

**CALIFORNIA COASTAL COMMISSION**

NORTH COAST DISTRICT OFFICE

710 E STREET • SUITE 200

EUREKA, CA 95501-1865

VOICE (707) 445-7833

FAX (707) 445-7877

**F9a**

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**STAFF REPORT: REGULAR CALENDAR**

<b>Application No.:</b>	<b>1-11-048</b>
<b>Applicant:</b>	<b>California Department of Fish and Game</b>
<b>Agent:</b>	Trinity Associates (Aldaron Laird)
<b>Location:</b>	Within the CDFG Fay Slough Wildlife Area east of Highway 101 and Humboldt Bay, south of Walker Point Road, Humboldt County (APNs 402-171-10).
<b>Project Description:</b>	After-the-fact authorization for the restoration of 16 acres of seasonal freshwater marsh (diked former tidelands) to restored tidal marsh by breaching an existing earthen dike along Fay Slough in two locations in May of 2011.
<b>Staff Recommendation:</b>	Approval with conditions.

**SUMMARY OF STAFF RECOMMENDATION**

The applicant is seeking after-the-fact approval for the restoration of 16 acres of seasonal freshwater marsh (diked former tidelands) to restored tidal marsh by breaching an existing earthen dike along Fay Slough in two locations in May of 2011 (**Exhibits 1-3**). The project site is located within the applicant's Fay Slough Wildlife Area east of Highway 101 and Humboldt Bay between Eureka and Arcata. The standard of review for the proposed CDP application is the Coastal Act.

Significant Coastal Act issues raised by this project include: a) restoration of marine resources and the biological productivity of coastal waters and wetlands; b) conversion of agricultural lands; and c) resolving conflicts among Chapter 3 policies in a manner which on balance is the most protective of significant coastal resources.

The proposed development will convert 16 acres of non-prime agricultural land inconsistent with Sections 30241 and 30242 of the Coastal Act. However, staff believes that to not approve the project would result in significant adverse impacts to marine resources and water quality that would be inconsistent with the mandates of Sections 30230 and 30231 of the Coastal Act to maintain and restore marine resources and coastal water quality. Without the proposed project, salmonids and other sensitive fish species will continue to be at risk of being stranded in the isolated ponded area without the ability to re-access the slough channel following an overtopping event. In addition, the water quality of Fay Slough will continue to be at risk of impacts associated with a sudden discharge of up to 48 acre-feet of potentially poor-quality ponded water into the slough from a dike failure incident. Furthermore, the biological productivity of Fay Slough would not be maintained or improved, including habitat value for a diversity of sensitive species and habitats associated with the intertidal environment.

To ensure that the maintenance and enhancement of marine resources and of the biological productivity of coastal waters that would enable the Commission to use the balancing provision of Section 30007.5 is achieved, staff recommends **Special Condition 1**. This condition requires the applicant to submit a final restoration monitoring plan that includes the marine restoration goals of (a) ensuring that fish are unable to become stranded in the restoration area and have functional access between Fay Slough and the restoration area should fish enter the restoration area from the slough; and (b) achieving 16 acres of desired target tidal habitats within the restoration area (e.g., salt marsh, brackish marsh, tidal mudflats, and tidal channels).

Commission staff recommends **approval** of coastal development application 1-11-048, as conditioned. The recommended motion and resolution are shown on page 4.

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## APPENDICES

[Appendix A – Substantive File Documents](#)

## EXHIBITS

- Exhibit 1 – Regional location map
- Exhibit 2 – Project vicinity map
- Exhibit 3 – Other nearby wildlife areas
- Exhibit 4 – Fay Slough Wildlife Area overview map
- Exhibit 5 – Site plan (2011 aerial photo)
- Exhibit 6 – Aerial photos (2005-2010)
- Exhibit 7 – Mapped habitat types in the project area
- Exhibit 8 – Site photos

## MOTION AND RESOLUTION

The staff recommends that the Commission adopt the following resolution:

### Motion:

*I move that the Commission approve coastal development permit 1-11-048 pursuant to the staff recommendation.*

Staff recommends a **YES** vote on the foregoing motion. 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:

*The Commission hereby approves coastal development permit 1-11-048 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.*

## I. STANDARD CONDITIONS

This permit is granted subject to the following 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. **Interpretation:** Any questions of intent of interpretation of any condition will be resolved by the Executive Director or the Commission.
3. **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.
4. **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.

