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STAFF REPORT: MATERIAL AMENDMENT

Amendment Application No.: **1-10-032-A5**

Applicant: **Humboldt County Resource Conservation District**

Location: Across ~808 acres of mostly agricultural properties under a variety of different ownerships, including the 440-acre Riverside Ranch owned by the California Department of Fish and Wildlife, along ~7.5 miles of the Salt River near Ferndale, Humboldt County.

Description of Previously Approved Project: Implement the Salt River Ecosystem Restoration Project, a multi-year, region-wide, collaborative restoration and flood alleviation project comprised of three major components: (1) Phase 1 involves restoring approximately 400 acres of estuarine marsh, estuarine aquatic, riparian, and freshwater wetland habitats on the lower 2.5 miles of the Salt River and on the 440-acre Riverside Ranch former dairy farm property owned by the Department of Fish & Game; (2) Phase 2 involves restoring hydraulic capacity, in-stream fish habitat, riparian vegetation, and improved water quality along an additional approximately 5 miles of the Salt River, ~2,900 feet of lower Francis Creek, and ~500 feet of lower Eastside Drainage; and (3) long-term maintenance and adaptive management activities to ensure

	the project meets its goals and objectives to be performed over multiple years.
Proposed Amendment:	(1) Install a new bridge and relocate a culvert crossing over the restored Salt River to replace historic/existing crossings and maintain continued access to agricultural lands under single ownership that are bisected by the river channel; (2) make minor changes to the final approved Habitat Mitigation and Monitoring Plan related to amount and location of restored freshwater wetland habitats in the Phase 2 project area; and (3) extend the period of development authorization for post-construction repair and maintenance and adaptive management activities covered by the permit for up to 10 years.
Staff Recommendation:	Approval with conditions.

SUMMARY OF STAFF RECOMMENDATION

In October of 2011, the Commission approved Coastal Development Permit (CDP) No. 1-10-032 for the Salt River Ecosystem Restoration Project (SRERP),[1] a multi-year, region-wide, collaborative restoration and flood alleviation project led by the Humboldt County Resource Conservation District. Phase 1 of the SRERP was successfully implemented in 2013, and Phase 2 construction began in 2014. Due to the size of the Phase 2 project area (5+ miles of riverine restoration) and limitations on construction timing (limited to the dry season period of approximately May-October), Phase 2 construction necessarily spans multiple construction seasons and is being conducted in sub-phases. Phase 2 construction has taken longer than originally anticipated to construct for a variety of reasons and currently is approximately 75% complete, with Phase 2A completed, and Lower Phase 2B and Upper Phase 2B yet to be constructed. The RCD anticipates the project being fully implemented in two remaining construction seasons (2018 and 2019).

Several components of the originally permitted development were found to constitute "substantial alterations" of rivers and streams consistent with the specific provisions of Section 30236 of the Coastal Act. In its approval of the original permit, the Commission found that the SRERP was for the two permissible purposes enumerated under 30236: (1) necessary flood control to protect existing roads, houses, agricultural structures, public infrastructure, and other development in the floodplain where no other method for protecting existing structures in the floodplain is feasible; and (2) necessary improvement of fish and wildlife habitat. The specific development proposed under this permit amendment request remains consistent with these two permissible purposes.

[1] The staff report and findings for approval of the original permit are accessible from the Commission's website: https://documents.coastal.ca.gov/reports/2011/10/W10b-10-2011.pdf

Staff believes that the installation of the bridge and culvert crossings proposed under this permit amendment is consistent with Section 30236, because the stream alterations are necessary modifications to the overall flood control project approved under the original permit. Staff also believes the changes to the amount and location of habitat are necessary improvements of fish and wildlife habitat. Further, the Applicant proposes to undertake the work proposed under this permit amendment consistent with the original permit conditions imposed for the protection of water quality and sensitive habitats, including Special Conditions 3 requiring adherence to various construction standards and best management practices.

Staff recommends that the Commission modify several special conditions of the original permit to ensure the stream alterations proceed with the best mitigation measures feasible as required by Section 30236. Special Condition 2 requires that the Applicant implement habitat restoration and monitor the project site in accordance with the approved final HMMP. Modified Special Condition 4 requires adherence to the final stormwater pollution prevention plan approved for each construction season, including the multiple phases of Phase 2 construction. Modified Special Condition 6 requires adherence to the final debris disposal plan approved for each construction season, which ensures that no construction debris or materials contaminate coastal waters or wetlands. Finally, Modified Special Condition 15 extends the development authorization timeline to better coordinate the post-construction monitoring schedules with the authorized Adaptive Management Plan. Appendix B includes all conditions that apply to CDP Nos. 1-10-032-A5.

The motion to adopt the staff recommendation of approval of CDP amendment with special conditions is found on page 5.

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APPENDICES

EXHIBITS

I. MOTION AND RESOLUTION

Motion:

*I move that the Commission **approve** the proposed amendment to Coastal Development Permit No. 1-10-032 subject to the conditions set forth in the staff recommendation.*

Staff recommends a **YES** vote on the foregoing motion. Passage of this motion will result in conditional approval of the permit 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: Coastal Development Permit (CDP) No. 1-10-032 was approved on October 5, 2011 pursuant to five (5) standard conditions and thirty (30) special conditions. Standard Conditions 1-5 and Special Conditions 1, 3, 7-14 and 16-30 of CDP 1-10-032 remain in full force and effect for Permit Amendment No. 1-10-032-A5. Special Conditions 2, 4-6, and 15 are modified as shown below (note: only the portion of Special Condition 2 relevant to CDP Amendment No. 1-10-032-A5 is shown below). Also shown below, Special Condition Nos. 31 through 33 are new conditions added to CDP Amendment No. 1-10-032-A5. New conditions and modifications to existing conditions imposed in this action on Permit Amendment No. 1-10-032-A5 are shown in ~~**bold strikethrough**~~ text and **bold underlined** text. Appendix B includes all standard and special conditions that apply to the amended development, as approved by the Commission in its original action and as modified and/or supplemented by all subsequent amendments, including this amendment.

Note: only the portion of Special Condition 2 relevant to CDP Amendment No. 1-10-032-A5 is shown below; for the condition in its entirety see Appendix B.

2. Final Revised Habitat Monitoring & Reporting Program

(A) PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall submit, for the review and written approval of the Executive Director, a final revised habitat monitoring and reporting program that substantially conforms with

the plan prepared by H.T. Harvey & Associates titled "Salt River Ecosystem Restoration Project Habitat Mitigation and Monitoring Plan" dated May 4, 2011…

…

(B) If the 10th-year biological monitoring report indicates that the project has been unsuccessful, in part, or in whole, based on the approved goals and objectives set forth in the approved coastal development permit application, **as amended,** the permittee shall submit an application of ~~**an**~~ **a further** amendment to CDP No. 1-10-032 proposing a revised or supplemental restoration and monitoring program to compensate for those portions of the ~~**original**~~ **approved** program which did not meet the approved goals and objectives within six months of submittal of the 10th-year biological monitoring report.

(C) The permittee shall **implement habitat restoration and** monitor the project site in accordance with the approved final habitat restoration and monitoring program **developed by H.T. Harvey & Associates dated July 2012, except as revised under Amendment No. 1-10-032-A5 relative to restored habitat area locations and projections as shown on revised Figures 5, 7, and 9 and in revised Table 1**. Any proposed changes to the approved final monitoring program shall be reported to the Executive Director. No changes to the approved final monitoring program shall occur without a Commission amendment to this coastal development permit, unless the Executive Director determines that no amendment is legally required.

