in their original footprint, and repairing failed channel banks with the same material and within the same footprint as the original bank. Mowing will be restricted to the channel, channel banks, and area between the channel and the adjacent road. Vegetation may be trimmed or removed to allow access to the channel.

The appellant, Mr. Benjamin, raises two potentially important biological issues. He is concerned that maintenance activities in ditches or swales near seasonal wetlands could result in dewatering those wetlands and could result in harm to California red-legged frogs and San Francisco garter snakes.

I see no basis in fact for the concern that wetlands may be dewatered as a result of the proposed maintenance activities. By removing restrictions to flow within the drainage ditches, the maintenance may prevent flooding that might occasionally reach some of the wetlands, however no evidence has been presented that these ditches drain existing wetlands. Seasonal wetlands are generally within depressions and would not be expected to be affected by a swale some distance away. Subsurface flow to the ditches is unlikely unless there is a shallow perched water table that intersects the ditch. There is no evidence that such is the case.

The greatest potential biological risk of the project is to California red-legged frogs and San Francisco garter snakes. The U.S. Fish and Wildlife Service (Tattersall 2013) finds that there is suitable habitat for these species throughout the City of Half Moon Bay and surrounding areas, that most of the drainages that will be subject to maintenance activities are occupied by both species, and that the maintenance activities will result in take of both species in the form of death, harm or harassment. These drainages and surrounding areas are probably most likely used periodically as dispersal and foraging habitat, especially during the rainy season. (707) 826-8950

CALIFORNIA COASTAL COMMISSION NORTH COAST DISTRICT 1385 8th Street, Suite 130 ARCATA, CA 95521



M E M O R A N D U M

FROM:	John D. Dixon, Ph.D.
	Ecologist

TO: Stephanie Rexing

SUBJECT: Appeal of City of Half Moon Bay Drainage Maintenance Project

DATE: March 27, 2014

Documents reviewed:

James Benjamin. February 6, 2014. Appeal of local government approval of the City of Half Moon Bay citywide drainage ditch maintenance project.

City of Half Moon Bay. November 14, 2013. Final draft initial study, Citywide Drainage Ditch Maintenance Project, City of Half Moon Bay, San Mateo County, California.

SWCA Environmental Consultants. November 14, 2013. Biological resource evaluation for the citywide drainage ditch maintenance project, Half Moon Bay, San Mateo County, California. A report prepared for the City of Half Moon Bay.

SWCA Environmental Consultants. November 15, 2013, revised January 6, 2014. Mitigation Monitoring Program for the Citywide Drainage Ditch Maintenance Project, City of Half Moon Bay, San Mateo County, California.

Tattersall, E. (U.S. Fish & Wildlife Service). October 24, 2013. Letter to B. Ambo (City of Half Moon Bay) regarding "Comments on biological resource evaluation for the Citywide Drainage Ditch Maintenance Project, Half Moon Bay, San Mateo County, California.

Two drainages included in the Initial Study and Mitigated Negative Declaration (Roosevelt drainage and Kehoe ditch drainage) are natural features that were removed from the maintenance project at the time of the City Council's action. As a result, the locally approved drainage ditch maintenance project for Half Moon Bay applies only to 13 man-made swales or ditches in the southern part of the city between Kelly Avenue and Redondo Beach Road (Figure 1). These ditches generally run along the edge of a road that borders undeveloped land on one or both sides, or they extend from the edge of a residential area across undeveloped land to the beach. Many have culverts for part of their length. They are all west of Highway 1 and convey water to the sea.

The immediately adjacent habitat along each of these drainages is ruderal vegetation, non-native grassland, or planted eucalyptus or cypress trees. In addition, there is a small patch of willows near the Railroad Avenue drainage, a small patch of northern coastal scrub along Wavecrest Road and several patches of northern coastal scrub and northern coastal bluff scrub along Redondo Beach Road adjacent to those drainages. Seasonal wetlands occur within a few 10s of feet from three drainages (in the open spaces near Central Avenue, Myrtle Street, and Wavecrest Road). A prevalence of wetland vegetation (so-called 1-parameter or CCC wetlands) occurs within the boundaries of six of the drainages (B-6, B-9, B-10, C-2, C-3, and C-6 in Figure 1).

Maintenance activities include removing debris, mowing with a weed eater or articulating mower, removing accumulated sediment by hand or with a backhoe from the street, removing herbaceous plants and shrubs and triming trees less than 4-inch diameter at breast height (DBH) from within the channel (no tree removal is proposed), replacing failed culverts or other storm water structures in their original footprint, and repairing failed channel banks with the same material and within the same footprint as the original bank. Mowing will be restricted to the channel, channel banks, and area between the channel and the adjacent road. Vegetation may be trimmed or removed to allow access to the channel.

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The greatest potential biological risk of the project is to California red-legged frogs and San Francisco garter snakes. The U.S. Fish and Wildlife Service (Tattersall 2013) finds that there is suitable habitat for these species throughout the City of Half Moon Bay and surrounding areas, that most of the drainages that will be subject to maintenance activities are occupied by both species, and that the maintenance activities will result in take of both species in the form of death, harm or harassment. These drainages and surrounding areas are probably most likely used periodically as dispersal and foraging habitat, especially during the rainy season. The project incorporates several provisions in the Mitigation and Monitoring Plan that reduce the potential risk of physical injury and death to the frogs and snakes. In particular:

- MM BIO-1 requires a biologist to delineate the work area.
- MM BIO-10 restricts work (except at C-1 & C-3) to the period April 15 to October 31 or June 15 to October 31, depending on location. This is generally the dry season when dispersal is least likely.
- MM BIO-12 calls for a survey for red-legged frogs at all locations except B-3, C-1, C-3 and C-4 within 48 hours of start of activities.
- MM BIO-13 requires a biologist to be present during all activities at all locations except B-3, C-1, C-3 and C-4. If California red-legged frogs are found, work will stop and the City will initiate formal consultation with USFWS.
- MM BIO-14 requires that vegetation first be cut to 6 inches in height to allow a biologist to search for red-legged frogs. Additional vegetation removal can then take place with the biologist moving in front of the equipment to continue to search for frogs.
- MM BIO-18 & MM BIO-27 require an exclusion fence where large equipment is used.
- MM BIO-24 calls for full time monitoring for S. F. garter snakes at all locations except B-3, C-1, C-3, and C-4. The biologist can stop work if necessary to protect the snake.
- MM BIO-25 requires a biologist to conduct surveys before project activities take place only at locations B-9, B-10, C-6, and C-7. If a snake is seen, USFWS and CDFW will be notified and the snake will be monitored until it leaves the area.

These are appropriately protective measures and it is unlikely that different mitigation measures would be employed were these activities proposed under individual permits.

Figure 1. Location of the 13 man-made ditches in the City of Half Moon Bay Citywide Drainage Ditch Maintenance Project.



Rexing, Stephanie@Coastal

From:	Jimmy Beniamin ≲iamhen@nachell net>
Sent:	Tuesday, August 20, 2013 2:54 PM
То:	Rexing, Stephanie@Coastal; Dan Cordova@fws.gov; Deleon, Suzanne@Wildlife
Subject:	Comments on CEQA IS/MND SCH 2013-08-2031 Drainages are Ditches Everywhere in City of Half Moon Bay
Attachments:	2013 08 20 response to staff report (as submitted).pdf; 20 08 2013 staff report - habitat overlay map amendment.pdf; Draft Mitigated Negative Declaration and Initial Study for the Citywide Drainage Ditch Maintenance Project (OCR'd).pdf

Dear Three:

The City of HMB is about a week into its 30-day CEQA comment period on an IS/MND that is shocking in its intention to maintain (cut trees, weed-whack, remove vegetation, dredge) a remarkably complete list of drainages. There is an emergency aspect, but they are scheduling the work in the dry season or during "fair weather", and they will only perform maintenance actions needed to maintain the stream. The IS misses previously studied and acknowledged habitat, and the mitigation lets the dirt fly as long as there is a biologist looking over the worker's shoulder.

Their familiar strategy is to obfuscate with a heavy yet fluffy IS/MND

(attached) to shift the burden to others to show that a drainage is an ESHA, rather than accept the burden as applicant to produce evidence that it is not; and to force others to show their project has potentially significant adverse impacts, instead of demonstrating it would not. They also seem to be in denial about take through harassment / degrading of habitat and food sources, rather than maiming or killing.

In 2004 the City's Public Works Director provided the then-DFG with its own list of biological resources. I would think they should be on the hook to try to explain why these previously acknowledged locations should now be subject to such invasive maintenance.

The biotics reports are large, and I can't reduce them enough to send. If you don't have them but are interested, you can download them from the Planning Department's page on the City's website, <u>www.hmbcity.com</u>.

I need to read it, but I hope that you will be able to provide insight to the City during their CEQA comment period, which ends Sept. 9.

Please let me know if you have questions,

- Jimmy

PS: Since each of you are involved with the City's plan to "maintain"

drainages, you may be interested to know that the City of Half Moon Bay is starting to amend its LCP to protect habitat that has been found to contain or support CRLF and SFGS, as well as riparian corridor and wetlands that were the subject of a settlement agreement between the City and yours truly.

The attached staff report on tonight's consent calendar is a pretty tepid start, but it is a start.

My response includes a copy of the Court's Statement of Decision that that the Kehoe Watercourse and riparian area are qualified under the LCP as ESHAs (riparian AND supporting or containing SFGS and CRLF), as is the Caltrans mitigation wetland (wetland AND supporting or containing SFGS and CRLF). A

1985 study of the uplands between the Kehoe Watercourse and the road to the wastewater treatment plant reinforces value and potential for SFGS and CRLF anywhere on the parcel. Let me know if you would like a copy.

- Jimmy Benjamin

Rexing, Stephanie@Coastal

From: Sent: To: Subject: Attachments:	Jimmy Benjamin <jimmyinhmb@gmail.com> Monday, August 26, 2013 10:48 PM Rexing, Stephanie@Coastal Supporting documents ALRiley_Stream%20Protection%20Circular.pdf; 2013 08 20 response to staff report (as submitted).pdf; 20 08 2013 staff report - habitat overlay map amendment.pdf; Jimmy's</jimmyinhmb@gmail.com>
	submitted comment on draft CE update with attachments.pdf; SMCLCP HMB CirculationElementComments.pdf

Hi Stephanie,

Thank you for our phone conversation this morning, and for the opportunity to provide you with some documents that might be good background for conversation.

Riley's Stream Primer

To better understand the impacts of drainage maintenance activities and the opportunities for restoration, I spent some quality time with a few documents, beginning with the attached one created by stream restoration expert Ann L. Riley at the SF Regional Water Quality Control Board (she studied with Leopold at Berkely). She makes the case that stream stabilization is a necessary part of habitat restoration, and that habitat degradation causes stream destabilization. sometimes far from the site at which the damage took place.

The balance of this email cites particularly relevant parts of her stream restoration primer. I know it's long, but the document (attached) is longer, so I hope the excerpts are useful.

I will send you two additional emails that call out useful insights, one from USACE and the other from a Federal Interagency Working Group which includes the National Resource Conservation Service).

This is one of several documents that provide a credible source of expert opinion about the potentially significant adverse impact of drainage maintenance of the sort contemplated by the City of Half Moon Bay, but also the opportunity for restoration of damaged streams based on more scientific thinking.

