

CALIFORNIA COASTAL COMMISSION

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W27a

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STAFF REPORT: PERMIT AMENDMENT

Application No.: 4-11-069-A2

Applicant: Santa Barbara County Flood Control District

Agent: Maureen Spencer and Seth Shank

Location: Southeast portion of Goleta Slough (*including the lower reaches of Atascadero Creek, San Jose Creek, San Pedro Creek, and the main channel of Goleta Slough*) and Goleta Beach County Park, Santa Barbara County

Description of Previously Approved Project: Implement an annual sediment removal and flood carrying capacity improvement program for portions of Goleta Slough for a period of five years. The program will involve the removal of sediment (using a combination of hydraulic dredging and/or dragline desilting/excavation methods) from the lower reaches of Atascadero Creek, San Jose Creek, San Pedro Creek, and the main channel of Goleta Slough on an as-needed basis (removal of between 20,000 cu. yds. and 200,000 cu. yds. of sediment/year). Excavated sediment from dragline desilting/excavation will be temporarily stockpiled approximately 30 to 100 ft. in distance from the top of the creek bank. All suitable excavated sediment will be placed in the surfzone at Goleta Beach County Park.

Proposed Amendment: Modify Long-Term Biological Monitoring Program requirements of Special Condition Eight (8) and extend the duration of the permit term for their annual dredging/desilting program and sediment disposal activities.

Staff Recommendation: Approval with Special Conditions

SUMMARY OF STAFF RECOMMENDATION

The Santa Barbara County Flood Control District (SBCFCD) is proposing to amend Coastal Development Permit (CDP) No. 4-11-069, initially granted by the Commission on May 9, 2012 with 13 special conditions, in order to modify the Long-Term Biological Monitoring Program requirements of Special Condition Eight (8) and to extend the duration of the permit term for their approved annual dredging/desilting program and sediment disposal activities in the southeast portion of Goleta Slough and Goleta Beach County Park. The existing requirements of Special Condition Eight (8) have proven to be infeasible for the reasons described below. After extensive consultation with Commission staff, the SBCFCD is therefore proposing to modify these requirements in a manner that will allow the SBCFCD to effectively carry out the Biological Monitoring Program while also ensuring that the Program effectively serves its intended purpose.

To address potential impacts to environmentally sensitive habitats and marine resources as a result of the project, Special Condition Eight (8) of the CDP requires the SBCFCD to submit a Long-Term Biological Monitoring Program designed to monitor slough infauna, beach infauna, eelgrass beds, kelp beds, and surfgrass/reef habitats in a manner that would be capable of detecting an at least 20% difference between the impact sites (the sites within the expected reach of the project's effects) and the reference sites for purposes of assessing significant adverse impacts as a result of the project. In order to develop a monitoring program that complies with Special Condition 8, the SBCFCD analyzed the central tendencies of the measured parameters for several habitats and found that the natural variability of the habitats greatly exceeds 20%, meaning the monitoring program would require extremely large sample sizes to achieve the statistical rigor of the condition. This natural variability is attributable to the fact that Goleta Bay is a seasonally, annually, and decadal dynamic ecosystem. Further, even if the data from such large sampling sizes were obtained, it would not be useful in analyzing significant adverse impacts as a result of the project given the dynamic nature and seasonal variability of the habitats within Goleta Bay, as well as the numerous anthropogenic activities occurring in the same vicinity as the project. For these reasons, Commission Staff Ecologist Dr. Jonna Engel worked cooperatively with SBCFCD staff and consultants to develop a monitoring program framework that involves more appropriate sampling and trend analysis methodologies capable of detecting significant, system-wide habitat changes attributable to the project. Therefore, staff recommends that the Long-Term Biological Monitoring Program requirements of Special Condition 8 be revised to reflect the recommendations of Dr. Engel.

In addition, the CDP was approved for a period of five (5) years from the date of Commission action on May 9, 2012 and will thus terminate on May 9, 2017. However, the CDP has not been issued to-date because of delays in satisfying all prior-to-issuance special conditions of the permit. This dredging program in Goleta Slough is very complex with several different resource areas, regulatory agencies and permit requirements to consider, which collectively result in a complicated and lengthy compliance process for SBCFCD. Specifically, the strict statistical requirements of Special Condition 8 proved technically infeasible for the District, which took time to analyze and find a solution. Since the permit term will soon expire in May of this year, and in consideration of the prior condition compliance delays that have postponed permit

issuance and project commencement, the applicant has requested that the permit term be extended for up to ten years as part of the subject amendment request. As such, Commission staff recommends that Special Condition 12 of the CDP be revised to allow the permit term to extend five (5) years from the date of Commission action on the subject amendment, with an allowance for a onetime, five (5) year extension beyond that. This five year extension would be subject to Executive Director approval based on a finding that there are no changed circumstances associated with the dredging/desilting and sediment disposal activities that have the potential to cause adverse impacts, either individually or cumulatively, on coastal resources or public access, and that the terms and conditions of this CDP remain adequate to protect coastal resources and public access to and along the shoreline.

Therefore, Staff recommends that the Commission **approve** the modifications to Special Conditions 8 and 12 of the permit. The motion to adopt the staff recommendation of approval of the permit amendment with special conditions is found on page 5.

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I. MOTION AND RESOLUTION

Motion:

*I move that the Commission **approve** the proposed amendment to Coastal Development Permit No. 4-11-069 pursuant to the staff recommendation.*

Staff recommends a **YES** vote. Passage of this motion will result in approval of the amendment as conditioned and adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of the Commissioners present.

Resolution:

The Commission hereby approves the coastal development permit amendment on the grounds that the development, as amended and subject to conditions, will be in conformity with the policies of Chapter 3 of the Coastal Act. Approval of the permit amendment complies with the California Environmental Quality Act because feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the amended development on the environment.

II. STANDARD AND SPECIAL CONDITIONS

Note: The original permit (CDP No. 4-11-069) contains thirteen special conditions. CDP Amendment No. 4-11-069-A1 deleted Special Condition 9. All of the other special conditions will remain in effect, except **Special Condition Nos. 8 and 12**, which are replaced in their entirety and reimposed as conditions of the CDP as amended. The modified conditions are listed below. The new language of Special Conditions 8 and 12 appears in underlined font. For comparison, the text of the original permit conditions is included in [Exhibit 3](#). The standard conditions of CDP 4-11-069 will remain in effect and are unchanged by this amendment.

8. Long-Term Biological Monitoring Program

A. Prior to issuance of the Coastal Development Permit, the applicant shall submit to the Executive Director, for review and written approval, a final Long-Term Biological Monitoring Plan (hereafter “Plan”), designed to identify trends and to detect significant changes in freshwater and marine habitats in and near areas impacted by the Santa Barbara County Flood Control District’s (SBCFCD) Goleta Slough Dredging and Beach Replenishment Program (for the term of this permit). The Plan shall outline sampling design and survey methods, statistical approaches used to evaluate the data, and the skills and qualifications for all personnel. The Plan shall incorporate the following:

(1) The Plan shall include a background section that provides a description and historical review of the creeks, slough, sandy beach, intertidal surfgrass/rocky reef, eelgrass, and giant kelp

habitats in and near the footprints of the SBCFCD dredging and sediment deposition work program. The historical review must include a summary of past quantitative sampling/survey work conducted on these habitats to document trends in habitat boundaries and species composition for comparison with ongoing biological monitoring findings.

(2) The biological monitoring program shall monitor the following habitats: creeks/slough, sandy beach, intertidal surfgrass/rocky reef, eelgrass, and giant kelp. In addition to monitoring the above habitats within the expected reach of the project's effects ("impact zone"), reference sites will also be monitored. Reference sites must be the most proximal respective habitats with similar physical factors (e.g. wave regime, depth, exposure, sediment delivery). Where suitable reference sites are not feasible, the Plan will describe the analysis used to evaluate potential reference sites, and will propose alternative sampling methods and analysis for the associated habitat.

The Plan must include an exhibit that identifies the location of the creek/slough, sandy beach, intertidal surfgrass/rocky reef, eelgrass, and giant kelp in the impact zone and their respective reference site locations. The impact and reference sites for each respective habitat type must be monitored using the same survey methods. Monitoring shall take place once per year in the summer/fall regardless of whether any dredging and sediment deposition is scheduled to occur.

Intertidal surfgrass/rocky reef, eelgrass, and giant kelp monitoring shall continue using the field sampling methods previously employed by the County of Santa Barbara pursuant to CDP 4-05-139. The giant kelp habitat and sandy beach invertebrate infaunal data that is collected each year in the project vicinity by the National Science Foundation (NSF) Santa Barbara Coastal Long Term Ecological Research (LTER) program at the University of California, Santa Barbara may be utilized as part of this SBCFCD Long-Term Biological Monitoring program.

The creek/slough monitoring must include at least two sampling locations, one within the dredging footprint and one outside the dredging footprint, with additional sampling locations as detailed in the Plan.

The sandy beach infaunal monitoring must include at least two sampling locations; one within the sediment deposition footprint and one outside of the sediment deposition footprint but within Goleta Beach Park. At each location the sandy beach sampling must consist of a minimum of three transects oriented perpendicular to the ocean and extending from the upper beach zone through the swash zone during low tide.

The biological monitoring strategy must employ a sampling design capable of:

a. Analyzing trends in population metrics for intertidal surfgrass/rocky reef, eelgrass, and giant kelp (e.g. density, percent cover) in the project areas and reference sites. Statistical analysis shall be used to detect change through time and/or differences between project sites vs reference sites according to significance criteria discussed in the Plan.

b. Tracking recovery of creek/slough benthic infauna over time and identifying changes in species composition (e.g. species richness, dominance, diversity) at the

project sites and reference sites. Statistical analysis shall be used to determine if a significant difference exists between the impact and reference sites through time, according to significance criteria discussed in the Plan.

c. Tracking recovery of sandy beach infauna over time and identifying changes in species composition (e.g. species richness, dominance, diversity) at the project site and reference site. Statistical analysis shall be used to determine if a significant difference exists between the impact and reference sites through time, according to significance criteria discussed in the Plan.

B. The applicant shall submit an annual monitoring report each year, written by a qualified biologist, documenting the results of the biological monitoring. The monitoring report shall include, but not be limited to, the following information:

(1) The monitoring report shall document detailed information regarding implementation of any SBCFCD project activities including, but not limited to, the date, length of time of operations, construction methods, dredging and deposition locations, sediment quantities, weather conditions, and any unusual events that resulted in, or potentially could have resulted in, adverse impacts to biological resources. The monitoring report shall consider any activities, in addition to those conducted by the SBCFCD (e.g. activities conducted by the County of Santa Barbara Parks and Recreation, Santa Barbara Airport), with the potential to adversely impact the habitats in Goleta Bay monitored by the SBCFCD.

(2) The monitoring report shall summarize the natural phenomena influencing the Goleta Bay area such as storm activity during each fall/winter season including storm dates (length of storm), wave heights, rainfall amounts, slough opening status, and creek/slough flow rates (cfs). The monitoring report shall include a discussion of the range of turbidity plumes and any recommendations to reduce turbidity related to project activities; any incidents during construction where turbidity control measures were implemented; and conclusions regarding turbidity impact upon biological resources.

(3) The monitoring report shall summarize the sampling data for each respective habitat and provide the results of statistical analyses. This information shall be used to make reasoned conclusions regarding population trends, potential impacts, and differences between impact and reference sites for each of the habitats being monitored. The raw sampling data collected for each habitat shall be included as an appendix in each annual report.

(4) If biological monitoring detects significant adverse impacts upon one or more habitats per the criteria identified in the Plan, the monitoring report shall discuss the potential causes for the change(s). If the changes are determined to be directly attributed to the SBCFCD activities, SBCFCD shall propose and, after approval by the Executive Director (or Commission if material permit amendments are needed in order to allow the changes), carry out adaptive management adjustments to the sediment dredging and deposition activities that will avoid significant habitat impacts in the future.

(5) If extreme and/or unforeseen adverse impacts outside the scope covered under this permit are detected during project operations, the applicant shall cease work at the subject project site and shall immediately notify local resource agencies. The applicant, local resource agencies including the Coastal Commission, and other entities with ongoing work in the area shall confer, as soon as possible, to discuss the potential causes of the adverse impact(s). The applicant may be required to submit a revised or supplemental program to adequately mitigate such impacts. The revised, or supplemental, program shall be processed as an amendment to this coastal development permit. Project activities shall resume only upon written approval of the Executive Director.

(6) If sensitive species are encountered at any time during SBCFCD sediment dredging or deposition activities, SBCFCD shall immediately contact and consult with the appropriate agency to determine the course of action necessary to protect and insure survival of the respective organism.

C. The applicant shall undertake the development in accordance with the approved monitoring program. If annual analysis of the data indicates that the monitoring program is not adequately representing the habitats or potential impacts, the applicant and Executive Director shall discuss the need for changes to the approved program. No change to the program shall occur without a Commission approved amendment to the permit unless the Executive Director determines that no such amendment is required.

12. Duration of Permit

This coastal development permit shall be valid for a period of five years from the date of Commission action on this permit amendment, after which time the CDP shall expire. The dredging/desilting and sediment disposal activities allowed under this CDP, as conditioned, may be extended one time for a period of five years from the date of expiration subject to Executive Director review and approval with verification that there are no changed circumstances associated with the dredging/desilting and sediment disposal activities that have the potential for significant adverse impacts, either individually or cumulatively, on coastal resources or public access to and along the shoreline, and that the terms and conditions of this CDP remain adequate to protect coastal resources and public access to and along the shoreline. For such an extension, the Permittee must provide evidence that there are no changed circumstances that affect the feasibility or efficacy of this approved CDP's terms and conditions and must request Executive Director approval prior to the expiration of the initial five-year CDP period. If the Executive Director determines that there are changed circumstances and re-review is warranted, the Permittee shall submit a complete CDP application to authorize future project activities.

III. FINDINGS AND DECLARATIONS

A. PROJECT BACKGROUND AND AMENDMENT DESCRIPTION

Project Background

On May 9, 2012 the Commission approved Coastal Development Permit (CDP) 4-11-069 for dredging/desilting and sediment disposal activities by the Santa Barbara County Flood Control

District (SBCFCD) within the southeast portion of Goleta Slough and Goleta Park, subject to 13 special conditions. The project includes an annual sediment removal and flood carrying capacity improvement program for portions of Goleta Slough for a period of five (5) years. Sediment will be removed (using a combination of hydraulic dredging and dragline desilting/excavation methods) from the lower reaches of Atascadero Creek, San Jose Creek, San Pedro Creek, and the main channel of Goleta Slough on an as needed basis. The amount of sediment permitted for removal is between 20,000 cu. yds. and 200,000 cu. yds. per year and in no case is the amount of excavation allowed to exceed 200,000 cu. yds. per year. All of the excavated sediment that is suitable for beach nourishment will be placed in the surfzone at Goleta Beach County Park. See the staff report for CDP 4-11-069 for more detailed information about the approved project ([Exhibit 4](#)).

The original permit also allowed breaching the mouth of Goleta Slough approximately 1-3 times per year; however, the CDP was amended on June 11, 2014 to remove the breaching of the mouth of Goleta Slough and delete Special Condition 9, which required the submittal of a plan to manage the periodic opening of the Goleta Slough Mouth ([Exhibit 5](#)). All other special conditions remained unchanged. Operation staging, equipment mobilization (in areas other than on the beach), and dragline desilting/excavation will occur only during the period between September 15 and March 1, and hydraulic dredging operations and sediment disposal/beach replenishment activities will occur only during the period between October 15 and March 1, unless additional time is granted by the Executive Director for good cause. Dredging activities may occur on less than an annual basis depending on the quantity of sediments present and the necessity for removal.

The subject dredging activity is located within the Goleta Slough and its related stream courses ([Exhibit 2](#)). The slough is the drainage basin for five creeks that originate on the southern slopes of the nearby Santa Ynez Mountains: Atascadero Creek, San Jose Creek, San Pedro Creek, Carneros Creek, and Tecolotito Creek. Although the Commission has previously certified a Local Coastal Program (LCP) for Santa Barbara County, the subject dredging activity is located within a portion of the Coastal Zone subject to the Commission's retained permit jurisdiction and, therefore, required a CDP issued by the Commission. The standard of review for this project is the Chapter 3 policies of the Coastal Act.

Amendment Description

The amendment proposes to modify the requirements of the Long-Term Biological Monitoring Program required by Special Condition Eight (8) and to extend duration of the permit term for the approved annual dredging/desilting program and sediment disposal activities.

The subject CDP was approved for a period of five (5) years from the date of Commission action on May 9, 2012 and will thus terminate on May 9, 2017. However, the CDP has not been issued to-date because of delays in satisfying all prior-to-issuance special conditions of the permit. This dredging program in Goleta Slough is very complex with several different resource areas, regulatory agencies and permit requirements to consider, which collectively result in a complicated and lengthy compliance process for SBCFCD. Specifically, the strict statistical requirements of Special Condition 8 of the Commission's CDP proved technically infeasible for the District, which took time to analyze and find a solution as explained more fully below. Since

the permit term will soon expire in May of this year, and in consideration of the prior condition compliance delays that have postponed permit issuance and project commencement, the applicant has requested that the permit term be extended for up to ten years as part of the subject amendment request.

The amendment also proposes to modify the sampling requirements of the Long-Term Biological Monitoring Program required by Special Condition Eight (8) to better identify trends and detect significant changes in freshwater and marine habitats in and near the project activity areas. Per Special Condition Eight (8), prior to issuance of the coastal development permit the SBCFCD is required to submit a Long-Term Biological Monitoring Program designed to monitor slough infauna, beach (swash zone and middle and upper beach) infauna, eelgrass beds, kelp beds, and surfgrass/reef habitat. The program shall outline the sampling design, survey methods, statistical approaches, and the skills and qualifications for all personnel. The program requires SBCFCD to design a monitoring program based on the 20-20-20 design rule such that the sampling would be designed to have the capability to detect a difference of at least 20% between the sites within the expected reach of the project's effects (impact sites) and the reference sites. The SBCFCD analyzed the central tendencies of the measured parameters for several habitats and found that the natural variability exceeded 20%, and thus, detecting a 20% difference of the means between the control and reference sites using the 20-20-20 design rule outlined in Special Condition Eight (8) would require extremely large sample sizes and be technically infeasible.

In response, Commission staff (including Commission Staff Ecologist, Dr. Jonna Engel) and the applicant had several meetings to discuss the required sampling approach and alternative sampling approaches for the Long-Term Biological Monitoring Program. As a result of this coordination, Dr. Engel and Commission staff concluded that holding the SBCFCD to the high sampling and statistical standards of the 20-20-20 design rule was inappropriate because identifying differences between impact and reference sites would be nearly impossible considering the natural dynamic of the area and the large number of anthropogenic activities occurring in the Goleta Beach area. As such, Dr. Engel and Commission staff agreed to modify Special Condition Eight (8) and revise the Long-Term Biological Monitoring Program such that it involves more appropriate sampling and trend analysis methodologies capable of detecting significant, system-wide habitat changes attributable to the project.

B. MARINE RESOURCES

Section 30230 of the Coastal Act states:

Marine resources shall be maintained, enhanced and where feasible, restored. Special protection shall be given to areas of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.

Section 30231 of the Coastal Act states:

The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the

protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.

Section 30240 of the Coastal Act states:

(a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas.

(b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.

Section 30230 requires that uses of the marine environment be carried out in a manner that will sustain the biological productivity of coastal waters for long-term commercial, recreational, scientific, and educational purposes. Section 30231 requires that the biological productivity and quality of coastal waters be maintained. Section 30240 of the Coastal Act states that environmentally sensitive habitat areas shall be protected and that development within or adjacent to such areas must be designed to prevent impacts which would degrade those resources.

Pursuant to Special Condition 8 of the approved CDP, the SBCFCD is required to prepare and implement a Long-term Biological Monitoring Program to address any potential biological impacts as a result of the project. Special Condition 8 specifies that the program shall be based on the 20-20-20 design rule such that the sampling would be designed to have the capacity to detect a difference of at least 20% between the project's impact sites and reference sites for each habitat type (slough and beach infauna, eelgrass and kelp beds, and surfgrass/rocky intertidal). Further, in order to avoid the mistake of determining that there is no difference between the impact and reference sites when there is a difference (known as a Type II error), an a priori power analysis for the respective habitat monitoring designs is required. In its effort to prepare a Long-term Biological Monitoring Program pursuant to the requirements of Special Condition 8, the SBCFCD's consultant conducted an *a priori* power analysis of the sampling protocols of several habitats to determine the number of samples needed to detect at least a 20% difference between the measurements collected at impact and reference sites and found that, because the natural variability of the parameters exceeded 20%, the sample size needed was extremely large. This natural variability is attributable to the fact that Goleta Bay is a seasonally, annually and decadal dynamic ecosystem. Further, there are numerous anthropogenic activities occurring in the same vicinity as the project that make it difficult to implement a habitat monitoring program that is effective in analyzing significant adverse impacts that can be attributable to the project.

In addition to the subject CDP, three other Commission CDPs (4-14-0687, 4-14-1900, and E-12-007) have been issued permitting activities in the Goleta slough and beach area. CDP 4-14-0687

includes the retention of an approximately 1,200 linear foot as-built rock revetment at the western end of Goleta Beach County Park as well as sand backpassing activities and opportunistic beach nourishment using material generated from other Commission approved projects. CDP 4-14-1900 allows for the dredging of Atascadero Creek on an as-needed basis and potential placement of suitable excavated material in the surfzone at Goleta Beach. E-12-007 is an experimental project to evaluate recruitment of kelp and the formation of kelp beds using 212 granite columns embedded into the sandy subtidal substrate offshore. Emergency permits in the Goleta Beach area are also sometimes issued by the Commission for activities such as repairs to development following damage from wave erosion and flood control breaching of the Goleta Slough mouth to drain the overflowing floodwater and prevent flooding of adjacent development. While conditioned to avoid impacts to coastal resources to the maximum extent feasible, each of these aforementioned anthropogenic activities has the potential to impact the Goleta Beach area, and therefore, impact the biological monitoring required pursuant to Special Condition Eight (8).