4. Final Storm Water Pollution Prevention Plan

(A) PRIOR TO COMMENCEMENT OF DEVELOPMENT OTHER THAN AUTHORIZED VEGETATION REMOVAL, the applicant shall submit, for the review and approval of the Executive Director, a final Storm Water Pollution Prevention Plan (SWPPP) for Phase 1 construction activities. PRIOR TO COMMENCEMENT OF **EACH CONSTRUCTION SEASON FOR LATER** PHASE**S** ~~**TWO**~~ **OF** DEVELOPMENT, the applicant shall submit, for the review and approval of the Executive Director, a final SWPPP for ~~**the Phase 2**~~ **that season's** construction activities. The final SWPPPs shall include provisions for all of the following:

1. Runoff from the project site shall not increase sedimentation in coastal waters or wetlands post-construction. During construction runoff from the project site shall not increase sedimentation in coastal waters beyond what's allowable under the final Water Quality Certification approved for the project by the North Coast Regional Water Quality Control Board;
2. Runoff from the project site shall not result in other pollutants entering coastal waters or wetlands during construction or post-construction;
3. Best Management Practices (BMPs) shall be used to prevent the entry of polluted stormwater runoff into coastal waters and wetlands during construction and post-construction, including use of relevant BMPs as detailed in the current California Storm Water Quality Best Management Handbooks (http://www.cabmphandbooks.com);
4. An on-site spill prevention and control response program, consisting of best management practices (BMPs) for the storage of clean-up materials, training, designation of responsible individuals, and reporting protocols to the appropriate

public and emergency services agencies in the event of a spill, shall be implemented at the project to capture and clean-up any accidental releases of oil, grease, fuels, lubricants, or other hazardous materials from entering coastal waters or wetlands;

5. A schedule for installation and maintenance of appropriate construction source-control BMPs to prevent entry of stormwater runoff into the construction site and the entrainment of excavated materials into runoff leaving the construction site; and
6. The SWPPPs shall be consistent with the provisions of all other terms and conditions of Coastal Development Permit No. 1-10-032.

(B) The permittee shall undertake development in accordance with the approved final storm water pollution prevention plans. Any proposed changes to the approved final plans shall be reported to the Executive Director. No changes to the approved final plans shall occur without a Commission amendment to this coastal development permit, unless the Executive Director determines that no amendment is legally required.

5. Final Construction Plans

(A) PRIOR TO COMMENCEMENT OF DEVELOPMENT OTHER THAN AUTHORIZED VEGETATION REMOVAL, the applicant shall submit, for the review and approval of the Executive Director, final plans for Phase One (1) construction that substantially conform with the Phase 1 construction 75 percent plans prepared by Kamman Hydrology & Engineering, Inc. dated May 2011 and which are consistent with all Special Conditions of Coastal Development Permit No. 1-10-032;

(B) PRIOR TO COMMENCEMENT OF **EACH CONSTRUCTION SEASON FOR LATER** PHASE**S** ~~**TWO**~~ **OF** DEVELOPMENT OTHER THAN AUTHORIZED VEGETATION REMOVAL, the applicant shall submit, for the review and approval of the Executive Director, both of the following:

1. Final plans for ~~**Phase Two (2)**~~ **that season's** construction **activities** that substantially conform with the Phase 2 construction 50 percent plans prepared by Winzler & Kelly and Michael Love & Associates dated May 2011 and which are consistent with all Special Conditions of Coastal Development Permit No. 1-10-032; and
2. Final project plans for the construction of the Francis Creek culvert replacement at Port Kenyon Road that substantially conform with the preliminary plans prepared by Humboldt County dated January 7, 2011.

(C) The permittee shall undertake development in accordance with the approved final construction plans. Any proposed changes to the approved final plans shall be reported to the Executive Director. No changes to the approved final plans shall occur without a Commission amendment to this coastal development permit, unless the Executive Director determines that no amendment is legally required.

6. Final Debris Disposal Plans

(A) PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the applicant shall submit, for the review and written approval of the Executive Director, final plans for the disposal of all construction debris, excess sediments, vegetative spoils, and any other debris and waste expected to be generated by the authorized Phase One (1) work. In addition, PRIOR TO COMMENCEMENT OF **EACH**

CONSTRUCTION SEASON FOR LATER PHASE**S** ~~**TWO**~~ **OF** DEVELOPMENT, the applicant shall submit, for the review and approval of the Executive Director, final plans for the disposal of all construction debris, excess sediments, vegetative spoils, and any other debris and waste expected to be generated by ~~**the authorized Phase 2**~~ **that season's** work.

1. The plans shall demonstrate that:
    a. All temporary stockpiles of construction debris, excess sediments not approved for reuse on surrounding agricultural uplands pursuant to Special Condition No. 13, vegetative spoils, and any other debris and waste associated with the authorized work shall be minimized and limited to areas within the proposed project footprint as depicted on the final approved construction plans required by Special Condition No. 5 and where they can feasibly be contained with appropriate BMPs to prevent any discharge of contaminants to coastal waters and wetlands;
    b. All construction debris, excess sediments not approved for reuse on surrounding agricultural uplands pursuant to Special Condition No. 13, vegetative spoils, and any other debris and waste generated by the authorized work shall be disposed of at an authorized disposal site(s) capable of receiving such materials;
    c. Side casting or placement of any construction debris, excess sediments not approved for reuse on surrounding agricultural uplands pursuant to Special Condition No. 13, vegetative spoils, and any other debris and waste generated by the authorized work within the Salt River, any slough, creek, or drainage, or any other wetland area, including grazed seasonal wetlands, is prohibited; and
    d. Disposal of excavated sediments on surrounding agricultural uplands in the coastal zone for agronomic reuse purposes shall occur only on properties for which final sediment reuse plans have been approved pursuant to Special Condition No. 13.
2. The plans shall include, at a minimum, the following:
    a. A site plan showing all proposed locations for the temporary stockpiling of construction debris, excess sediments, vegetative spoils, and any other debris and waste associated with the authorized work during construction operations;
    b. A description of the manner by which the stockpiled materials will be removed from the construction site and identification of all debris disposal sites that will be used; and
    c. A schedule for the removal of all construction debris, excess sediments, vegetative spoils, and any other debris and waste associated with the authorized work.

(B) The permittee shall undertake development in accordance with the approved final debris disposal plans. Any proposed changes to the approved final plans shall be reported to the Executive Director. No changes to the approved final plans shall occur without a Commission amendment to this coastal development permit, unless the Executive Director determines that no amendment is legally required.

15. Length of Development Authorization for Ongoing Maintenance and Adaptive Management Activities Authorized by CDP 1-10-032, as Amended. Development authorized by this amended permit **for ongoing maintenance and adoptive management activities** is valid for five (5) years from the date of Commission approval **of CDP Amendment No. 1-10-032-A5** (until ~~**October 5, 2016**~~ **April 11, 2023**). One request for an additional five-year period of development authorization may be accepted, reviewed and approved by the Executive Director for a maximum total of ten (10) years of development authorization from the date of Commission approval **of CDP Amendment 1-10-032-A5** (**until April 11, 2028**), provided the request would not alter the project description and/or require modifications of conditions due to new information or technology or other changed circumstances. The request for an additional five-year period of development authorization shall be made at least 120 days prior to ~~**October 5, 2016**~~ **April 11, 2023**. If the request for an additional five-year authorization period would alter the project description and/or require modifications of conditions due to new information or technology or other changed circumstances, an amendment to CDP No. 1-10-032 shall be necessary to authorize development beyond ~~**October 5, 2016**~~ **April 11, 2023**.