I will send you two more with excerpts, but they are bigger.

LCP Amendment to add ESHAs to LCP Sensitive Habitat and Water Resources Overlay and Zoning 18.38 Sensitive Habitat Areas in Coastal Resources Maps

As part of the settlement agreed by my wife and I with the City, they agreed to use best efforts and reasonable diligence to update the referenced maps to show them as ESHA's riparian, wetland, and habitats for listed species (SFGS and CRLF). On August 20, about a year to the day after they signed the agreement, the City Council adopted a resolution initiating the amendment process, but the staff report (attached) had some flaws. I raised some concerns in a short letter that puts the agreement, and findings in the court's Statement of Decision, and some post-trial observations of CRLF in the record.

Circulation Element

We spoke briefly about the City's circulation element, which would need to be harmonized through the LCP. I appreciate the CCC staff's balance of interest in policies that could have adverse effects on coastal resources with respect for the City's internal processes. For your information only, I attach a comment letter from the San Mateo County League for Coastside Protection, and a letter that I submitted. The City recently announced that they were postponing their Planning Commission's public hearing on the draft for c. one month to consider the comments.

I hope that these will be supplement coming up to speed on pressing coastal issues in Half MoorABay, IMB-14-0004 Exhibit 6 Page 2 of 26

Sincerely,

- Jimmy

Excerpts from

Riley, A. L. (2003), A Primer on Stream and River Protection for the Regulator and Program Manager, Technical Reference Circular W.D. 02 - #1, San Francisco Bay Region, California Regional Water Quality Control Board, Oakland, CA.

It contains a very good discussion of how improper management wreaks havoc on riparian systems. If RWQCB were become involved in stream redesign, she would be the expert. I believe her expertise is so far above others that in our regulatory regimes that we should ask CCC to require her review and approval of the plan. Here are a few excerpts from her document.

• [Pages 36,37 = pdf pages 42,43] [ED: may explain lack of vegetation upstream and recently fallen willow downstream. Calls out the potential for disturbances to hurt native vegetation]

Sometimes the observer sees the stream in the earlier stages of vegetation losses, in which trees and shrubs are falling over and becoming uprooted...

Channel disturbances can be so dramatic that they lead to the inability of native plant species to establish permanent residency on the channel banks. These disturbances can include the introduction of extremely flashy flood flows because of watershed development, clearing, grazing, faming of logging operations. These disturbed conditions can create the environments that favor invasive exotic species to move in or the channel may remain with very little permanent vegetative cover.

Stream scientists have determined that streamside vegetation has a profound influence on the stability of stream channels. Stream channels undergoing some erosion and depositional changes in which sediments loads and sizes are in balance with the stream discharges and channel slopes may show some localized disturbance of streamside vegetation. However, one of the wonderful qualities of native riparian species is their ability to thrive in the dynamic, ever adjusting stream environments. Willows and cottonwoods live in the front line of disturbance, colonizing and recolonizing stream banks and in the process, protecting their stability against the high velocities of flood discharges. They create enough stability in this challenging environment to allow other plant species to take hold among them such as alders, sycamores, bay and dogwood. Even in situations where new meanders may be forming vegetation quickly recovers these erosional sites. However, one of the indicators of an out-of-balance system, as previously discussed, is a channel which cannot support a vegetative cover.

- Frequently the loss of streamside vegetation can simply be explained by its removal by streamside property
 owners. Usually the removal is done in ignorance as to the consequences this will have on their properties. A
 common belief is that the substitution of vegetation with a "hardscape" such as concrete, gabions or rock will
 make the stream banks more stable.
- [Page 38 = pdf page 44] [ED: Why vegetation is good for banks and beds of streams]

Bare stream banks will tend to erode and widen creating conflicts with streamside land uses. If stream banks are planted, there is a greater tendency for the stream to make any additional adjustments to its size by deepening. Unlike solid retaining walls, rocks or gabions, plants have the ability to expand their protective structural components, i.e., roots, to deeper levels in the streambed and profile. Riprap and concrete are easily undercut by unstable, adjusting stream channels but it's mach harder for the stream to

Exhibit 6 Page 3 of 26

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undercut roots because the roots expand to new locations and reproduce themselves in vertical and horizontal directions to fill the voids caused by soil loss. Unfortunately, structural walls do not have this expansive and flexible capability. The literature in the evolving field of "soil bioengineering" which is concerned with the stabilization of hill slopes, stream and other difficult environments with plant materials use quantifiable measurements to conclude that the tensile strength of plant roots can exceed that of concrete. Research is no being published which indicates the level of resistance of planted streams to different values of shear stresses (pressure on stream channel boundaries in pounds per square foot).

- Page 49,50 = pdf page 55,56) Simple Channel Stabilizing Practices are not hard to understand:
 - Use reference reaches of channel to size the channel and determine sinuosity. Helping the stream channel return to a stable width and depth will contribute significantly to solving erosion (or sedimentation) problems. The simplest approach for determining what this stable width and depth is to help the property owner find nearby stream reaches in what appears to be a stable, healthy channel condition with similar slope and soils. The shape of this stable reach, or "reference reach" can be copied in the area that is unstable. For most streams in the SF Bay Area, a healthy stable reach will have well vegetated banks (vertical banks are natural), a single, unbraided channel (without center channel sediment bars), point bar formations, or steps and pools in steeper reaches, and no signs of headcutting as illustrated in Figure 3. If the channel is straight on relatively gentle or flat valley slopes (5% or less slope) for a distance of more than eight times the channel width then suspect a degraded straightened channel. If the meanders appear unmodified this is another indication that the reach observed provides a good reference reach. Even if the channels appear degraded in very urban settings, you can usually find reache3s where stable active channels have formed despite the compromised conditions. A reference channel does not have to be located in a pristine environment. Restoring a new stable channel cross-sectional area may entail removal of existing bank control works. [ED: Riley estimated that sinuous path should be 7 times longer than path as crow flies]
 - Restoring the floodplain area is the best way for the property manager to increase the flood capacity of the stream corridor. This spares the active channel from becoming over-widened (Fig. 6 defines the terms used in this chapter). [ED: feasible where there is open space adjacent to a channelized stream].
 - Attempt to recreate where old removed meanders used to flow. Re-attach them to the channel if this is still possible. If this is not an option increase the length of the channel as much as feasible by excavating more length where it can be fit in and round the site constraints. Meanders can also be re-established by assisting their development through adding woody debris, rootwads, wood or rock deflectors to the stream channel. It is best to use experienced help with these kinds of modifications so that they do not destabilize the channel slope or width and result in unintended channel reactions.
 - The most effective and risk free channel improvement is to re-vegetate stream banks with willows, cottonwoods, dogwood and ninebark. These species are widespread in the Bay Area and usually easy to collect in adequate numbers as cuttings from plants along stable portions of stream channels. Even if some of them get washed out or die, little is lost and much is gained by the vegetation that survives. Extend the planting projects from the top of the active channel all the way to the top of the terrace. Make sure there is a protected buffer area on top of the terrace, or the ground level where the structures or land uses begin, to avoid impacts to the channel from the adjacent storm drainage and activities.
 - Remove fill from those channels that have been filled. Significant benefits can be achieved even by recovering some of the small headwater ephemeral channels. Remove culverts when feasible. When culverts must remain, but are installed either too high and create dams in the channel or too low so that they fill with sediment and create up-slope erosion, it will be necessary to realign the culverts at a more appropriate elevation and slope. Sometimes culverts are perched high above the downstream reach

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because the force of the flows concentrated and accelerated by the culvert erode the stream bottom. The state and federal fisheries agencies have guidelines on the re-establishment of channel slopes for fisheries passage which should be followed.

- In steeper, headwater streams which typically have very low sinuosities, or meandering, the energy of the stream is expended in a series of drops referred to a boulder steps and pools if the channel slopes need to be restored to a more stable condition in these steep reaches, it is necessary for the drops or steps to be not too high and or spaced too far apart. Generally, steps over a foot and a half can be the most unstable. [ED: most of HMB streams are not so steep. Maybe Seymour...]
- [Page 53 = pdf p59]: [ED: Adopt coherent stream restoration project by coordinating individual projects that affect stream

An inherent weakness in the common approach of permitting individual projects as they occur randomly through time at scattered locations is that the management plan prescribed for anyone site occurs in isolation from other watershed sites and activities. The source of a property owner's stream or river problem may be on their own property, a nearby neighbor's or miles away in the watershed. The measures taken to address the stream problem could make things better or worse for nearby neighbors.

The isolated, uncoordinated project could use the principles described here but the new stability could be over-powered by something such as a new stormwater culvert installed up stream. The first consideration is that if the stream stabilization project stable width and depth dimensions, and carefully matches the stream sinuosity, channel slope and valley slope, the stream will be more resilient to future impacts on the site. The stream should have a better defense from any erosional headcuts moving upstream which may enter the restored section. Likewise if stream meandering is traveling in a down stream direction towards the restored section which already has a stream length in balance with the valley, and a stream shape conducive to efficient sediment transport, the channel has a better chance of maintaining a stable condition. In other words, the resiliency of the site to defend against and recover from current, future or distant watershed disturbance is increased.

The small property owner commonly suffers the consequences of the actions of its neighbors in the up, down or across channel locations. Such watershed disturbances out of the control of the property owner are not uncommon. It is this situation, which has popularized the organization of watershed councils on small creeks to large rivers. The regulator should encourage property owners to take advantage of gathering neighbors, and fellow watershed inhabitants and seeking coordinated help from local, state and federal agencies in order to attract the cooperation and resources of others in addressing problems that necessarily cross property lines. These coordinated efforts include the advantages of being able to attract government assistance with technical expertise, materials, equipment and grants of funds. A list of stream partnership organizations and watershed councils in the SF Bay Area is provide din Appendix C.

[ED: Upstream property owners have certainly modified stream banks. Bridges, archery ranges, retaining walls. The channelization and upstream loss of instream and inbank vegetation could easily defeat any remediation being attempted here.]

- [Page 55 = pdf page 61] Table 1"State and Federal Regulations Affecting Stream Protection Involved in Stream . Protection" calls out some of the laws that we state and federal laws that we claim the City has violated, and some of the organizations with whom work in streams should be coordinated.
- Page 57 = pdf page 63 is a table listing types of potential environmental degradation from such land uses and . disturbances as ...vegetation clearing and channelization, etc. [Shows both channelization and vegetation clearing could have DIRECT adverse impacts including channel widening and downcutting, increased flow Page 5 of 26

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velocity, reduced ground water recharge and aquifer volume, decreased floodplain capacity, reduced stream capacity to assimilate nutrients / pesticides, limited opportunity for habitat development, streambank erosion and channel scour, increased bank failure, stream corridor fragmentation, linear distribution of habitat, loss of edge and interior habitat, increase of opportunistic species, increased exposure to solar radiation and temperature extremes, loss of riparian vegetation, increased water temperature, increased water temperature, impaired aquatic habitat diversity, reduced invertebrate population in stream, loss of associated wetland function including water storage, sediment trapping, recharge and habitat, reduced instream oxygen concentration, invasion of exotic species, reduced gene pool of native species for dispersal and colonization, reduced species diversity and biomass.