## II. SPECIAL CONDITIONS

This permit is granted subject to the following special conditions:

1. **Restoration Monitoring Program.** BY OCTOBER 1, 2012, or such additional time as the Executive Director may grant for good cause, the applicant shall submit, for the review and approval of the Executive Director, a final restoration monitoring plan designed by a qualified biologist or ecologist for monitoring the tidal restoration area to ensure that the project area is restored to functional tidal habitat as proposed.
  - A. The plan shall at a minimum include the following:
    - (i) Performance standards for achieving the marine restoration goals of (a) ensuring that fish will not become stranded in the restoration area and will have functional access between Fay Slough and the restoration area; and (b) restoring 16 acres of desired target tidal habitats within the restoration area (e.g., salt marsh, brackish marsh, tidal mudflats, and tidal channels);
    - (ii) Provisions for monitoring the restoration area for, at a minimum, the following attributes: (a) hydrology, including the extent of tidal inundation in the restoration area; (b) vegetation, including species diversity, vegetative habitat types, vegetative cover within habitat types, and nonnative species cover within habitat types within the restoration area; and (c) use of the restoration area by fish and other wildlife;
    - (iii) Provisions for monitoring the restoration area in accordance with the approved final restoration monitoring plan for a period of 5 years;
    - (iv) Provisions for submittal of annual monitoring reports to the Executive Director by September 1 of each year for the duration of the required monitoring period, beginning in 2013; and
    - (v) Provisions for submittal of a final monitoring report to the Executive Director at the end of the 5-year monitoring and reporting period, no later than December 31, 2017. The final report must be prepared in conjunction with a qualified biologist. The report must evaluate whether the tidal restoration site conforms to the goals, objectives, and performance standards set forth in the approved final restoration program. The report must address all of the monitoring data collected over the 5-year period.
  - B. If the final report indicates that the restoration project has been unsuccessful, in part or in whole, based on the approved performance standards, the permittee shall submit, within 90 days, a revised or supplemental restoration program, or mitigation program if remediation is not feasible, to compensate for those portions of the original program which did not meet the approved performance standards. The revised restoration program shall be processed as an amendment to this coastal development permit, unless the Executive Director determines that an amendment is not legally required.
  - C. The permittee shall monitor the restoration site in accordance with the approved final plan. Any proposed changes to the approved final plan shall be reported to the Executive Director. No changes to the approved final plan shall occur without a

Commission amendment to this coastal development permit, unless the Executive Director determines no amendment is legally required.

2. **Assumption of Risk, Waiver of Liability, and Indemnity Agreement.** By acceptance of this permit, the applicant acknowledges and agrees (i) that the site may be subject to hazards from earthquakes, erosion, flooding, inundation, extreme high tide events, and tsunami wave run-up; (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 arising from any injury or damage due to such hazards.
3. **State Lands Commission Review.** BY OCTOBER 1, 2012, or such additional time as the Executive Director may grant for good cause, 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.
4. **Humboldt Bay Harbor, Recreation, and Conservation District Approval.** BY OCTOBER 1, 2012, or such additional time as the Executive Director may grant for good cause, the applicant shall provide, for the review and written approval of the Executive Director, a copy of a permit issued by the Humboldt Bay Harbor, Recreation, and Conservation District, or evidence that no permit is required. The applicant shall inform the Executive Director of any changes to the project required by the District. 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.
5. **Permit Expiration & Condition Compliance.** Because the proposed development has already commenced, this coastal development permit shall be deemed issued upon the Commission's approval and will not expire. Failure to comply with the special conditions of this permit may result in the institution of an action to enforce those conditions under the provisions of Chapter 9 of the Coastal Act.