31. Demonstration of Adequate Property Rights. PRIOR TO ISSUANCE OF COASTAL DEVELOPMENT PERMIT AMENDMENT NO. 1-10-032-A5, the Applicant shall submit, for the review and written approval of the Executive Director, copies of all landowner access agreements for all properties within Phase 2 involved in the amended development project area. All landowner access agreements shall clearly demonstrate that the property owner grants permission to the Applicant to undertake development on the property as conditioned by the Commission.

32. Other Agency Approvals. PRIOR TO ISSUANCE OF COASTAL DEVELOPMENT PERMIT AMENDMENT NO. 1-10-032-A5, the Applicant shall provide to the Executive Director a copy of a permit or letter or permission from the California Department of Fish and Wildlife, or evidence that no permit or permission is required from the following agencies. The Applicant shall inform the Executive Director of any changes to the project required by the Department. Such changes shall not be incorporated into the project until the Applicant obtains a Commission amendment to this coastal development permit, unless the Executive Director determines that no amendment is legally required.

33. State Lands Commission Review. PRIOR TO ISSUANCE OF COASTAL DEVELOPMENT PERMIT AMENDMENT NO. 1-10-032-A5, the Applicant shall provide to the Executive Director a written determination from the State Lands Commission that:

(A) No State or public trust lands are involved in the development; or

(B) State or public trust lands are involved in the development and all permits required by the State Lands Commission have been obtained; or

(C) State or public trust lands may be involved in the development, but pending a final determination an agreement has been made with the State Lands Commission for the approved project as conditioned by the Commission to proceed without prejudice to that determination.

III. FINDINGS AND DECLARATIONS

A. ENVIRONMENTAL SETTING

The Salt River is a tributary to the Eel River Estuary located approximately five miles south of Humboldt Bay and 15 miles south of Eureka near the city of Ferndale (Exhibit 1). Historically, the Salt River was largely influenced by tidal action and was the principal slough tributary to the Eel River Estuary. In the 1800's, the Salt River had four anadromous freshwater tributaries, seven smaller drainages and several significant estuarine tributaries. Today, the channel is largely undefined and marshy, and only one of the river's tributaries supports severely limited habitat for some species of anadromous fish.

Past and ongoing land use practices in the surrounding area in combination with natural geographic and geologic factors and processes contributed to the hydrologic dysfunction and ecological decline of the Salt River. The severely aggraded condition of the channel that characterized the Salt River in recent times has largely resulted from historical (and ongoing) land reclamation activities, past levee and tide gate construction in the area, and uncontrollable and (to a lesser extent) controllable sediment loads related to landslides, bank erosion, earth flows, timber harvesting practices, and road-related sources in the upper watershed in the Wildcat Hills south of Ferndale. Periodic flooding from the Eel River also deposited large amounts of sediment, filling the historic channels that helped to drain the basin. In general, the Salt River filled in with sediment faster than that sediment could be removed naturally, due to the elimination of channel cleansing forces such as flow volume and tidal exchange.

The hydraulic dysfunction of the Salt River led to significant annual flooding and water quality problems in the region for many decades. Agriculture (mostly dairies, grazing, and hay cropping) is the principal land use in the lower Salt River Basin. As sediment loads continually aggraded drainages each winter during the rainy season, the Salt River and the lower reaches of its tributaries overflowed their banks, resulting in almost perpetual flood conditions across several areas, including public and private roads and infrastructure, residences, and agricultural lands. Approximately 750 acres of mostly prime agricultural lands in the area surrounding the Salt River were taken out of production for one to eight months each year due to chronic flooding. Forage productivity was greatly compromised by inundation impacts, and agricultural producers bore production losses and the additional expenses associated with supplemental feed, pumping out floodwater, and farming and re-seeding flooded areas.

In addition to regular and sustained flooding in the region, the hydrologically impaired condition of the Salt River channel lead to numerous water quality problems. Of great significance for water quality is the fact that sedimentation and flow volume reduction in the Salt River reduced channel capacity and the receiving water flows to the point that the effluent from the City of Ferndale's wastewater treatment plant, located near the confluence of the Salt River and Francis Creek, violated water quality standards. The failure of the City to comply with water quality regulations was directly related to the degraded channel conditions in the Salt River.

B. PERMITTING HISTORY

On October 5, 2011, the Commission approved Coastal Development Permit (CDP) No. 1-10-032 for the Salt River Ecosystem Restoration Project (SRERP),[2] a multi-year, region-wide, collaborative restoration and flood alleviation project led by the Humboldt County Resource Conservation District (hereafter "RCD" or "Applicant"). The approved project has three major components: (1) Phase 1 involves restoring approximately 400 acres of estuarine marsh, estuarine aquatic, riparian, and freshwater wetland habitats on the lower 2.5 miles of the Salt River and on the 440-acre Riverside Ranch former dairy farm property owned by the Department of Fish & Wildlife; (2) Phase 2 involves dredging and channel modifications to restore hydraulic capacity, in-stream fish habitat, riparian vegetation, and improve water quality along an additional approximately 5 miles of the Salt River, ~2,900 feet of lower Francis Creek, and ~500 feet of lower Eastside Drainage; and (3) long-term maintenance and adaptive management activities to ensure the project meets its goals and objectives to be performed over multiple years (Exhibit 3).

Phase 1 was successfully implemented in 2013, and Phase 2 construction began in 2014. Due to the size of the Phase 2 project area (5+ miles of riverine restoration) and limitations on construction timing (limited to the dry season period of approximately May-October), Phase 2 construction necessarily spans multiple construction seasons and is being conducted in sub-phases. Phase 2 construction has taken longer than originally anticipated to construct for a variety of reasons and currently is approximately 75% complete, with Phase 2A completed, and Lower Phase 2B and Upper Phase 2B yet to be constructed. The RCD anticipates the project being fully implemented in two remaining construction seasons (2018 and 2019).

From 2012-2017, the Commission approved four immaterial amendments to the original permit, each of which involved either adding or removing certain properties from the project area footprint and/or shifting certain segments or portions of the project area boundaries slightly to avoid locating development on certain properties (e.g., from unwilling landowners). The approved project area spans nearly 100 APNs under the ownership of approximately 45 different landowner entities, each of whom the RCD has executed agreements with, which grant the RCD permission to undertake development on the properties as conditioned by the Commission under the original permit.

C. COASTAL ACT ISSUES RAISED UNDER THE ORIGINAL PROJECT APPROVAL

Restoration of Marine Resources and Water Quality (Coastal Act sec. 30230-30231)

The Salt River historically functioned as a migration corridor for adult salmonids reaching spawning habitat in tributaries within the Wildcat Mountains and provided rearing habitat for juveniles migrating downstream to the Eel River estuary. Poor fish passage conditions in many parts of the basin coupled with riparian vegetation loss in some locations and water quality problems related to water temperature, water chemistry, turbidity, and sediment load have resulted in drastic population declines of all species of salmonids (including coho salmon, Chinook salmon, and steelhead trout) that formerly were more widespread in the Salt River and

[2] The staff report and findings for approval of the original permit are accessible from the Commission's website: https://documents.coastal.ca.gov/reports/2011/10/W10b-10-2011.pdf

its tributaries. The SRERP was developed to respond to these problems, with the expected benefits of reduced flood impacts, improved fish passage, improved water quality, improved and expanded habitat for riparian and wetland species, and improved sediment transport.