- Page 60ff = pdf page 66 shows the adverse impacts that can result from outmoded approaches or mistakes in stream management. These are very plausible impacts from actions proposed (or, in the case of the Kehoe Watercourse, taken) to manage Half Moon Bay drainages:
 - Stream straightening and meander removal: Channel slope steepens, elevation or grade lowers, bottom erodes, water table drops, base flows de3crease banks collapse, riparian vegetation degrades, water temperature increases. Downstream sedimentation: upstream erosion by headcutting.
 - Watershed vegetation removal, vegetation clearing or removal: Channels erode wider change in timing and concentration of runoff, channel erosion and bank failure; increased sediment supply to the downstream channel
 - Stream bed or bank hardening with rocks, gabions, sheetwalls, concrete cribwalls riprap and other debris or products: Up and downstream bank failure, stream bottom incision. Discharges flowing downstream are sediment starved = erosion. Loss of point bar formation, pools, riffles.
 - Streambed disturbances: animal, human use, and equipment: Increased fine sediments, bank erosion from access, riparian vegetation degrades water quality decreases
 - *Culverting undersized, wrong grades, wrong slopes:* Culvert lowers the channel grade: erosion upstream (headward). Culvert raises the channel grade: deposition upstream, erosion; deposition in culvert
 - Bridges with wrong alignments, grades, low clearances or narrow spans: Create hydraulic constrictions, backing water up and creating flooding; concentrate runoff into channels: erosion.
 - Soil exposure, compaction, road construction, watershed paving, overgrazing, storm water concentration: Concentration of discharges, increase of discharges. Flashy flows: erosion, widescale bank failures.
 - Trails, utility crossing including water and sewer pipes, gas lines, (low clearances, grades and spills) and railroad crossings: Create hydraulic constriction, backing water up and create flooding. Concentrate runoff into channels: erosion
 - *Woody debris removal from channel:* Loss of channel roughness, reduction of pools, riffles, flashier flows, channel incision or widening, and backwater habitat.
 - Introduction of exotic species: animal and plant: Plants may be less capable of holding bank shapes and may out compete native plants, which more effectively provide bank structure and active channel shapes. This can cause bank collapse, channel erosion. Invasion of sun loving plans in the active channel creates channel filling.
 - o Drainage, land reclamation: Dewatering lands. [Indirect effect of incision]
- Page 67ff = pdf 73ff describes a flow chart (mistakenly called a decision tree) that prioritizes developing objectives for restoration:
 - 1. Determine and Protect Stable Channel Width and Depth
 - 2. Assure Vegetated Boundary along Active Channel
 - 3. Determine a stable channel length and sinuosity

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- 4. New channel length and meanders should occur without abrupt grade differences
- 5. Pdf p77 = p71: Protect a meander belt width for a stable planform: A channel meanderbelt is defined as the space an active channel uses to meander the width and length it requires for a stable planform op the landscape. The amplitude of a meander defines the minimum flood plain space required by the crabbit for

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physical stability. Without this space the creek will usually react by either creating head cutting (Fig. 3) and,or the creek will attack its banks, trying to re-establish its meander pattern. Both reactions create substantial erosion an harm to adjacent property.

A meander belt width can be simply calculated by adding the active channel to the meander's amplitude. A reasonable estimate for a stream meander amplitude is 2.7 times the active channel width, without regard to changes in stream type, for the San Francisco Bay Region. (The changes in channel meander patterns between lower watershed channels and upper watershed channels can be represented by the different channel meander distances.

- 6. Protect or restore adequate side slopes from the tops of banks to the tops of terraces Provide for stable terrace slopes joining the floodplain or channel bank to the top of the ground elevation at the project site. This part of the stable channel equation is the least conducive to generalizing for project planning. In many situations in the San Francisco Bay Region, terrace slopes with a 1.5 to 1 slope (1.5 foot horizontal distance for every foot vertical distance), which are planted using soil bioengineering revegetation methods, are not too steep to be stable. Of course, any site with more gentle slopes such as 2:1 and 3:1 may be even more stable. Some areas have geology and soil mantle with inherently unstable properties, with landslide zones and seismic fault lines complicating the picture. Site-specific measures have to be applied to these difficult sites. Keep in mind unstable terrace slopes are frequently due to localized drainage problems.
- 7. Protect and restore the floodplain and meanderbelt. Protect a stream corridor that has enough feet to accommodate the combined stability needs of the active channel width, meanderbelt and terrace slopes. Where possible seek expansion of the width of the floodplain area beyond the minimum required for the calculated channel meanderbelt. This floodplain area will contribute to the cross-sectional area needed to convey a design discharge for flood control considerations, add to the ability of plants to stabilize the stream system and reduce terrace side slope erosion hazards. This increases the ability of the stream system to support a riparian corridor and water treatment functions of the riparian wetland. Regulators, public works engineers, stream project designers, land planners, and property owners have a tendency to view the available stream corridor as the space that should be minimized in order to

accommodate the other streamside land uses. This perspective blinds the viewer to what are often opportunities to expand the stream corridor enough to assure a stable channel that will no longer create chronic maintenance problems. The lack of meander corridor problem can often be solved by removing a few parking spaces in parking lots, acquiring a vacant lot, or rearranging the location of "out" buildings / structures, such as tool shacks, play equipment, utility boxes or poles, sidewalks and trails, driveway access, etc. Put the correct meander on the plan first, and then view the spatial conflicts as an opportunity to improve the site plan.

It is counterproductive for planners to propose new development or new structures, such as retaining walls, next to a destabilized channel, as tis placement will be in a hazard area. Widely used products such as concrete walls, articulated concrete blocks, gabions and other "retaining" methods encroaching on the corridor required for a stable channel is a recipe for project failure. A sustainable site plan developed with the objective to avoid flood and erosion hazards enjoys a long-term economy in the context of a lowered local public works hazard and the reduction of maintenance costs while simultaneously protecting the beneficial uses of the waterway.

If there are not options to expand a project's right-of-way for a stable meander belt, it is best to compromise the design by steepening the terrace slopes and not narrow the meander belt.

8. Protect and restore terrace side slopes. After all opportunities to expand a stream corridor required for a calculated stable channel and stream corridor are realized and there still remains some undersized sections, the compromised stream sections should first steepen the terrace side slopes to reduce the required stream corridor width. (this section essentially says that in difficult urban situations, it is more important to assign scarce space to retain the integrity of the active channel and meander for stability and protection of stream functions and water quality, if necessary by using permeable physical structures such as vegetated wood crib walls, which allow for unrestricted water movement through the banks. As with the Kehoe drainage, ecologists may present other habitat priorities based on the specific habitat needs of a listed endangered species, for example.. In the absence of these kinds of specific environmental needs, in-stream habitat should be prioritized over visual quality over landscaping schemes for terrace slopes in Head and the specific habitat for the specific habitat priorities based on the specific habitat needs of a listed endangered species, for example.. In the absence of these kinds of specific environmental needs, in-stream habitat should be prioritized over visual quality over landscaping schemes for terrace slopes in Head Marken States and the specific habitat priorities based on the specific habitat needs of a listed endangered should be prioritized over visual quality over landscaping schemes for terrace slopes in Head Marken Back and the specific habitat priorities based on the specific habitat needs of a listed endangered should be prioritized over visual quality over landscaping schemes for terrace slopes in Head Marken Back and the specific habitat head should be prioritized over visual quality over landscaping schemes for terrace slopes in the specific habitat head scheme habitat should be prioritized over visual quality over landscaping schemes for terrace slopes

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over the use of tight spaces.[ED: In this case, however, there is plenty of land to the south – the Landstra property is open and available for precisely this type of work.]

- 9. Employ Intensive Soil Bioengineering Revegetation Systems. Impermeable retaining walls such as concrete, rock, sheet-metal and wood can have high failure rates because of the buildup of pore pressure behind the structures in a water saturated environment. Engineers have recognized the superior tensile strength of plant roots to hold stream banks and terrace slopes. Stability will be improved if these rigid structures are removed, particularly if they are compromising stable channel shapes. For those projects with terrace slopes compromised because of narrow project widths, the use of the most dense and deeply planted soil bioengineered revegetation systems will maximize stability of the slopes. If vertical walls are constructed, the cost of their maintenance and eventual replacement should be a factor in the planning.
- 10. Meander lengths should be the last physical feature compromised within the meanderbelt. In the event of a severe restriction of right-of-way options, the meander length should be the next component after terrace side slopes to be compromised. Meander length compromises require rocked outside channel bends and acceptance of future stream bottom erosion and planform instabilities. The channel slope can sometimes be broken up into very small drops as a means of compensating for the lack of channel length. Channel headcutting and long term maintenance costs are commonly associated with this kind of compromise. (correct bankfull channel widths and depth should always be a protected project feature with an exception made for alluvial fan braided channels.)
- [Page 88 = pdf page 94] Important definitions shown in diagram of the anatomy of a meander. Key concepts:
 - Meander length (= wavelength in idealized sinusoid)
 - Amplitude (from middle of stream to between opposing curves
 - Channel width (from bank to bank)
 - Meander belt Width: amplitude + channel width

Principles for designing a stream remediation

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- 1. meander length rangers from 7=10 times channel width to channel width
- 2. Ratio of Amplitude to channel width: 2.7
- 3. Ratio of curvature to channel width: 2.3 (ranges 1.5 4.5)
- 4. Ratio of meander length to radius of curvature: Approximately 1/5 of meander length

Dr. Riley's text contains an appendix of reference citations. The other two publications discussed below are cited in Dr. Riley's appendix.

From: Sent: To: Subject: Jimmy Benjamin <jimmyinhmb@gmail.com> Monday, August 26, 2013 11:19 PM Rexing, Stephanie@Coastal USACE on Stream Management

Hi Stephanie,

Okay, here are excerpts from a second tome on stream management titled, surprisingly, *Stream Management*. My excerpts are a little briefer.

My apologies if this (and one more email of excerpts I have prepared) is already well known to you!

- Jimmy

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US Army Corps of Engineers

The second manual, prepared by the US Army Corps of Engineers, is

Fischenich, J. C. and Allen, H. (1999). *Stream Management*, ERDC/ELSR-W-00-1, U.S. Army Engineer Research and Development Center, Waterways Experiment Station, Vicksburg, MS.

It is available over the web at http://el.erdc.usace.army.mil/publications.cfm?Topic=techreport&Code=watqual.

Stream Management contains lots of potentially useful language that show conflicts between stream stability and the mistaken approach that the City of Half Moon Bay took to managing the Kehoe drainage, and proposes to take with many more drainages in the project currently under CEQA review. This document calls out an approach to planning and executing rehabilitation that the City has not adopted, to put it mildly. For example, for habitat restoration to be an effective mitigation, steps must be taken to ensure that the created habitat is in equilibrium. Unfortunately, the City has or is so far been unwilling to do any significant design of this equilibrium, much less the planning needed to achieve it. Specific citations of interest include:

- [Page 1-2] <u>Stream management, stabilization, and restoration require a knowledge and awareness of the complex interactions between watershed and stream processes, boundary sediments, and bank and floodplain conditions.</u> Identifying the causes of channel instability or potential channel instability and having the knowledge of the magnitude and distribution of channel adjustment processes are necessary to
 - o Estimate future channel changes
 - o Develop appropriate mitigation measures
 - Preserve and protect the stream corridor

Human activities such as urbanization, channelization and other land uses contribute to accelerated erosion... Many of the adverse consequences of development can be avoided through careful planning or mitigated through land-use adjustments. Others will require direct intervention using erosion control measures. An increasing appreciation for the environmental value of our stream systems has led to a revival of old methods and the development of <u>new techniques that not only provide erosion control but also restore or enhance the</u> <u>aquatic and riparian environment.</u> [emphasis added]

• [Page 2-1] Understanding stream form is a necessary first step in evaluating and predicting fluvial (riverine) mechanics, geomorphology, stream stability, habitat characteristics and functional potential. These, in turn are

necessary to develop alternatives for the restoration and management of our stream systems and to make an informed choice among alternatives.