### III. FINDINGS AND DECLARATIONS

The Commission hereby finds and declares as follows:

### **A. PROPOSED PROJECT DESCRIPTION**

The applicant is seeking after-the-fact approval for breaching two small areas totaling 25 feet in length within an existing ~11,000-foot-long earthen dike along Fay Slough in May of 2011 for the purpose of converting 16 acres of seasonal generally freshwater marsh (diked former tidelands) to restored tidal marsh habitat that now is inundated twice a day during regular high tides (**Exhibits 1-2**). Prior to the proposed breaching, an approximately 16-acre portion of the 484-acre Fay Slough Wildlife Area (FSWA) was subject to recurring inundation (including in 2009, 2010, and 2011) resulting from stormwater runoff entering the area during heavy rains coupled with tidal water overtopping a low point on the unmaintained earthen dike separating the area from Fay Slough during extreme high tides (**Exhibit 5**). During periods of flooding and overtopping, the ~16-acre area would be inundated with up to three feet of standing brackish water (see **Exhibits 5 and 7**). Listed salmonids present in the slough during an overtopping event could become stranded in the ~16-acre ephemeral pond, since the fish would have no means of re-accessing the slough channel once they became trapped in the ponded area inboard of the slough dike. In addition, when the subject area is ponded, the hydrostatic pressure exerted on the dike during low tide and percolation through the dike could cause the dike to fail uncontrollably, suddenly releasing up to 48 acre-feet of water into Fay Slough with significant water quality impacts from erosion-related turbidity increases and discharge of poor-quality (high temperature, high salinity, low dissolved oxygen) ponded water into the slough.

The applicant proposes the excavation of a 50-square-foot (10 feet long by 5 feet deep) tapered breach in the northwest corner of the perimeter dike with a backhoe. An existing unimproved access road along the perimeter of the FSWA is proposed for heavy equipment access to this western breach site. The purpose of this western breach is to allow the flooded area to partially drain back into Fay Slough for worker safety purposes prior to the hand-digging of a 75-square-foot (15 feet long by 5 feet deep) tapered breach in an area of the dike on the east side of the inundated area inaccessible to vehicles and heavy equipment. The applicant proposes to construct both dike breaches during a single tide cycle to limit access and soil disturbance impacts. The applicant proposes to place excavated spoils from both breach sites in adjacent upland areas on top of the existing dike. The proposed project would result in a net increase of approximately 300 square feet of wetland area from the conversion of the two upland breach sites (dike areas) to restored tidal wetlands.

### **B. BACKGROUND, ENVIRONMENTAL SETTING, AND PERMITTING HISTORY**

#### **Background**

The applicant is seeking after the fact authorization for the development. Prior to the development, the applicant had been concerned about possible fish stranding and dike failure as described above. In addition, the applicant wanted to drain the inundated area prior to the onset of the mosquito breeding season and before water quality deteriorated to such extent that it could not be discharged into Fay Slough in preparation for restoring tidal functions to the area. Thus, with the assistance of an available California Conservation Corps crew, the applicant implemented the proposed project without the benefit of a coastal development permit or emergency permit authorization in May of 2011.

### Environmental setting

The project area is located within the applicant's 484-acre Fay Slough Wildlife Area (FSWA) at the southeastern tip of the property (**Exhibit 4**). The project area is located on the north side of the upstream end of Fay Slough due south of the end of Walker Point Road. The FSWA is located in an unincorporated area of Humboldt County northeast of the City of Eureka, the Arcata-Eureka Highway 101 corridor, and Humboldt Bay.

Prior to its acquisition by the applicant in 1987, the FSWA had been used for livestock grazing and other agricultural purposes. The FSWA is a "Type C" wildlife area, which allows for passive recreational uses such as bird-watching and wildlife viewing. No camping is allowed in the area, and hunting of waterfowl, coot, and snipe is permitted during open seasons. Other federal, state, and local wildlife areas in the nearby vicinity include the Humboldt Bay National Wildlife Refuge, the Mad River Slough Wildlife Area, and lands owned and managed for wildlife habitat by the City of Arcata (**Exhibit 3**).

The FSWA is bordered along its southern end by Fay Slough and bisected by multiple slough channels, an existing unimproved access road, and several interior dikes. With the exception of the road and dikes, the entire FSWA is considered wetland habitat, primarily diked former tidelands. Highway 101 forms the northwestern boundary of the FSWA and separates it from the intertidal marshes and mudflats of Humboldt Bay. Murray Field, a county airport at the north end of the City of Eureka, is located adjacent to the FSWA to the south, and access to the FSWA from Highway 101 is shared with an automobile dealership north of Murray Field. Lands adjacent to the north, south and east of FSWA are in agricultural use (**Exhibit 5**).