The original Special Condition Eight (8), as written, requires a rigorous sampling design and statistical analysis that has proven to be ineffective for identifying adverse impacts to the slough and marine habitats caused by the SBCFCD activities. Commission Ecologist Dr. Engel and Commission staff acknowledge that requiring the SBCFCD to implement a monitoring program based on the 20-20-20 design rule is inappropriate because attributing impacts specifically to the SBCFCD activities through this methodology would be nearly impossible considering the dynamics of the natural system and the impacts of other anthropogenic activities in the area. In response, Dr. Jonna Engel determined that the requirements of Special Condition Eight (8) should be revised to include more appropriate sampling and trend analysis methodologies capable of detecting significant, system-wide habitat changes attributable to the project. Commission staff and SBCFCD worked cooperatively on specific revisions to Special Condition Eight (8), including a change from biannual sampling in the fall and spring to annual sampling in the fall only, revising the requirements for reference sites, and allowing the plan to be modified if annual analysis of the data indicates that the program is not adequately representing the habitats or potential impacts. Dr. Engel determined that because the Long-Term Biological Monitoring Program would function more effectively by analyzing significant system-wide changes and trends, annual fall sampling, as opposed to biannual sampling in fall and spring, would provide a more stable period to consistently measure every year and detect changes through time. Furthermore, annual fall sampling will allow the SBCFCD to incorporate biological monitoring data from the University of California, Santa Barbara (UCSB) Long Term Ecological Research Project (LTER) into the Long-Term Biological Monitoring Plan to help minimize project costs. Special Condition Eight (8) also originally required two (2) reference sites for each of the habitats to be monitored; however, Special Condition Eight (8) as amended will allow the Long-Term Biological Monitoring Program the flexibility to propose the appropriate number and location of reference sites necessary to detect significant system-wide changes. Lastly, Special Condition Eight (8) as amended will allow the SBCFCD and the Executive Director to review the Long-Term Biological Monitoring Program on an annual basis and if it is determined that the program is not adequately representing the habitats or potential impacts, adjustments can be made to the program.

Coastal Act Sections 30230 and 30231 require that the biological productivity and quality of coastal waters be protected and that uses of the marine environment be carried out in a manner that will sustain the biological productivity of coastal waters for long-term commercial, recreational, scientific and educational purposes. Coastal Act Section 30240 states that development within or adjacent to environmentally sensitive habitat areas be designed to prevent impacts which would degrade those resources. Special Condition Eight (8) was designed to maintain and protect the biological productivity of coastal waters by implementing a Long-Term Biological Monitoring Program capable of detecting impacts to biological resources as a result of the project's dredging and sediment disposal activities. For the reasons discussed above, the Commission finds the changes to the requirements of Special Condition 8 (Long-Term Biological Monitoring Program) will ensure the project more accurately detects and addresses potential biological impacts as a result of the project and will also ensure that the SBCFCD can adaptively manage the monitoring program if it is not adequately representing the habitats or potential impacts. As such, the proposed amendment will better monitor and protect the environmentally sensitive habitats and marine resources, consistent with Coastal Act Sections 30230, 30231 and 30240.

C. DURATION OF PERMIT

Pursuant to Special Condition 12 of the CDP, the permit term was for a period of five (5) years from the date of Commission action. The Commission approved the subject CDP on May 9, 2012 and, as such, the term of the permit will expire on May 9, 2017. However, the CDP has not been issued to-date because of delays in satisfying all prior-to-issuance special conditions of the permit. This dredging program in Goleta Slough is very complex with several different resource areas, regulatory agencies and permit requirements to consider, which collectively result in a complicated and lengthy compliance process for SBCFCD. Specifically, the strict statistical requirements of Special Condition 8 of the Commission's CDP proved technically infeasible for the District, which took time to analyze and find a solution as explained more fully above. Since the permit term will soon expire in May of this year, and in consideration of the prior condition compliance delays that have postponed permit issuance and project commencement, the Commission finds it appropriate to extend the permit term for five years from the date of Commission action on this amendment so that the CDP can be effectively issued and the approved work can be performed.

In addition to extending the CDP for five (5) years from the date of Commission action on the subject amendment, Special Condition 12 as amended will also allow for a onetime extension of five (5) years from the date of termination, subject to Executive Director approval, if there are no changed circumstances. In order to receive approval of the onetime extension, the SBCFCD must provide evidence that there are no changed circumstances associated with the dredging/desilting and sediment disposal activities that have the potential for adverse impacts, either individually or cumulatively, on coastal resources or public access, and that the terms and conditions of this CDP remain adequate to protect coastal resources and public access to and along the shoreline. As previously discussed in the section above, Goleta Bay is a system that is naturally dynamic with multiple anthropogenic activities occurring simultaneously in the area. It is possible that in five (5) years, at the time of CDP renewal, the Goleta Bay system could be significantly different than at the time of CDP issuance. Conditioning the onetime extension of

the subject CDP will allow the Commission the opportunity to take into account any changed circumstances and reconsider the project. If the CDP's terms and conditions are continuing to function as intended and coastal resources or public access are not being adversely impacted as a result of the project, the CDP can be extended one time for a period of five (5) years. Should circumstances change and coastal resources or public access are being impacted as a result of the project, the SBCFCD shall submit a complete CDP application to authorize future project activities.

D. CALIFORNIA ENVIRONMENTAL QUALITY ACT

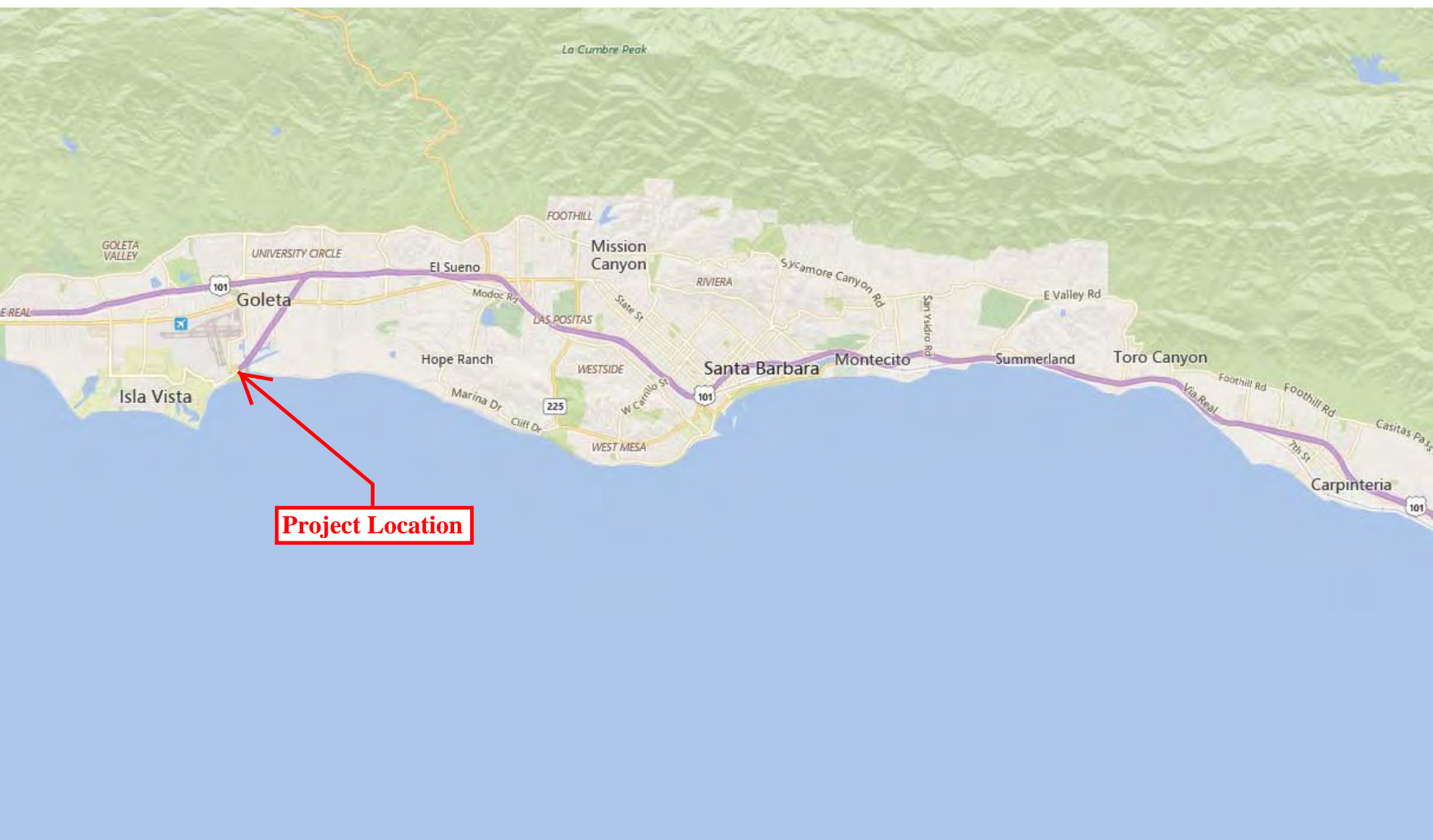
Section 13096 of the Commission's administrative regulations requires Commission approval of a Coastal Development Permit application to be supported by a finding showing the application, as modified by any conditions of approval, is consistent with any applicable requirement of the California Environmental Quality Act (CEQA). Section 21080.5(d)(2)(A) of CEQA prohibits a proposed development from being approved if there are feasible alternatives or feasible mitigation measures available, which would substantially lessen any significant adverse effect that the proposed development may have on the environment.

The Commission incorporates its findings on conformity with Coastal Act policies at this point as if set forth in full. As discussed above, the project as proposed to be amended has been conditioned to be consistent with the policies of the Coastal Act. No public comments regarding potential significant adverse environmental effects of the project amendment were received prior to preparation of the staff report. As specifically discussed in these above findings, which are hereby incorporated by reference, mitigation measures that will minimize or avoid all significant adverse environmental impacts have been required. As conditioned, there are no feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse impacts which the activity may have on the environment. Therefore, the Commission finds that the proposed amended development, as conditioned to mitigate the identified impacts, is consistent with the requirements of the Coastal Act to conform to CEQA.

APPENDIX A

Substantive File Documents:

File for Coastal Development Permit No. 4-05-139; File for Coastal Development Permit No. 4-11-069; File for Coastal Development Permit No. 4-11-069-A1; Long-Term Biological Monitoring Program for Goleta Beach, URS Corporation, November 2015



Project Location

EXHIBIT 1
4-11-069-A2 (Santa Barbara County
Flood Control District)
Vicinity Map



CALIFORNIA COASTAL COMMISSION

South Central Coast District Office
89 South California Street, Suite 200
Ventura, California 93001-2801
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Date: **June 23, 2014**Permit Application No.: **4-11-069-A1****NOTICE OF INTENT TO ISSUE AMENDMENT
TO COASTAL DEVELOPMENT PERMIT**

THE SOLE PURPOSE OF THIS NOTICE IS TO INFORM THE APPLICANT OF THE STEPS NECESSARY TO OBTAIN A VALID AND EFFECTIVE COASTAL DEVELOPMENT PERMIT ("CDP"). A Coastal Development Permit for the development described below has been approved but is not yet effective. Development on the site cannot commence until the CDP is effective. In order for the CDP to be effective, Commission staff must issue the CDP to the applicant, and the applicant must sign and return the CDP. **Commission staff cannot issue the CDP until the applicant has fulfilled each of the "prior to issuance" Special Conditions.** A list of all the Special Conditions for this permit is attached.

On June 11, 2014, the California Coastal Commission granted to **Santa Barbara County Flood Control District**, an amendment to Permit No. **4-11-069**, subject to the attached conditions. The development originally approved by the permit consisted of:

An annual sediment removal and flood carrying capacity improvement program for portions of Goleta Slough for a period of five years. The program will involve the removal of sediment (using a combination of hydraulic dredging and/or dragline desilting/excavation methods) from the lower reach of Atascadero Creek, San Jose Creek, San Pedro Creek, and the main channel of Goleta Slough on an as-needed basis (removal of between 20,000 cu. yds. and 200,000 cu. yds. of sediment/year). Excavated sediment from dragline desilting/excavation will be temporarily stockpiled approximately 30 to 100 ft. in distance from the top of the creek bank. All suitable excavated sediment will be placed in the surfzone at Goleta Beach County Park. The program also includes breaching the mouth of Goleta Slough approximately 1 - 3 times/year.

at Southeast portion of the Goleta Slough (including the lower reaches of Atascadero Creek, San Jose Creek, San Pedro Creek, and the main channel of Goleta Slough) and Goleta Beach County Park, Santa Barbara County.

Changes approved by this amendment consist of: **Revise project description to delete proposed breaching of the mouth of Goleta Slough and delete Special Condition 9 (Slough Mouth Openings).**

more specifically described in the application filed in the Commission offices.

Unless changed by the amendment, all conditions attached to the effect.

**EXHIBIT 3
4-11-069-A2 (Santa Barbara County
Flood Control District)
Notice of Intent to Issue Permit for
CDP No. 4-11-069-A1**

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The amendment is being held in the Commission offices until fulfillment of the Special Conditions 1-12, imposed by the Commission. Once these conditions have been fulfilled, the amendment will be issued.

For your information, all the imposed conditions are attached.

Issued on behalf of the California Coastal Commission on May 9, 2012.

If you have any questions regarding how to fulfill the "prior to issuance" Special Conditions for CDP No. 4-11-069-A1, please contact the Coastal Program Analyst identified below.

Sincerely,

CHARLES LESTER,
Executive Director


Amber Geraghty
Coastal Program Analyst

ACKNOWLEDGMENT

The undersigned permittee acknowledges receipt of this Notice of the California Coastal Commission determination on Permit No. 4-11-069-A1 and fully understands its contents, including all conditions imposed.

Date

Permittee

Please sign and return one copy of this form to the Commission office at the above address.

STANDARD CONDITIONS

1. **Notice of Receipt and Acknowledgment.** The permit is not valid and development shall not commence until a copy of the permit, signed by the

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permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.

2. **Expiration.** If development has not commenced, then permit will expire two years from the date on which the Commission voted on the application. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.
3. **Interpretation.** Any questions of intent or interpretation of any condition will be resolved by the Executive Director or the Commission.
4. **Assignment.** The permit may be assigned to any qualified person, provided assignee files with the Commission and affidavit accepting all terms and conditions of the permit.
5. **Terms and Conditions Run with the Land.** These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.

SPECIAL CONDITIONS:

1. Timing Constraints

- A. Operation staging, equipment mobilization (except on areas of the beach), and dragline desilting/excavation shall occur only during the period between September 15 and March 1, unless additional time is granted by the Executive Director for good cause. Hydraulic dredging operations and any sediment disposal/beach replenishment (surfzone only) activities shall occur only during the period between October 15 and March 1, unless additional time is granted by the Executive Director for good cause. If additional time is granted for good cause, all timing constraints in 1.B through 1.D of this special condition shall continue to apply.
- B. Desilting/dredging operations shall be limited to no more than 10 hours/day in the event that streamflow velocity within Maria Ygnacio Creek is between 10 and 30 cfs. In the event that streamflow velocities exceed 30 cfs, then dredging operations shall cease until streamflow velocities decrease to less than 30 cfs.
- C. Sediment disposal/beach replenishment operations within the surfzone at Goleta Beach may occur Monday through Friday, excluding state holidays. No work shall occur on Saturday or Sunday.
- D. If additional time is granted by the Executive Director outside of the authorized operation period, pursuant to 1.A above, all construction operations, including operation of equipment, material placement in surfzone, placement or removal of equipment or facilities, restricting public access, beach regrading/grooming, or other activities *shall be prohibited in the following circumstances:*

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- 1) On any part of the beach and shorefront in the project area from the Friday prior to Memorial Day in May through Labor Day in September to avoid impacts on public recreational use of the beach and other public amenities in the project vicinity.
- 2) On any part of the beach and shorefront in the project area when California grunion (of any life stage, including eggs) are present during any run periods and corresponding egg incubation periods, as identified by the surveys conducted pursuant to **Special Condition Six**, to avoid impact on the spawning of the California Grunion.
- 3) On any part of the beach and shorefront in the project area when Western Snowy Plover are present, as identified by the surveys conducted pursuant to **Special Condition Six**, to avoid adverse effects to Western Snowy Plovers.
- 4) On any part of the beach and shorefront in the project area when Beldings Savannah Sparrow are present, as identified by the surveys conducted pursuant to Special Condition Six, to avoid adverse effects to Beldings Savannah Sparrow.

2. Operation Staging & Maintenance Responsibilities

It shall be the applicant's responsibility to assure that the following occurs concurrent with, and after completion of, all project operations:

A. Creek Dredging/Desilting Activities

- (1) Hydraulic dredging and dragline desilting/excavation in Atascadero Creek and Goleta Slough shall be implemented so as to leave an undisturbed 10 foot-wide strip along one side of the creek and slough to minimize adverse impacts to steelhead and tidewater goby.
- (2) All creek bank areas disturbed as a result of this project shall be planted and maintained for erosion control and habitat restoration purposes as soon as possible after disturbance has occurred. Disturbed creek banks may be planted and maintained with locally native seeds or plants endemic to native riparian habitat areas or native upland species, as appropriate.

B. Surfzone Sediment Disposal/Beach Nourishment Activities

- (1) All construction operations on the beach, including operation of heavy equipment and material placement in surfzone, shall be limited the minimum footprint necessary for surfzone disposal (maximum 130 ft. in width or less).
- (2) All suitable dredged material shall be placed in the surfzone such that no dredged material is left on the natural beach. At the completion of the surfzone disposal operations, the project footprint area on the beach shall be decompacted/ripped and replaced to the *approximate* previously existing natural beach topography and compaction ratio in order to restore the dynamic shoreline habitat and to facilitate recreational use, consistent with the timing constraints listed in **Special Condition One**. In addition, if surfzone disposal operations impact established coastal strand habitat on the upper beach, this area must be restored and revegetated to an approximation of its pre-disturbance condition at the completion of the surfzone disposal.

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- (3) For hydraulic dredging, the slurry discharge pipeline shall follow a single route across the beach to reach the surfzone and shall not be moved more than 50 ft. to the upcoast or downcoast in order to minimize beach disturbance. The discharge pipeline shall be placed in the active surfzone to assure that no dredged material is discharged onto the beach.
- (4) All sediment disposal/beach nourishment operations (including disposal pipeline route, vehicle access route, or equipment corridor) shall be implemented in a manner that will minimize disturbance of the wrack zone, the coastal strand and dune zones and other intertidal areas. Prior to the commencement of any sediment disposal/beach nourishment operations, wrack within the project reach shall be collected, separated, and retained, to the maximum extent feasible, in areas where discharge operations will result in the loss or disturbance of wrack. Wrack and under wrack deposits shall be placed at the appropriate tidal level in an adjacent area that will not be impacted by project activities.

C. All Project Activities

- (1) Staging areas shall be used only during active construction operations and shall not be used to store materials or equipment between operations.
- (2) The applicant shall not store any construction materials or waste where it will be or could potentially be subject to wave erosion and dispersion. In addition, no machinery shall be placed, stored or otherwise located in the intertidal zone at any time, except for the minimum necessary to implement the project.
- (3) Construction equipment shall not be cleaned near the creeks, on the beach, or in the beach parking lots.
- (4) Construction debris and sediment shall be properly contained and secured on site with BMPs to prevent the unintended transport of sediment and other debris into coastal waters by wind, rain or tracking.
- (5) Construction debris and sediment shall be removed from construction areas as necessary to prevent the accumulation of sediment and other debris which may be discharged into coastal waters. Any and all debris resulting from construction activities shall be removed from the project site within 24 hours. Debris shall be disposed at a debris disposal site outside of the coastal zone or at a location within the coastal zone authorized to receive such material.
- (6) The applicant shall be responsible for removing all unsuitable material or debris within the project area. Debris shall be disposed at a debris disposal site outside of the coastal zone or at a location within the coastal zone authorized to receive such material.

- D. Sediment Amount: The total amount of dredged material disposed of in the surfzone at Goleta Beach pursuant to this permit, in combination with any other permitted sediment disposal or beach replenishment project, shall not exceed a cumulative total of 200,000 cu. yds. of sediment/year. The applicant shall be responsible for coordinating with all other permitted potential sediment deposition projects at Goleta Beach. If material is placed at Goleta Beach as part of any other permitted project, then the applicant shall limit the amount the amount of material discharged in the surfzone at Goleta Beach pursuant to this permit to ensure that no more than 200,000 cu. yds. of material is deposited at Goleta Beach during any given year for the life of this project. The deposition of additional quantities of dredged material greater than 200,000 cu. yds. at

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Goleta Beach during any given year will require an amendment to this coastal development permit.