- [Page 2-2] Slope is one of the most critical pieces of design information required when channel modifications are considered. Chanel slope directly impacts flow velocity and shear stress. Because these attributes drive the geomorphic processes of erosion, sediment transport, and sediment deposition, channel slope becomes a controlling factor in channel shape and pattern.
- [Page 2-10*ff*] Velocity may reach values of 60-70 percent or more of the time average velocity because of the inherent variability of turbulent flow...Velocity is thus a highly variable quantity in time and space. The character of that variation is important since velocity influences the processes of erosion, [sediment] transportation and deposition.
- [Page 2-16] Changes in sediment load, flow regime and boundary conditions can disrupt the balance resulting in a stream that undergoes rapid morphological changes. Channel modification and urbanization are probably the most common causes...In a typical incising channel, the streambed degrades until critical bank height is exceeded and the bank fails, increasing channel width and sediment load. Over time, the stream will move toward a new equilibrium and incision will cease when one or a combination of the following conditions develops:
 - Incision upstream, sedimentation downstream and bank failure flatten the longitudinal slope and widen the channel until flow velocity and bed shear stress drop below erosive levels.
 - Fine sediments are eroded away leaving only course sediments that armor the streambed sufficiently to preventing [sic] further incision.
 - The thalweg encounters hard substrate slowing or stopping incision.
 - o Recovery of riparian and instream vegetation increases streambed and streambank cohesion.

... A typical incised channel is deep, broad and lacks a defined or stable low-flow channel. The banks are steep and subject to ongoing failure. Pool habitat is usually lacking and riparian vegetation is often rare or absent. Much of the original floodplain habitat may have been destroyed by erosion or left permanently dry by the receding streambed. Incising channels has been a major cause of destruction and deterioration of floodplain habitats and associated wetlands.

- [Page 2-21, in discussion of average shear stress as a tool for analyzing sediment transport] short term pulses in the flow can give rise to instantaneous stresses of at least three times the average. [So in a turbulent area (such as a turn in the stream, or near armoring), high-flow events are particularly erosive to the stream bed – especially when emergent vegetation has been removed, like they did on the stream on/adjacent to my property]
- [Page 2-23]. Bank erosion. The bank material of natural channels is more variable than the bed material. Most channel banks possess some degree of cohesion because of finer material, so that the analysis of bank erosion is not a simple extension of non-cohesive bed case with a downslope gravity component added. A further complication is provided by vegetation, whose root system can reinforce bank material and increase erosion resistance.
- [Page 2-25] Hydraulic erosion [discusses several types of hydraulic erosion which may be occurring including
 fluvial, impinging and piping. Piping, in particular, may explain the changes in elevation of my property, since it is
 otherwise well protected from surface erosion, and yet the changes in elevation between the City's survey make
 me wonder if that should be a critical part of their assessment of the impacts in their after-the-fact CDP.]
- [Page 2-26 through 2-31] discussion of erosion resulting from geotechnical failure. Shallow areas next to low water suggestive of shallow sliding, visible tree roots suggestive of cantilever failure; wet earth flow may also be contribute to erosion here and probably contributed to failure of the riprap that the City attempted on a reach of the Kehoe Watercourse to the east in the nineties.

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• [pages 2-31 through 2-33] Weakening actions

Seven categories of factors responsible for decreasing the erosion resistance and mechanical stability of a bank may be identified.

- Leaching leads to weakening of the bank through the reduction of cohesion that occurs when clay minerals are removed by solution in groundwater seeping through the bank. This process can seriously reduce bot the mechanical strength of the bank material and its erosion resistance, leading to bank instability and erosion that would not be able to erode unleached bank materials. The vulnerability of a bank to leaching depends on its clay mineralogy and the chemistry of the pore water.... The significance of leach to bank stability and erodibility should not be underestimated.
- Trampling weakens the bank through the destruction of the soil fabric.... Trampling is a serious weakening factor because the erosion resistance and stability of many soils rely almost entirely on the soil fabric. Also, trampling reduces infiltration capacity, leading to increased overland flow... It may allow bank erosion and failure to occur at locations which would be entirely stable if the bank were untrampled.
- Riparian vegetation is vulnerable to damage from a variety of natural processes and human actions. Erosion that sours or undermines roots will often kill vegetation, while mass failure uproots and relocates it, generally with fatal results. Human actions, including unsympathetic channel maintenance, trampling an overgrazing by farm stock and cutting by anglers, can severely damage or remove vegetation completely. Riparian vegetation plays a crucial and integral role in determining the erosion resistance and mechanical stability of stream banks. This role is complex and the sensitivity of a bank to destabilization due to the disruption or removal of vegetation is difficult to predict. However, numerous case studies demonstrate that destruction of riparian vegetation can accelerate bankline retreat rates dramatically. The significance of riparian vegetation must be recognized. It is an integral component of the river bank system, and its destruction may be a crucial factor in weakening a bank and allowing erosion to begin. If trampling, overgrazing or inappropriate maintenance have led to destruction of the riparian corridor, its reestablishment should be a high priority in any scheme for bank management or erosion control.
- Mechanical damage...present footholds for erosion and failure to begin to attack otherwise stable banks. Instability may spread outwards to affect intervening, natural reaches, leading to disruption of the entire bankline. The significance of mechanical damage is that it leads to localized erosion that has the potential to spread widely. The sensitivity of a reach to destabilization in this way is difficult to predict. Hence, it is high undesirable that mechanical damage to natural banks to be allowed.
 [Ed: that for years the City dug out the stream and south bank using a mechanized equipment (shovel) upstream from my property.]
- Positive pore water pressures occur when drainage of water through the bank is restricted...Positive pore water pressures are most likely when the water surface elevation in the channel falls rapidly...Poorly drained banks are often observed to collapse during drawdown after flood peaks.
- Desiccation occurs when a soil shrinks and cracks on drying to the point that electrochemical bonds between particles and aggregates are broken. During the summer, the face of an unvegetated bank with a southern exposure may reach a very high temperature, leading to intense desiccation. [ED: this could describe a reach of the stream near Highway 1, where the unsuccessful riprap repair took place.
 Freezing and thawing of water [not an issue here]
- Appropriate planting in streambank by zone. P2-33, 2-37 through 2-39. To paraphrase: Plants must be selected to tolerate the hydrology of the various zones (toe zone, splash zone, bank zone, terrace zone), provide diversity of habitat; they can provide significant protection buffering the stream's banks from erosion in big storm events. According to the report, NRCS can help with plant selection. In this case, however, the NRCS letter indicates the City asked how to repair an area where willows were cut, not how to restore and stabilize the habitat. It's not clear whether the NRCS staff has actually even inspected the stream bank.
- [page 3-8] Table 3.4 "Biological Functions, Indicators and Measures" suggest standards that would be
 appropriate for evaluating a restoration design and some mitigation and monitoring plan. It doesn't have much
 about list species, however, so I need to find standards appropriate for SFGS, CRLF and SF Yellowthroat. Table

3.5 shows methods used by federal agencies –probably the most appropriate is the Fish and Wildlife Service's Habitat Evaluation Procedure, but I need to look at it.

- [Page 3-14] (Why the indiscriminant removal of debris hurts the wildlife): The quantity of terrestrial vegetation, as well as its species composition, can directly affect stream channel characteristics. Root systems in the stream bank can bind bank sediments and moderate erosion processes. Trees and smaller woody debris that fall into the stream can deflect flows and induce erosion at some points and deposition at others. Thus woody debris accumulation can influence pool distribution, organic matter and nutrient retention, and the formation of microhabitats that are important to fish and invertebrate aquatic communities.
- [Page 3-25] Without a comprehensive reach or watershed assessment selected restoration measures often ignore underlying problems at a broader scale and are either ineffective or not cost effective relative to other measures. (A description of the elements of a bio and habitat logical assessment)
- [Page 3-38] Description of the U5 Fish and Wildlife Services Habitat Evaluation Procedures these feel like the things that we should be requiring them to do to plan remediation. Just thinking about restoration of the Kehoe Watercourse, for example:
 - start with the formation of a study team. Possible participants, at different involvement levels, could Coastal Commission, SF Water Board, DFG, FWS, USACE, City, ? State Parks ? What about non-regulatory agencies – Soil Conservation District, NRCS? Landowners: SAM, Benjamin, other interested neighbors defining study area boundaries? Conservation groups? The broader the group the harder to make progress. If the goal is narrow enough, maybe the regulatory agencies are sufficient – and could avoid bias.
 - o Identify objectives
 - Survey stream conditions exploit existing data and fill in what is needed to produce a sufficiently clear view of stream dynamics to drive decision-making.
 - Fluvial processes
 - Geomorphology
 - Hydrology
 - Hydraulics
 - Stream Ecology
 - Natural and anthropogenic impacts
 - Define requirements for a remediation project to restore sustainable habitat for listed species (SFGS. CRLF, SF Common Yellowthroat), appropriate multiples
 - Remodel and possibly relocate Kehoe drainage to protect development by handling 100-year storm flows without instability caused by erosion threatening structures
 - Develop a plan that achieves these goals including mitigation and monitoring of success (must deal with invasive exotics (ice plant, cape ivy)
 - Develop a plan that can compete for grant funding or maybe shop the project as a field project to earth sciences classes at universities?
 - o The study area
 - the drainage, from Highway 1 to confluence with Pilarcitos Creek
 - riparian corridor, and SAM property
 - o Participants
 - Regulatory agencies: Coastal Commission, SF Water Board (A L Riley is a recognized stream restoration wizard), DFG, FWS, USACE – they are the sole determinants of their requirements
 - Stakeholders:
 - City, Benjamin, ? Conservation Corps ?
 - Those at risk of erosion residents adjoining the stream
- Chapter 4 is a nice summary of how streambank erosion should be analyzed. The nicest thing I can say this is something the City did NOT do in considering their remediation, let alone their 2009 Kehoe Ditch cleaning project.

11. C.

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From:
Sent:
To:
Subject:

Jimmy Benjamin <jimmyinhmb@gmail.com> Monday, August 26, 2013 11:21 PM Rexing, Stephanie@Coastal FISRWG on Stream Corridor Restoration

Okay, one more then I'm crashing. At <u>www.nrcs.usda.gov/technical/stream_restoration/newtofc.html</u> there is the 637page

Federal Interagency Stream Restoration Working Group (FISRWG), *Stream Corridor Restoration: Principles, Processes and Practices*, GPO Item No. 0123-A, (adopted as Part 653 of the National Engineering Handbook, USDA-Natural Resources Conservation Service)

The document is careful to state in its introduction that it is not a policy document, and no federal agency is bound by it – this will make it hard to suggest that FWS, DFG, CCC or other agencies are compelled to use NRCS approaches advocated there. Even so, there are some useful tidbits that link stream restoration to habitat restoration for listed species, and discuss the importance to stream health of not ignoring exotic invasive species.