In its approval of CDP 1-10-032, the Commission found that SRERP would (1) greatly increase estuarine marsh, aquatic and freshwater wetland habitats in the overall project area; (2) improve or reconnect access to approximately 15 miles of salmonid spawning habitat in Reas, Francis, and Williams Creeks; (3) improve over 7.5 miles of riverine channel habitat with multiple fish habitat features such as alcoves and instream structures; (4) increase the availability of necessary transition (salt/freshwater) habitat for juvenile coho and other salmonids by 264 acres; (5) increase eelgrass habitat by 8.7 acres; and (6) and create up to 11 acres and 12,500 linear feet of suitable habitat for the federally listed tidewater goby (*Eucyclogobius newberryi*). The Commission found that the project as conditioned would maintain and enhance the functional capacity of the habitat and increase the biological productivity of coastal waters necessary to maintain and restore optimum populations of marine organisms and to protect human health, consistent with the mandates of Sections 30230 and 30231 of the Coastal Act.

Allowable Use of Wetland Fill for Restoration Purposes (Coastal Act sec. 30233)

Under the original permit approval, the Commission found that the proposed diking, dredging, and filling aspects of Phase 1 of the project as conditioned, to restore and enhance wetland habitat on the lower 2.5 miles of the Salt River and on the former Riverside Ranch dairy property involving the dredging of ~153,150 cubic yards of material and the placement of ~337,450 cubic yards of fill material (1) was for an allowable use, (2) had no feasible less environmentally damaging alternative, (3) would provide adequate mitigation for potential impacts associated with the diking, dredging, and (4) would maintain and enhance marine habitat values consistent with Sections 30230, 30231, and 30233 of the Coastal Act.

Permissible Alterations of Rivers and Streams (Coastal Act sec. 30236)

The Commission further found that the substantial alterations of approximately 5 miles of the Salt River and lower Francis Creek associated with Phase 2 activities involving the dredging and channel modifications were for permissible purposes under Coastal Act section 30236, as the dual principal objectives of the project are: (1) the necessary improvement of fish and wildlife habitat within the river corridor; and (2) necessary flood control where no other method to protect existing structures and development in the floodplain is feasible (including houses, barns, roads, a municipal wastewater treatment facility, and other structures). The Commission imposed Special Conditions 2 through 16 as feasible mitigation measures to minimize the project's potential impacts to water quality, sensitive species, wetlands, and other environmentally sensitive habitats.

Permissible Conversion of Non-Prime Agricultural Lands (Coastal Act sec. 30242)

In its approval of the original permit, the Commission found that the conversion of 273 acres of non-prime agricultural lands on Riverside Ranch for the Phase 1 development was consistent with section 30242 of the Coastal Act, because it was both necessary to preserve prime agricultural land in the surrounding basin and compatible with continued agricultural use on surrounding lands. Although the conversion of non-prime agricultural land on Riverside Ranch for estuarine restoration resulted in the loss of approximately 1,776 Animal Unit Months

(AUMs) per year of agricultural productivity, the overall project, when completed, is expected to protect and enhance and improve productivity on at least 750 acres of prime agricultural land in the surrounding area by reducing flooding through the restoration of channel cleansing forces, such as flow volume and tidal exchange (which would result in part from the greater tidal prism accommodated by the Phase 1 restoration component of the project). The project is expected to result in an overall net gain in agricultural productivity. To ensure the project preserves and improves productivity on prime agricultural land, Special Condition 17 of the CDP requires monitoring and documentation of agricultural productivity in the surrounding area beginning the first year following completion of Phase 2 construction and continuing each year for at least five years. If the monitoring indicates that the project has been unsuccessful, the permittee must submit a further permit amendment request for project revisions to achieve the required increase in agricultural productivity.

Impermissible Conversion of Prime Agricultural Lands and Conflict Resolution

Due to the substantial alteration of the Salt River channel approved under the original project, including widening of the channel and restoring riparian vegetation along its banks, Phase 2 of the SRERP, upon completion, will result in the permanent conversion of 52 acres of prime agricultural land along the restored Salt River channel. In its approval of CDP 1-10-032, the Commission found this conversion of prime agricultural land to be inconsistent with section 30241 of the Coastal Act. The Commission invoked section 30007.5 of the Coastal Act, finding that (1) the project presents a true conflict between Chapter 3 policies of the Coastal Act; (2) the restoration of habitats for the benefit of juvenile salmonids and tidewater gobies, among other marine resources, would convert agricultural land in a manner inconsistent with the provisions of sections 30241 of the Coastal Act; (3) to not approve the project would result in a failure to maintain and enhance marine resources and the biological productivity of coastal waters that would be inconsistent with the mandates of Sections 30230 and 30231 of the Coastal Act; (4) the benefits of the project are inherent in the essential nature of the project, and there are no alternatives identified that are both feasible and consistent with all of the relevant Chapter 3 policies; and (5) the impacts on coastal resources from not constructing the project would be more significant than the project's agricultural conversion impacts. The Commission imposed Special Condition Nos. 2 through 22 in approving the SRERP pursuant to section 30007.5 of the Coastal Act. These conditions require in part:

- Submittal of and adherence to a final revised Habitat Mitigation and Monitoring Plan, stormwater pollution prevention plan, final construction plans, debris disposal plans, rare plant mitigation and monitoring plans, agricultural enhancement monitoring plan, public access plan for Riverside Ranch, adaptive management plan, and annual maintenance/ adaptive management operations plans;
- Adherence to specific construction responsibilities and best management practices;
- Specific measures to protect sensitive fish, aquatic resources, sensitive bird nesting habitats, and archaeological resources;
- Restrictions and standards for riparian vegetation removal and for revegetation of disturbed areas;

- Requirements for submittal of site-specific final sediment reuse plans prior to placement of riverine dredge spoils on agricultural lands in the surrounding area for beneficial reuse; and
- Requirements to restore prime agricultural land on Riverside Ranch.

The list of conditions attached to CDP 1-10-032 is included in Appendix B.

D. CURRENT AMENDMENT REQUEST

The RCD proposes the following additional development and project modifications under the current permit amendment request: (1) install a new bridge and relocate a culvert crossing over the restored Salt River and a tributary alcove; (2) make minor changes to the final approved Habitat Mitigation and Monitoring Plan related to the amount and location of restored freshwater wetland habitats in the Phase 2 project area; and (3) extend the period of development authorization for post-construction repair and maintenance and adaptive management activities covered by the permit for up to 10 years. Each is summarized below and project plans are attached as Exhibit 2.

- New bridge: A new 40-foot-long by 16-foot-wide bridge would be installed on a property under a single ownership that is bisected by the existing Salt River channel to be restored under the Phase 2 project work. The free-span bridge deck would be supported on concrete abutments protected by rock slope protection to prevent scour under and adjacent to the bridge. The proposed new bridge would replace an abandoned crossing over the river that had been located downstream on the same property but which is no longer functional due to sediment aggradation in the area. The subject agricultural property is approximately 200 acres in size and is managed in part for dairy, grazing, and hay cropping.