3. Temporary Sediment Stockpile Sites

- A. Permanent stockpiling of material at any of the stockpile sites subject to this permit shall not be allowed. The stockpile sites must be cleared and returned to their pre-construction condition with no remaining equipment, silt fencing, or construction equipment remaining on-site within one week of the end of each project.
- B. Stockpiled materials shall be located as far from stream areas on the designated site(s) as feasible and in no event shall materials be stockpiled less than 30 ft. in distance from the top edge of a stream bank.
- C. Temporary erosion control measures, such as sand bag barriers, silt fencing; and/or swales, shall be implemented for all stockpiled material. These temporary erosion control measures shall be required at the site(s) prior to or concurrent with the initial project operations and shall be monitored and maintained until all stockpiled material has been removed from the project site. Successful implementation of erosion control measures will ensure that the material is completely stabilized and held on site.

4. Sediment Sampling Analysis and Monitoring Program

- A. ***At least two (2) weeks prior to disposal of excavated material***, the applicant shall provide evidence to the Executive Director of the location and method of disposal to an approved disposal location either outside of the coastal zone, a site within the coastal zone permitted to receive such fill, or in the surfzone at Goleta Beach. If the excavated material will be deposited in the surfzone at Goleta Beach, an engineer(s) or environmental professional(s), with appropriate qualifications acceptable to the Executive Director, shall: (1) prepare and submit within thirty (30) days, but no later than two (2) weeks, prior to each dredging/desilting operation, a Sampling and Analysis Plan and conduct testing at the source and receiver site for the review and approval of the Executive Director and (2) monitor the site during all sediment disposal activities. The Sampling and Analysis Plan shall be consistent with the following:
 - (1) **Sediment Sampling** – Core samples shall be collected throughout the source area, with one (1) sample per 0.5 acres, and a minimum of five (5) samples per source site for contaminant testing and a minimum of three (3) samples per source site for all other sediment testing. Borings shall extend to the maximum anticipated excavation depth.
 - (2) **Grain Size** – Grain size analyses shall be conducted on each sample. The material shall be analyzed for consistency with the U.S. Army Corps of Engineers (ACOE) / Environmental Protection Agency (EPA), State Water Resources Control Board and California Regional Water Quality Control Board (RWQCB) criteria for beach replenishment. Material suitable for surf disposal shall be consistent with the following:
 - i. Samples shall demonstrate that 75% or more of the material is coarse grained (retained on a Standard U.S. Sieve Size No. 200).
 - ii. Of the coarse grained material fraction (retained on a Standard U.S. Sieve Size No. 200), no more than 5% shall consist of gravel or pebble-sized material (2 mm – 64 mm) and no more than 0.5% of the source material shall consist of

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cobble-sized material or larger (>64 mm). To achieve the desired gradation of material, the oversize source may be screened out or mechanically sorted.

- iii. Source material that does not meet these grain size requirements shall not be disposed of in the surfzone.
 - (3) Contaminants – Based on U.S. EPA Tier I analyses results, Tier II bulk chemical analysis shall be conducted on representative composite samples of each source proposed for surfzone disposal. The material shall be analyzed for consistency with EPA, ACOE, State Water Resources Control Board and RWQCB requirements for beach replenishment. At a minimum, the chemical analysis shall be conducted consistent with the joint EPA/Corps *Inland Testing Manual*. If the ACOE / EPA, State Water Resources Board or RWQCB determine that the sample(s) exceed Effects Range Medium (ER-M) contaminant threshold levels according to the NOAA Screening Quick Reference Tables (SQUIRTs), these materials shall not be used for surfzone disposal.
 - (4) Debris Content – The monitor shall conduct a visual inspection of all stockpiled sediments excavated by bucket/dragline desilting/excavation operations that meet the grain size thresholds and are not determined to be contaminated shall be visually inspected prior to transport to Goleta Beach for surfzone disposal. These inspections shall determine whether or not debris such as trash, woody debris, plant material, charcoal or pockets of discolored sediment is present within the stockpiled material. If present, all such debris shall be separated from the sand material prior to transport to Goleta Beach (by mechanical screening, manual removal or other means) and taken to a permitted disposal site authorized to receive such material.
- B. The analysis shall include confirmation by the U.S. Army Corps of Engineers and California Regional Water Quality Control Board that the material proposed for beach replenishment meets the minimum criteria necessary for surfzone disposal.

5. Public Access Program

- A. ***Prior to the issuance of the coastal development permit***, the applicant shall submit for the review and approval of the Executive Director, a report which describes the methods (including signs, fencing, posting of security guards, etc.) by which safe public access to or around the operation sites and/or staging areas shall be maintained during all project operations. Where public paths or bikeways shall be closed during active operations, a person(s) shall be on-site to detour traffic.
- B. The report shall include plans for staging and storage of equipment. Where use of public parking spaces is unavoidable, the minimum number of public parking spaces that are required for the staging of equipment, machinery and employee parking shall be used.
- C. The applicant shall post each construction site with a notice indicating the expected dates of surfzone deposition activities and/or beach closures.

6. Project Responsibilities and Monitoring

Prior to issuance of the coastal development permit, and prior to the commencement of work each subsequent year, the applicant shall retain the services of the following specialists, with appropriate qualifications acceptable to the Executive Director: (1) a qualified biologist or environmental resource specialist; (2) a qualified engineer, soil scientist or resource specialist; and (3) a qualified archaeologist and appropriate Native American consultant. Prior to

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issuance of the coastal development permit, the qualifications of the specialists shall be submitted for the review and approval of the Executive Director and the contact information for the biologist or resource specialist shall be submitted. All dredging and surfzone disposal activities shall be carried out consistent with the following:

- A. Turbidity. The qualified biologist or environmental resource specialist shall visually monitor and document the turbidity of coastal waters during all surfzone disposal activities. The extent and duration of turbidity plumes shall be recorded and mapped by the monitor during each day of disposal activities. If the turbidity plume is observed to reach kelp beds or eelgrass beds (east of Goleta Pier, off Goleta Point) surfzone disposal shall be terminated until the turbidity plume has dissipated. In addition, the qualified biologist or environmental resource specialist shall utilize a secchi disk at several sites along the length of Goleta pier prior to sediment disposal operations, during sediment disposal operations, and immediately after sediment disposal operations to establish ambient levels of turbidity prior to commencement of development and to document turbidity during project activities. If turbidity levels are significantly above ambient levels for more than three (3) consecutive days, then the rate of disposal shall be reduced so that large, long lasting turbidity plumes are no longer created. After all surfzone disposal operations have ceased, the applicant shall monitor and document the extent and duration of any lasting turbidity plume. The final results of all turbidity monitoring shall be reported to the Commission within 30 days following each annual creek dredging and disposal operation.
- B. Grain Size & Debris: The qualified engineer, soil scientist or resource specialist shall be present whenever sand is being placed in the surfzone. The monitor shall, through grab samples, visual inspection or other methods, ensure that the delivered material is within the acceptable size ranges. If the material is not within the acceptable size range, the monitor shall halt the placement of sand on the beach or in the surfzone. The monitor shall also examine the material to determine presence of debris (e.g., trash, wood, or vegetation). If any debris from the dredge site is detected on the beach, the debris shall be immediately removed from the beach and from the source material. All debris shall be removed to the maximum feasible extent.
- C. Archaeology. The qualified archaeologist and appropriate Native American consultant shall be present on-site during all desilting/dredging activities which occur within or adjacent to the archaeological sites in the project area. Specifically, the desilting/dredging operations on the project site shall be controlled and monitored by the archaeologist with the purpose of locating, recording and collecting any archaeological materials. In the event that any significant archaeological resources are discovered during operations, all work in this area shall be halted and an appropriate data recovery strategy be developed, subject to review and approval of the Executive Director, by the applicant's archaeologist and the native American consultant consistent with CEQA guidelines.
- D. Biology. One week and one day prior to initiation of all creek dredging activities and subsequent surfzone disposal operations, the qualified biologist or environmental resource specialist (biological monitor) shall survey the project site(s) to ensure that initiation of work will not impact any sensitive species or habitats (e.g. coastal strand, salt marsh, etc.) . Project activities including dredging and surfzone sediment deposition operations shall not occur until any sensitive species (e.g., western snowy plovers, Belding's savannah sparrows, steelhead, grunion, etc.) have left the project area or its vicinity and all sensitive habitats have been avoided to the maximum extent feasible. In addition, the biological monitor shall survey the project sites daily to document the presence of any sensitive species or habitats and any measures taken to avoid or

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mitigate disturbance. The results of these surveys shall be included in the post-operation submittal pursuant to **Special Condition 6.F.**, below. In the event that any sensitive wildlife species exhibit reproductive or nesting behavior, the biological monitor shall require the applicant to cease work, and shall immediately notify the Executive Director and local resource agencies. Project activities shall resume only upon written approval of the Executive Director. The biological monitor shall require the applicant to cease work should any breach in permit compliance occur or if any unforeseen sensitive habitat issues arise. The biological monitor shall immediately notify the Executive Director if activities outside of the scope of this coastal development permit occur. If significant impacts or damage occur to sensitive wildlife species or sensitive habitat, the applicant shall be required to submit a revised or supplemental program to adequately mitigate such impacts and to restore the respective habitat if necessary. The revised, or supplemental, program shall be processed as an amendment to this coastal development permit.

- E. Pre-Operation Submittal. The applicant shall submit an annual pre-operation dredging and disposal operation plan within thirty (30) days, but no later than two (2) weeks, prior to each annual dredging operation for the review and approval by the Executive Director, including:

- (1) Site plan (drawn to scale) showing the portions of the creeks and slough to be dredged, the disposal site location, and the footprint of all beach operations consistent with Special Condition 3.b.
- (2) Detailed description of the planned dredging/desilting operation, including the method of dredging/desilting and disposal, volume of dredged/excavated spoils to be removed, and volume to be discharged to the surfzone.
- (3) Description of equipment to be used, including bin capacity when dragline desilting/excavation is utilized.
- (4) Schedule of proposed beginning and ending dates consistent with timing constraints listed in **Special Condition One**.
- (5) Results of the dredged/excavated sediment analysis, pursuant to **Special Condition Four**.

- F. Post-Operation Submittal. The applicant shall submit an annual post-operation assessment (within 60 days of completion of each annual operation) summarizing the dredging and discharge operations. The post-operation submittal shall include the results of all monitoring conducted pursuant to this permit, including but not limited to turbidity monitoring results and biological monitoring results. Any issues or complaints regarding the project received by the public shall be documented in the submittal.

- G. Proposed changes to the project may require a permit amendment or new permit. Any proposed changes to the approved program shall be reported to the Executive Director. No change to the program shall occur without a Commission-approved amendment to the permit unless the Executive Director determines that no such amendment is required.

7. Long-Term Shoreline Monitoring Program

- A. *Prior to issuance of the coastal development permit*, the applicant shall submit to the Executive Director for review and written approval, a report for a long-term shoreline monitoring program for Goleta Beach (for the term of this permit). The program shall

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outline the procedure for the necessary surveys, report preparation and submittal, and the skills and qualifications for all personnel and shall incorporate the following:

- (1) The monitoring program shall record detailed project information, including the information required pursuant to **Special Condition Six**, Annual Project Responsibilities and Monitoring, regarding implementation of the annual project activities including, but not limited to, the date, length of time of construction, quantity, location, method of construction, sediment analysis, weather conditions, and any issues or complaints regarding the project received by the public.
 - (2) The monitoring program shall document the available public access during project implementation, timing of access, and any other restrictions to public access in the project area, and shall include any access issues or complaints raised by the public.
 - (3) The monitoring program shall include two beach profiles per year, either one in spring and one in fall or one in summer and one in winter after completion of yearly/as-needed project operations. Profiles and monitoring shall be done by a licensed civil engineer, surveyor, or qualified professional approved by the Executive Director. The profiles shall overlay the established profiles for each location surveyed.
 - (4) The monitoring program shall: quantify the volumetric change in the beach for each survey period; analyze the seasonal changes in width and length of dry beach, subaerial and nearshore slope, offshore extent of toe, and overall volume of sand in the profile; estimate the rate and extent of transport of material up- and down-coast from the disposal sites; compare actual changes to the shoreline changes that were anticipated during the design phase of this project; determine the time period over which the beach benefits related to the project can be identified as distinct from background conditions; and qualify any abnormal wave and current conditions that could account for changes to the beach outside what was anticipated. The report shall utilize aerial photographs, to the extent feasible, to prepare the summary of beach width and sand volume changes.
 - (5) The monitoring program shall include cumulative data detailing the annual quantity and deposition of material, including, if applicable, interaction of the project with other permitted shoreline projects that may occur in the project area.
- B. The applicant shall submit, on an annual basis each year that surfzone disposal activities occur, a written report indicating the results of the long-term monitoring program. The report shall include a brief history of the previous years' project, if any, and shall also include photographs taken from pre-designated sites (annotated to a copy of the site plans) to track changes in shoreline conditions.
- C. Monitoring reports shall be prepared by a licensed civil engineer, geologist or engineering geologist with expertise in coastal processes. These reports shall be submitted annually to the Executive Director, the first report within 2 months of completion of the second semi-annual beach profile (the spring or fall after completion of construction). All later reports shall be submitted within 2 months of the subsequent annual survey cycle.
- D. The applicant shall undertake the development in accordance with the approved monitoring program. Any proposed changes to the approved program shall be reported to the Executive Director. No change to the program shall occur without a Commission-approved amendment to the permit unless the Executive Director determines that no such amendment is required.

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8. Long-Term Biological Monitoring Program

A. Prior to issuance of the coastal development permit, the applicant shall submit to the Executive Director, for review and written approval, a long-term biological monitoring plan designed to detect potential biological impacts of the project (for the term of this permit). The monitoring plan shall outline sampling design and survey methodologies, statistical approaches used to evaluate the data, and the skills and qualifications for all personnel. The monitoring plan shall incorporate the following:

- (1) The biological monitoring plan shall include a background section that provides a description and historical review of the slough, beach, rocky intertidal, eelgrass, and kelp bed habitats in the vicinity of the dredging and sediment deposition project. The historical review must include a summary of past quantitative sampling/survey work conducted on these habitats within the Goleta Bay area in order to document trends in species composition, habitat areal extent, temporal changes, etc. for comparison with the monitoring program findings.
- (2) The monitoring program shall monitor the following habitats: slough infauna, beach (swash zone and middle and upper beach) infauna, eelgrass beds, kelp beds, and surfgrass/reef habitat. In addition to monitoring the above habitats within the expected reach of the project's effects, reference sites of the above habitats outside the expected reach of the project's effects must be monitored. Monitoring shall take place bi-annually in the fall prior to annual dredging and sediment deposition and in the spring after annual dredging and sediment deposition.

Eelgrass bed, kelp bed, and surfgrass/rocky intertidal monitoring methodology shall continue in a manner consistent with the sampling protocols previously utilized by the County of Santa Barbara pursuant to the required special conditions of CDP 4-05-139. The applicant shall provide an "a priori" power analysis of the adequacy of the previously utilized sampling protocols adequate to detect at least a 20% difference between measurements collected (e.g. percent cover, density, etc.) at the impact and reference sites. In the event that the a priori analysis indicates that revisions to the sampling protocols are necessary to adequately assess the effects of the project, then the applicant shall revise the eelgrass bed, kelp bed, and surfgrass/rocky intertidal sampling protocols as necessary.

The slough infaunal monitoring must include a minimum of 3 core samples randomly collected from the main slough dredging footprint using a grab sampler deployed from a boat. The beach infaunal monitoring must consist of a minimum of three transects oriented perpendicular to the ocean and spanning the swash zone during low tide. The three transects must be randomly placed in an area spanning the project footprint and 50 feet to either side of it. A minimum of three cores per zone (swach zone and middle and upper beach) randomly located along each transect must be sampled. The applicant shall provide an a priori power analysis of the slough and beach infaunal sampling protocols to determine if they will be adequate to detect at least a 20% difference between measurements collected (e.g. species number and density) at the impact and reference sites. In the event that the a priori analysis indicates that revisions to the sampling protocols are necessary to adequately assess the effects of the project then the applicant shall revise the slough infauna and beach infauna sampling protocols as necessary.

In addition to the surfgrass/rocky intertidal reference sites, a minimum of two reference sites must be established for slough and beach infauna, eelgrass beds, and kelp beds. Reference sites must be upcoast and outside of the expected reach

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of the project's effects and the reference sites must be the most proximal respective habitat with similar physical factors (e.g. wave regime, depth, exposure, etc.) The long-term biological monitoring plan must include an exhibit that identifies the location of the respective reference habitat locations. Lastly, in addition to eelgrass and kelp bed quantitative data collection (e.g. percent cover data), surveys for these habitats shall quantify the total area of impact and reference sites in order to follow total area trends.

- (3) The monitoring program shall specify the criteria that would indicate the program's effectiveness/success in avoiding adverse impacts to biological resources. The criteria shall be specific enough to provide a mechanism to determine when/how a project results in adverse impacts to biological resources at each site and a mechanism for making adjustments to future sediment deposition projects.
 - (4) The monitoring program shall consider potential impacts to previously unidentified or new resources in the project vicinity. If the beach replenishment operations could potentially impact such resources, the monitoring program shall be revised to assess impacts to those resources.
- B. The applicant shall submit an annual report each year that sediment deposition activities occur, written by a qualified biologist, indicating the results of the long-term monitoring program. The monitoring report shall further include, but not be limited to, the following information:
- (1) The annual monitoring report shall indicate whether one or more of the habitats (slough infauna, beach infauna, eelgrass beds, kelp beds, surfgrass/rocky intertidal) required to be monitored pursuant to this condition have been adversely impacted relative to the reference sites.
 - (2) The report shall include a brief history of the previous years' effort, if any, and an analysis of the total impact to biological resources.
 - (3) The monitoring report shall document detailed project information regarding the implementation of the annual project activities including, but not limited to, the date, length of time of operations, quantity, location, method of construction, source of material, weather conditions, and any unusual events that resulted in, or potentially could have resulted in, adverse impacts to biological resources.
 - (4) The monitoring report shall report all storm activity during each respective annual fall/winter season including storm dates (length of storm), wave height, rain fall amounts, slough opening status, creek/slough cfs, and the results of the turbidity sampling. The monitoring report shall include a discussion of the range of turbidity plumes and any recommendations to reduce turbidity related to project activities; any incidents during construction where turbidity control measures were implemented; and conclusions regarding turbidity impact upon biological resources.
- C. If the Executive Director determines that adverse impacts have occurred to marine habitat, the Executive Director shall provide written notice to the applicant of such determination. The applicant shall cease work at the subject project site, and shall immediately notify local resource agencies. The applicant shall be required to submit a revised or supplemental program to adequately mitigate such impacts. The revised, or supplemental, program shall be processed as an amendment to this coastal development permit. Project activities shall resume only upon written approval of the Executive Director.
- D. The applicant shall undertake the development in accordance with the approved monitoring program. Any proposed changes to the approved program shall be reported to

NOTICE OF INTENT TO ISSUE AMENDMENT TO COASTAL DEVELOPMENT PERMIT

the Executive Director. No change to the program shall occur without a Commission-approved amendment to the permit unless the Executive Director determines that no such amendment is required.

9. Slough Mouth Opening DELETED AS OF 6-11-2014

~~Prior to issuance of the coastal development permit, the applicant shall submit to the Executive Director for review and written approval, a plan for periodic opening of the Goleta Slough Mouth. The plan shall specify the following:~~

- ~~(1) Goleta Slough water surface elevation tied to a vertical datum, time of year, weather conditions, water quality, and any other criteria that would trigger the necessity for Slough Mouth opening (not more than 3 times per year) in order to prevent flooding of existing facilities and developed areas;~~
- ~~(2) Method for breaching (type of equipment, access route, trench/notching dimensions and elevations, etc.) and site plan showing approximate breach locations;~~
- ~~(3) Method and timing of biological surveys prior to Slough Mouth Opening;~~
- ~~(4) Description of biological resource avoidance procedures and mitigation measures to minimize all potential adverse impacts to sensitive species within and near the slough, including but not limited to Tidewater goby and Steelhead.~~
- ~~(5) Timing of breaching of the slough mouth shall occur, to the greatest extent possible, when the mouth would typically be open (late fall/winter). The only exception to this would be when existing facilities and development are in imminent danger of flooding or when fish kills are likely due to excessive eutrophication.~~

10. Assumption of Risk

By acceptance of this permit, the applicant acknowledges and agrees (i) that the site may be subject to hazards from storm waves, surges, erosion, and flooding; (ii) to assume the risks to the applicant and the property that is the subject of this permit of injury and damage from such hazards in connection with this permitted development; (iii) to unconditionally waive any claim of damage or liability against the Commission, its officers, agents, and employees for injury or damage from such hazards; and (iv) to indemnify and hold harmless the Commission, its officers, agents, and employees with respect to the Commission's approval of the project against any and all liability, claims, demands, damages, costs (including costs and fees incurred in defense of such claims), expenses, and amounts paid in settlement.

Prior to issuance of the Coastal Development Permit, the applicant shall submit a written agreement, in a form and content acceptable to the Executive Director, incorporating all of the above terms of this condition.

11. Required Approvals

By acceptance of this permit, the applicant agrees to obtain all other necessary State or Federal permits that may be necessary for all aspects of the proposed project (including the California Department of Fish and Game, California State Lands Commission, Regional Water Quality Control Board, and the U.S. Army Corps of Engineers).

NOTICE OF INTENT TO ISSUE AMENDMENT TO COASTAL DEVELOPMENT PERMIT

12. Duration of Permit

This permit is valid for a period of five (5) years from the date of Commission action, after which time the permit shall expire. Any dredging/desilting, sediment disposal activities, or slough mouth opening after the expiration of this permit will require the issuance of a new coastal development permit.