The perspective of this document is BIG. For example see p, a BIG advisory committee (Foresters, legal consultants, botanists, microbiologists, engineers, hydrologists, economists, geomorphologists, archaeologists, sociologists, soil scientists, rangeland specialists, land scape architects, fish and wildlife biologists, public involvement specialists, real estate experts, ecologists, native Americans and tribal leaders). The scale is appropriate for a broad restoration project over a large area, like the American River project described on p212*ff*, but it would be overkill (and in this environment, a death sentence) for a small project like this. A better model might be the Pilarcitos Creek Advisory Committee that has administered money to restore Pilarcitos Creek after a spill from the nearby Ox Mountain landfill. The County Soil Conservation District has been very active (probably funded to some extent) by that project NRCS consultant Jim Howard sits in the same office as the County SCDThere is a okay-looking checklist on page 225 that outlines measureable attributes for describing conditions in the stream corridor. If the items described there are well investigated, we would be a long way toward having the information that regulators would expect to drive a remediation project.

Specific text that might be worth knowing:

- [Page 2-56,57 = pdf pages 137,138] list of eight habitat features that stream corridors provide for fauna (water source, high biomass, varied cover types and food availability, critical microclimates, horizontal and vertical habitat diversity, maximized edge effect, effective migration routes, connectivity between vegetated patches. A restored habitat should provide these features. There is an interesting point here about the consequences of routing additional drainages to an existing stream as the City had done with the Kehoe Watercourse.
- [Pages 2-80 through 2-84 = pdf pages 161-165] Nice layman's description of habitat function
- [Page 3-8 = pdf page 178] Adverse impact of channelization:

Stream channelization and diversions can disrupt riffle and pool complexes needed at different times in the life cycle of certain aquatic organisms (ED: recall my video of CA Conservation Corps workers hoeing out deep pools, and the crew leaders statement about removal of snags). The flood conveyance benefits of channelization and diversions are often offset by ecological losses resulting from increased stream velocities and reduced habitat diversity. Instream modification such as uniform cross section and armoring result in less habitat for organisms living in or on stream sediments. Habitat is also lost when large woody debris, which frequently supports a high density of aquatic macroinvertebrates is removed (Bisson et al. 1987, Sweeney 1992).

A-2-HMB-14-0004 Exhibit 6 Page 13 of 26 [Page 3-10,11 = pdf page 18,1810] Impact of exotic species are acknowledged. Impact of cape ivy could be compared to kudzu discussion. Mentions adverse impact of bull frogs on western stream natives. Example of salt cedar removal illustrates that plants like cape ivy can be combatted, esp. in such a small geographic area (I have seen treatments in Monterey, for example).

[page 3-14 = pdf page 184] Discusses removal of vegetation and instream in context of agriculture. The motivation may be different, but the impact shoe still fits.:

Vegetative Clearing

One of the most obvious disturbances from agriculture involves the removal of native, riparian and upland vegetation. Producers often crop as much productive land as possible to enhance economic returns; therefore, vegetation is sacrificed to increase arable acres.

As the composition and distribution of vegetation are altered, the interactions between structure and function can become fragmented. Vegetative removal from streambanks, floodplains, and uplands often conflicts with the hydrologic and geomorphic functions of stream corridors. These disturbances can result in sheet and rill as well as gully erosion, reduced infiltr4ation, increased upland surface runoff and transport of contaminants, increased streambank erosion, unstable stream channels and impaired habitat.

Instream Modifications

Flood-control structures and channel modifications implemented to protect agricultural systems further disrupt the geomorphic and hydrologic characteristics of stream corridors and associated uplands. For agricultural purposes, streams are often straightened or moved to "square up" fields for more efficient production and reconstructed to a new profile and geometric cross section to accommodate increased runoff. Str4eam corridors are also often modified to enhance conditions for single purposes such as fish habitat, or manage conditions such as localized streambank erosion [ED: recall City's failed upstream riprap attempt, and upstream residents unpermitted armoring]. Some of the potential effects caused by these changes are impaired upland or floodplain surface and subsurface flow; increased water temperature, turbidity, and pH; incised channels, lower ground water elevations, streambank failure; and loss of habitat for aquatic and terrestrial species.

[ED: the irony here is that the cleaning project (and the willow staking project did NOT clear any of the exotic vegetation]

- [page 3-18,19 = pdf pages 188,189] Adverse impacts of loss of vegetative cover: "Reduced vegetative cover can increase soil compaction and decrease the depth of and productivity of topsoil. Reduced cover of mid-story and overstory plants decreases shade and increases water temperatures, although this effect diminishes as stream width increases. Sediment from upland or streambank erosion can reduce water quality through increases in turbidity and attached chemicals....Extensive loss of ground cover in the watershed and stream corridor can decrease infiltration and increase runoff, leading to higher flood peaks and additional runoff volume. Where reduced cover increases overland flow and prevents infiltration, additional water may flow more rapidly into stream channels so that flow peaks com earlier rather than later in runoff cycle, producing a more "flashy" stream system... [E]xcessive water reaching the system without additional sediment may cause channel degradation as increased stream energy erodes channel bottoms, incising the channel.,"
- [page 3-21 through 3-25] Discussion of problems facing urban stream runoff, pollutants, loss of trees,... all true but not very applicable to us, except may to argue the ESHA is already stressed, and didn't need this cleaning project insult.
- [page 5-10 = pdf page 248] Acknowledgement of permitting requirements: "Federal, state or local permits might be required for some types of stream restoration activities. Some states, such as California, require permits for any activity in a streambed." Goes on to discuss CWA section 404. The need to plan for required local and state permits on page 5-11. [ED NEPA and US Endangered Species Act are also referenced on page 5-11 but only with respect to initiatives that receive federal support. I wonder if there is a path from Conservation Corps funding back to the Feds?]

- [Page 6-12 = pdf page 182] More clear indications of permitting requirements. Local/State are cited abstractly, but federal list (after all, it's a federal document) specifically call out Sections 401, 402 and 404 of the Federal Clean Water Act and the Incidental take permits that would be required under the Federal Endangered Species Act.
- [Page 6-14 = pdf page 284] Caption on Figure 6.9: " The number of permits required for an aquatic restoration effort may appear daunting but they are all necessary."

Amusing text on same page: "Whether or not that local agency claims jurisdiction over the particular activity, its staff will normally be aware of state and federal requirements that might be applicable. Local permit requirements vary from place to place and change periodically, so it is best to contact the appropriate agency for the most current information."

- [Page 6-16 = pdf page 286] "Drainage easement allows for the implementation and permanent maintenance of a drainage facility at a particular site. Usually, the property owner has free use of the property for any nonconflicting activities" Don't know whether the City would try to hang their defense on a broad interpretation of "maintenance" in this definition, but it is clearly limited by law, as shown by DFG rejection of channel maintenance approval for Kehoe Ditch.
- [Page 6-24ff = [pdf pages 288ff] Discussion of Monitoring Plan is the rest of chapter 6. Calls out when to develop
 it (during planning), what it should contain (written, vision, goals, objectives, performance criteria linked to
 goals; reliance on instream organisms for success criteria, reporting and appropriate response to
 measurements). Cites USFWS habitat evaluation procedures on p6-26 (with specific technique for riparian zone
 monitoring that I haven't seen).
- [Page 7-86 through 7-91] Chapter 7 explains a large number of models that are useful in restoration projects several could be useful. The referenced pages discuss the USFWS habitat evaluation procedure.
- [Page 8-7 = pdf page 421] If there is a target species, restoration should meet its functional requirements. Our listed species' requirements should be part of the design of the remediation, but of course are not.
- [Pages 8-61 through 8-66 = pdf pages 475-480] Specific advice on streambank restoration:
 - "On larger streams or where erosion is severe, an effective approach involves a team effort that includes expertise in soils, biology, plant sciences, landscape architecture, geology, engineering and hydrology."
 - [Live woody cuttings or poles of readily sprouting species] alone are sufficient on some streams or some bank zones, but as erosive forces increase, they can be combined with other materials such as rocks, logs or brush and natural fabrics. In some cases, woody debris is incorporated specifically to improve habitat characteristics of the bank and near-bank channel zones."
- [Page 8-79 through 8-83] Restoration in the case of areas that have been channelized. Skipping the case study:

Channelization and Diversions

Channelization and flow diversion represent forms of hydrologic modification commonly associated with most principal land uses, and their effects should be considered in all restoration efforts. In some cases, restoration design can include the removal or redesign of channel modifications to restore preexisting ecological and flow characteristics.

Modification of existing projects, including operation and maintenance or management can improve some negative effects without changing the existing benefits or creating additional problems. Levees may be set back from the stream channel to better define the stream corridor and reestablish some or all of the natural floodplain functions. Setback levees can be constructed to allow for overbank flooding, which provides surface water contact with streamside areas such as floodplains and wetlands. Instream modifications such as uniform cross sections or armoring associated with channelization or flow diversions may be removed, and design and placement of meanders can be used to reestablish more natural channel characteristics. In many cases, however, existing land uses might limit or prevent the removal of existing channel or floodplain modifications. In such cases, restoration design must consider the effects of existing channel modifications or flow diversions, in the corridor and the watershed.

> A-2-HMB-14-0004 Exhibit 6 Page 15 of 26

Exotic Species

Exotic species are another common problem of stream corridor restoration and management. Some land uses have actually introduced exotics that have become uncontrolled, while others have merely created an opportunity for such exotics to spread. Again, control of exotic species has some common aspects across land uses, but design approaches are different for each land use.

28

Control of exotics in some situations can be extremely difficult and may well be impractical if large acreages or well-established populations are involved. Use of herbicides may be tightly regulated or precluded in many wetland and stream side environments, and for some exotic species there are no effective countermeasure that can be easily implemented over large areas (Reiger and Kreager 1990). Where aggressive exotics are present, every effort should be made to avoid unnecessary soil disturbance or disruption of intact native population, and newly established populations of exotics should be eradicated.

Controlling exotics and weeds can be important because of potential competition with established native vegetation, colonized vegetation, and artificially planted vegetation in restoration work. Exotics compete for moisture, nutrients, sunlight, and space and can adversely influence establishment rates of new plantings. To improve the effectiveness of revegetation work, exotic vegetation should be cleared prior to planting; nonnative growth must also be controlled after planting.

[ED: we don't have any plan for monitoring the ivy and other exotics - which are on SAM's side of the stream too, BTW]

- [Page 8-97 through 8-102 = pdf pages 512-516] Discusses urban stream restoration, including the following 7 specific tools.
 - 1. Partially restore the predevelopment hydrological regime.
 - 2. Reduce urban pollutant pulses
 - 3. Stabilize channel morphology
 - 4. Restore instream habitat structure
 - 5. Reestablish riparian cover
 - 6. Protect critical stream substrates
 - 7. Allow recolonization of the stream community
- [Page 9-16] Timing of plant installations: "Plants should be installed when dormant for the highest rate of survival. Survival is further influenced by species used and how well they are matched to site conditions, available moisture, and time of installation. In mild climates, the growth of roots occurs throughout the winter, improving survival of fall plantings. Where high wintertime flows are anticipated, however, first season cuttings might not survive unless given some physical protection from scour....Irrigation might be necessary in some regions of the country to ensure successful establishment of vegetation.
- [Page 9-18] Establishment of new plants

Competing Plants

Although a well-chosen and established plant community should require no human assistance to maintain vigor and function, competition from other plants during establishment might be a problem. Competing plants commonly do not provide the same long-term benefits for stability, erosion control, wildlife habitat, or food supply. The restoration plan therefore must include some means to suppress or eliminate them during the first year or two after construction.