  When the original project was approved in 2011, the applicant recognized at that time the need to provide for a replacement crossing of the reconstructed river channel to allow for continued agricultural use of the property in a manner that would protect water quality. Constructing a bridge would provide cattle access between barn and pasture across the restored river without trampling through the bed of the river and adversely affecting the associated habitat in and adjacent to the river. The preliminary plans submitted with the original permit application showed a gap in planned riparian plantings along the portion of the river running through the property to indicate that a future crossing would be designed and constructed to cross the river somewhere on the property in the future. However, the crossing location and design had not been determined at the time the applicant was securing the original permits for the overall 5+-mile-long and 750+-acre SRERP project.

- Culvert relocation: The Applicant proposes to remove an existing degraded access road crossing over a former side channel tributary to the mainstem of the river that is located partially within an area proposed to be restored to off-channel habitat under the Phase 2 project and install a new culverted crossing, similar in size and aerial extent to the existing crossing, across the alcove channel to be restored on the property. The proposed relocated crossing consists of three 36-inch-diameter culverts with a crossing top-width of approximately 20 feet. In addition to providing a necessary livestock crossing in a manner

that protects water quality and aquatic habitat, the culverted crossing is designed to help meet the flood control objectives of the SRERP by regulating the flow of water in and out of the alcove in a manner that will sustain the velocity of flow at a sufficient rate and over a longer period of time to reduce aggradation of sediments within the alcove channel and the mainstem of the river.

- Changes to the approved Habitat Mitigation and Monitoring Plan: The Applicant is requesting certain changes to the approved final HMMP involving reconfiguration of approximately 12 acres of restored habitats as follows: (a) riparian plantings would be reduced in certain portions of the Phase 2 project area, (b) an equivalent amount of riparian plantings would increase in certain other portions of the Phase 2 project area, (c) as a result of the increased riparian planting in certain areas, there would be a corresponding reduction in the total acreage of "freshwater channel wetlands" (floodplain bench wetlands) to be restored as part of the Phase 2 project; and (d) as a result of the reduced riparian plantings in certain areas, there would be corresponding increase in the total amount of prime agricultural land to remain unaffected (not to be converted) by the Phase 2 restoration project. Importantly, there would be no change to the increase in riparian wetland habitat to be restored under the project overall.

- Extend the period of development authorization for adaptive management activities: Given the watershed-level scale of the SRERP, the variety of habitats and hydrologic conditions to be restored, the high initial disturbance to the ecosystem associated with the project, interactions with agricultural land uses, and a typical level of uncertainty associated with the evolution of ecosystem restoration projects in general, the approved project authorizes the implementation of an adaptive management program (AMP) for up to 10 years from the date of the Commission's original permit approval (Special Condition 15). The final approved AMP, as required by Special Condition 14 (see Appendix B), identifies monitoring activities to evaluate progress towards meeting the project goals and objectives, establishes the triggers or thresholds that would initiate a management response, and describes a range of potential adaptive management actions authorized under the CDP.

  Although Phase 1 was completed on schedule (2013), the Phase 2 project work is behind schedule, having experienced delays, funding constraints, landowner disputes, and a greater number of seasons to construct the project than originally envisioned. Because construction of this large-scale restoration project is still in process and has taken longer than originally anticipated, the Applicant has not yet had the opportunity to fully implement the approved AMP, particularly in the Phase 2 project area.

  Because the AMP is integral to ensuring that the SRERP meets its long-term goals and objectives of habitat restoration, improved water quality, and sustained hydraulic conveyance, this amendment request includes a request to extend the period of development authorization for post-construction repair and maintenance and adaptive management activities covered by the permit, as described in the approved AMP, for up to 10 additional years from the date of Commission approval of 1-10-032-A5. The proposed revised development authorization timeline would better coordinate the post-construction

monitoring schedules required by Special Conditions 2, 11 and 17 with the AMP authorization period.

E. STANDARD OF REVIEW

The overall project area of the SRERP is bisected by the boundary between the retained CDP jurisdiction of the Commission and the CDP jurisdiction delegated to Humboldt County by the Commission through the County's certified local coastal program (LCP). The portions of the project area within the Commission's retained jurisdiction include Riverside Ranch, the Salt River channel, the portions of the Francis Creek channel downstream of the city limits of Ferndale, and some of the agricultural areas proposed for sediment reuse. The remainder of the portion of the project area within the coastal zone, including most of the agricultural areas proposed for sediment reuse, is within the CDP jurisdiction of Humboldt County.

Section 30601.3 of the Coastal Act authorizes the Commission to process a consolidated CDP application when requested by the local government and the applicant and approved by the Executive Director for projects that would otherwise require coastal development permits from both the Commission and from a local government with a certified LCP. Under the original permit request, the Humboldt County Board of Supervisors adopted a resolution, and both the applicant and the County submitted letters requesting consolidated processing of the coastal development permit application by the Commission for the subject project, which was approved by the Executive Director.

The policies of Chapter 3 of the Coastal Act provide the legal standard of review for a consolidated coastal development permit application submitted pursuant to Section 30601.3. The local government's certified LCP may be used as guidance.

F. APPLICANT'S LEGAL INTEREST IN THE SUBJECT PROPERTY

None of the project area within the footprint of the proposed amended development is in the applicant's ownership. Instead, the proposed project area spans multiple properties under the ownership of several different ownership entities (see Appendix C for list of properties affected by this permit amendment). As required by section 30601.5 of the Coastal Act, the applicant has submitted evidence that (a) each property owner has been notified of the amended development as proposed in the CDP amendment application, and (b) each property owner has been invited to join the CDP amendment application as a co-applicant. In addition, as also required by Section 30601.5, Special Condition 31 added to CDP Amendment 1-10-032-A5 requires the applicant to provide Landowner Agreements signed by each of the property owners giving the RCD permission to undertake development approved under this permit amendment as conditioned by the Commission.

G. OTHER AGENCY APPROVALS AND STAFF CONSULTATIONS

North Coast Regional Water Quality Control Board

The proposed amended development requires a modification to the water quality certification issued by the regional water board for the project. The regional water board issued an amendment to the Federal Clean Water Act, Section 401, Water Quality Certification for the project on March 23, 2018.

California Department of Fish and Wildlife

The proposed amended development requires a lake and streambed alteration agreement with the Department. New Special Condition 32 attached to CDP Amendment 1-10-032-A5 requires submittal of a copy of the Department's approval prior to issuance of the amended permit.

Other Agency Approvals

The original project required permits from the County (conditional use permit, encroachment permit) and the Army Corps of Engineers. The Applicant has confirmed with the County and the Corps respectively and submitted evidence that no modifications to the County permits or to the Corps permit are required for the proposed amended development.

Staff Consultations

In the preparation of these Findings, the Commission staff consulted[3] with the Tribal Historic Preservation Offices for the Blue Lake Rancheria, the Bear River Band of the Rohnerville Rancheria, and the Wiyot Tribe/Table Bluff Rancheria. None of the THPOs identified concerns or provided recommendations on the proposed amended development.[4]

H. PUBLIC TRUST LANDS

Because the project site is located in an area subject to the public trust as discussed above, to ensure that the applicant has the necessary authority to undertake all aspects of the project on these public lands, the Commission attaches new Special Condition 33. This condition requires that the project be reviewed and where necessary approved by the State Lands Commission prior to the issuance of the permit amendment.