13. Indemnity

By acceptance of this permit, the Applicant/Permittee agrees to reimburse the Coastal Commission in full for all Coastal Commission costs and attorneys fees -- including (1) those charged by the Office of the Attorney General, and (2) any court costs and attorneys fees that the Coastal Commission may be required by a court to pay -- that the Coastal Commission incurs in connection with the defense of any action brought by a party other than the Applicant/Permittee against the Coastal Commission, its officers, employees, agents, successors and assigns challenging the approval or issuance of this permit. The Coastal Commission retains complete authority to conduct and direct the defense of any such action against the Coastal Commission.

CALIFORNIA COASTAL COMMISSION

SOUTH CENTRAL COAST AREA
89 SOUTH CALIFORNIA ST., SUITE 200
VENTURA, CA 93001
(805) 585-1800



W23a

ADDENDUM

DATE: May 7, 2012

TO: Commissioners and Interested Parties

FROM: South Central Coast District Staff

SUBJECT: Agenda Item W23a, Application No. 4-11-069 (Santa Barbara County Flood Control District), Wednesday, May 9, 2012

The purpose of this addendum is to modify Special Condition 8 (Long-Term Biological Monitoring Program) and related findings.

Note: ~~Strikethrough~~ indicates text to be deleted from the April 26, 2012 staff report and underline indicates text to be added to the April 26, 2012 staff report.

1.) Special Condition 8 on Pages 14-15 of the report shall be modified as follows:

- A. Prior to issuance of the coastal development permit, the applicant shall submit to the Executive Director, for review and written approval, a long-term biological monitoring plan designed to detect potential biological impacts of the project (for the term of this permit). The monitoring plan shall outline sampling design and survey methodologies, statistical approaches used to evaluate the data, and the skills and qualifications for all personnel. The monitoring plan shall incorporate the following:

...

- (2) The monitoring program shall monitor the following habitats: slough infauna, beach (swash zone and middle and upper beach) infauna, eelgrass beds, kelp beds, and surfgrass/reef habitat. In addition to monitoring the above habitats within the expected reach of the project's effects, reference sites of the above habitats outside the expected reach of the project's effects must be monitored. Monitoring shall take place bi-annually in the fall prior to annual dredging and sediment deposition and in the spring after annual dredging and sediment deposition.

Eelgrass bed, kelp bed, and surfgrass/rocky intertidal monitoring methodology shall continue in a manner consistent with the sampling protocols previously utilized by the County of Santa Barbara pursuant to the required special conditions of CDP 4-05-139. The applicant shall provide an "a priori" power analysis of the adequacy of the previously utilized sampling protocols adequate to detect at least a 20% difference between measurements collected (e.g. percent cover, density, etc.) at the impact and reference sites. In the event that the a priori

EXHIBIT 4
4-11-069-A2 (Santa Barbara County
Flood Control District)
Staff Report for CDP No. 4-11-069

analysis indicates that revisions to the sampling protocols are necessary to adequately assess the effects of the project, then the applicant shall revise the eelgrass bed, kelp bed, and surfgrass/rocky intertidal sampling protocols as necessary.

The slough infaunal monitoring must include a minimum of 3 core samples randomly collected from the main slough dredging footprint using a grab sampler deployed from a boat. The beach infaunal monitoring must consist of a minimum of three transects oriented perpendicular to the ocean and spanning the swash zone during low tide. The three transects must be randomly placed in an area spanning the project footprint and 50 feet to either side of it. A minimum of three cores per zone (swash zone and middle and upper beach) randomly located along each transect must be sampled. The applicant shall provide an a priori power analysis of the slough and beach infaunal sampling protocols to determine if they will be adequate to detect at least a 20% difference between measurements collected (e.g. species number and density) at the impact and reference sites. In the event that the a priori analysis indicates that revisions to the sampling protocols are necessary to adequately assess the effects of the project then the applicant shall revise the slough infauna and beach infauna sampling protocols as necessary.

...

2.) The following changes to the findings shall be made on page 30 of the staff report:

Further, to address any potential biological impacts, **Special Condition Eight (8)** requires the applicant to implement a Long-term Biological Monitoring Program. The program shall include slough and beach (swash zone and middle and upper beach) infauna, eelgrass and kelp bed and surfgrass/rocky intertidal bi-annual monitoring. Reference sites for all habitats shall be established to increase the potential for the monitoring program to detect project impacts...

CALIFORNIA COASTAL COMMISSION

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W23a

Filed: 11/14/11
180th Day: 5/12/12
Staff: A. Geraghty
Staff Report: 4/26/12
Hearing Date: 5/9/12

STAFF REPORT: REGULAR CALENDAR

APPLICATION NO.: 4-11-069

APPLICANT: Santa Barbara County Flood Control District

AGENTS: Maureen Spencer and Seth Shank

PROJECT LOCATION: Southeast portion of Goleta Slough (*including the lower reaches of Atascadero Creek, San Jose Creek, San Pedro Creek, and the main channel of Goleta Slough*) and Goleta Beach County Park, Santa Barbara County.

PROJECT DESCRIPTION: Implement an annual sediment removal and flood carrying capacity improvement program for portions of Goleta Slough for a period of five years. The program will involve the removal of sediment (using a combination of hydraulic dredging and/or dragline desilting/excavation methods) from the lower reaches of Atascadero Creek, San Jose Creek, San Pedro Creek, and the main channel of Goleta Slough on an as-needed basis (removal of between 20,000 cu. yds. and 200,000 cu. yds. of sediment/year and in no case shall the amount of excavation exceed 200,000 cu. yds. of sediment/year). Excavated sediment from dragline desilting/excavation will be temporarily stockpiled approximately 30 to 100 ft. in distance from the top of the creek bank. All suitable excavated sediment will be placed in the surfzone at Goleta Beach County Park. The program also includes breaching the mouth of Goleta Slough approximately 1-3 times/year.

MOTION & RESOLUTION: Page 5

SUMMARY OF STAFF RECOMMENDATION: Staff recommends **approval** of the proposed project **with thirteen (13) special conditions** regarding (1) timing constraints, (2) operation staging and maintenance responsibilities, (3) temporary sediment stockpile sites, (4) sediment sampling analysis and monitoring program, (5) public access program, (6) project responsibilities and monitoring, (7) long-term shoreline monitoring program, (8) long-term

biological monitoring program, (9) Slough Mouth Opening Plan, (10) Assumption of Risk, (11) required approvals, (12) duration of permit, and (13) indemnity.

The Santa Barbara County Flood Control District proposes an annual sediment removal and flood carrying capacity improvement program for portions of Goleta Slough for a period of five years. The program will involve the removal of sediment, using a combination of hydraulic dredging and dragline desilting/excavation methods, as needed, from the lower reaches of Atascadero Creek, San Jose Creek, San Pedro Creek, and the main channel of Goleta Slough on an as-needed basis. The County proposes to remove between 20,000 cu. yds. and 200,000 cu. yds. of sediment/year. Excavated sediment from dragline desilting/excavation will be temporarily stockpiled approximately 30 to 100 ft. in distance from the top of the creek bank. Sediment will be tested and all suitable excavated sediment will be placed in the surfzone at Goleta Beach County Park. If the sediment does not meet testing criteria, it will be taken to an upland disposal site. The program also includes breaching the mouth of Goleta Slough approximately 1-3 times/year. Santa Barbara County Flood Control District does not propose any vegetation removal as part of this permit.

The stated purpose of the program is to maintain existing flood water carrying capacity in the Goleta Slough and related creek system to reduce potential flooding of adjacent developed areas, residences, roadways, and the Santa Barbara Airport and provide sediment for beach nourishment. Although the Commission has previously certified a Local Coastal Program for Santa Barbara County, this project is located within an area of Santa Barbara County where the Commission has retained jurisdiction over the issuance of coastal development permits and the standard of review for this project is the Chapter 3 policies of the Coastal Act.

The Commission has previously issued Coastal Development Permits (CDP) 4-93-205, 4-00-206, and 4-05-139 in 1994, 2000, and 2005, respectively, to the Santa Barbara County Flood Control District for substantially the same project as is proposed by this application. All three permits were subject to several special conditions, including a specific provision that limited the effective term of each permit to a 5-year period, after which time, any future dredging/desilting and surfzone deposition activities would require a new permit from the Commission. CDP 4-05-139 expired on October 13, 2010; therefore, the County is proposing this subject application to continue the ongoing creek desilting/dredging and surfzone disposal program for an additional five years until 2017.

After the most recent sediment disposal/beach nourishment activities at Goleta Beach (Winter/Spring 2011), some members of the public raised concerns about beach nourishment operations at Goleta Beach, including the dark brown/black muddy color of the deposited material, the extent of beach area occupied during nourishment activities, and the high amount of turbidity offshore. In response, Commission staff confirmed that a hard pan soil layer had formed on the west end of Goleta Beach, which apparently resulted due to the unintended retention of sediment on the sandy beach. Although it is not clear if those issues were related to the Santa Barbara County Flood Control District activities or another entity placing sediment at Goleta Beach under the BEACON program permit (now expired), the special conditions of the subject permit are designed to prevent such impacts from occurring as a result of future sediment disposal/nourishment operations. Specifically, Special Condition Two (2) requires that all suitable dredged material shall be placed in the surfzone such that no dredged material is left on

the natural beach. At the completion of the surfzone disposal operations, the project footprint area on the beach shall be decompacted/ripped and replaced to the *approximate* previously existing natural beach topography and compaction ratio in order to restore the dynamic shoreline habitat. Currently, the Santa Barbara County Flood Control District is the only entity permitted to conduct sediment deposition/nourishment at Goleta Beach and all suitable dredged/excavated sediment is proposed to be placed directly in the active surfzone, not on the beach. In order to minimize adverse impacts to the marine environment while meeting flood control objectives, thirteen (13) special conditions are required for this coastal development permit.

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EXHIBITS

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| Exhibit 7. Proposed Location of Surfzone Disposal |

I. STAFF RECOMMENDATION

MOTION: *I move that the Commission approve Coastal Development Permit No. 4-11-069 pursuant to the staff recommendation.*

Staff Recommendation of Approval:

Staff recommends a **YES** vote. Passage of this motion will result in approval of the permit as conditioned and adoption of the following resolution and findings. The motion passes only by affirmative vote of a majority of the Commissioners present.

Resolution to Approve the Permit:

The Commission hereby approves a coastal development permit for the proposed development and adopts the findings set forth below on grounds that the development as conditioned will be in conformity with the policies of Chapter 3 of the Coastal Act and will not prejudice the ability of the local government having jurisdiction over the area to prepare a Local Coastal Program conforming to the provisions of Chapter 3. Approval of the permit complies with the California Environmental Quality Act because either 1) feasible mitigation measures and/or alternatives have been incorporated to substantially lessen any significant adverse effects of the development on the environment, or 2) there are no further feasible mitigation measures or alternatives that would substantially lessen any significant adverse impacts of the development on the environment.

II. SPECIAL CONDITIONS

1. Timing Constraints

- A. Operation staging, equipment mobilization (except on areas of the beach), and dragline desilting/excavation shall occur only during the period between September 15 and March 1, unless additional time is granted by the Executive Director for good cause. Hydraulic dredging operations and any sediment disposal/beach replenishment (surfzone only) activities shall occur only during the period between October 15 and March 1, unless additional time is granted by the Executive Director for good cause. If additional time is granted for good cause, all timing constraints in 1.B through 1.D of this special condition shall continue to apply.
- B. Desilting/dredging operations shall be limited to no more than 10 hours/day in the event that streamflow velocity within Maria Ygnacio Creek is between 10 and 30 cfs. In the event that streamflow velocities exceed 30 cfs, then dredging operations shall cease until streamflow velocities decrease to less than 30 cfs.
- C. Sediment disposal/beach replenishment operations within the surfzone at Goleta Beach may occur Monday through Friday, excluding state holidays. No work shall occur on Saturday or Sunday.
- D. If additional time is granted by the Executive Director outside of the authorized operation period, pursuant to 1.A above, all construction operations, including operation of equipment, material placement in surfzone, placement or removal of equipment or facilities, restricting public access, beach regrading/grooming, or other activities *shall be prohibited in the following circumstances:*
 - (1) On any part of the beach and shorefront in the project area from the Friday prior to Memorial Day in May through Labor Day in September to avoid impacts on public recreational use of the beach and other public amenities in the project vicinity.
 - (2) On any part of the beach and shorefront in the project area when California grunion (of any life stage, including eggs) are present during any run periods and corresponding egg incubation periods, as identified by the surveys conducted pursuant to **Special Condition Six**, to avoid impact on the spawning of the California Grunion.
 - (3) On any part of the beach and shorefront in the project area when Western Snowy Plover are present, as identified by the surveys conducted pursuant to **Special Condition Six**, to avoid adverse effects to Western Snowy Plovers.
 - (4) On any part of the beach and shorefront in the project area when Beldings Savannah Sparrow are present, as identified by the surveys conducted pursuant to Special Condition Six, to avoid adverse effects to Beldings Savannah Sparrow.

2. Operation Staging & Maintenance Responsibilities

It shall be the applicant's responsibility to assure that the following occurs concurrent with, and after completion of, all project operations:

A. Creek Dredging/Desilting Activities

- (1) Hydraulic dredging and dragline desilting/excavation in Atascadero Creek and Goleta Slough shall be implemented so as to leave an undisturbed 10 foot-wide strip along one side of the creek and slough to minimize adverse impacts to steelhead and tidewater goby.
- (2) All creek bank areas disturbed as a result of this project shall be planted and maintained for erosion control and habitat restoration purposes as soon as possible after disturbance has occurred. Disturbed creek banks may be planted and maintained with locally native seeds or plants endemic to native riparian habitat areas or native upland species, as appropriate.

B. Surfzone Sediment Disposal/Beach Nourishment Activities

- (1) All construction operations on the beach, including operation of heavy equipment and material placement in surfzone, shall be limited the minimum footprint necessary for surfzone disposal (maximum 130 ft. in width or less).
- (2) All suitable dredged material shall be placed in the surfzone such that no dredged material is left on the natural beach. At the completion of the surfzone disposal operations, the project footprint area on the beach shall be decompacted/ripped and replaced to the *approximate* previously existing natural beach topography and compaction ratio in order to restore the dynamic shoreline habitat and to facilitate recreational use, consistent with the timing constraints listed in **Special Condition One**. In addition, if surfzone disposal operations impact established coastal strand habitat on the upper beach, this area must be restored and revegetated to an approximation of its pre-disturbance condition at the completion of the surfzone disposal.
- (3) For hydraulic dredging, the slurry discharge pipeline shall follow a single route across the beach to reach the surfzone and shall not be moved more than 50 ft. to the upcoast or downcoast in order to minimize beach disturbance. The discharge pipeline shall be placed in the active surfzone to assure that no dredged material is discharged onto the beach.
- (4) All sediment disposal/beach nourishment operations (including disposal pipeline route, vehicle access route, or equipment corridor) shall be implemented in a manner that will minimize disturbance of the wrack zone, the coastal strand and dune zones and other intertidal areas. Prior to the commencement of any sediment disposal/beach nourishment operations, wrack within the project reach shall be collected, separated, and retained, to the maximum extent feasible, in areas where discharge operations will result in the loss or disturbance of wrack. Wrack and under wrack deposits shall be placed at the appropriate tidal level in an adjacent area that will not be impacted by project activities.

C. All Project Activities

- (1) Staging areas shall be used only during active construction operations and shall not be used to store materials or equipment between operations.
 - (2) The applicant shall not store any construction materials or waste where it will be or could potentially be subject to wave erosion and dispersion. In addition, no machinery shall be placed, stored or otherwise located in the intertidal zone at any time, except for the minimum necessary to implement the project.
 - (3) Construction equipment shall not be cleaned near the creeks, on the beach, or in the beach parking lots.
 - (4) Construction debris and sediment shall be properly contained and secured on site with BMPs to prevent the unintended transport of sediment and other debris into coastal waters by wind, rain or tracking.
 - (5) Construction debris and sediment shall be removed from construction areas as necessary to prevent the accumulation of sediment and other debris which may be discharged into coastal waters. Any and all debris resulting from construction activities shall be removed from the project site within 24 hours. Debris shall be disposed at a debris disposal site outside of the coastal zone or at a location within the coastal zone authorized to receive such material.
 - (6) The applicant shall be responsible for removing all unsuitable material or debris within the project area. Debris shall be disposed at a debris disposal site outside of the coastal zone or at a location within the coastal zone authorized to receive such material.
- D. Sediment Amount: The total amount of dredged material disposed of in the surfzone at Goleta Beach pursuant to this permit, in combination with any other permitted sediment disposal or beach replenishment project, shall not exceed a cumulative total of 200,000 cu. yds. of sediment/year. The applicant shall be responsible for coordinating with all other permitted potential sediment deposition projects at Goleta Beach. If material is placed at Goleta Beach as part of any other permitted project, then the applicant shall limit the amount the amount of material discharged in the surfzone at Goleta Beach pursuant to this permit to ensure that no more than 200,000 cu. yds. of material is deposited at Goleta Beach during any given year for the life of this project. The deposition of additional quantities of dredged material greater than 200,000 cu. yds. at Goleta Beach during any given year will require an amendment to this coastal development permit.

3. Temporary Sediment Stockpile Sites

- A. Permanent stockpiling of material at any of the stockpile sites subject to this permit shall not be allowed. The stockpile sites must be cleared and returned to their pre-construction condition with no remaining equipment, silt fencing, or construction equipment remaining on-site within one week of the end of each project.
- B. Stockpiled materials shall be located as far from stream areas on the designated site(s) as feasible and in no event shall materials be stockpiled less than 30 ft. in distance from the top edge of a stream bank.

- C. Temporary erosion control measures, such as sand bag barriers, silt fencing; and/or swales, shall be implemented for all stockpiled material. These temporary erosion control measures shall be required at the site(s) prior to or concurrent with the initial project operations and shall be monitored and maintained until all stockpiled material has been removed from the project site. Successful implementation of erosion control measures will ensure that the material is completely stabilized and held on site.

4. Sediment Sampling Analysis and Monitoring Program

- A. *At least two (2) weeks prior to disposal of excavated material*, the applicant shall provide evidence to the Executive Director of the location and method of disposal to an approved disposal location either outside of the coastal zone, a site within the coastal zone permitted to receive such fill, or in the surfzone at Goleta Beach. If the excavated material will be deposited in the surfzone at Goleta Beach, an engineer(s) or environmental professional(s), with appropriate qualifications acceptable to the Executive Director, shall: (1) prepare and submit within thirty (30) days, but no later than two (2) weeks, prior to each dredging/desilting operation, a Sampling and Analysis Plan and conduct testing at the source and receiver site for the review and approval of the Executive Director and (2) monitor the site during all sediment disposal activities. The Sampling and Analysis Plan shall be consistent with the following:

- (1) Sediment Sampling – Core samples shall be collected throughout the source area, with one (1) sample per 0.5 acres, and a minimum of five (5) samples per source site for contaminant testing and a minimum of three (3) samples per source site for all other sediment testing. Borings shall extend to the maximum anticipated excavation depth.
- (2) Grain Size – Grain size analyses shall be conducted on each sample. The material shall be analyzed for consistency with the U.S. Army Corps of Engineers (ACOE) / Environmental Protection Agency (EPA), State Water Resources Control Board and California Regional Water Quality Control Board (RWQCB) criteria for beach replenishment. Material suitable for surf disposal shall be consistent with the following:
 - i. Samples shall demonstrate that 75% or more of the material is coarse grained (retained on a Standard U.S. Sieve Size No. 200).
 - ii. Of the coarse grained material fraction (retained on a Standard U.S. Sieve Size No. 200), no more than 5% shall consist of gravel or pebble-sized material (2 mm – 64 mm) and no more than 0.5% of the source material shall consist of cobble-sized material or larger (>64 mm). To achieve the desired gradation of material, the oversize source may be screened out or mechanically sorted.
 - iii. Source material that does not meet these grain size requirements shall not be disposed of in the surfzone.
- (3) Contaminants -- Based on U.S. EPA Tier I analyses results, Tier II bulk chemical analysis shall be conducted on representative composite samples of each source proposed for surfzone disposal. The material shall be analyzed for consistency with EPA, ACOE, State Water Resources Control Board and RWQCB

requirements for beach replenishment. At a minimum, the chemical analysis shall be conducted consistent with the joint EPA/Corps *Inland Testing Manual*. If the ACOE / EPA, State Water Resources Board or RWQCB determine that the sample(s) exceed Effects Range Medium (ER-M) contaminant threshold levels according to the NOAA Screening Quick Reference Tables (SQUIRTs), these materials shall not be used for surfzone disposal.

- (4) Debris Content – The monitor shall conduct a visual inspection of all stockpiled sediments excavated by bucket/dragline desilting/excavation operations that meet the grain size thresholds and are not determined to be contaminated shall be visually inspected prior to transport to Goleta Beach for surfzone disposal. These inspections shall determine whether or not debris such as trash, woody debris, plant material, charcoal or pockets of discolored sediment is present within the stockpiled material. If present, all such debris shall be separated from the sand material prior to transport to Goleta Beach (by mechanical screening, manual removal or other means) and taken to a permitted disposal site authorized to receive such material.
- B. The analysis shall include confirmation by the U.S. Army Corps of Engineers and California Regional Water Quality Control Board that the material proposed for beach replenishment meets the minimum criteria necessary for surfzone disposal.

5. Public Access Program

- A. *Prior to the issuance of the coastal development permit*, the applicant shall submit for the review and approval of the Executive Director, a report which describes the methods (including signs, fencing, posting of security guards, etc.) by which safe public access to or around the operation sites and/or staging areas shall be maintained during all project operations. Where public paths or bikeways shall be closed during active operations, a person(s) shall be on-site to detour traffic.
- B. The report shall include plans for staging and storage of equipment. Where use of public parking spaces is unavoidable, the minimum number of public parking spaces that are required for the staging of equipment, machinery and employee parking shall be used.
- C. The applicant shall post each construction site with a notice indicating the expected dates of surfzone deposition activities and/or beach closures.