Competing plants may be controlled adequately by mechanical means. Cutting the top growthe of competing

Exhibit 6 Page 16 of 26 plants can slow their development long enough for the desired plants to become established. Hand weeding is also very effective, although it is usually feasible only for small sites or those with an ongoing source of volunteer labor.

Unfortunately, some species can survive even the most extreme mechanical treatment. They will continue to reemerge until heavily shaded or crowded out by dense competing stands. In such cases the alternatives are limited. The soil containing the roots of the undesired vegetation can be excavated and screened or removed from the site, relatively mature trees can be planted to achieve near-instantaneous shading, or chemical fertilizers or herbicides can be applied.

 [Pages 9-26ff = pdf pages 544ff] The maintenance of a restoration project would not include the removal of native riparian vegetation that supports the stream's functions. Appropriate maintenance plan elements are describe here. Specifically, on page 9-27:

> Many traditional channel maintenance actions may be inappropriate in the context of a stream corridor restoration. In particular, removal of wood debris may be contrary to restoration objectives.. Appropriate levels of woody debris loading should be a design specification of the project, and the decision to remove or reposition particular pieces should be based on specific concerns, such as unacceptably accelerated bank erosion due to flow deflection, creation of ice jams causing an increased chance of flooding, or full resistance to high-flow velocities or saturation of bank soils. Replanting should be an anticipated potential maintenance need in this situation.

Additional text discusses vegetation maintenance, trash removal, cleaning and repair of structures like nesting boxes, platforms and waterers that are beneficial to wildlife, levee management, mosquito control.

Okay, I think that's all I have to say on the subject. I hope that these emails will be useful to you.

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Jimmy

A-2-HMB-14-0004 Exhibit 6 Page 17 of 26

From: Sent: To: Subject:

ł

James Benjamin <jimmyinhmb@gmail.com> Thursday, November 14, 2013 3:58 PM Rexing, Stephanie@Coastal Appeal of PDP-050-12

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Hi Stephanie,

Section 18.20.075(E)(3)(a) of the HMB Muni code requires an appeal to be scheduled for a hearing within 30 days of receipt of appeal by Planning Director. Appeal was received by City on October 29, so I would expect appeal to scheduled no later than November 28. Is that the interpretation of the CCC legal staff?

With thanks,

Jimmy



CITY OF HALF MOON BAY

City Hall • 501 Main Street • Half Moon Bay • CA • 94019

November 15, 2013

Mr. James Benjamin 400 Pilarcitos Avenue Half Moon Bay, CA 94019-1475

Subject: PDP-050-12, Kehoe Ditch Retroactive Coastal Development Permit Appeal

Dear Mr. Benjamin,

This letter is to notify you that in accordance with Municipal Code Sec. 18.20.075(D)3a, we are hereby scheduling the appeal of the Planning Director's approval of the Retroactive Coastal Development Permit for the routine maintenance of the Kehoe Ditch for the December 10, 2013, Planning Commission hearing at 7:00. Notices for the hearing will be sent out to the surrounding properties 10 days prior to the hearing, as well as the site posted and a legal ad published in the newspaper. The staff report for the appeal hearing will be sent out no later than Friday, December 6, and the staff report will also be available for review and downloaded from the City's website.

Sincerely,

Anothillise

Scott Phillips, Associate Planner

A-2-HMB-14-0004 Exhibit 6 Page 19 of 26

From:	limmy Benjamin <iimmyinhmb@gmail.com></iimmyinhmb@gmail.com>			
Senf:	Tuesday January 21, 2014 4:51 PM			
	Poving Stophonic Quantum Constal			
10.				
Subject:	Updated comments on Citywide Drainage Maintenance and LCP and zoning maps amendment for Kehoe Watercourse, Landstra and Caltrans Mitigation Wetland			
Attachments:	2014 01 21 comment on Kehoe maps amendment staff report.pdf; 2014 01 14 comment on staff report for Appeal of PDP-019-13.pdf; 2013-10-24 USFWS 2013-TA-0642 Citywide Drainage Ditch Project.pdf			

Hi Stephanie,

FYI, tonight the HMB CC will consider (1) the appeal of Drainage Armageddon and (2) approval and transmitting to CCC for certification an amendment to the LCP and zoning maps showing the sensitive habitats adjacent to the Kehoe Watercourse. Attached is a comment letter dated today for each project.

The staff report released this past Thursday removes the Kehoe Watercourse and the Roosevelt Watercourse are removed of the Drainage Armageddon CDP – but both are still in the CEQA documents and the Streambed Alteration Agreement. This is unlike the treatment of the Pilarcitos, Frenchmans Creeks and other A-zone drainages which were previously excised from the CEQA document and removed in a revised SAA application.

The response to comments by staff suggests that despite the BRE reporting suitable habitat for CRLF and/or SFGS at drainages B-6, B-9, B-10, C-2 and C-6, that there could be no additional concerns about adverse impacts to the habitat of listed species. In its October 24, 2013 letter, USFWS explicitly stated that the Service considers "most drainages identified in the Creek Maintenance Plan are occupied by the California red-legged frog and San Francisco garter snake." This would have been after the removals reflected in the October 14, 2013 revised IS/MND.

Staff response states that the regulatory agencies have expressed no concerns about erosion or flood at the December meeting, strongly implying that there are no concerns.

This email also includes as an attachment my 2-page rejoinder on Condotti's staff report for the LCP and Zoning map amendment, with a copy of previous correspondence. The amendment passes a resolution based on findings without evidence, even though evidence is in abundance. The resolution itself concludes that the areas are likely to contain or support listed species, rather than asserting that the areas contain or support the species, which is the relevant criterion for inclusion on the maps. I'm also concerned that the exhibits cited in the resolution do not clearly call out the riparian area and corridor associated with the Kehoe Watercourse, and does not indicate the Caltrans mitigation wetland at all.

In both cases, it is abundantly clear that the City considers the frog or the snake, but not the habitat, the resource, in clear conflict with the use of the term in the zoning ordinance and LCP.

I was reminded of the importance of the maps when I ran into the new owner of three parcels north of Casa del Mar. He said that he planned to extend Pilarcitos Ave. north beyond wave to put in a row of houses (this was the subject the uproar from Casa del Mar neighbors during the circulation element review). When I mentioned that CRLF were present on the site the new owner said that was not true, that he had checked the map and there was no indication of listed species on the site. What a pity we cannot seem to demand a current map with comprehensive habitat information.

- Jimmy

A-2-HMB-14-0004 Exhibit 6 Page 20 of 26

From:	Jimmy Benjamin <jimmyinhmb@gmail.com></jimmyinhmb@gmail.com>
Sent:	Sunday, February 02, 2014 3:53 PM
To:	Rexing, Stephanie@Coastal
Subject:	City-wide drainage maintenance project - HMB Review coverage, public reaction to hearing, Letter to the editor
Attachments:	2014 01 29 HMB Review Kehoe-Citywide report.pdf

Hi Stephanie,

Just a heads-up that the City Council recently denied my appeal of the City-wide drainage maintenance project. The deliberation actually didn't include a word about merits or faults in the appeal, just a lot of kvetching about having to withdraw Kehoe and Roosevelt from the CDP.

I remain concerned that the USFWS has advised the City that other drainages still in the project support or contain protected species, the project allows unspecified work in the passive open-space areas west of neighborhoods and the Coastal trail which could affect the area's biological productivity, and the IS/MND revision withdraws findings for Pilarcitos, Arroyo Leon and Frenchman's but not Kehoe or Roosevelt. So when you receive the FLAN and the window for appeals to the Coastal Commission opens, could you please let me know?

The Half Moon Bay Review covered it, sort of (see attached article). If you have the stomach for the video, the Council's invective is streamed (then criticized) by commenters in the following HMB Review TalkAbout thread:

The Shameful Excortation, Vilification, and Demonization Of Mr. Benjamin

More constructively: We neighbors added an agenda item to the monthly meeting Sewer Authority Midcoastside Board of Directors to discuss of the possible southward relocation of the Kehoe Watercourse to give it space to meander, separate it from urban use, etc. It went pretty well, kicking the legs out from under the City's argument that they could not get permission to do it.

I sent the following letter to the Review's editor earlier today, after reflection and softening an earlier draft.

Had an interesting chat with a friend about that question concerning eucalyptus trimming in an ESHA. If it's still bouncing around, I'd like to add something to the mix. Please give me a call when you have a couple of minutes to discuss.

Okay, you're up to date!

- Jimmy

Dear Editor:

As recently reported, the City Council attacked me at their 1/21 meeting. I would like to respond.

Councilwoman Patridge accused me of being a liar, stating that my response to the City's recently approved vague and destructive drainage projects "goes back on [my] words." She knows the *Benjamin vs. City of Half Moon Bay* settlement agreement protects myBightton Exhibit 6

comment, appeal, and fully participate as a citizen. That agreement also requires a severalacre pipeline staging area on a City parcel be restored with native plants. Visit that site southeast of the SAM Plant, see the asphalt, concrete and aggregate, untouched except for ten or so run-over plants the City left to desiccate last April, and decide for yourself who has lived up to their words.

Council should grant itself permits for needed, well-understood drainage improvements at specific locations consistent with our laws. It should also respond to imminent flood or erosion threats to life or property, and promptly obtain after-the-fact permits. But no Council may ignore state and federal laws governing projects in sensitive habitats, delegating to staff what work will occur where, and what mitigation is appropriate. Court findings and jurisdictional agencies' comments confirm that this has produced poorly-considered plans that violate the law.

The Council badly misconstrued the comments of our neighborhood. We are not asking for erosion-inducing, habitat-destroying, business-as-usual cleaning. Twenty-two households adjacent to the Kehoe Watercourse have signed a letter calling for the drainage to be relocated southward onto SAM's (Sewer Authority Midcoastside) property. On 1/27, three of SAM's six directors (not including the City Council's two representatives) publicly embraced the relocation idea.

Oddly, Councilwoman Fraser blamed me for forcing the City to listen to jurisdictional regulatory agencies. The U.S. Fish and Wildlife Service and Coastal Commission staff previously advised that repairs and other approvals are needed to comply with the Endangered Species Act and Coastal Act. That should have been forceful enough to be heard without an appeal.

These politicians have learned nothing from the Kehoe lawsuit's teachable moment. Their ongoing contempt for environmental law and for due process is clear for all to see. They continue to act in an unprincipled manner, distorting facts, flouting laws they find inconvenient, and attacking those who hold them accountable.

/s/James Benjamin



From:
Sent:
To:
Subject:
Attachments:

Jimmy Benjamin <jamben@pacbell.net> Monday, November 18, 2013 9:56 AM Rexing, Stephanie@Coastal; Dan_Cordova@fws.gov City moving forward with City-wide drainage maintenance project DSC00984.JPG

Just a heads-up that I received notice of the project's planner that a CDP for this project is scheduled for consideration on Nov. 26 by the Half Moon Bay Planning Commission. I have not read the response to comments carefully, but at first glance the City has removed emergency work and Pilarcitos and Frenchman's Creeks, but have left Roosevelt and Kehoe watercourses in the CDP. I will review carefully this week and very likely file an appeal.