Fay Slough is a tributary to Humboldt Bay that supports a number of rare, threatened, and endangered species. Sensitive fish species known to occur or potentially found in Fay Slough include coho salmon (*Oncorhynchus kisutch*, federally and state-threatened), Chinook salmon (*O. tshawytscha*, federally threatened), steelhead trout (*O. mykiss irideus*, federally threatened), coast cutthroat trout (*O. clarkii clarkia*, state species of special concern), tidewater goby (*Eucyclogobius newberryi*, federally endangered), longfin smelt (*Spirinchus thaleichthys*, state endangered), and a number of other fishes. In addition, there are five federally designated critical habitats in Fay Slough adjacent to the project area for coho and Chinook salmon, steelhead, tidewater goby, and green sturgeon (*Acipenser medirostris*). Furthermore, various rare plant species also occur in salt and brackish marsh habitats of the FSWA near the project area, including Humboldt Bay owl's clover (*Castilleja ambigua* ssp. *humboldtiens*, California Rare Plant Rank 1B.2<sup>1</sup>), Point Reyes bird's beak (*Chloropyron* [*Cordylanthus*] *maritimum* ssp. *palustre*, California Rare Plant Rank 1B.2), and Lyngbye's sedge (*Carex lyngbyei*, California Rare Plant Rank 2.2). Moreover, sensitive bird species that forage in FSWA and nearby vicinity include brown pelican (*Pelecanus occidentalis*), various species of herons and egrets, various species of diurnal raptors, and numerous other bird species. Humboldt Bay in general is an important link in the Pacific Flyway of migratory waterfowl, shorebirds, and other water-

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<sup>1</sup> California Native Plant Society (CNPS). 2012. *Inventory of Rare and Endangered Plants* (online edition, v8-01a). CNPS. Sacramento, CA. <http://www.cnps.org/inventory>. **LIST 1B** = Rare, threatened, or endangered in California and elsewhere; **LIST 2** = Rare, threatened, or endangered in California but more common elsewhere; **0.2** = fairly endangered in California.



associated birds. The habitat provided at FSWA and other seasonal and estuarine wetlands around the bay are part of the complex ecosystem that supports hundreds of thousands of migrant and resident wildlife.

The project area is planned and zoned for Agricultural Exclusive uses under the Humboldt County LCP (though the standard of review for the proposed project is the Chapter 3 policies of the Coastal Act). Despite this planning and zoning designation, the applicant's management goal for the project area according to the 1993 FSWA Management Plan is to restore its historic tidal marsh and wildlife habitat functions, particularly since the area has been functioning as a freshwater to brackish marsh for decades due to the recurring flooding events described above. In addition, due to site-specific topography, the shape of Fay Slough, and the layout of property boundaries, the project area is isolated from surrounding agricultural and natural resources lands and is difficult to access by vehicles and agricultural equipment.

### **Permitting history at Fay Slough Wildlife Area**

The Commission has previously approved wetland enhancement activities at the FSWA. In 1989, the Commission approved Coastal Development Permit 1-89-31 that involved creating over 11 acres of wetlands by removing fill and improving freshwater wetlands on about 120 acres. The fill removed included buildings, concrete pads, and earthen fills present at the site when it was acquired by the applicant in 1987. The project also included placing fill on interior roads to form low dikes, and constructing 550 feet of additional dike. The dike, which resulted in the filling of 13 acres of wetland, was constructed to hold runoff water in two shallow freshwater ponds totaling about 120 acres. In 2001, the Commission approved CDP 1-00-025, which authorized a wetland enhancement project that involved: (1) repairing 5,142 linear feet of existing dike, (2) removing 1,400 linear feet of dike, (3) constructing 630 linear feet of new dike, (4) excavating seven shallow ponds, (5) installing four water control structures, (6) raising 2,182 linear feet of access road by two feet, and (7) creating approximately 0.52 acres of wetland at the Eel River Wildlife Area to mitigate for wetland fill from dike improvements. In 2004 the Commission approved a material amendment to CDP 1-00-025 allowing for additional wetland enhancement activities involving excavation of a three-acre basin within and next to existing seasonally inundated sloughs, installation of a new water control structure, and placement of 11,400 cubic yards of spoil material atop 8,435 linear feet of existing road prism ranging from one to two feet in depth.