I. DEVELOPMENT WITHIN COASTAL RIVERS & STREAMS

Section 30236 of the Coastal Act states the following:

> *Channelizations, dams, or other substantial alterations of rivers and streams shall incorporate the best mitigation measures feasible, and be limited to (l) 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.*

Under the original permit, several components of riverine-related development were found to constitute "substantial alteration" of rivers and streams consistent with the specific provisions of Section 30236. These include (a) the excavation of over 600,000 cubic yards of material from river and stream channels, (b) the restoration of an active Salt River channel, the creation of a variable width bench adjacent to the active channel, and the creation of

[3] Via email on March 7, 2018.

[4] Only the THPO for the Blue Lake Rancheria responded to the email referral.

sediment management areas, and (c) the restoration of riparian forest cover along the outer edges of the active benches.

The first test set forth by Section 30236 is that any proposed substantial alteration of a river or stream may be allowed only if it's for one of the purposes enumerated in the policy. In its approval of the original permit, the Commission found that the SRERP has two principal purposes enumerated under 30236: (1) necessary flood control to protect existing roads, houses, agricultural structures, public infrastructure, and other development in the floodplain where no other method for protecting existing structures in the floodplain is feasible; and (2) necessary improvement of fish and wildlife habitat. The specific development proposed under this permit amendment request remains consistent with these two purposes.

Flood Control Purpose

As discussed in the findings for approval of the original permit, one of the purposes of the substantial alterations to rivers and streams resulting from the SRERP is to control flooding to protect County roads, the Ferndale wastewater treatment plant, existing residences, agricultural structures, public infrastructure, and other development in the floodplain. The hydraulic dysfunction of the Salt River has led to chronic significant annual flooding and water quality problems in the region for many decades. Under the original permit approval, the Commission found that there are no other feasible methods for protecting existing structures within the floodplain, such as constructing dams upstream in tributary watersheds, constructing a series of sediment basins to reduce the amount of sediment entering the Salt River, or constructing large levees throughout the length of the river corridor.

The bridge and culverted crossing proposed by the amendment request are modifications of the larger overall flood control project. The property on which the two proposed crossings will be located is a 200-acre dairy ranch that is bisected by the main river channel to be restored. According to the RCD, this site is the only property in the entire project area footprint where an agricultural property under single ownership is bisected by the restoration footprint (upstream the channel straddles property boundaries rather than bisects single properties). Because of the decades of sediment aggradation in the Salt River and Francis Creek that have led to the current state of habitat degradation, narrow width, and hydrologic dysfunction, which in turn has led to chronic flooding in the area for many decades, and because of existing crossings that are in place but which have become plugged and buried by sediment (believed to be several feet below existing ground elevation), cattle and farm equipment on the property historically have had and still currently have access from the barn and dairy facilities across the river to grazing lands on the other side. However, once this reach of the river is substantially altered for the principal purposes of flood control and fish and wildlife habitat improvement, and once the existing crossings are removed, the river's restored dimensions will be over 40 feet wide, hindering continued access by cattle and farm equipment between facilities and lands on opposite sides of the restoration footprint (33 acres south of the Salt River and 44 acres east of the backwater alcove known as Lake Vevoda) unless new replacement crossings are installed as proposed. With implementation of the approved Phase 2 habitat improvements on the property as approved under the original permit, the proposed crossings are needed to maintain continued access to ranch lands on both sides of the substantially altered river for agricultural management.

The proposed culverted crossing is located near the mouth of the off-channel alcove and is designed to provide for the temporarily storage of floodwaters from the river during high flow events. Installation of the proposed culverts at the base of the alcove channel, as opposed to a free span bridge, is necessary to regulate the flow of water draining from the alcove and sustain the velocity of the flow at a level that will avoid deposition and aggradation of sediment in the mainstem river channel. Additionally, by constricting the flow, the culverted crossing will lengthen the duration of the flow draining from the alcove, thereby further helping to avoid deposition and aggradation of sediment that would clog the river channel and exacerbate flooding in the surrounding area. There are no other identified alternatives for regulating or constricting the flow.

Both crossings will allow cows traveling from barn to pasture to cross the restored channels without trampling through the aquatic habitat. When the original project was approved, the applicant recognized the need to provide for a replacement crossing of the reconstructed river channel to allow for continued agricultural use of the property in a manner that would protect water quality. Preliminary plans submitted with the original permit application generally depict an area where a future crossing would be installed on the subject property. However, the exact crossing location and design had not been determined at the time the applicant was securing the original permits for the overall 5-mile-long and 750-acre SRERP project.

Therefore, the Commission finds that the installation of the crossings proposed under this permit amendment is consistent with Section 30236, because the stream alterations are necessary modifications to the overall flood control project approved under the original permit and are necessary for public safety and for the protection of existing development. In addition, no other feasible measures currently exist to protect county road the Ferndale wastewater treatment plant, and houses, barns, and other structures in the region from flooding within the lower Salt River floodplain.

Fish and Wildlife Habitat Improvement Purpose

As discussed in the findings for approval of the original permit, one of the dual purposes of the substantial alterations to rivers and streams resulting from the SRERP is to provide extensive fish habitat improvements, including habitats for coho salmon, Chinook salmon, steelhead trout, and coastal cutthroat trout. The reconstructed channels will reconnect access to approximately 15 miles of salmonid spawning habitat in Reas, Francis, and Williams Creeks. Additionally, the project will result in the improvement of over 7.5 miles of habitat within the main-stem Salt River with multiple fish habitat features such as alcoves and instream structures. In addition to fish habitat benefits, the channel reconstruction work will restore the diversity of habitats that historically occurred in the river corridor, including Sitka spruce forest riparian habitat, active bench habitats, and transitional “ecotone” habitats between estuarine/freshwater and wetland/upland areas. The restored habitat and vegetative diversity along the river corridor will provide habitat for great diversity of birds and other wildlife. Moreover, “wildlife-friendly” fencing will be erected at the interface of restored riparian habitats with agricultural lands to protect the restored habitat areas from livestock impacts while allowing deer, fox, and other wildlife to migrate through the area unimpeded.

All of these fish and wildlife habitat improvement goals of the original project are retained in the project as amended under the proposed permit amendment, as discussed below.

The restoration of riparian forest cover along the outer edges of the active benches as authorized under the original permit greatly improves habitat for fish and wildlife along the Salt River consistent with section 30236. With the restoration of hydrology and improvement of over 7.5 miles of habitat within the main-stem Salt River with multiple fish habitat features such as alcoves and instream structures, the completed project will result in improved habitat for salmonids and other fish species. Restored riparian habitat is essential for fish-bearing streams to regulate temperature, protect water quality, and provide food for aquatic life.

As proposed under this permit amendment, approximately 12-acres of riparian habitat will be reconfigured, essentially (a) reduced in certain areas currently used for agriculture (e.g., around the off-channel alcove/Lake Vevoda area) that instead will be retained in continued agricultural use, and (b) added in certain other areas along the mainstem of the Salt River that previously were planned as "freshwater channel wetlands" along what's referred to as the "active bench" under the approved HMMP.