In addition to the appeal, this action flies in the face of the settlement agreement, which clearly states (paragraph D.5) that no project will be undertaken, or even considered complete for processing, in the Kehoe Watercourse or the Landstra parcel, until the City has fulfilled its LCP Sensitive Habitat and Water Resources overlay and its zoning ordinance Coastal Resources maps — which to my knowledge have not yet been presented to the Planning Commission or City Council, let alone submitted to the CCC for certification.

The City has also scheduled Dec. 10 consideration by the Planning Commission of my appeal for their nothing-butchainsaws-was-wrong, no-impact, no-mitigation, the after-the-fact CDP for 2009 work in the Kehoe drainage.

To maximize control of both items, tomorrow night the City will quietly amend its master fee schedule to state that appeals of City-as-applicant projects are free.

One other item: this weekend I noticed that continuing erosion and path-clearing by the creek-"cleaning" workers has made the ground under the 1988 riparian fence low enough for raccoons or other animals to scramble out of (and presumable, for domestic predators to scramble into) the drainage. See attached pictures that I took yesterday. On the lawn side of the fence I will install a board to discourage the four-legged commuters, and some pea gravel, etc. to dissipate sheet-wash. But at some point the City needs to be accountable for the water they are adding to the natural drainage in contravention of hazard and, now, biological, policies.

- Jimmy

A-2-HMB-14-0004 Exhibit 6 Page 24 of 26

From:	Jimmy Benjamin <jamben@pacbell.net></jamben@pacbell.net>			
Sent:	Sunday, November 24, 2013 12:54 PM			
То:	Dan Cordova@fws.gov; Sheila Steen Larsen; Rexing, Stephanie@Coastal			
Subject:	Another California red-legged frog observed in Half Moon Bay, CA			
Attachments:	2011-10-03 CRLF HMB.pdf; GoogleEarth image with marked CRLF observations jpg			

I did not include the stand-alone picture in the report because in a database, I think the data should tell the story. But thought it might be helpful for you.

- Jimmy

From: Jimmy Benjamin [mailto:jamben@pacbell.net]
Sent: Sunday, November 24, 2013 12:44 PM
To: <u>CNDDB@dfg.ca.gov</u>
Subject: Report of California red-legged frog observed in Half Moon Bay, CA

Attached please find a report and photo documentation of a CRLF seen in Half Moon Bay.

Thank you,

- James Benjamin

A-2-HMB-14-0004 Exhibit 6 Page 25 of 26

From:Jimmy Benjamin <jimmyinhmb@gmail.com>Sent:Monday, February 10, 2014 8:53 PMTo:Rexing, Stephanie@CoastalSubject:RE: Supporting material for recently appealed City of Half Moon Bay City-wide drainage
maintenance project PDP-019-13

Dear Stephanie,

In my haste I neglected to include in the appeal the references to the Biological Resource Evaluation (BRE) procured by the City which cites CRLF and/or SFGS habitat in the Myrtle Street Bubble-up (b-6), Seymour Drainage (B-9), Redondo Beach Road (B-10), Poplar Street (C-2), Railroad Ave. (C-3) and Wavecrest Road (C-6), in addition the four drainages removed from the project as upheld by the City Council. (Roosevelt [B-1], Kehoe [B-2], Magnolia [B-7] and Seymour Detention Basin [B-8]). I apologize for the omission!

- Jimmy Benjamin

From: Jimmy Benjamin [mailto:jimmyinhmb@gmail.com]
Sent: Monday, February 10, 2014 11:49 AM
To: <u>Stephanie.Rexing@coastal.ca.gov</u>
Subject: Supporting material for recently appealed City of Half Moon Bay City-wide drainage maintenance project PDP-019-13

Dear Stephanie,

Thank you for confirming receipt of my appeal of PDP-019-13 on February 6, 2014. Attached to this email please find the following supplementary material in support of the appeal:

- Comments by appellant on draft IS-MND
- Appellant's local appeal to the Half Moon Bay City Council
- Appellant's comment on staff report recommending denial of local appeal
- Receipt for Feb. 10, 2014 mailing of copies of appeal to applicant and interested parties

Please let me know if you have any questions, or require additional information.

- Jimmy Benjamin

CALIFORNIA COASTAL COMMISSION NORTH CENTRAL COAST DISTRICT OFFICE 45 FREMONT ST, SUITE 2000 SAN FRANCISCO, CA 94105-2219 VOICE (415) 904-5260 FAX (415) 904-5260 TDD (415) 597-5885



Memorandum

April 8, 2014

То:	Commissioners and Interested Parties				
FROM:	Dan Carl, North Central Coast District Deputy Director North Central Coast District				
Re:	<u>Additional Information for Commission Meeting</u> Thursday, April 9, 2014				
<u>Agenda</u> <u>Item</u>	Applicant	Description	<u>Page</u>		
W14a	A-2-HMB-14-004 City of Half Moon Bay	Correspondence, James Benjam	in 1-9		
W15.5a	A-2-SNF-12-020 SF Rec. & Park Dept.	Emails and Correspondence	10-69		

Item W14a A-2-HMB-14-0004 Substantial Issue

Ms. Stephanie Rexing California Coastal Commission North Central District Office 45 Fremont Street, Suite 2000 San Francisco, CA 94105

April 4, 2014

Dear Ms, Rexing:

Thank you for sending me a copy of the staff report dated 3/28/2014 for A-2-HMB-14-004. This report's conclusion of no substantial issue rests on an application of the 1999 *Bolsa Chica* decision. More particularly, the report asserts that for the City of Half Moon Bay's project PDP-019-12, the specific Coastal Act section 30236 controls over more general sections 30233 and 30240. The appellate court's decision contemplated a project in an area which was not covered by a certified LCP, whereas the standard of review for A-2-HMB-14-004 is the City of Half Moon Bay certified Local Coastal Program, which balances resource protection with competing interests and resolves overlapping policies in a manner that was certified by the Coastal Commission. (In the attached 2005 letter, Coastal Commission staff rejected the applicability of the interpretive guidelines that were analyzed in *Bolsa Chica* to wetlands policies in areas covered by Half Moon Bay's certified LCP.) Several aspects of PDP-019-12 confound a straightforward application of Coastal Act section 30236 and LCP policy 3-9:

- This analysis considers the more general sections 30240 and 30233, but does not consider the
 narrowly focused policies of the certified LCP which specifically protect the habitats of rare,
 endangered, threatened or unique species, and even more specifically to several policies and
 ordinance sections which protect the habitats of the California Red-legged frog and San Francisco
 garter snake. These policies are more narrowly focused than the general policies discussed and
 discounted in portions of *Bolsa Chica* pertaining to 30233, 30236 and 30240.
- The inclusion in the certified LCP of protections of habitat for listed species, as opposed to protection of only the listed species themselves, makes the LCP consistent with federal law, which is outside the scope of the Bolsa Chica holdings. As approved, PDP-019-13 would permit the City's public works department to implement bank stabilization activities, including but not limited to rock lining, at any location within the project area, including areas west of all development except for the Coastal Trail. In addition to interfering with the stream dynamics that are a natural part of the coastal Trail. In addition to flisted species. Similarly, watching for frogs or snakes while project crews remove their protective cover and the habitat in which their micro fauna prey thrives allows biologists to mitigate the risk of direct take, but actually facilitates indirect take through habitat degradation. The USFWS most recently stated the implementation of the project will result in take by harassment, and thus is not consistent with LCP policy 3-4(b), which requires projects to comply with USFWS regulations.
- Policy 1-2 of the certified LCP calls for policy overlaps to be resolved, on balance, in favor of
 greater protection of coastal resources.

• The flood control projects of Coastal Act section 30236 and LCP Policy 3-9 are permitted only on the conditions that no other method for protecting existing structures in the flood plain is feasible, and where such protection is necessary for public safety or to protect existing development. A significant portion of the PDP-019-13 project area is westward of all development except for the Coastal Trail and the Myrtle Street bubble-up.F or the portions of this project on the watercourses¹ in the passive open space between existing the Coastal Trail and closest existing development, there is no evidence supporting a finding that the project of such scope is necessary and the only feasible alternative for protecting public safety or existing development.

Most of the concerns outlined in appeal A-2-HMB-14-0004 could be addressed simply by restricting the project to developed areas, where there the project would arguably contribute to the goals of public safety or protection of existing development. Indeed, I applaud the City's intent to repair the project area's clogged culverts, and the removal of trash and non-native vegetation, particularly invasive species. If the eastern developed portion of the project area is analyzed separately from the western, wide-open portion of the project area, the Bolsa Chica holding for resolving conflicts between specific and general policies conflict are largely moot, and the Hobson's choice between public safety and protection of listed species, riparian and wetland habitat is exposed as a false choice. Otherwise, PDP-019-12 appears to be a template for scoping projects large enough to create a policy conflict that can be ruinously applied to vulnerable areas.

For these reasons, I respectfully ask the staff to support a Commission finding of substantial issue to allow the project to be refined to better comply with the City's certified LCP.

Unfortunately, I will not be able to travel to the Commission's April meeting in Santa Barbara, but I ask that you convey these concerns to the members of the Commission, and look forward to your response and the Commission's deliberations.

Thank you for considering my comments, and for your service.

/James Benjamin/

James Benjamin (Appellant) 400 Pilarcitos Avenue Half Moon Bay, CA 94019-1475

¹ The staff report states (pages 4-5) "Most recently, the drainages were maintained by the City pursuant to a 2004 California Department of Fish and Wildlife (CDFW) 5-year term Streambed Alteration Agreement, but that agreement has since expired." The record should reflect that the expired agreement covered portions of only five of the thirteen drainages that are the subject of this project. A list of the covered drainages appears on pages 558 of the staff report.

STATE OF CALIFORNIA-THE DESCURCE AGENCY

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CALIFORNIA COASTAL COMMISSION NORTH CENTRAL COAST DISTANCE 45 FRENDAT, SULTS 2010 SAN FRANCISCO, CA 94191-22119 VOICE AND TDD (113) 5910 5268 FAN 1413) 901-5408



June 9, 2005

Don Dakins Senior Planuer City of Half Moon Bay 501 Main Street Half Moon Bay, CA 94019

RE: PDP-23-05, Bicycle and Pedestrian Trail within Caltrans Right of Way

Dear Mr. Dakins:

Thank you for the opportunity to comment on the proposed bicycle and pedestrian trail within the Caltrans right of way. We support the City's efforts to improve bicycle and pedestrian access and to reduce vehicle dependency and traffic impacts generated by local vehicle trips. The purpose of this letter is to address the biological resources issues regarding the proposed development. Despite conclusions in the biological report that excluded the four drainages found within the project area as LCP jurisdictional wetlands, it is Commission staff's position that sufficient evidence has not been provided to support the dismissal of the drainages as wetlands, and that there is a possibility that the proposed project is within 100 feet of a wetland, and therefore within the Coastal Commission's appeal jurisdiction pursuant to Section 30603(a) of the Coastal Act. At this time, Commission staff has the following comments regarding the proposal:

1. Wetlands

The Biological Review performed by Biotic Resources Group concluded that the four drainage ditches on-site are not LCP jurisdictional wetlands based on the grounds that 1) the Coastal Commission guidelines exempt drainage channels, if constructed in upland areas, from LCP wetland requirements, and that 2) no wetland vegetation were found in the drainage ditches.