## **C. OTHER AGENCY APPROVALS**

### **Department of Fish and Game**

The applicant served as the lead agency for the project for CEQA purposes. The applicant determined that the project qualified for a CEQA Categorical Exemption under Class 33 Small Habitat Restoration Projects.

### **North Coast Regional Water Quality Control Board**

The RWQCB has a Class 33 Water Quality Certification order, which covers CEQA Class 33 categorical exemption projects. Staff from the RWQCB determined that the proposed project was covered under the Class 33 order. Thus, no further approval from the RWQCB for the proposed project is required.

### **U.S. Army Corps of Engineers**

The Corps has regulatory authority over projects involving diking, filling, and placement of structures in navigable waterways under Section 10 of the Rivers and Harbors Act (RHA) of 1899 (*33 U.S.C. 1344*) and projects involving filling or discharging of materials into waters and ocean waters under Section 404 of the Clean Water Act (CWA).

For the subject project, the Corps' Eureka staff determined that the proposed project is eligible for coverage under Nationwide Permit No. 23 (Approved Categorical Exclusions). A NWP is a general approval of the activity identified in that permit.

Pursuant to Section 307(c)(3)(A) of the Coastal Zone Management Act (CZMA), any applicant for a required federal permit to conduct an activity affecting any land or water use or natural resource in the coastal zone must obtain the Coastal Commission's concurrence in a certification to the permitting agency that the project will be conducted consistent with California's approved coastal management program. The Commission's review of the subject CDP application 1-11-048 serves as Commission review of the project under the CZMA.

Under NWP 23, the applicant is not required to submit a pre-construction notification to the Corps prior to commencing the proposed activity. Thus, the Corps' determination that the project is eligible for coverage under NWP 23 serves as the ultimate Corps approval of the project. The applicant is responsible for adhering to the general conditions specified in the NWP.

### **State Lands Commission**

The State Lands Commission (SLC) has direct jurisdiction and authority over ungranted sovereign tidelands and submerged lands underlying the State's navigable waterways (ocean, bays, sloughs, lakes, and rivers) as well as over lands subject to the public trust. At the time of this staff report, SLC staff was still investigating the jurisdictional status of the lands within the project area. To ensure that the applicant has sufficient legal property interest in the site to undertake all aspects of the project on these public lands, the Commission attaches **Special Condition 3**. This condition requires that the project be reviewed and where necessary approved by the SLC.

### **Humboldt Bay Harbor, Recreation, and Conservation District**

The Harbor District is a county-wide agency with permit jurisdiction over all tidelands, submerged lands, and other lands that have been granted to the District by the SLC, including all of Humboldt Bay. To ensure that the project ultimately approved by the District is the same as the project authorized herein, the Commission attaches **Special Condition 4**, which requires the applicant to demonstrate that all necessary approvals from the District for the proposed project have been obtained.

### **D. STANDARD OF REVIEW**

The proposed project is located in the Commission's retained jurisdiction. Humboldt County has a certified local coastal program (LCP), but the site is within an area shown on State Lands Commission maps over which the state retains a public trust interest. Therefore, the standard of

review that the Commission must apply to the project is the Chapter 3 policies of the Coastal Act.

#### **E. RESTORATION OF MARINE RESOURCES & BIOLOGICAL PRODUCTIVITY**

Section 30230 of the Coastal Act states as follows:

*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 as follows:

*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.*

As cited above, Coastal Act Sections 30230 and 30231 require, in part, that marine resources and coastal wetlands and waters be maintained, enhanced, and where feasible restored. These policies specifically call for the maintenance of the biological productivity and quality of marine resources, coastal waters, streams, wetlands, and estuaries necessary to maintain optimum populations of all species of marine organisms and for the protection of human health.

The purpose of the proposed dike breaching activities is to restore historic tidal habitats to diked former tidelands that have been functioning generally as seasonal freshwater wetlands for over 100 years. Neither the Coastal Act nor the Commission's administrative regulations contain a precise definition of "restoration." The dictionary defines "restoration" in terms of actions that result in returning an article "back to a former position or condition," especially to "an unimpaired or improved condition."<sup>2</sup> The particular restorative methods and outcomes vary depending upon the subject being restored. For example, the Society for Ecological Restoration defines "ecological restoration" as "the process of intentionally altering a site to establish a defined indigenous, historical ecosystem. The goal of the process is to emulate the structure, function, diversity, and dynamics of the specified ecosystem."<sup>3</sup> Implicit in all of these varying definitions and distinctions is the understanding that the restoration entails returning something to a prior state.