6. Project Responsibilities and Monitoring

Prior to issuance of the coastal development permit, and prior to the commencement of work each subsequent year, the applicant shall retain the services of the following specialists, with appropriate qualifications acceptable to the Executive Director: (1) a qualified biologist or environmental resource specialist; (2) a qualified engineer, soil scientist or resource specialist; and (3) a qualified archaeologist and appropriate Native American consultant. Prior to issuance of the coastal development permit, the qualifications of the specialists shall be submitted for the review and approval of the Executive Director and the contact information for the biologist or resource specialist shall be submitted. All dredging and surfzone disposal activities shall be carried out consistent with the following:

- A. Turbidity. The qualified biologist or environmental resource specialist shall visually monitor and document the turbidity of coastal waters during all surfzone disposal activities. The extent and duration of turbidity plumes shall be recorded and mapped by the monitor during each day of disposal activities. If the turbidity plume is observed to reach kelp beds or eelgrass beds (east of Goleta Pier, off Goleta Point) surfzone disposal shall be terminated until the turbidity plume has dissipated. In addition, the qualified biologist or environmental resource specialist shall utilize a secchi disk at several sites along the length of Goleta pier prior to sediment disposal operations, during sediment disposal operations, and immediately after sediment disposal operations to establish ambient levels of turbidity prior to commencement of development and to document turbidity during project activities. If turbidity levels are significantly above ambient levels for more than three (3) consecutive days, then the rate of disposal shall be reduced so that large, long lasting turbidity plumes are no longer created. After all surfzone disposal operations have ceased, the applicant shall monitor and document the extent and duration of any lasting turbidity plume. The final results of all turbidity monitoring shall be reported to the Commission within 30 days following each annual creek dredging and disposal operation.
- B. Grain Size & Debris: The qualified engineer, soil scientist or resource specialist shall be present whenever sand is being placed in the surfzone. The monitor shall, through grab samples, visual inspection or other methods, ensure that the delivered material is within the acceptable size ranges. If the material is not within the acceptable size range, the monitor shall halt the placement of sand on the beach or in the surfzone. The monitor shall also examine the material to determine presence of debris (e.g., trash, wood, or vegetation). If any debris from the dredge site is detected on the beach, the debris shall be immediately removed from the beach and from the source material. All debris shall be removed to the maximum feasible extent.
- C. Archaeology. The qualified archaeologist and appropriate Native American consultant shall be present on-site during all desilting/dredging activities which occur within or adjacent to the archaeological sites in the project area. Specifically, the desilting/dredging operations on the project site shall be controlled and monitored by the archaeologist with the purpose of locating, recording and collecting any archaeological materials. In the event that any significant archaeological resources are discovered during operations, all work in this area shall be halted and an appropriate data recovery strategy be developed, subject to review and approval of the Executive Director, by the applicant's archaeologist and the native American consultant consistent with CEQA guidelines.
- D. Biology. One week and one day prior to initiation of all creek dredging activities and subsequent surfzone disposal operations, the qualified biologist or environmental resource specialist (biological monitor) shall survey the project site(s) to ensure that initiation of work will not impact any sensitive species or habitats (e.g. coastal strand, salt marsh, etc.) . Project activities including dredging and surfzone sediment deposition operations shall not occur until any sensitive species (e.g., western snowy plovers, Belding's savannah sparrows, steelhead, grunion, etc.) have left the project area or its vicinity and all sensitive habitats have been avoided to the maximum extent feasible. In addition, the biological monitor shall survey the project sites daily to document the presence of any sensitive species or habitats and any measures taken to avoid or mitigate disturbance. The results of these surveys shall be included in the post-operation submittal pursuant to **Special Condition 6.F.**, below. In the event that any sensitive wildlife species exhibit reproductive

or nesting behavior, the biological monitor shall require the applicant to cease work, and shall immediately notify the Executive Director and local resource agencies. Project activities shall resume only upon written approval of the Executive Director. The biological monitor shall require the applicant to cease work should any breach in permit compliance occur or if any unforeseen sensitive habitat issues arise. The biological monitor shall immediately notify the Executive Director if activities outside of the scope of this coastal development permit occur. If significant impacts or damage occur to sensitive wildlife species or sensitive habitat, the applicant shall be required to submit a revised or supplemental program to adequately mitigate such impacts and to restore the respective habitat if necessary. The revised, or supplemental, program shall be processed as an amendment to this coastal development permit.

- E. Pre-Operation Submittal. The applicant shall submit an annual pre-operation dredging and disposal operation plan within thirty (30) days, but no later than two (2) weeks, prior to each annual dredging operation for the review and approval by the Executive Director, including:
- (1) Site plan (drawn to scale) showing the portions of the creeks and slough to be dredged, the disposal site location, and the footprint of all beach operations consistent with Special Condition 3.b.
 - (2) Detailed description of the planned dredging/desilting operation, including the method of dredging/desilting and disposal, volume of dredged/excavated spoils to be removed, and volume to be discharged to the surfzone.
 - (3) Description of equipment to be used, including bin capacity when dragline desilting/excavation is utilized.
 - (4) Schedule of proposed beginning and ending dates consistent with timing constraints listed in **Special Condition One**.
 - (5) Results of the dredged/excavated sediment analysis, pursuant to **Special Condition Four**.
- F. Post-Operation Submittal. The applicant shall submit an annual post-operation assessment (within 60 days of completion of each annual operation) summarizing the dredging and discharge operations. The post-operation submittal shall include the results of all monitoring conducted pursuant to this permit, including but not limited to turbidity monitoring results and biological monitoring results. Any issues or complaints regarding the project received by the public shall be documented in the submittal.
- G. Proposed changes to the project may require a permit amendment or new permit. Any proposed changes to the approved program shall be reported to the Executive Director. No change to the program shall occur without a Commission-approved amendment to the permit unless the Executive Director determines that no such amendment is required.

7. Long-Term Shoreline Monitoring Program

- A. *Prior to issuance of the coastal development permit*, the applicant shall submit to the Executive Director for review and written approval, a report for a long-term shoreline

monitoring program for Goleta Beach (for the term of this permit). The program shall outline the procedure for the necessary surveys, report preparation and submittal, and the skills and qualifications for all personnel and shall incorporate the following:

- (1) The monitoring program shall record detailed project information, including the information required pursuant to **Special Condition Six**, Annual Project Responsibilities and Monitoring, regarding implementation of the annual project activities including, but not limited to, the date, length of time of construction, quantity, location, method of construction, sediment analysis, weather conditions, and any issues or complaints regarding the project received by the public.
 - (2) The monitoring program shall document the available public access during project implementation, timing of access, and any other restrictions to public access in the project area, and shall include any access issues or complaints raised by the public.
 - (3) The monitoring program shall include two beach profiles per year, either one in spring and one in fall or one in summer and one in winter after completion of yearly/as-needed project operations. Profiles and monitoring shall be done by a licensed civil engineer, surveyor, or qualified professional approved by the Executive Director. The profiles shall overlay the established profiles for each location surveyed.
 - (4) The monitoring program shall: quantify the volumetric change in the beach for each survey period; analyze the seasonal changes in width and length of dry beach, subaerial and nearshore slope, offshore extent of toe, and overall volume of sand in the profile; estimate the rate and extent of transport of material up- and down-coast from the disposal sites; compare actual changes to the shoreline changes that were anticipated during the design phase of this project; determine the time period over which the beach benefits related to the project can be identified as distinct from background conditions; and qualify any abnormal wave and current conditions that could account for changes to the beach outside what was anticipated. The report shall utilize aerial photographs, to the extent feasible, to prepare the summary of beach width and sand volume changes.
 - (5) The monitoring program shall include cumulative data detailing the annual quantity and deposition of material, including, if applicable, interaction of the project with other permitted shoreline projects that may occur in the project area.
- B. The applicant shall submit, on an annual basis each year that surfzone disposal activities occur, a written report indicating the results of the long-term monitoring program. The report shall include a brief history of the previous years' project, if any, and shall also include photographs taken from pre-designated sites (annotated to a copy of the site plans) to track changes in shoreline conditions.
- C. Monitoring reports shall be prepared by a licensed civil engineer, geologist or engineering geologist with expertise in coastal processes. These reports shall be submitted annually to the Executive Director, the first report within 2 months of completion of the second semi-annual beach profile (the spring or fall after completion of construction). All later reports shall be submitted within 2 months of the subsequent annual survey cycle.

- D. The applicant shall undertake the development in accordance with the approved monitoring program. Any proposed changes to the approved program shall be reported to the Executive Director. No change to the program shall occur without a Commission-approved amendment to the permit unless the Executive Director determines that no such amendment is required.

8. Long-Term Biological Monitoring Program

- A. Prior to issuance of the coastal development permit, the applicant shall submit to the Executive Director, for review and written approval, a long-term biological monitoring plan designed to detect potential biological impacts of the project (for the term of this permit). The monitoring plan shall outline sampling design and survey methodologies, statistical approaches used to evaluate the data, and the skills and qualifications for all personnel. The monitoring plan shall incorporate the following:

- (1) The biological monitoring plan shall include a background section that provides a description and historical review of the slough, beach, rocky intertidal, eelgrass, and kelp bed habitats in the vicinity of the dredging and sediment deposition project. The historical review must include a summary of past quantitative sampling/survey work conducted on these habitats within the Goleta Bay area in order to document trends in species composition, habitat areal extent, temporal changes, etc. for comparison with the monitoring program findings.
- (2) The monitoring program shall monitor the following habitats: slough infauna, beach (swash zone) infauna, eelgrass beds, kelp beds, and surfgrass/reef habitat. In addition to monitoring the above habitats within the expected reach of the project's effects, reference sites of the above habitats outside the expected reach of the project's effects must be monitored. Monitoring shall take place bi-annually in the fall prior to annual dredging and sediment deposition and in the spring after annual dredging and sediment deposition.

Eelgrass bed, kelp bed, and surfgrass/rocky intertidal monitoring methodology shall continue in a manner consistent with the sampling protocols previously utilized by the County of Santa Barbara pursuant to the required special conditions of CDP 4-05-139. The applicant shall provide an "a priori" power analysis of the adequacy of the previously utilized sampling protocols adequate to detect at least a 20% difference between measurements collected (e.g. percent cover, density, etc.) at the impact and reference sites. In the event that the a priori analysis indicates that revisions to the sampling protocols are necessary to adequately assess the effects of the project, then the applicant shall revise the eelgrass bed, kelp bed, and surfgrass/rocky intertidal sampling protocols as necessary.

The slough infaunal monitoring must include a minimum of 3 core samples randomly collected from the main slough dredging footprint using a grab sampler deployed from a boat. The beach infaunal monitoring must consist of a minimum of three transects oriented perpendicular to the ocean and spanning the swash zone during low tide. The three transects must be randomly placed in an area spanning the project footprint and 50 feet to either side of it. A minimum of three cores randomly located along each transect must be sampled. The applicant shall provide

an a priori power analysis of the slough and beach infaunal sampling protocols to determine if they will be adequate to detect at least a 20% difference between measurements collected (e.g. species number and density) at the impact and reference sites. In the event that the a priori analysis indicates that revisions to the sampling protocols are necessary to adequately assess the effects of the project then the applicant shall revise the slough infauna and beach infauna sampling protocols as necessary.

In addition to the surfgrass/rocky intertidal reference sites, a minimum of two reference sites must be established for slough and beach infauna, eelgrass beds, and kelp beds. Reference sites must be upcoast and outside of the expected reach of the project's effects and the reference sites must be the most proximal respective habitat with similar physical factors (e.g. wave regime, depth, exposure, etc.) The long-term biological monitoring plan must include an exhibit that identifies the location of the respective reference habitat locations. Lastly, in addition to eelgrass and kelp bed quantitative data collection (e.g. percent cover data), surveys for these habitats shall quantify the total area of impact and reference sites in order to follow total area trends.

- (3) The monitoring program shall specify the criteria that would indicate the program's effectiveness/success in avoiding adverse impacts to biological resources. The criteria shall be specific enough to provide a mechanism to determine when/how a project results in adverse impacts to biological resources at each site and a mechanism for making adjustments to future sediment deposition projects.
 - (4) The monitoring program shall consider potential impacts to previously unidentified or new resources in the project vicinity. If the beach replenishment operations could potentially impact such resources, the monitoring program shall be revised to assess impacts to those resources.
- B. The applicant shall submit an annual report each year that sediment deposition activities occur, written by a qualified biologist, indicating the results of the long-term monitoring program. The monitoring report shall further include, but not be limited to, the following information:
- (1) The annual monitoring report shall indicate whether one or more of the habitats (slough infauna, beach infauna, eelgrass beds, kelp beds, surfgrass/rocky intertidal) required to be monitored pursuant to this condition have been adversely impacted relative to the reference sites.
 - (2) The report shall include a brief history of the previous years' effort, if any, and an analysis of the total impact to biological resources.
 - (3) The monitoring report shall document detailed project information regarding the implementation of the annual project activities including, but not limited to, the date, length of time of operations, quantity, location, method of construction, source of material, weather conditions, and any unusual events that resulted in, or potentially could have resulted in, adverse impacts to biological resources.
 - (4) The monitoring report shall report all storm activity during each respective annual fall/winter season including storm dates (length of storm), wave height, rain fall

amounts, slough opening status, creek/slough cfs, and the results of the turbidity sampling. The monitoring report shall include a discussion of the range of turbidity plumes and any recommendations to reduce turbidity related to project activities; any incidents during construction where turbidity control measures were implemented; and conclusions regarding turbidity impact upon biological resources.

- C. If the Executive Director determines that adverse impacts have occurred to marine habitat, the Executive Director shall provide written notice to the applicant of such determination. The applicant shall cease work at the subject project site, and shall immediately notify local resource agencies. The applicant shall be required to submit a revised or supplemental program to adequately mitigate such impacts. The revised, or supplemental, program shall be processed as an amendment to this coastal development permit. Project activities shall resume only upon written approval of the Executive Director.
- D. The applicant shall undertake the development in accordance with the approved monitoring program. Any proposed changes to the approved program shall be reported to the Executive Director. No change to the program shall occur without a Commission-approved amendment to the permit unless the Executive Director determines that no such amendment is required.

9. Slough Mouth Opening

Prior to issuance of the coastal development permit, the applicant shall submit to the Executive Director for review and written approval, a plan for periodic opening of the Goleta Slough Mouth. The plan shall specify the following:

- (1) Goleta Slough water surface elevation tied to a vertical datum, time of year, weather conditions, water quality, and any other criteria that would trigger the necessity for Slough Mouth opening (not more than 3 times per year) in order to prevent flooding of existing facilities and developed areas;
- (2) Method for breaching (type of equipment, access route, trench/notching dimensions and elevations, etc.) and site plan showing approximate breach locations;
- (3) Method and timing of biological surveys prior to Slough Mouth Opening;
- (4) Description of biological resource avoidance procedures and mitigation measures to minimize all potential adverse impacts to sensitive species within and near the slough, including but not limited to Tidewater goby and Steelhead.
- (5) Timing of breaching of the slough mouth shall occur, to the greatest extent possible, when the mouth would typically be open (late fall/winter). The only exception to this would be when existing facilities and development are in imminent danger of flooding or when fish kills are likely due to excessive eutrophication.

10. Assumption of Risk

By acceptance of this permit, the applicant acknowledges and agrees (i) that the site may be subject to hazards from storm waves, surges, erosion, and flooding; (ii) to assume the risks to the

applicant and the property that is the subject of this permit of injury and damage from such hazards in connection with this permitted development; (iii) to unconditionally waive any claim of damage or liability against the Commission, its officers, agents, and employees for injury or damage from such hazards; and (iv) to indemnify and hold harmless the Commission, its officers, agents, and employees with respect to the Commission's approval of the project against any and all liability, claims, demands, damages, costs (including costs and fees incurred in defense of such claims), expenses, and amounts paid in settlement.

Prior to issuance of the Coastal Development Permit, the applicant shall submit a written agreement, in a form and content acceptable to the Executive Director, incorporating all of the above terms of this condition.

11. Required Approvals

By acceptance of this permit, the applicant agrees to obtain all other necessary State or Federal permits that may be necessary for all aspects of the proposed project (including the California Department of Fish and Game, California State Lands Commission, Regional Water Quality Control Board, and the U.S. Army Corps of Engineers).

12. Duration of Permit

This permit is valid for a period of five (5) years from the date of Commission action, after which time the permit shall expire. Any dredging/desilting, sediment disposal activities, or slough mouth opening after the expiration of this permit will require the issuance of a new coastal development permit.

13. Indemnity

By acceptance of this permit, the Applicant/Permittee agrees to reimburse the Coastal Commission in full for all Coastal Commission costs and attorneys fees -- including (1) those charged by the Office of the Attorney General, and (2) any court costs and attorneys fees that the Coastal Commission may be required by a court to pay -- that the Coastal Commission incurs in connection with the defense of any action brought by a party other than the Applicant/Permittee against the Coastal Commission, its officers, employees, agents, successors and assigns challenging the approval or issuance of this permit. The Coastal Commission retains complete authority to conduct and direct the defense of any such action against the Coastal Commission.

III. FINDINGS AND DECLARATIONS

The Commission hereby finds and declares:

A. PROJECT DESCRIPTION AND BACKGROUND

The proposed project is for the implementation of an annual sediment removal and flood carrying capacity improvement program for portions of Goleta Slough for a period of five years. The program will involve the removal of sediment (using a combination of hydraulic dredging and dragline desilting/excavation methods as needed) from the lower reaches of Atascadero Creek, San Jose Creek, San Pedro Creek, and the main channel of Goleta Slough on an as-needed basis (removal of between 20,000 cu. yds. and 200,000 cu. yds. of sediment/year and in no case shall the amount of excavation exceed 200,000 cu. yds. of sediment/year) (Exhibits 1-6). All suitable excavated sediment will be placed in the surfzone at Goleta Beach County Park (Exhibit 7). The program also includes breaching the mouth of Goleta Slough approximately 1-3 times/year. Operation staging, equipment mobilization (in areas other than on the beach), and dragline desilting/excavation will occur only during the period between September 15 and March 1 and hydraulic dredging operations and sediment disposal/beach replenishment activities will occur only during the period between October 15 and March 1, unless additional time is granted by the Executive Director for good cause. Dredging activities may occur on less than an annual basis depending on the quantity of sediments present and the necessity for removal. An average of approximately 105,00 cubic yards of material has been removed per season since 1994, with a range of 10,000-238,000 cu. yds. of material.

The proposed project includes two potential methods of sediment removal: hydraulic dredging and dragline desilting/excavation. Both hydraulic dredging and dragline desilting/excavation can be used during any given maintenance year. Hydraulic dredging in Atascadero, San Jose, and San Pedro creeks will be used when quantities of sediment in the three creeks exceed 50,000 cu. yds. of material (Exhibits 2-6). A floating hydraulic dredge vessel is placed into the slough or creek by a land-based crane at the east end of the Goleta Beach parking lot and work progresses upstream. Hydraulic dredging involves a floating vessel with a "cutterhead" dredge, an active rotating auger surrounding a suction line, which combines in-stream water with the excavated streambed material to create a slurry material. The material is pumped through a 12-inch diameter polyurethane pipeline, after the pipeline exits the water, it runs under the bike path in two locations, then passes through a 24-inch diameter PVC pipe sleeve located under the western end of the Goleta Beach parking lot, approximately 2,500 feet west of the slough mouth, and stretches to the surfzone at Goleta Beach. The bike path will remain usable during the project. One staging area has been established along each creek and one at the east end of the parking lot at Goleta Beach. Hydraulic dredging has historically been performed a minimum of 10 hours per day, 5 days a week, but has the potential to operate 24 hours/day, 5 days/week for most of the project area. The dredge would operate 10 hours/day when working in the vicinity of the ranger's residence near Goleta Beach Park and the mobile home park located between San Jose Creek and Atascadero Creek.

Sediment may also be removed from the creeks by the dragline desilting/excavation method when quantities of sediment are estimated to be less than 50,000 cu. yds. of material. Dragline desilting/dredging involves operation of a crane rigged as a dragline (bucket scoop) from the adjacent creek banks.

Removed sediments will be stockpiled adjacent to the creek approximately 30 to 100 ft. in distance from the top of the bank. Stockpiling of soils would be on the eastern side/access roadway of San Pedro Creek, western side/access roadway of San Jose Creek, and along the northern side/access roadway of Atascadero Creek. The stockpile locations do not contain native vegetation and are located on existing maintenance roads. (Exhibit 3) No vegetation is proposed to be removed.

In addition, the proposed project also includes periodic breaching of the mouth of Goleta Slough on an as-needed basis. Santa Barbara County Flood Control District has indicated that the slough mouth is expected to require breaching approximately 1-3 times/year in order to prevent flooding of the adjacent airport. Breaching involves the use of a bulldozer to create a trench from the ocean to the slough. Based on past activities, the trench varies in length depending on the width of the beach, but is typically 200 ft. long by 40 ft. wide. Approximately 1,000 cu. yds. of sand is pushed up out of the trench onto the beach.

The proposed dredging activity is located within the Goleta Slough (and its related stream courses) one of the 19 major wetland habitats specifically identified in Chapter 3 of the Coastal Act. The slough is the drainage basin for five creeks that originate on the southern slopes of the nearby Santa Ynez Mountains: Atascadero Creek, San Jose Creek, San Pedro Creek, Carneros Creek, and Tecolotito Creek. Although the Commission has previously certified a Local Coastal Program (LCP) for Santa Barbara County, the proposed dredging activity is located within a portion of the Coastal Zone subject to the Commission's retained permit issuance jurisdiction and, therefore, requires a coastal development permit issued by the Commission. The standard of review for this project is the Chapter 3 policies of the Coastal Act.