The property where riparian plantings are to be reduced by approximately 12 acres changed ownership in 2013. The current owner has requested a reduction in the authorized riparian plantings on the property to maintain the continued use of the affected areas around the river and off-channel alcove for agriculture. A minimum 15-foot-wide band of riparian habitat as approved under the original permit will still be planted on both sides of the mainstem river and off-channel alcove, thereby maintaining the original restoration intent of the restored riparian corridor to buffer water temperatures and provide structural roosts to migrating birds, cover for salmonids, and corridors for wildlife movement.

In the originally approved HMMP, the active benches, which are now proposed under the permit amendment to be restored in various areas along the river corridor with a total of 12 acres of riparian habitat, were originally proposed as sparsely vegetated freshwater wetland that would be inundated 20-30 days per year under high water flows. The approved HMMP described the active benches as a "highly dynamic interface between the active channel and floodplain" and "where natural recruitment of woody vegetation is anticipated." The active benches were designed to support, over time, the recruitment of some riparian habitat, but some parts of the active bench along the restored river corridor, called passive sediment management areas (SMAs), were intended to be periodically excavated or dredged for sediment removal if needed to maintain flow velocity and sediment conveyance along the river. Unlike the primary active SMA at the confluence of Francis Creek with the Salt River, which is expected to receive large deposits of sediment on an annual basis and is designed to receive a large volume of sediment that routinely will be actively managed for sediment removal, passive SMAs would be managed much less frequently and only if needed.

Since construction of Phase 1 of the project and the lower portion of Phase 2, including construction of the principal active SMA at the confluence of Francis Creek and the mainstem of the Salt River, sediment transport analyses have been completed to evaluate the

effectiveness of the partially constructed SRERP in achieving the planned flood control objectives. These analyses (Exhibit 4) indicate that the primary active SMA, if properly maintained under the approved Adaptive Management Plan (AMP) required by Special Condition 14, will effectively capture coarse sediments that otherwise would deposit in the restored downstream active bench areas, originally planned as passive SMAs.

In addition to the effectiveness of the active SMA in capturing coarse sediment, the reconstructed portions of the active channel also have been effective in transporting sediment out of the system. Monitoring and analysis conducted over the five years since the project was initially constructed indicate that the reconstructed active channel is sustaining high flow velocities as planned, which facilitates positive sediment transport through the system and minimizes sediment deposition in the channel and on the active benches. Geomorphic monitoring to date suggests that not only is it possible for the active benches to support additional riparian plantings as proposed under this permit amendment, but that planting additional riparian vegetation in these areas will improve hydraulic roughness, thereby slowing flows over the active benches while increasing or maintaining high scouring velocities in the channel itself, further supporting sediment conveyance through the system. In addition, planting the active bench areas as proposed with riparian vegetation will increase shading and suppress the growth of densely growing invasive species in the project area (such as reed canary grass) that degrade habitat values for fish and wildlife species.

Finally, the planting of the active benches with riparian species as proposed will maintain or increase the planned ecological integrity of the Salt River ecosystem by increasing the width, for over two miles, of woody riparian vegetation beyond the minimum 15-foot-wide band originally planned along portions of the mainstem river channel. Species proposed for riparian planting are the same as those permitted for planting in riparian habitats under the approved HMMP. Wider and continuous tracks of riparian habitat generally provide greater ecological function and value relative to narrower habitat areas and fragmented habitats. Special-status birds with the potential to occur in the area, including willow flycatchers (*Empidonax traillii*) and western yellow-billed cuckoo (*Coccyzus americanus occidentalis*), are known to use wide continuous riparian areas. Additionally, planting several miles of active bench as proposed under the amended development will reduce edge habitat, which in general tends to support a greater amount and diversity of nonnative plants and animals (such as the shade-intolerant and highly invasive reed canary grass and the nonnative and parasitic brown-headed cowbird).

Overall, the riparian reconfiguration proposed under this permit amendment will provide an equivalent or potential increase in broader contiguous riparian areas necessary for the improvement of fish and wildlife habitat. Therefore, the Commission finds that the proposed amended development continues to be necessary for fish and wildlife habitat improvement consistent with Coastal Act section 30236.

Best Mitigation Measures Feasible

The second test set forth by Section 30236 of the Coastal Act is whether the best feasible mitigation measures have been provided to avoid or minimize the significant adverse

environmental impacts associated with the proposed substantial alteration of rivers and streams.

The proposed crossings are designed to ensure fish passage throughout the restored channel. The proposed bridge will have a free-span concrete deck that fully spans the width of the active channel corridor and which will be supported by concrete abutments on either end. The proposed culverted crossing has been designed consistent with CDFW fish passage guidelines and will be reviewed and approved by CDFW prior to construction (Special Condition 32). Furthermore, the amount of fill material associated with both crossings is proposed to be minimized by (1) limiting channel fill associated with the new bridge to only the area under the new bridge and to the minimum area needed to prevent scour to bridge abutments (approximately 450 square feet total); and by (2) removing the existing culvert crossing in its entirety and limiting the new culvert crossing to the same size and aerial extent of the existing crossing to offset fill impacts. Moreover, the size of the crossings will be set at an elevation equivalent to that of the restored river channel, thereby allowing flow from the mainstem of the river to backwater into the alcove area, providing essential off-channel fish habitat and flood attenuation in this area. Installation of the culverts as proposed will allow the floodwaters of the backwater alcove to rise and fall in sync with the flow stage in the Salt River channel, controlling hydraulic conditions and sediment transport in a manner that also provides for fish passage. Finally, there will be no net loss of aquatic habitat resulting from the two crossings, since (a) both crossings are replacing existing crossings that currently exist or have existed in the recent past (prior to sediment aggradation) on the property; and (b) old crossings will be removed during riverine restoration activities.

Under the original permit, the Commission imposed various special conditions as feasible mitigation measures to minimize the project's potential impacts to water quality, sensitive species, wetlands, and other environmentally sensitive habitats. The Applicant proposes to undertake the work proposed under this permit amendment consistent with the original permit conditions imposed for the protection of water quality and sensitive habitats. These include Special Conditions 3, 7, and 12, which remain in full force and effect:

Special Condition 3 imposes various construction responsibilities that must be adhered to during construction to protect water quality and sensitive habitats in and adjacent to the project area. These include measures such as (but not limited to) (a) prior to commencement of ground-disturbing activities, appropriate erosion, sediment, and runoff control measures shall be deployed in accordance with the final Storm Water Pollution Prevention Plan (SWPPP) approved pursuant to Special Condition 4, and all measures shall be properly maintained throughout the duration of construction activities; (b) prior to the commencement of construction, the limits of the work areas and staging areas shall be delineated in cooperation with a qualified biologist, limiting the potential area affected by construction and ensuring that all agricultural lands, wetlands, and other environmentally sensitive habitats adjacent to construction areas are avoided during construction; (c) grading, excavation, and other earth-moving activities shall only be conducted during the dry season and all work shall cease upon the onset of precipitation at the project site and shall not recommence until the predicted chance of rain is less than 40 percent; (d) any fueling and maintenance of construction equipment shall occur within upland areas outside of environmentally sensitive habitat areas or within designated staging areas; and (e)

upon completion of construction activities and prior to the onset of the rainy season, all bare soil areas shall be seeded in compliance with Special Condition 12 and mulched with weed-free rice straw.