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<sup>2</sup> Merriam-Webster's Collegiate Dictionary, Tenth Edition

<sup>3</sup> "Definitions," *Society of Ecological Restoration News*, Society for Ecological Restoration; Fall, 1994

Historic tidal marsh habitat has been reduced in the Humboldt Bay region by over 90 percent over the past 100+ years. Diking and filling in the early part of the last century to promote agricultural, industrial, and urban land uses resulted in the substantial degradation of northern California coastal wetlands, including those around Humboldt Bay. This degradation has resulted in a significant reduction in wetland function and wildlife values. Historically, Humboldt Bay extended from the sand spits that separate it from the Pacific Ocean to the base of the inland foothills. The bay was first diked in the late 19<sup>th</sup>-century by the railroad crossing the marshes between Eureka and Arcata. Subsequent dike construction further isolated former tidelands from the bay and the area was converted to agricultural uses. Like many of the historic tidelands around Humboldt Bay, the FSWA was never fully drained following the construction of the bay levee and therefore, the vast majority of the FSWA remains wetland habitat. However, these diked former tidelands today are functioning primarily as seasonal freshwater wetland habitat rather than historic tidal wetland habitat. The U.S. Fish and Wildlife Service and other resource agencies in the region have indicated that restoration of tidal marsh habitats around the bay is a high priority, as tidal marsh restoration is necessary for the protection, enhancement, and restoration of numerous native fish (including juvenile salmonids and tidewater goby), wildlife (including numerous bird species such as California brown pelican), and plant communities (including various rare salt marsh and brackish marsh plants), which are dependent on tidal marsh for their existence.

As discussed above, Fay Slough supports a number of rare, threatened, and endangered marine species and their associated designated critical habitats, including coho and Chinook salmon, steelhead trout, tidewater goby, green sturgeon, and a number of other species. Also as discussed above, prior to implementation of the proposed restoration project for which the applicant is requesting after-the-fact approval, these sensitive fish species were at risk of being stranded in the ephemeral pond that would form in the proposed restoration area on a recurring basis due to stormwater runoff inflow to the pond and overtopping of the dike by tides from Fay Slough, with no ability for the fish to re-access the slough channel. In addition, sensitive fish and other marine resources within Fay Slough as well as the water quality of the slough itself were at risk of impacts related to the potential for a sudden discharge of up to 48 acre-feet of ponded water (potentially of poor water quality if released with high temperature and salinity and low dissolved oxygen levels) into the slough from a failure of the unimproved, unmaintained dike. Furthermore, the proposed breaching of the dike will result in the restoration of 16 acres of tidal habitats. These habitats will include, among others, the expansion of suitable habitat for at least three DFG- and CNPS-listed rare plant species (Humboldt Bay owl's-clover, Point Reyes bird's beak, and slough sedge) that are known to occur in the salt and brackish marsh habitats associated with Fay Slough. Furthermore, the proposed restoration project will restore and enhance habitat for marine-associated and other types of birds, such as brown pelican, various types of shorebirds, and others that inhabit the estuarine wetlands of Fay Slough and Humboldt Bay. Therefore, for all of the above reasons, the proposed project will enhance and restore marine resources and protect and enhance the biological productivity and quality of coastal waters appropriate to maintain optimum populations of marine organisms and for the protection of human health, consistent with the requirements of Coastal Act Sections 30230 and 30231.

This finding that the proposed project is truly for restoration purposes is based in part on the assumption that the proposed project will be successful in restoring various historic habitats and

processes as proposed and at increasing habitat values. As such, there must be assurance that the proposed project will be successful in increasing and enhancing habitat values. Otherwise, should the project be unsuccessful at increasing and/or enhancing habitat values, or worse, if the proposed impacts of the project actually result in long term degradation of the habitat, the proposed project would not maintain and enhance marine resources or the biological productivity and quality of coastal waters consistent with the mandates of Sections 30230 and 30231.