All portions of the project site are designated as environmentally significant habitat areas by the Santa Barbara County Local Coastal Program. The Goleta Slough, including the three creeks to be dredged, are identified wetlands areas. Several identified archaeological sites are located adjacent to the three creeks where dredging will occur. Public bicycle/pedestrian trails are located adjacent to several of the creeks to be dredged and public access will remain available along the entire length of Goleta Beach where sediment disposal/beach nourishment activities will occur.

Permit History

The Commission has previously approved three separate permit applications over the past 17 years for essentially the same project that is now proposed for dredging operations of the three subject creeks and deposition of the excavated material in the surfzone at Goleta Beach County Park. Coastal Development Permit (CDP) 4-93-205, CDP 4-00-206, and CDP 4-05-139 were previously issued by the Commission in 1994, 2000, and 2005 respectively, to the Santa Barbara County Flood Control District for dredging of the slough/creeks and disposal of between 20,000 – 200,000 cu. yds. of material per year in the surfzone at Goleta Beach. The Commission

approved CDP 4-00-206, CDP 4-93-205, and CDP 4-05-139 subject to several special conditions, including a condition specifying that the effective term of each permit was limited to a 5-year period only and that future dredging and surfzone deposition activities (after the 5-year term of each permit ended) would require a new permit from the Commission. CDP 4-05-139 expired on October 13, 2010; therefore, the County is proposing this subject application to continue dredging and beach disposal operations for an additional five years until 2017.

In addition, on March 16, 2005, the Commission approved CDP 4-02-074 to allow the Beach Erosion Authority for Clean Oceans and Nourishment (BEACON) to implement a five-year program to place a maximum of 791,500 cubic yards per year of suitable beach replenishment material at five separate beach fill sites within Santa Barbara and Ventura Counties (including the deposition of up to 100,000 cu. yds./year of beach replenishment material at Goleta Beach County Park). BEACON is a joint powers authority whose members consist of the different local government agencies in Santa Barbara and Ventura Counties, including Santa Barbara County itself. CDP 4-02-074 expired on March 16, 2010. Further, Goleta Beach County Park has been subject to several other coastal permits for placement of beach nourishment material, including CDP 4-02-054 (BEACON) which approved a one-time beach nourishment demonstration program at Goleta Beach utilizing up to 150,000 cubic yards of sand from the West Beach area of Santa Barbara Harbor and placing it within a 2,200 foot long by 400 foot wide beach fill deposition site at Goleta Beach County Park. Additionally, temporary sand berms were constructed for the winter seasons from 2001-2005 (pursuant to CDP 4-00-193, CDP 4-01-136, and CDP 4-02-128).

Subsequent to the expiration of CDP 4-05-139 in October 2010, Santa Barbara County Flood Control District received two emergency permits for dredging/desilting activities in Goleta Slough and the adjoining creeks in February 2010 (CDP 4-10-118-G) and in January 2011 (CDP 4-11-015-G). The emergency activities were necessary due to sediment accumulation from fires in the Santa Barbara/Goleta area and subsequent heavy rain events. The emergency permits required all dredged/desilted material to meet the testing criteria previously outlined in CDP 4-05-139 prior to surfzone disposal at Goleta Beach. The emergency permits required the Flood Control District to dispose of any unsuitable sediment at an appropriate disposal site located outside of the coastal zone. During the 2010 and 2011 emergency events, all sediment was disposed of at Goleta Beach. Based on a summary of those disposal activities provided in a report titled "Desilted Materials Sampling and Analysis Program," prepared for Santa Barbara County Flood Control District by Padre Associates, Inc., dated January 2012, the fine content of the material deposited at Goleta Beach in February 2010 exceeded the permitted fine content of 25% fines (passing through a Standard U.S. Sieve Size No. 200) as required by CDP 4-05-139, and as required by other resource agencies. The fines deposited at Goleta Beach in February 2010 ranged from 30%-44%, well above the 25% fine content limit.

Subsequent to the 2010 and 2011 emergency events and other sediment deposition/beach nourishment conducted at Goleta Beach in February 2010 and March 2010, under the now expired BEACON program permit, some members of the public raised concern about a hard pan soil layer that appeared on the western end of Goleta Beach. In response, Santa Barbara County Flood Control District hired professional registered geotechnical engineers, Fugro Consultants, Inc., in September 2011 to evaluate the exposed hard layer of sediment. Based on site specific testing, the fines content (passing through a Standard U.S. Sieve Size No. 200) ranged from 28%

to 38% fines. Fugro Consultants, Inc. concluded that the material, a layer of dark brown to dark gray silty sand with clay, clay pockets and organics, was likely associated with the recent beach nourishment efforts at Goleta Beach. However, Fugro was unable to identify the time of placement or the source material. Under the proposed project, Santa Barbara County Flood Control District will be able to conduct routine maintenance as-needed, such that any need for future emergency operations would be minimal. Further, because the Santa Barbara Flood Control District is currently the only authorized agency to conduct sediment disposal activities at Goleta Beach, and because all material will be disposed of in the surfzone, no sediment is expected to remain on the beach. Thus, no material with fine content exceeding 25% fines will be placed on the beach as a result of the proposed project.

The only current active permit for deposition of material at Goleta Beach is CDP 4-09-068. CDP 4-09-068, approved by the Commission on March 10, 2010, authorizes the Santa Barbara County Flood Control District to implement an annual dredging program for a 1.4 mile reach of Atascadero Creek that will include removal of 2,000–30,000 cu. yds of sediment on an as-needed basis and potential placement of suitable excavated material in the surfzone at Goleta Beach County Park. CDP 4-09-068 has the same sediment testing requirements as the proposed project and is limited to 25% fine material.

B. ENVIRONMENTALLY SENSITIVE HABITAT AND MARINE RESOURCES

Section **30230** of the Coastal Act states:

Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.

Section **30231** of the Coastal Act states that:

The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges- and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.

Section **30236** of the Coastal Act states:

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 floodplain 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.

Section **30240** of the Coastal Acts states:

(a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas.

(b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.

Section 30231 requires that the biological productivity and quality of coastal waters be maintained. Section 30230 requires that uses of the marine environment be carried out in a manner that will sustain the biological productivity of coastal waters for long-term commercial, recreational, scientific, and educational purposes. Section 30236 allows for alterations to streambeds when required for flood control projects where no other less damaging alternative is feasible and when necessary to protect public safety or existing development. In addition, Section 30240 of the Coastal Act states that environmentally sensitive habitat areas shall be protected and that development within or adjacent to such areas must be designed to prevent impacts which could degrade those resources.

The proposed project is for the implementation of an annual dredging program for portions of Goleta Slough. The program will involve dredging the lower reaches of Atascadero Creek, San Jose Creek, San Pedro Creek, and the main channel of the slough on a periodic basis (removal of no more than 200,000 cu. yds. of sediment/year). The program also includes breaching the mouth of Goleta Slough approximately 1-3 times/year and placement of all suitable dredged material in the surfzone at Goleta Beach County Park. Excavated material will be stockpiled adjacent to the creek approximately 30 to 100 ft. in distance from the top of the bank. (Exhibit 3) Operation staging, equipment mobilization (in areas other than on the beach), and dragline desilting/excavation will occur only during the period between September 15 and March 1 and hydraulic dredging operations and sediment disposal/beach replenishment activities will occur only during the period between October 15 and March 1, unless additional time is granted by the Executive Director for good cause. Hydraulic dredging has historically been performed a minimum of 10 hours per day, but has the potential to operate 24 hours/day, 5 days/week for most of the project area. Dragline dredging is proposed to take place a maximum of 10 hours per day/5 days per week. The dredge would operate 10 hours/day when working in the vicinity of the ranger's residence near Goleta Beach Park and the mobile home park located between San Jose Creek and Atascadero Creek.

The proposed dredging activity will be located within Goleta Slough (and its related stream courses) one of the 19 major wetland habitats specifically identified in Chapter 3 of the Coastal Act. All portions of the project site are designated as environmentally significant habitat areas by the Santa Barbara County Local Coastal Program. The slough is the drainage basin for five creeks that originate on the southern slopes of the nearby Santa Ynez Mountains: Atascadero Creek, San Jose Creek, San Pedro Creek, Carneros Creek, and Tecolotito Creek. The other two creeks (Carneros and Tecolotito) will also be periodically dredged; however, these two creeks are not located within the Commission's original permit issuance jurisdiction and are, therefore, not part of this permit application.

Historically, Goleta Slough was a relatively deep water lagoon environment. Since the 1850's, progressive sedimentation from these five creeks have transformed the Goleta Slough from a deep water wetland habitat to a shallow coastal salt marsh crossed by numerous tidal channels.

Additional fill has occurred as a result of development on site, including the Santa Barbara Airport, a highway, and various urban development. The current slough is approximately 300 acres in area (occupying an area less than 40% of its pre-World War II size).

The natural pattern for many seasonal sloughs/estuaries in southern California, including Goleta Slough, is to remain closed during the summer and open during the winter. Generally summers are characterized by small, low energy waves that deliver sand onshore so that beaches become wider and slough/estuary mouths close. Winters are generally characterized by large, high energy waves that erode beach sand shifting it offshore and cause slough/estuary mouths to close.

The Goleta Slough provides perennial and seasonal habitat for several endangered and sensitive wildlife species including Belding's savannah sparrow, steelhead trout, white-tailed kite, light-footed clapper rail, plover, heron, egret, and at least 26 other bird species. Biological surveys indicate that tidewater goby may be present within in the slough. Vegetation within the undisturbed portion of the slough is dominated by salt tolerant native wetland plant species such as perennial pickleweed, which comprises about 90% of the sloughs vegetative cover. In addition to salt tolerant species, several smaller areas of the slough also support freshwater marsh vegetation as well.

Steelhead (*Oncorhynchus mykiss*)

Steelhead have historically entered Goleta Slough to migrate up the tributary streams for spawning. Steelhead have been divided into 15 evolutionary significant units (ESU)). The populations that occur between Los Angeles County and northern Santa Barbara County constitute the South-Central Evolutionary Significant Unit (ESU) which has been designated an endangered species by the National Marine Fisheries Service. Southern steelhead are anadromous (migrating from freshwater to the ocean as juveniles and returning to freshwater as an adult to spawn). Steelhead enter their natal creeks and streams, often through sloughs/estuaries, to spawn during times of high flow which typically occur during the late fall and winter in southern California. Spawning occurs from December through June. Juvenile steelhead that are ready to emigrate to the ocean are termed smolts. They often rear in sloughs/estuaries for several weeks or months prior to entering the ocean in the spring.

The Final Environmental Impact Report (94-EIR-1) dated September 2000 and the Final Subsequent Environmental Impact Report (SCH No. 2000031092) dated October 2010 indicate that no recent evidence of migration and spawning of steelhead has been observed in the slough. However, the EIR documents also indicate that individual steelhead have been observed in Maria Ygnacio Creek (an upstream tributary). The Goleta Slough and its tributaries were designated as Critical Habitat on September 2, 2005 as part of the South Coast Hydrology Unity. (FSEIR, October 2010) As such, the project area may potentially contain steelhead migrating upstream in search of spawning habitat which may be adversely affected by the proposed dredging activities. The potential occurrence of steelhead within the project reach is expected to be rare, and would generally consist of migrating fish. Migration occurs during high flow periods, typically in the late fall/winter when adults enter from the ocean and in early spring when smolts leave for the ocean. (FSEIR, October 2010). The Final Subsequent EIR dated October 2010 states:

Measures from the 2000 Supplemental EIR were adopted to mitigate impacts to steelhead migration, including conducting hydraulic dredging earlier in the year, and restricting hydraulic dredging when the flow rate exceeds 20 cubic feet per second at the Maria Ygnacio Creek stream gauge, and limiting drag-line desilting to 10 hours per day. Based on data from the Maria Ygnacio Creek stream gauge, the peak annual flow is typically several hundred cfs. Steelhead migration would be entirely unimpeded during high flow periods (hydraulic desilting), or limited to off-work hours (drag-line desilting). Steelhead are unlikely to feed in the Goleta Slough and would avoid active desilting areas. Therefore significant water quality and foraging impacts to steelhead are not anticipated.

As noted above, the proposed project has the potential to result in adverse effects to steelhead (a federally listed endangered species) if the proposed dredging and slough mouth activities occur while adult steelhead are migrating or when steelhead smolts are rearing in the slough. Migration occurs during high flow periods, typically in the fall/early winter when adults enter from the ocean and in early spring when smolts leave for the ocean. Smolts spend several weeks or months in sloughs/estuaries before emigrating to the ocean. The proposed dredging activities may occur between September 15 and March 1 of any given year during the project period and may, therefore, result in potential adverse effects to adult and juvenile steelhead.

The Final Subsequent EIR indicates that steelhead are not expected to be actively migrating upstream during the fall and winter season if the stream is not flowing at an adequate rate. The County has further indicated that steelhead are not expected to occur within the project area if streamflows are less than 10 cubic feet per second (cfs). In order to minimize potential adverse effects to steelhead from the proposed project, the County is proposing to limit dredging operations to no more than 10 hours/day in the event that streamflow velocity within Maria Ygnacio Creek (a tributary of Atascadero Creek where steelhead trout have been found) is between 10 and 30 cfs. In the event that streamflow velocities exceed 30 cfs, then dredging operations shall cease in order to minimize potential impacts to steelhead migrating during increased flow events. Therefore, in order to ensure implementation of the proposed timing limitations for dredging/desilting activities and to minimize potential adverse effect to steelhead, **Special Condition One (1)** requires that dredging and desilting/excavation operations shall be limited to no more than 10 hours/day in the event that streamflow velocity within Maria Ygnacio Creek are between 10 and 30 cfs. In the event that streamflow velocities exceed 30 cfs, then dredging and desilting/excavation operations shall cease until streamflow velocities decrease to less than 30 cfs. In addition, **Special Condition One (1)** also provides that dragline desilting/excavation shall occur only during the period between September 15 and March 1, unless additional time is granted by the Executive Director for good cause. Hydraulic dredging operations and any sediment disposal/beach replenishment (surfzone only) activities shall occur only during the period between October 15 and March 1, unless additional time is granted by the Executive Director for good cause. These timing restrictions on the period of time that dredging/desilting operations may occur will ensure that these activities will not occur during the breeding season for any sensitive bird or fish species and that surfzone disposal would occur during the appropriate times of year when ocean turbidity is expected to occur naturally due to stormwater runoff.

Tidewater Goby (*Eucyclogobius newberryi*)

The Tidewater goby was listed as an endangered species by USFWS in 1994 and critical habitat was re-designated in 2008, which did not include Goleta Slough or its tributaries. Tidewater goby was listed as extirpated from the Goleta Slough in the Recovery Plan for the species. Surveys of San Jose Creek and San Pedro Creek in August 2008 did not detect tidewater goby. However, recent protocol surveys indicate that this species occurs in Los Carneros Creek, Tecolotito Creek, and Atascadero Creek. (FSEIR, October 2010). The Final Subsequent EIR states that goby mortality may occur as a result of starvation caused by dredging-related degradation of foraging habitat and, in addition, mortality may occur as a result of direct contact with dredging equipment and entrainment.

Further the EIR states that, although dredging/desilting activities would avoid periods of high population density (March-June), mortality is considered a significant and unavoidable impact. The October 2010 SEIR recommends a mitigation measure that would leave a 10 foot-wide strip of streambed along one edge of Atascadero Creek undisturbed from the dragline or hydraulic dredge in order to minimize impacts to fish species, including goby and steelhead. Thus, in order to ensure this measure is adequately implemented in a manner that will avoid or minimize potential adverse impacts to sensitive fish species, **Special Condition Two (2)** also requires the applicant to maintain a 10 foot-wide buffer strip along one edge of creek and slough banks during hydraulic and dragline dredging operations in Atascadero Creek and Goleta Slough to allow a refuge area to minimize adverse impacts to both goby and Steelhead trout.

Slough Mouth Opening

In addition, the proposed project also includes periodic breaching of the mouth of Goleta Slough on as needed basis. The slough mouth has been historically breached by the applicant approximately 1-3 times/year using a bulldozer to create a trench from the slough to the ocean. In the past, the trench has varied in length depending on the width of the beach, but is typically 200 ft. long by 40 ft. wide. Approximately 1,000 cu. yds. of sand has been pushed up out of the trench onto the beach. The Santa Barbara County Flood Control District has indicated that the proposed breaching of the slough mouth is necessary in order to both maintain water quality within the slough (in order to prevent fish kill due to oxygen depletion) and prevent flooding of the Santa Barbara City Airport and other residentially and commercially developed properties within the area. The County has indicated that the airport, which was constructed on an artificial fill pad within the slough, would be subject to potential flooding due to rising water levels within the slough prior to natural breaching of the slough during the winter storm season.

The County asserts that breaching the mouth of the slough is necessary to maintain adequate water quality within the slough and is not expected to result in adverse impacts to sensitive fish species. The Biological Analysis prepared by County staff dated 8/10/05 states:

*There are relatively few impacts associated with breaching the slough mouth. There is the possibility of small estuarine fish such as killifish or various species of gobies being entrained in the flow going out when the actual breach occurs. This is expected to involve at most a small number of individuals since the higher speed flow is localized and short lived. There are no Tidewater gobies *Eucyclogobius newberryi* (1993 Swift, 1996 Santa Barbara County P&D Energy Department), in the estuary so there would not be an adverse impact on that species. The sand that is pushed aside as part of the breaching has almost no fauna such as clams and of course there is no flora at the site where the breaching is done.*

In past permit actions, the Commission has found that artificially breaching estuaries may result in potential significant adverse effects to tidewater goby that are unable to resist the increased tidal action and are subsequently swept out to sea. The Commission's biologist, Dr. John Dixon, has indicated that, although artificially breaching particular estuaries may result in some potential adverse effects to marine habitat and certain fish species in other wetland areas (particularly smaller stream estuaries) in the case of Goleta Slough (a historic deepwater area) such breaching is necessary in order to maintain adequate water quality and wetland habitat. As such, the Commission finds that the proposed project is necessary in order to prevent flooding of existing development and to maintain wetland habitat and water quality within Goleta Slough. In addition, the Commission finds that alteration of streambeds, as proposed by this project, is consistent with Section 30236 of the Coastal Act when required for flood control projects to protect public safety or existing development and when adverse effects have been mitigated to the maximum extent feasible.

Thus, although periodic breaching of the slough may be necessary to prevent flooding of the adjacent developed upland areas, the Commission has found, in previous permit actions, that breaching may also result in potential adverse impacts to sensitive fish species, such as goby and steelhead trout. Thus, in order to avoid or minimize adverse impacts to sensitive fish species, **Special Condition Nine (9)** requires the Santa Barbara County Flood Control District, prior to issuance of the coastal development permit, to submit to the Executive Director for review and written approval, a plan for periodic opening of the Goleta Slough Mouth. The plan shall specify the following: Goleta Slough water surface elevation, time of year, weather conditions, and any other criteria that would trigger the necessity for Slough Mouth opening (not more than 3 times per year) in order to prevent flooding of existing facilities and developed areas; method for breaching (type of equipment, access route, trench/notching dimensions and elevations, etc.) and site plan showing approximate breach locations; method and timing of biological surveys prior to slough mouth opening, and a description of biological resource avoidance procedures and mitigation measures to minimize all potential adverse impacts to sensitive species within and near the slough, including but not limited to tidewater goby and steelhead. In addition, to avoid the adverse impact of steelhead smolts prematurely emigrating to the ocean, **Special Condition Nine (9)** also requires artificial breaching of the slough to occur to the greatest extent possible during the timeframe when the slough mouth would typically be open (late fall/winter). The only exception to this would be when existing facilities and development are in imminent danger of flooding or when fish kills are likely due to excessive eutrophication.

In addition, the Commission finds that the proposed flood control project will result in some potential adverse effects to surrounding habitat due to unintentional disturbance from construction equipment and dredging activity. Therefore, to ensure that any potential adverse effects to sensitive riparian habitat, wetlands, and beach environment are minimized during actual dredging activities, **Special Condition Six (6)** requires that a qualified biologist or environmental resource specialist shall conduct a survey of the project site each day prior to commencement of any dredging or surfzone disposal activities to determine whether any sensitive wildlife species are present. In the event that any sensitive wildlife species are present on the project site (including but not limited to western snowy plover, Belding's savannah sparrow, California grunion, steelhead trout) exhibit reproductive or nesting behavior, the environmental specialist shall require the applicant to cease work, and shall immediately notify

the Executive Director and local resource agencies. Project activities shall resume only upon written approval of the Executive Director. The monitor(s) shall require the applicant to cease work should any breach in permit compliance occur or if any unforeseen sensitive habitat issues arise. The monitor(s) shall immediately notify the Executive Director if activities outside of the scope of this coastal development permit. If significant impacts or damage occur to sensitive wildlife species, the applicant shall be required to submit a revised, or supplemental program to adequately mitigate such impacts. The revised, or supplemental, program shall be processed as an amendment to this coastal development permit.