With respect to the Commission's Wetland Interpretive Guidelines, Commission staff would like to clarify that the Coastal Commission adopted the Guidelines to serve as a guidance document only for areas in the Coastal Zone without a certified LCP and that they were not intended to be used in post-LCP certified areas. The guidelines do not have the legal status of a statute or a regulation, and they do not define or modify the definition of wetlands under the certified Half Moon Bay LCP. As the Commission's Guidelines cannot be used to provide the wetlands exemptions for the constructed drainage ditches, the drainage ditches would be subject to review under the City's certified LCP wetland policies, if they meet the wetlands definition.

The Half Moon Bay LCP Zoning Code Sec. 18.38.020.E defines wetlands as follows:

Lotter to Dokins-Bills/Pedotinan Trail June 9, 2005 Page 2 of 4

Wetlands. As defined by the US Fish and Wildlife Service, a wetland is an area where the water table is at, near, or above the land surface long enough to bring about the formation of hydric soils (o) to support the growth of plants which normally are found to grow in water or wet ground. Such wetlands can include mud flats (barren of vegetation), marshes, and swamps. Such wetlands can be either fresh or saltwater, along streams (riparian), in tidally influenced areas (near the ocean and usually below extreme high water of spring tides), marginal to lakes, ponds, and man-made impoundments. Wetlands do not include areas which in normal rainfall years are permanently submerged (streams, lakes, ponds, and impoundments), nor marine or estuarine areas below extreme low water of spring tides, nor vernally wet areas where the soils are not hydric.

In addition, Section 18.02.040 states:

<u>Wetland</u>: The definition of wetland as used and as may be periodically amended by the California Department of Fish and Game, the California Coastal Commission and the US Fish and Wildlife Service. [Emphasis added]

Accordingly, Section 13577b.1 of the Commission's regulations states:

Wetland shall be defined as land where the water table is at, near, or above the land surface long enough to promote the formation of hydric sails to support the growth of hydrophytes, and shall also include thase types of wetlands where vegetation is lacking and soil is poorly developed or absent as a result of frequent and drastic fluctuations of surface water levels, wave action, water flow, twibidity or high concentrations of sails or other substances in the substrate. Such wetlands can be recognized by the presence of surface water or saturated substrate at some time during each year and their location within, or adjacent to, vegetated wetlands or deep-water habitats.

The biological report indicates evidence of flow for the drainages but concludes that the drainages are upland habitat due to the absence of wetland vogetation. However, according to the above definitions for wetlands, especially the one in the Commission's regulations, the presence of any one of the three criteria (hydrology, hydric soils, and hydrophytic vegetation) should be used to delineate wetlands, and that the absence of one criteria (vegetation) does not mean that the other criteria are absent as well or that the area does not qualify as a wetland. As the applicant's biological report used vegetation as the sole indicator of wetlands and did not assess hydrology or soils, it has not adequately established the presence/absence of wetlands in the project area based on criteria in the LCP. To analyze for consistency with applicable LCP wetlands policies, Commission staff recommends that the City request a wetland delineation based on the criteria in the LCP to determine the extent (if any) of wetlands in the project area and the extent (if any) of potential wetland impacts that would result from the proposed project.

If wetlands that meet the LCP definition were found, then construction of a bicycle and pedestrian path that would fill wetlands would not be a permitted use according to Section 18.38.080 of the Zoning Code that states:

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Wetlands

A. Permitted uses

- J. Education and research.
- 2. Passive recreation such as bird-watching.
- 3. Fish and Wildlife management activities.

B. Permitted uses with approval of a Use Permit

- J. Bridges.
- 2. Pipelines and stormwater runoff facilities.
- 3. (Improvement, repair or maintenance of roadways.)

•••

2. ESHA

Your June 9, 2005 staff report states "While there was not any observances of wetland vegetation during the field survey, the recent occurrence of special status species must be assumed during the site analysis of any project that will have the potential to be within a close proximity to drainage watercourses --whether natural or constructed." It is unclear which special-status species is referenced in this statement, however, if any special status species is assumed to be present within and close to the drainages in the project site, then those drainages and any additional areas close to the drainages would qualify as environmentally sensitive habitat areas (ESHA) under the City's LCP Policy 3-1:

Define sonsitive habitats as any area in which plant or animal life or their habitats are either rare or aspecially valuable and as those areas which meet one of the following criteria: (1) habitats containing or supporting "rare and endongered" species ...

Such areas include riparian areas, wetlands, kand dunes, marine habituts, sea cliffs, and habituts supporting rare, endangered, and unique species.

As the assumption of presence of special-status species leads to the designation of the drainages and areas close to the drainages as ESHA, the proposed project must then be reviewed for conformity with the applicable ESHA policies in the City's LCP. Under LCP Policy 3-4 only "resource-dependent or other uses which will not have a significantly adverse impact in sensitive habitat" would be permitted in an ESHA. Construction of a bicycle and pedestrian trail would not be considered a resource-dependent use and would therefore not be allowable in ESHA under the LCP. Moreover, the California Court of Appeal (Bolsa Chica Land Truet v. Superior Court (1999) 83 Cal.Rptr. 850.) has confirmed that that impacts to ESHA from non-resource dependent uses are prohibited under the Coastal Act and corresponding LCPs.

If the City does not intend to consider all of the drainages and areas close to the drainages as ESHA, Commission staff then recommends that instead of assuming the presence of specialstatus species in all of the drainages, that the City request a more precise biological assessment to determine the presence or absence of special-status species in each of the drainages so that the

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extent of ESHA in the project area could be more accurately described and that the proposed development could be adequately evaluated for consistency with the ESHA policies of the LCP.

We hope that these comments are of assistance to your project review. Please coulast me at (415) 904-5260 with any questions.

Signature on file

Yuhilan Zhang Coastal Program Analyst North Cantral Coast District

Cc: Paul Nagengast, Half Moon Bay Public Works



United States Department of the Interior

FISH AND WILDLIFE SERVICE Sacramento Fish and Wildlife Office 2800 Cottage Way, Room W-2605 Sacramento, California 95825-1846

In Reply Refer To: 08ESMF00-2013-TA-0642

OCT 2 4 2013

Bruce Ambo Planning Manager 501 Main Street Half Moon Bay, California 94019

Subject: Comments on Biological Resource Evaluation for the Citywide Drainage Ditch Maintenance Project, Half Moon Bay, San Mateo County, California

Dear Mr. Ambo,

This correspondence is in response to your July 3, 2013, memo requesting comments from the U.S. Fish and Wildlife Service (Service) on the July 3, 2013, *Biological Resource Evaluation for the Citywide Drainage Ditch Maintenance Project, Half Mon Bay, San Mateo County, California* (Creek Maintenance Plan). Based on our review of the document, we are concerned about the the potential effects of the proposed Citywide Drainage Ditch Maintenance Project (project) on the federally threatened California redlegged frog (Rana draytonii) and the endangered San Francisco garter snake (*Thamnophis sirtalis tetrataenia*). This letter is issued under the authority of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.)(Act).

The purpose of the project is described within the Creek Maintenance Plan as: "to restore drainage features to their originally constructed conditions to maintain water transport capacity; maintain the integrity of existing flood and sediment control structures; minimize potentially hazardous situations such as flooding, bank, culvert, and roadway erosion. and improve visibility of drainage features." Maintenance activities used to achieve the project goal include sediment removal, vegetation trimming and removal, bank protection repair, culvert replacement, and removal of non-native vegetation. Equipment required for this work includes backhoes, dump trucks, mowers, power hand tools (chainsaws and weed trimmers), and manual hand tools.

The Service is concerned that there is a likelihood for presence of the California redlegged frog and San Francisco garter snake within the footprint of the Creek Maintenance Plan: Lester to Dalana--Bike/Petistarian Trail June 9, 2005 Page 4 of 4

extent of ESHA in the project area could be more accurately described and that the proposed development could be adequately evaluated for consistency with the ESHA policies of the LCP.

We hope that these comments are of assistance to your project review. Please contact me at (415) 904-5260 with any questions.

Sincerely, Signature on file

> Yihilan Zhang Constal Program Analys; North Central Coast District

Cc: Paul Nagengast, Half Moon Bay Public Works

Mr. Bruce Ambo

- Both the California red-legged frog and San Francisco garter snake are known to
 occur within the project area and within dispersal distance of several drainages in
 the project area.
- Suitable habitat for both species is present throughout Half Moon Bay and surrounding properties.
- There are documented breeding ponds for the California red-legged frog within Half Moon Bay and surrounding properties.
- There is a lack of survey data for much of the suitable habitat for both species within the project footprint and surrounding areas.

Given the above facts, it is reasonable for the Service to consider that most drainages identified in the Creek Maintenance Plan are occupied by both the California red-legged frog and San Francisco garter snake.

Due to the likelihood of presence for the California red-legged frog, the San Francisco garter snake, and suitable habitat for both species, the Service has determined it is likely that implementation of the Creek Maintenance Plan will result in take of juvenile and adults of both species, in the form of death, harm, and/or harassment.

Section 9 of the Act prohibits the take of any federally listed animal species by any person subject to the jurisdiction of the United States. Within the Act, take is defined as "... to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." Harm has been further defined to include habitat destruction when it injures or kills a listed species by interfering with essential behavioral patterns, such as breeding, foraging, or resting. To harass has been defined as "to intentionally or negligently, through act or omission, create the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavior patterns such as breeding, feeding, and sheltering," Thus, not only are the California redlegged frog and San Francisco garter snake protected from such activities as collecting and hunting, but also from actions that cause their death or injury through damage or destruction of their habitat. The term "person" is defined as "...an individual, corporation, partnership, trust, association, or any other private entity; or any officer. employee, agent, department, or instrumentality of the federal government, of any state, municipality, or political subdivision of a state, or any other entity subject to the jurisdiction of the United States."

Take incidental to an otherwise lawful activity may be authorized by one of two procedures. If a federal agency is involved with the permitting, funding, or carrying out of the project and a listed species is going to be adversely affected, then initiation of formal consultation between that agency and the Service pursuant to section 7 of the Act is required. Such consultation could result in a biological opinion addressing the anticipated effects of the project to the listed species and may authorize a limited level of incidental take. If a federal agency is not involved in the project, and federally listed species may be taken as part of the project, then an incidental take permit pursuant to section 10(a)(1)(B) of the Act should be obtained. The Service may issue such a permit

Mr. Bruce Ambo

upon completion of a satisfactory conservation plan for the listed species that would be taken by the project.

The Service recommends that the City enter into discussions with the Service, the U.S. Army Corps of Engineers, the California Department of Fish and Wildlife, and the California Coastal Commission to discuss ways to implement the Creek Maintenance Plan without violation of the Act, the California Endangered Species Act, and other Federal and State regulations.

The Service looks forward to assisting the City of Half Moon Bay with achieving its project goal in a manner compliant with the Act. If you have any questions regarding this correspondence, please contact Dan Cordova (<u>Dan Cordova@fws.gov</u>) or Coast Bay Forest Foothills Division Chief, Ryan Otah (<u>Ryan Olah@fws.gov</u>) at (916) 414-6600.

Sincerely,

Signature on file

Eric Tattersall Deputy Assistant Field Supervisor

cc;

Suzanne Deleon, California Department of Fish and Wildlife Cameron Johnson, U.S. Army Corps of Engineers Karen Geisler, California Coastal Commission