Special Condition 7 requires adherence to various fish and aquatic resources protection measures and protocols including, but not limited to, measures the requirement that a qualified biologist shall use seining, dip nets, electrofishing, or other trapping procedures as applicable to transfer aquatic organisms out of the work area prior to commencement of in-water construction.

Special Condition 12 sets revegetation standards and restrictions to ensure that only native and non-invasive species are planted and seeded in the area.

The Commission also modifies and reimposes Special Conditions 2, 4, 5, and 6. Special Condition 2 is modified to require that the Applicant implement habitat restoration and monitor the project site in accordance with the approved final HMMP developed by H.T. Harvey & Associates dated July 2012, except as revised under Amendment No. 1-10-032-A5 relative to restored habitat area locations and projections as shown on revised Figures 5, 7, and 9 and in revised Table 1 (Exhibit 2). The HMMP includes provisions to ensure that the authorized planting plan ultimately is built-to-plan regarding location, spacing, and species diversity within four months following the completion of planting within each restoration area (all phases). The plan also requires that wildlife-friendly cattle exclusion fencing shall be installed along the restored channel areas to protect both the active channel and riparian plantings. Further, the HMMP includes provisions for quantitative monitoring of the riparian restoration areas within each habitat reach and type to ensure that the habitat develops as intended in terms of size, cover, and species diversity.

Special Condition 4 is modified and reimposed to clarify applicability to all project phases. This condition requires adherence to the final SWPPP approved for each phase of construction, including the multiple phases of Phase 2 construction. Special Condition 5, modified and reimposed under this permit amendment to clarify applicability to all project phases, requires adherence to final construction plans that substantially conform with preliminary plans approved under the original permit. Finally, Special Condition 6 is modified and reimposed under this permit amendment to clarify its applicability to all project phases. This condition requires adherence to the final debris disposal plan approved for each phase of construction, which ensures that no construction debris or materials contaminate coastal waters or wetlands.

The amended development comprises modifications necessary for (1) flood control where there is no other method to protect existing structures and development in the floodplain, and (2) the improvement of fish and wildlife habitat, both permissible uses under Section 30236. Further, the amended development, as conditioned, incorporates all feasible mitigation measures to minimize or avoid significant adverse environmental effects. Therefore, the Commission finds that as conditioned herein, the amended development is consistent with the requirements of section 30236 of the Coastal Act.

J. PERIOD OF DEVELOPMENT AUTHORIZATION FOR ADAPTIVE MANAGEMENT

Given the watershed-level scale of the SRERP, the variety of habitats and hydrologic conditions to be restored, the high initial disturbance to the ecosystem associated with the project, interactions with agricultural land uses, and a typical level of uncertainty associated with the evolution of ecosystem restoration projects in general, the approved project authorizes the implementation of an adaptive management program for up to 10 years from the date of the Commission's original permit approval (Special Condition 15). These authorized activities are described in the final approved Adaptive Management Plan (AMP) that was required to be submitted by Special Condition 14. The final approved AMP[5] describes the organizational structure for the adaptive management process, identifies the monitoring activities proposed to evaluate progress towards meeting the goals and objectives of the project, establishes the triggers or thresholds that would initiate a management response, and describes a range of potential adaptive management actions that may be undertaken on an as-needed basis. These potential management actions relate to erosion, sediment deposition, water quality, and vegetation maintenance. Prior to commencement of annual maintenance and/or adaptive management operations, Special Condition 16, which remains in full force and effect, requires that the Applicant submit an annual maintenance/ adaptive management operations plan to the Executive Director. The plan is required to conform with the AMP, to be consistent with all CDP conditions, and to contain certain details and information such as (a) a site plan; (b) copies of any necessary biological and botanical surveys needed for approval of annual maintenance/adaptive management activities as required by the AMP; (c) a plan for erosion, run-off, and sedimentation control to avoid significant adverse impacts on coastal resources; (d) if applicable, a debris disposal plan consistent with Special Condition 6, a creek dewatering and diversion plan consistent with the protection measures outlined in Special Condition 7 and a revegetation plan consistent with restrictions enumerated in Special Condition 12; and (e) a schedule for proposed annual maintenance/adaptive management activities; and other information. All of these conditions remain in full force and effect as conditions of this permit amendment.

Although the Phase 1 was completed on schedule (2013), the Phase 2 project work is behind schedule, having experienced delays, funding constraints, landowner disputes, and a greater number of seasons to construct the project than originally envisioned. Because construction of this large-scale restoration project is still in process and has taken longer than originally anticipated, the Applicant has not yet had the opportunity to fully implement the approved AMP. Because the AMP is integral to ensuring that the SRERP meets its long-term goals and objectives of habitat restoration, improved water quality, and sustained hydraulic conveyance, this amendment request includes a request to extend the period of development authorization for post-construction repair and maintenance and adaptive management activities covered by the permit, as described in the approved AMP, for up to 10 additional years from the date of Commission approval of 1-10-032-A5. The proposed revised development authorization timeline would better coordinate the post-construction monitoring schedules required by Special Conditions 2, 11 and 17 with the AMP authorization period.

[5] H.T. Harvey & Associates July 2012.

The Commission has, on occasion, granted special districts multi-year permits for such activities[6] in order to reduce both Commission and District staff workload associated with processing repetitive, routine coastal permits. However, given the fact that circumstances can change over time and techniques for addressing adaptive management needs can also evolve, the Commission chooses to grant an initial five year period of additional development authorization from the date of approval of CDP Amendment 1-10-032-A5 with a one-time ability to extend the period of development authorization for another five years, for a maximum total of 10 years of additional development authorization, if there are no changed circumstances that require review of the adaptive management operations, to ensure the development remains consistent with the Chapter 3 policies of the Coastal Act. Therefore, the Commission modifies and reimposes Special Condition 15 to limit the authorized development to five additional years from the date of approval of CDP Amendment 1-10-032-A5, but grants the Executive Director the authority to approve a request for an additional five years of adaptive management operations, provided that the request would not substantively alter the project description and/or potentially require modifications of the conditions due to new information or technology or other changed circumstances.

Finally, Special Condition 16, which remains in full force and effect without changes under this permit amendment, requires submittal of an annual maintenance/ adaptive management operations plan for the Executive Director's review and approval each year that maintenance/adaptive management activities are conducted pursuant to this CDP authorization to ensure that the various standards and restrictions required by the special conditions continue to be implemented during the course of long-term maintenance and adaptive management operations.

K. California Environmental Quality Act

The RCD, as the lead agency for CEQA purposes, certified a Final Environmental Impact Report for the proposed project on February 24, 2011 (SCH No. SD2007-05-06). The RCD Board of Directors adopted an addendum to the EIR for the proposed amended development on March 8, 2018.

Section 13096 of the Commission's administrative regulations requires Coastal Commission approval of coastal development permit applications 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 any feasible alternatives or feasible mitigation measures available, which would substantially lessen any significant adverse effect 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

[6] E.g., CDP 3-04-72 Moss Landing Harbor District routine pier replacement; CDP 3-02-047 Monterey Harbor routine operations and maintenance; CDP 1-03-004 Reclamation District levee repair and maintenance; CDP 1-07-041 Humboldt County Public Works Dpt. Jacoby Creek bridge sediment management; CDP 1-08-037 PG&E gas transmission line vegetation maintenance; etc.

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, can be found to be consistent with the requirements of the Coastal Act to conform to CEQA.