California Grunion (*Leuresthes tenuis*)

Additionally, the sandy beach on the subject site has been identified as a potential grunion spawning location. Sediment disposal/beach nourishment activities are not proposed to occur within the seasonally predicted run period and egg incubation period of the California grunion. However, the Commission finds that any potential disposal of large quantities of sediment into the surfzone may result in adverse effects to grunion due to direct disturbance by construction activity and use of heavy equipment on the sandy beach as well as indirect impacts from smothering of eggs previously deposited on the sandy beach. Therefore, in order to ensure that any potential adverse effects to grunion are avoided, **Special Conditions One (1) and Six (6)** prohibit any sediment disposal/beach nourishment activities from occurring on any part of the beach and shorefront in the project area when California grunion (of any life stage, including eggs) are present during any run periods and corresponding egg incubation periods. Further, in order to ensure that adverse impacts to the above referenced sensitive species are avoided, **Special Condition Six (6)** also requires a qualified biological monitor to be present during all project activities. The monitor shall have the authority to cease operations should any breach in permit compliance occur or if any unforeseen sensitive habitat issues arise. If significant impacts or damage occur to sensitive wildlife species, the applicant shall be required to submit a revised, or supplemental program to adequately mitigate such impacts. The revised, or supplemental, program shall be processed as an amendment to this coastal development permit.

Sediment Analysis

In addition, the applicant has submitted information that previous testing by County staff of dredged/excavated material from the subject creeks that was carried out over the past 17 years pursuant to the three previous coastal permits issued by the Commission determined that those sediments met federal and state beach nourishment and spoil discharge criteria, including physical and chemical testing. However, the Commission finds that because this project is proposed over a five year period of time and that water and sediment quality in creeks may change over time due to changed conditions resulting from new upstream development or potential new non-point source pollution impacts, that continued testing of all excavated material to determine suitability for beach deposition is necessary to minimize potential adverse impacts to the marine environment. Therefore, in order to ensure the long-term protection of marine resources, **Special Conditions Two (2), Four (4), and Six (6)** require that all excavated/dredged material meet federal and state beach nourishment and spoil discharge criteria, including physical and chemical testing as described in Special Condition Four (4) prior to surfzone disposal. Additionally, **Special Condition Seven (7)** requires pre- and post-construction monitoring of the shoreline project areas, including beach width and sand volume changes.

Further, the placement of source material on the beach is expected to result in increased turbidity at the deposition site. Temporary increases in turbidity and suspended solids decrease light penetration, causing a decline in primary productivity due to decreased photosynthesis by phytoplankton and may result in adverse impacts to marine organisms. Specifically, any appreciable turbidity increase may also cause clogging of gills and feeding apparatuses of fish and filter feeders. Turbidity impacts are anticipated to have the maximum concentrations generally restricted to the lower water column, and decreasing rapidly with distance due to settling and dilution. However, the impacts of surfzone and beach fill placement activities (i.e., increased turbidity, sedimentation, dissolved oxygen reduction, burial of organisms) are expected to be relatively localized in nature and mobile organisms would likely relocate to an undisturbed area. Following deposition activities, organisms are expected to recolonize previously disturbed areas.

As such, impacts from sediment re-suspension caused by the project are anticipated to be short-term in duration. In addition, the proposed deposition site is located in an area that is considered to have naturally high levels of turbidity due to high wave energy and creek outfall, particularly during the winter season when operations would take place. Regardless, in order to avoid or minimize potential adverse impacts due to marine organisms to the maximum extent feasible, **Special Condition One (1)** provides that dragline desilting/excavation shall occur only during the period between September 15 and March 1, unless additional time is granted by the Executive Director for good cause. Hydraulic dredging operations and any sediment disposal/beach replenishment (surfzone only) activities shall occur only during the period between October 15 and March 1, unless additional time is granted by the Executive Director for good cause. These timing restrictions on the period of time that dredging/desilting operations may occur will ensure that these activities will not occur during the breeding season for any sensitive bird or fish species and that surfzone disposal would occur during the appropriate times of year when ocean turbidity is expected to occur naturally due to stormwater runoff.

In addition, **Special Condition Six (6)** requires a qualified biologist or resource specialist to monitor turbidity during all project construction activities to ensure that this critical information regarding potential impacts to marine resources is recorded and reported to the Executive Director for consideration of future project approvals. The qualified biologist or environmental resource specialist is required to visually monitor and document the turbidity of coastal waters during all surfzone disposal activities. The extent and duration of turbidity plumes shall be recorded and mapped by the monitor during each day of disposal activities. If the turbidity plume is observed to reach kelp beds or eelgrass beds (east of Goleta Pier, off Goleta Point) surfzone disposal shall be terminated until the turbidity plume has dissipated. In addition, the qualified biologist or environmental resource specialist is required to utilize a secchi disk at several sites along the length of Goleta pier prior to sediment disposal operations, during sediment disposal operations, and immediately after sediment disposal operations to establish ambient levels of turbidity prior to commencement of development and to document turbidity during project activities. If significant levels of turbidity above ambient levels lasts more than three (3) consecutive days, then the rate of disposal is required to be reduced so that large, long lasting turbidity plumes are no longer created. After all surfzone disposal operations have ceased, the applicant is required to monitor and document the extent and duration of any lasting turbidity

plume. The final results of all turbidity monitoring is required to be reported to the Commission within 60 days following each annual creek dredging and disposal operation, as part of the post-operation submittal required by **Special Condition Six (6)**.

The composition (i.e., grain size) of the deposition material can also affect the marine environment. For instance, material with higher fine-grained material content will contribute to higher rates of turbidity (see above discussion of turbidity impacts) and will have higher likelihood of containing contaminants. In general, the higher the amount of coarse grained sand, the lower the turbidity and associated risks to offshore resources and productivity. As a result, the grain-size of the material is an important design characteristic of the project. Therefore, in order to ensure that biological productivity of coastal waters and the offshore environment is maintained, the Commission finds that a maximum of 25% fine-grained material shall be placed at any of the deposition sites, as provided in **Special Condition Four (4)**. This percentage of fine-grained material would be consistent with past Commission action in its approval of previous beach nourishment projects for Goleta Beach, including the Commission's approval of CDP 4-02-074 (BEACON), CDP 4-05-139, and CDP 4-09-068.

Further, in order to ensure that only appropriate material is deposited within the surfzone and marine environment, **Special Condition Four (4)** also addresses the placement of course-grained material at the deposition sites. Using the Wentworth Classification, cobble-sized material or larger (>64 mm; approx. = 2.5 in) shall not be placed at the deposition site at anytime. Although it is recognized that there may be occasional deposits of course grained material that is gravel or pebble-sized material (2 mm – 64 mm), **Special Condition Three (3)** requires that of the coarse grained material (retained on a Standard U.S. Sieve Size No. 200), no more than 0.5 percent shall consist of gravel or pebble-sized material. To achieve the desired gradation of material, the source may be screened out or mechanically sorted, or alternately, the source shall not be deposited at the site.

Debris such as trash, wood, or vegetation could also be present within the source material, especially material generated from flood control debris basins and creek dredging when dragline excavation is utilized. Screening may be performed by mechanically sifting the material through a coarse mesh to catch debris at the site, using conventional earthmoving equipment. To ensure that only material appropriate for beach nourishment is deposited within the surfzone and marine environment, **Special Condition Seven (7)** requires an on-site monitor, with qualifications acceptable to the Executive Director, to be present during all deposition operations to assess grain size and debris content. The monitor shall, through grab samples, visual inspection or other methods, ensure that the delivered material is within the acceptable size ranges for nourishment material. If the material is not sand or is not within the acceptable size range, the monitor shall halt the placement of sand on the beach. The monitor shall also examine the material to determine presence of debris. Prior to resuming operations, all debris shall be removed to the maximum feasible extent.

Further, the Commission notes that the applicant is requesting to place a significant volume of sediment within the surfzone at Goleta Beach on an annual basis, from 20,000 up to 200,000 cu. yds. per year. The only other active permit for deposition of material at Goleta Beach is CDP 4-09-068. CDP 4-09-068, approved by the Commission on March 10, 2010, authorizes the Santa Barbara County Flood Control District to implement an annual dredging program for a 1.4 mile

reach of Atascadero Creek that will include removal of 2,000–30,000 cu. yds of sediment on an as-needed basis and potential placement of suitable excavated material in the surfzone at Goleta Beach County Park. The amount of material to be placed in the surfzone is consistent with the amount of material previously authorized by the Commission for surfzone disposal at Goleta Beach in the previous permit actions.

In order to ensure that the cumulative effects of the development authorized by this permit and by other previously approved coastal permits for similar beach nourishment projects at the project site are not inadvertently greater than have been analyzed separately under any single application, **Special Condition Two (2)** limits the total amount of sediment/beach replenishment material that is deposited at Goleta Beach from all sediment disposal/beach replenishment projects (including, but not limited to, all deposition activities implemented pursuant to Coastal Development Permits 4-09-068) to no more than 200,000 cu. yds. of sediment/year. The applicant shall be responsible for coordinating with all other potential sediment disposal/beach replenishment projects at Goleta Beach. If material is placed at Goleta Beach as part of any other beach replenishment project, then the applicant shall limit the amount of material placed at Goleta Beach pursuant to this permit to ensure that no more than 200,000 cu. yds. of material is deposited at Goleta Beach during any given year for the life of this project. The placement of additional quantities of material greater than 200,000 cu. yds. at Goleta Beach during any given year will require an amendment to this coastal development permit.

Further, to address any potential biological impacts, **Special Condition Eight (8)** requires the applicant to implement a Long-term Biological Monitoring Program. The program shall include slough and beach infauna, eelgrass and kelp bed and surfgrass/rocky intertidal bi-annual monitoring. Reference sites for all habitats shall be established to increase the potential for the monitoring program to detect project impacts. The monitoring program should be designed to have the capability to detect a difference between the sites within the expected reach of the project's effects (impact sites) and the reference sites of at least 20%. In order to avoid the mistake of determining that there is no difference between the impact and reference sites when in fact there is a difference (known as Type II error), a priori power analyses for the respective habitat monitoring designs must be performed and included as a component of the long-term biological monitoring plan. In the event that the a priori analysis indicates that revisions to the sampling protocols are necessary to adequately assess the effects of the project, then the applicant shall revise the respective habitat sampling protocols as necessary. The monitoring program shall specifically identify the criteria that would indicate the program's effectiveness/success in avoiding adverse impacts to biological resources. The criteria shall be specific enough to provide a mechanism to determine when/how a project results in adverse impacts to biological resources at each site and a mechanism for making adjustments to future replenishment projects.

After the most recent sediment disposal/beach nourishment activities at Goleta Beach (Winter/Spring 2011), some members of the public raised concerns about beach nourishment operations at Goleta Beach, including the dark brown/black muddy color of the deposited material, the extent of beach area occupied during nourishment activities, and the high amount of turbidity offshore. In response, Commission staff confirmed that a hard pan soil layer had formed on the west end of Goleta Beach, which apparently resulted due to the unintended retention of sediment on the sandy beach. Therefore, to ensure that adverse

impacts to the sandy beach environment from surfzone sediment disposal operations are avoided or minimized to the maximum extent feasible, **Special Condition Two (2)** requires that all construction operations on the beach, including operation of heavy equipment and material placement in surfzone, shall be limited the minimum footprint (maximum 130 ft. in width or less) necessary for surfzone disposal. (Exhibit 7). All suitable dredged material is required to be placed only in the surfzone such that no dredged material is left on the natural beach. At the completion of the surfzone disposal operations, the project footprint area on the beach is required to be decompacted/ripped and replaced to the *approximate* previously existing natural beach topography and compaction ratio in order to restore the dynamic shoreline habitat and to facilitate recreational use, consistent with the timing constraints listed in **Special Condition One (1)**.

Additionally, **Special Condition Two (2)** requires that, for hydraulic dredging, the slurry discharge pipeline shall follow a single route across the beach to reach the surfzone and shall not be moved more than 50 ft. upcoast or downcoast in order to minimize beach disturbance. The discharge pipeline shall be placed in the active surfzone to assure that no dredged material is discharged onto the beach. All sediment disposal/beach nourishment operations (including disposal pipeline route, vehicle access route, or equipment corridor) shall be implemented in a manner that will minimize disturbance of the wrack zone, the coastal strand and dune zones and other intertidal areas. Prior to the commencement of any sediment disposal/beach nourishment operations, wrack within the project reach shall be collected, separated, and retained, to the maximum extent feasible, in areas where discharge operations will result in the loss or disturbance of wrack. Wrack and under wrack deposits shall be placed at the appropriate tidal level in an adjacent area that will not be impacted by project activities.

The riparian, wetland, and marine environment would also be subject to potential adverse impacts as a result of project activities if sediment, debris, or chemicals with hazardous properties are unintentionally released during dredging/disposal activities. Therefore, to ensure that construction material, debris, or other waste associated with project activities does not enter the water, the Commission finds **Special Condition Two (2)** is necessary to define the applicant's responsibility ensure proper disposal of solid debris and material unsuitable for placement into the marine environment. As provided by **Special Condition Two (2)**, it is the applicant's responsibility to ensure that no construction materials, debris or other waste is placed or stored where it could be subject to wave erosion and dispersion. Furthermore, **Special Condition Two (2)** assigns responsibility to the applicant that any and all construction debris, sediment, or trash shall be properly contained and removed from construction areas within 24 hours. Further, construction equipment shall not be cleaned on the beach or in the beach parking lots.

The Commission finds that the proposed project, as conditioned, will serve to minimize adverse effects to existing habitat and wildlife resources on site while meeting necessary flood control requirements. However, the Commission also finds that the marine, beach, riparian, and wetland habitats on site are subject to potential changes over time as new species migrate into the area or as potential unidentified impacts from the proposed dredging operation may be discovered over time. Therefore, in order to ensure that any potential changed circumstances which may be discovered at some future point in time, such as new information regarding sensitive habitat and wildlife resources on site or new impacts from the dredging project, are considered, Special

Condition Twelve (12) specifically limits the duration of all activities approved by this permit (including dredging, breaching, and sediment disposal) to a period of no more than five (5) years from the date of Commission action, after which time this permit shall expire. Any dredging, breaching, or surfzone disposal activities after the expiration of this permit will require the issuance of a new coastal development permit.

In addition, the proposed project will involve work within streams, wetland areas, and tidally influenced portions of the sandy beach and will also require approval from the United States Army Corps of Engineers, California State Lands Commission, California Department of Fish and Game, and the Regional Water Quality Control Board. Therefore, **Special Condition Eleven (11)** requires the applicant obtain all other necessary State or Federal permits that may be necessary for all aspects of the proposed project.

Therefore, the Commission finds that the proposed project, as conditioned, is consistent with Sections 30230, 30231, 30236, and 30240 of the Coastal Act.

C. HAZARDS AND SHORELINE PROCESSES

Section **30253** of the Coastal Act states in part that 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 natural landforms along bluffs and cliffs.*

Section 30253 of the Coastal Act mandates that new development minimize risks to life and property in areas of high geologic, flood, and fire hazard. The purpose of the proposed creek dredging program is to maintain the flood water carrying capacity in Atascadero Creek to reduce the likelihood of flood damage to adjacent residential areas, including the Santa Barbara City Airport. The proposed project will involve two potential methods of sediment removal: hydraulic dredging and dragline dredging.

Hydraulic dredging is proposed as the primary method of sediment removal and involves floating a dredge within the creeks to be dredged. A 10-12 inch diameter polyurethane discharge pipeline is floated in the channels behind the dredge to transport dredged material to Goleta Beach for disposal within the surfzone. In some areas, the discharge pipeline will be located on land as necessary where floating is not feasible. In order to ensure that all excavated material is suitable for surfzone/beach disposal, **Special Condition Four (4)** requires that prior to any excavation/dredging activity, the applicant shall submit a suitability analysis, for the review and approval of the Executive Director, of the sediment within the creek to be removed to determine its suitability for surfzone disposal/nourishment. In addition, **Special Condition Four (4)** requires the excavated/dredged material, prior to surfzone disposal, meet federal and state beach nourishment and spoil discharge criteria, including physical and chemical testing.

Sediments may also be removed from the creeks by the dragline desilting/excavation method. Dragline desilting/excavation involves operation of a crane rigged as a dragline (bucket scoop) from the adjacent creek banks. Removed sediments will be stockpiled adjacent to the creek approximately 30 to 100 ft. in distance from the top of the bank. However, the Commission finds that excavated materials that are placed in stockpiles are subject to increased erosion and potential adverse effects to adjacent streams and wetland areas from resedimentation and increased turbidity. The Commission also finds that additional landform alteration would result if the excavated material were to be retained on site. Therefore, in order to ensure that excavated material will not be permanently stockpiled on site and that erosion and resedimentation of the streams on site are minimized during any temporary stockpiling activities, **Special Condition Three (3)** also requires any stockpiled materials shall be located as far from the stream or wetland areas on site as feasible and in no event shall materials be stockpiled less than 30 ft. in distance from the top edge of the stream bank. Temporary erosion control measures (such as sand bag barriers, silt fencing; swales, etc.) shall be implemented in the event that temporary stockpiling of material is required. These temporary erosion control measures shall be monitored and maintained until all stockpiled fill has been removed from the project site. Permanent stockpiling of material on site shall not be allowed. The applicant shall provide evidence to the Executive Director of the location of the permanent disposal site for all excavated material prior to removal of the material from the project site. Should the dump site be located in the Coastal Zone, a coastal development permit shall be required.

Further, the Commission finds that the applicant is requesting to place a significant volume of sediment within the surfzone at Goleta Beach on an annual basis, from 20,000 up to 200,000 cu. yds. per year. The only other active permit for deposition of material at Goleta Beach is CDP 4-09-068. CDP 4-09-068, approved by the Commission on March 10, 2010, authorizes the Santa Barbara County Flood Control District to implement an annual dredging program for a 1.4 mile reach of Atascadero Creek that will include removal of 2,000–30,000 cu. yds of sediment on an as-needed basis and potential placement of suitable excavated material in the surfzone at Goleta Beach County Park. The amount of material to be placed in the surfzone is consistent with the amount of material previously authorized by the Commission for surfzone disposal at Goleta Beach in the previous permit actions.

In order to ensure that the cumulative effects of the development authorized by this permit and by other previously approved coastal permits for similar beach nourishment projects at the project site are not inadvertently greater than have been analyzed separately under any single application, **Special Condition Two (2)** limits the total amount of sediment/beach replenishment material that is deposited at Goleta Beach from all sediment disposal/beach replenishment projects (including, but not limited to, all deposition activities implemented pursuant to Coastal Development Permits 4-09-068) to no more than 200,000 cu. yds. of sediment/year. The applicant shall be responsible for coordinating with all other potential sediment disposal/nourishment projects at Goleta Beach. If material is placed at Goleta Beach as part of any other nourishment project, then the applicant shall limit the amount of material placed at Goleta Beach pursuant to this permit to ensure that no more than 200,000 cu. yds. of material is deposited at Goleta Beach during any given year for the life of this project. The placement of additional quantities of material greater than 200,000 cu. yds. at Goleta Beach during any given year will require an amendment to this coastal development permit.

To address potential cumulative impacts, **Special Condition Seven (7)** requires the implementation of a Long-term Shoreline Monitoring Program to analyze changes to beach profiles, sand width, and volume in relation to the volume and location of deposition activities. In the past, to avoid duplication of efforts, the program has been prepared in coordination with similar reports prepared by BEACON and by Santa Barbara County to satisfy the required conditions of approval of other related projects at the subject site (including the requirements of CDP 4-09-068). The Shoreline Monitoring Program requires information regarding the success of the placement activities in relation to maintaining public access, including any complaints that may have been received. The results of the monitoring are required to be submitted to the Executive Director on an annual basis, with conclusions regarding the level of success of the annual sand replenishment project(s). The report is required to include a brief history of the previous years' effort, if any, and required to include photographs taken from pre-designated sites (annotated to a copy of the site plans) to track changes in shoreline conditions.

In addition, the Commission notes, based on the information submitted by Santa Barbara County Flood Control District, that the proposed development is located in an area of the Coastal Zone which has been identified as subject to potential hazards from flooding. The applicant has indicated that the developed areas adjacent to the project site, such as the airport and nearby residential development (which are located within the identified flood plain) may be subject to seasonal flood events during the winter storm season. As such, the Commission notes that evidence exists that the project site is subject to potential risks due to storm waves and surges, high surf conditions, erosion, and flooding.

The Commission further notes that although the proposed development is intended as a flood control project and will serve to reduce the potential for flooding of the developed areas immediately upland of the project site, there remains some inherent risk to any flood control projects. The Coastal Act recognizes that certain types of development, such as the proposed project, may involve the taking of some risk. Coastal Act policies require the Commission to establish the appropriate degree of risk acceptable for the proposed development and to determine who should assume the risk. When development in areas of identified hazards is proposed, the Commission considers the hazard associated with the project site and the potential cost to the public, as well as the individual's right to use his property. As such, the Commission finds that due to the unforeseen possibility of storm waves, surges, erosion, and flooding, the applicant shall assume these risks as a condition of approval. Therefore, Special Condition Ten (10) requires the applicant to waive any claim of liability against the Commission for damage to life or property which may occur as a result of the permitted development. Further, Special Condition Thirteen (13) requires indemnification by the applicant. Coastal Act section 30620(c)(1) authorizes the Commission to require applicants to reimburse the Commission for expenses incurred in processing CDP applications. (See also 14 C.C.R. § 13055(e)). Thus, the Commission is authorized to require reimbursement for expenses incurred in defending its action on the pending CDP application. Therefore, consistent with Section 30620(c), the Commission imposes Special Condition Thirteen (13), requiring reimbursement of any costs and attorneys fees the Commission incurs "in connection with the defense of any action brought by a party other than the Applicant/Permittee challenging the approval or issuance of this permit."

Therefore, the Commission finds that the proposed project, as conditioned, is consistent with Coastal Act Section 30253.

D. PUBLIC ACCESS AND VISUAL RESOURCES

Coastal Act Section **30210** states that:

In carrying out the requirement of Section 4 of Article X of the California Constitution, maximum access, which shall be conspicuously posted, and recreational opportunities shall be provided for all the people consistent with public safety needs and the need to protect public rights, rights of private property owners, and natural resource areas from overuse.

Coastal Act Section **30211** states:

Development shall not interfere with the public's right of access to the sea where acquired through use or legislative authorization, including, but not limited to, the use of dry sand and rocky coastal beaches to the first line of terrestrial vegetation.

In addition, Section **30251** of the Coastal Act states that:

The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas such as those designated in the California Coastline Preservation and Recreation Plan prepared by the Department of Parks and Recreation and by local government shall be subordinated to the character of its setting.

Coastal Act sections 30210 and 30211 mandate that maximum public access and recreational opportunities be provided and that development not interfere with the public's right to access the coast. In addition, Coastal Act Section 30251 requires that visual qualities of coastal areas shall be considered and protected, landform alteration shall be minimized, and where feasible, degraded areas shall be enhanced and restored.

The proposed project will be located adjacent to and within public recreational areas including Goleta Beach County Park and the Atascadero Creek Bikeway system. Public bicycle/pedestrian trails are located adjacent to several of the creeks where dredging will occur and public access is available along the entire length of Goleta Beach where sediment disposal/beach nourishment activities will occur.

Public access along the sandy beach is available along the entire approximately 4/5 mile length of Goleta Beach County Park. The County has indicated that during calendar years 1998 and 1999, the park received 1,766,305 and 1,580,933 visitors, respectively. The period of heaviest use is from July through September (38 percent), followed by the period from April through June (22 percent). Twenty-one percent of visitors use the park from October through December and 18 percent use the park from January through March.

The proposed project includes disposal of excavated sediments within the surfzone at Goleta Beach. The Commission notes that disposal of the excavated sediments within the surfzone is intended to, in part, function as part of a regional beach nourishment program. Beach nourishment programs serve to enhance public recreational activities along the coast by creating

wider sandy beach areas available for public access. In addition, beach nourishment activities also provide some additional protection to beachfront development (including the public facilities located on site at Goleta Beach County Park) due to creation of a wider beach which, in turn, allows for greater dissipation of wave energy to occur.

However, beach nourishment activities also result in some temporary adverse effects to public access including closure of portions of the beach to public use during nourishment activities. Sediment dredged from the slough is expected to contain significantly higher levels of bacteria (including fecal coli form) and organic matter than beach sand. Operation of the dredge outlet pipe in the surfzone could have safety impacts to nearby swimmers and waders due to elevated levels of fecal coli form bacteria. The degradation of water quality would be localized and short-term in nature. To avoid potential safety impacts to beach users, the portion of the beach and water within 200 feet of the mouth of the dredge pipe will be closed to public access for the duration of the dredging. Advisories will be posted on site by the County advising beachgoers of the potential elevated levels of fecal coli form in ocean waters during dredging activities.

As a result of the extensive public use of each site combined with the intrusive nature of the deposition activities, public access will be temporarily impeded by the proposed project and will result in some adverse effects to the public's ability to access the sandy beach since beachgoers would be required to avoid the nourishment areas during placement and grading, as well as staging areas. Though deposition activities within the project site would temporarily displace beach area for public use, the remainder of the surrounding beach area would be available for public access. Under no circumstances would the entire beach be off-limits to the public. The proposed dredging activities will also result in some potential temporary disruption to the public's ability to use the bicycle/pedestrian trails on site resulting from construction vehicles crossing the bicycle path during dredging operations.

In addition, the Commission notes that the desilting/dredging activities are proposed during the fall and winter months when visitor-use of Goleta Beach County Park is lowest. The Commission also notes that closure of portions of the beach to public use during spring and summer months (during maximum visitor-use of the park) would result in significant impediment to the public's ability to fully utilize the public beach areas on site. In order to ensure that the applicant's proposal to limit the duration of the proposed dredging project is implemented and to ensure that adverse effect to public access and recreation are minimized, Special Condition One (1) limits operation staging, equipment mobilization (in areas other than on the beach), and dragline desilting/excavation to the period between September 15 and March 1 and hydraulic dredging operations and sediment disposal/beach replenishment activities will occur only during the period between October 15 and March 1, unless additional time is granted by the Executive Director for good cause. Dredging activities may occur on less than an annual basis depending on the quantity of sediments present and the necessity for removal. **Special Condition One (1)** also specifically requires that all deposition operations, including any restrictions on public access, be prohibited on any part of the beach and shorefront in the project area from the Friday prior to Memorial Day in May through Labor Day in September to avoid impact on peak public recreational use of the beach.

Furthermore, though the winter and early spring season is the appropriate time of year to implement project activities, given the mild climate, each of these sites are still expected to

attract extensive public visitorship on any given weekend. Since Goleta beach is subject to higher levels of public use during weekends, sediment disposal/placement activities during these times would result in significant adverse impacts to public access. Therefore, to ensure that maximum access is maintained for the public in the project area consistent with Coastal Act Section 30210, **Special Condition One (1)** requires that all construction operations, including any restrictions on public access, be prohibited on any part of the beach and shoreline in the project area on Saturdays and Sundays, thereby removing the potential for construction-related disturbances to conflict with weekend visitor activities. In this way, scheduling operations outside of peak recreational times will serve to minimize potential impacts on public access.

Furthermore, to ensure the safety of recreational users of the project site and to ensure that the interruption to public access of the project site is minimized, the Commission requires the applicant to submit a public access plan, pursuant to **Special Condition Five (5)**, to the Executive Director for review and approval. Special Condition Five (5) requires a description of the methods (including signs, fencing, posting or security guards, etc.) by which safe public access to and around the receiver site shall be maintained during and after beach deposition activities. Where use of public parking spaces is unavoidable, the minimum number of public parking spaces (on and off-street) that are required at each receiver site for the staging of equipment, machinery and employee parking shall be used.

Therefore, the Commission finds that the proposed project, as conditioned, is consistent with Sections 30210, 30211, and 30251 of the Coastal Act.

E. ARCHAEOLOGICAL RESOURCES

Coastal Act Section 30244 of the Coastal Act states that:

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

Archaeological resources are significant to an understanding of cultural, environmental, biological, and geological history. The coastal act requires the protection of such resources to reduce the potential adverse impacts through the use of reasonable mitigation measures. Degradation of archaeological resources can occur if a project is not properly monitored and managed during earth moving activities and construction. Site preparation can disturb and/or obliterate archaeological materials to such an extent that the information that could have been derived would be permanently lost. In the past, numerous archaeological sites have been destroyed or damaged as a result of development. As a result, the remaining sites, even though often less rich in materials, have become increasingly valuable as a resource. Further, because archaeological sites, if studied collectively, may provide information on subsistence and settlement patterns, the loss of individual sites can reduce the scientific value of the sites which remain intact.

The vicinity of the project area is known to have several archeological and cultural resource sites. Santa Barbara County was home to the Barbareno Chumash for over 9,000 years. The applicant has submitted a report titled "Archeological Surface Survey and Updated Records

Search for the Goleta Slough Flood Control Dredging Project,” prepared by Heritage Discoveries, Inc., dated July 28, 2009. The history of the Goleta Slough and tributaries is extensive. The ethnohistoric Chumash village of *Helo’* (“Mescalitan Island”) occupied the landform adjacent to San Pedro Creek on which the Goleta Sanitary District Wastewater Treatment Plant is now situated. Records indicate that portions of Goleta Slough were used as a shipyard, a whaling camp, and then eventually developed in 1928 and used as a Marine Corps training base. A Marine airstrip was developed over the western portion of Mescalitan Island and development of subsurface natural gas storage facilities subsequently in the 1940’s.

According to the 2010 FEIR and the Heritage Discoveries Inc. archeological report, the area between Goleta Beach and Atascadero Creek contains several prehistoric archeological sites (SBA-42, SBA-1698, SBA-1697, SBA-55, SBA-56, SBA-57, SBA-45, SBA-444, and SBA-43). The reports identified an extensive archeological site recorded on both sides of Atascadero Creek CA-SBA-45. This site was originally recorded in the 1920’s at the base of the mesa, now Atascadero Creek. The site was described as having cultural materials extending to six feet in depth and containing a variety of artifacts and burials. This site has been affected by construction of Highway 217 and realignment of Atascadero Creek. The site is now partially submerged in the creek and covered by dredging soils. The stream bank on the north edge of Atascadero Creek has been described as having 2 to 3 feet of dredged soils covering intact and significant archeological deposits. Additionally, a portion of CA-SBA-46, part of the larger Mescalitan site, occurs immediately west of Atascadero Creek, near San Jose Creek and San Pedro Creek. The archeological reports also indicate that prehistoric archeological sites are located at the western part of the proposed hydraulic dredge pipeline route (SBA-1158), at the eastern end of the pipeline corridor (SBA-1695), and on the north side of the slough mouth (SBA-1540).

In order to minimize the potential for adverse effects to cultural resources, the proposed dredging will only occur in the same areas of stream channel where dredging has occurred in previous years. The Commission finds that potential adverse effects to archeological resources may still occur due to inadvertent disturbance during dredging/desilting and sediment disposal activity. To ensure that impacts to archaeological resources are minimized, **Special Condition Six (6)** requires the applicant to have a qualified archaeologist and appropriate Native American consultant on-site during all desilting/dredging activities within or adjacent to the archaeological sites in the project area identified in the Heritage Discoveries Inc. archeological report, dated July 28, 2009. Specifically, the desilting/dredging operations on the project site shall be controlled and monitored by the archaeologist with the purpose of locating, recording and collecting any archaeological materials. In the event that any significant archaeological resources are discovered during operations, all work in this area shall be halted and an appropriate data recovery strategy be developed, subject to review and approval of the Executive Director, by the applicant’s archaeologist and the native American consultant consistent with CEQA guidelines.

Therefore, the Commission finds that the proposed project, as conditioned, is consistent with Section 30244 of the Coastal Act.

F. CEQA

Section 13096(a) of the Commission's administrative regulations requires Commission approval of a Coastal Development Permit application to be supported by a finding showing the application, as conditioned by any conditions of approval, to be consistent with any applicable requirements of the California Environmental Quality Act (CEQA). Section 21080.5(d)(2)(A) of CEQA prohibits a proposed development from being approved if there are feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse effect that the activity may have on the environment.

The Commission incorporates its findings on Coastal Act consistency at this point as if set forth in full. These findings address and respond to all public comments regarding potential significant adverse environmental effects of the project that were received prior to preparation of the staff report. As discussed in detail above, the proposed project, as conditioned, is consistent with the policies of the Coastal Act. Feasible mitigation measures which will minimize all adverse environmental impacts have been required as special conditions. As conditioned, there are no feasible alternatives or feasible mitigation measures available, beyond those required, which would substantially lessen any significant adverse impact that the activity may have on the environment. Therefore, the Commission finds that the proposed project, as conditioned to mitigate the identified impacts, can be found to be consistent with the requirements of the Coastal Act to conform to CEQA.

APPENDIX 1

Substantive File Documents

Coastal Development Permit (CDP) 4-05-139 (Santa Barbara County Flood Control District); CDP 4-00-206 (Santa Barbara County Flood Control District); CDP 4-93-205 (Santa Barbara County Flood Control District); CDP 4-02-074 (BEACON); Final Subsequent Environmental Impact Report (SCH No. 2000031092) by Santa Barbara County Flood Control and Water Conservation District, October 2010; “An Archeological Surface Survey and Updated Records Search,” by Thor Conway, Heritage Discoveries, Inc., July 2009; “Results of the Second Round of Tidewater Goby Protocol Surveys for Presence/Absence in Atascadero Creek in Santa Barbara County,” prepared by URS Corporation, dated October 19, 2009; “Lower Atascadero Creek Updated Southwestern Pond Turtle Habitat Enhancement and Protection Plan,” prepared by Santa Barbara County Flood Control District and Storrer Environmental Services, dated July 10, 2011; “Goleta Beach Monitoring Program 2009-2010 Annual Report,” prepared by Coastal Frontiers Corporation, March 7, 2011; “Monitoring of Kelp Beds, Eelgrass, and Surfgrass off Goleta Beach,” prepared by Chambers Group Inc., reports dated May 2006, October 2006, February 2007, August 2007, July 2009, May 2010, August 2010, December 2010; “Desilted Materials Sampling and Analysis Program,” prepared for Santa Barbara County Flood Control District by Padre Associates, Inc., dated January 2012; “Essential Fish Habitat Assessment for Flood Control Maintenance Activities in the Goleta Slough, prepared by Padre Associates, Inc., dated January 2012; “Summary of findings, Evaluation of Soil Layer Material Exposed at Goleta Beach County Park,” Fugro Consultants, Inc., dated September 29, 2011; “An Archeological Surface Survey and Updated Records Search for the Goleta Slough Flood Control Dredging Project, Goleta, Santa Barbara County,” Prepared by Thor Conway, Heritage Discoveries, Inc., dated July 28, 2009.

Local Approvals Received

California Department of Fish and Game, Streambed Alteration Agreement #5-108-00, dated October 18, 2000; U.S. Army Corps of Engineers, Permit # 2200001039-LM, dated August 29, 2000; California Regional Water Quality Control Board- Central Coast Region, conditional waiver for “Water Quality Certification, Atascadero Creek Maintenance Project,” Santa Barbara County,” dated November 20, 1994; Santa Barbara County, Coastal Development Permit for Atascadero Creek Maintenance, Case # 07CDP-00000-00084, approved October 17, 2007; County of Santa Barbara Minor Conditional Use Permit 10CUP-00000-00041 and Coastal Development Permit 10CDP-00000-00102, approved June 20, 2011 ; U.S. Army Corps of Engineers Regional Permit No. 63 Pre-Construction Notification, SPL-2010-1159-TS.

APPENDIX 2

Standard Conditions

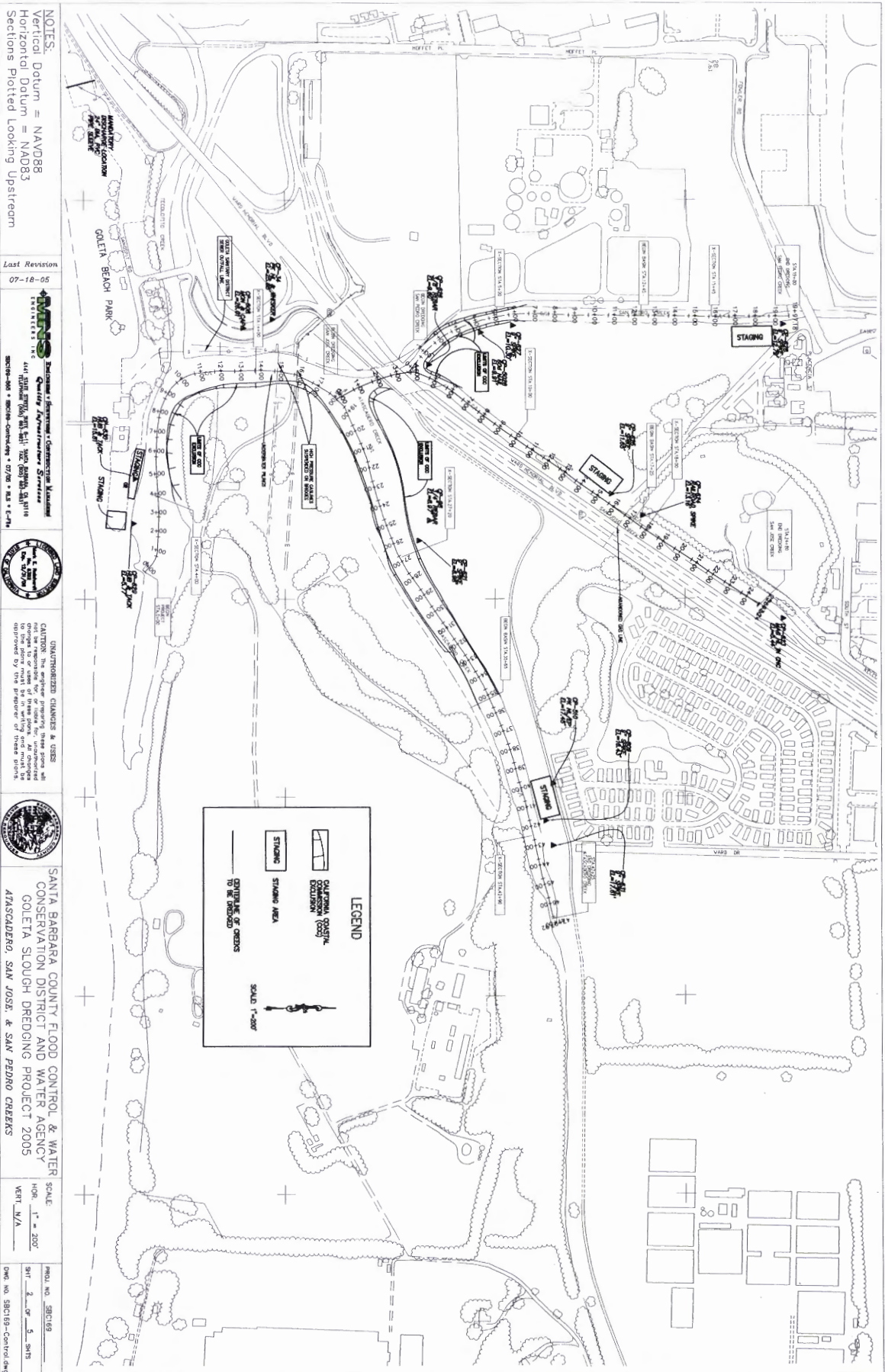
1. **Notice of Receipt and Acknowledgment.** The permit is not valid and development shall not commence until a copy of the permit, signed by the permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.
2. **Expiration.** If development has not commenced, the permit will expire two years from the date on which the Commission voted on the application. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.
3. **Interpretation.** Any questions of intent or interpretation of any condition will be resolved by the Executive Director or the Commission.
4. **Assignment.** The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.
5. **Terms and Conditions Run with the Land.** These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.



OCEAN

Project Location

| |
|---------------------|
| EXHIBIT 1 |
| CDP 4-11-069 |
| Vicinity Map |



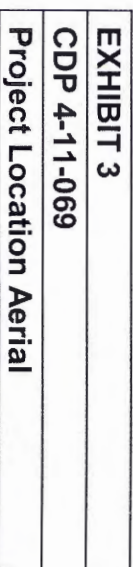


Figure 1.1-1. Proposed Maintenance and Staging Areas



Figure 5.1-1. Representative Hydraulic Dredging Sampling Locations for Atascadero, San Jose, and San Pedro Creeks (Re-evaluated per maintenance event)



Figure 5.1-2. Representative Dragline Desilting Sampling Locations for San Jose, and San Pedro Creeks (Re-evaluated per maintenance event)



Figure 5.1-3. Representative Dragline Desilting Sampling Locations for Atascadero Creek (Re-evaluated per maintenance event)



EXHIBIT 7

CDP 4-11-069

Proposed Location of Access
Footprint for Surfzone Disposal
and Location of Hydraulic Dredge
Disposal Pipeline

CALIFORNIA COASTAL COMMISSION

SOUTH CENTRAL COAST AREA
89 SOUTH CALIFORNIA ST., SUITE 200
VENTURA, CA 93001
(805) 585-1800

**NOTICE OF PROPOSED PERMIT AMENDMENT**

TO: All Interested Parties

FROM: Charles Lester, Executive Director

DATE: May 30, 2014

SUBJECT: Coastal Development Permit No. 4-11-069 granted to Santa Barbara County Flood Control District for the project activities described below located in the southeast portion of the Goleta Slough (including the lower reaches of Atascadero Creek, San Jose Creek, San Pedro Creek, and the main channel of Goleta Slough) and Goleta Beach County Park, Santa Barbara County consisting of:

An annual sediment removal and flood carrying capacity improvement program for portions of Goleta Slough for a period of five years. The program will involve the removal of sediment (using a combination of hydraulic dredging and/or dragline desilting/excavation methods) from the lower reaches of Atascadero Creek, San Jose Creek, San Pedro Creek, and the main channel of Goleta Slough on an as-needed basis (removal of between 20,000 cu. yds. and 200,000 cu. yds. of sediment/year and in no case shall the amount of excavation exceed 200,000 cu. yds. of sediment/year). Excavated sediment from dragline desilting/excavation will be temporarily stockpiled approximately 30 to 100 ft. in distance from the top of the creek bank. All suitable excavated sediment will be placed in the surfzone at Goleta Beach County Park. The program also includes breaching the mouth of Goleta Slough approximately 1-3 times/year.

The Executive Director of the California Coastal Commission has reviewed a proposed amendment (4-11-069-A1) to the above referenced permit, which would result in the following changes:

Revise project description to delete proposed breaching of the mouth of Goleta Slough and delete Special Condition 9 (Slough Mouth Opening).

FINDINGS

Pursuant to 14 Cal. Admin. Code Section 13166(a)(2) this amendment is considered to be **IMMATERIAL** and the permit will be modified accordingly if no written objections are received within ten working days of the date of this notice. This amendment has been considered "immaterial" for the following reason(s):

The proposed amendment involves a minor revision to the five-year program because the Santa Barbara County Flood Control District no longer proposes to breach the mouth of the Goleta Slough. Because slough mouth breaching will not occur, Special Condition 9, which required a plan for opening the slough mouth, including methods and timing of breaching, is no longer necessary. Therefore, this proposed amendment will not result in any adverse impacts to biological resources on the site and is consistent with all Chapter 3 policies of the Coastal Act.

If you have any questions about the proposal or wish to register an objection, please contact Amber Geraghty at the Commission's Ventura office (805) 585-1800.

EXHIBIT 5
4-11-069-A2 (Santa Barbara County
Flood Control District)
Staff Report for CDP No. 4-11-069-A1