To ensure that the project area is restored to functional tidal habitat as proposed, the Commission attaches **Special Condition 1**. This condition requires the applicant to submit a final restoration monitoring plan that includes the marine restoration goals of (a) ensuring that fish will not become stranded in the restoration area and will have functional access between Fay Slough and the restoration area; and (b) achieving 16 acres of desired target tidal habitats within the restoration area (e.g., salt marsh, brackish marsh, tidal mudflats, and tidal channels). Furthermore, the condition requires the monitoring plan to include provisions for remediation to ensure that the goals and objectives of the restoration project are met. As the restoration project's stated purpose is to enhance and restore the functional capacity and biological productivity of coastal wetlands and waters, Special Condition 1 will ensure that the site is monitored for achievement of these goals. In short, the proposed restoration work will provide significant benefits to marine resources such as sensitive fish and estuarine plant species, and it will increase available "critical habitat" for listed salmonids, tidewater goby, and green sturgeon. Without the proposed project, salmonids and other sensitive fish species will continue to be at risk of being stranded in the isolated ponded area without the ability to re-access the slough channel following an overtopping event. In addition, the water quality of Fay Slough will continue to be at risk of impacts associated with a sudden discharge of up to 48 acre-feet of potentially poor-quality ponded water into the slough from a dike failure incident. Furthermore, the biological productivity of Fay Slough would not be maintained or improved, including habitat value for a diversity of sensitive species and habitats associated with the intertidal environment.

Therefore, the Commission finds that the proposed dike breaching and restoration project is mandated by the requirements of Sections 30230 and 30231, and, as conditioned, the project will ensure the successful restoration of the biological productivity and quality of coastal waters, maintain and enhance the functional capacity of the habitat, maintain and restore optimum populations of marine organisms, and protect human health as mandated by the requirements of Sections 30230 and 30231 of the Coastal Act.

## **F. PROTECTION OF AGRICULTURAL LANDS**

Coastal Act Section 30241 states as follows:

*The maximum amount of prime agricultural land shall be maintained in agricultural production to assure the protection of the areas agricultural economy, and conflicts shall be minimized between agricultural and urban land uses through all of the following:*

- (a) *By establishing stable boundaries separating urban and rural areas, including, where necessary, clearly defined buffer areas to minimize conflicts between agricultural and urban land uses.*

- (b) *By limiting conversions of agricultural lands around the periphery of urban areas to the lands where the viability of existing agricultural use is already severely limited by conflicts with urban uses or where the conversion of the lands would complete a logical and viable neighborhood and contribute to the establishment of a stable limit to urban development.*
- (c) *By permitting the conversion of agricultural land surrounded by urban uses where the conversion of the land would be consistent with Section 30250.*
- (d) *By developing available lands not suited for agriculture prior to the conversion of agricultural lands.*
- (e) *By assuring that public service and facility expansions and nonagricultural development do not impair agricultural viability, either through increased assessment costs or degraded air and water quality.*
- (f) *By assuring that all divisions of prime agricultural lands, except those conversions approved pursuant to subdivision (b), and all development adjacent to prime agricultural lands shall not diminish the productivity of such prime agricultural lands.*

The portion of Section 30250 referenced above applicable to this project type and location [subsection (a)] requires that:

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

In addition, Coastal Act Section 30250 requires consideration of the cumulative impacts of development, defined in Coastal Act Section 30105.5 as follows:

*"Cumulatively" or "cumulative effect" means the incremental effects of an individual project shall be reviewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.*

Coastal Act Section 30242 states as follows:

*All other lands suitable for agricultural use shall not be converted to nonagricultural uses unless (1) continued or renewed agricultural use is not feasible, or (2) such conversion would preserve prime agricultural land or concentrate development consistent with Section 30250. Any such permitted conversion shall be compatible with continued agricultural use on surrounding lands.*

The total acreage of the project area is 16 acres, none of which is currently being used for agricultural purposes nor has been used for agricultural purposes for at least 25 years.

Nevertheless, as discussed in the Findings below, the proposed project will result in the conversion of 16 acres of non-prime pastureland in the project footprint to tidal habitats, inconsistent with Sections 30241 and 30242 of the Coastal Act.

### **Significance of agricultural lands in Humboldt County**

Humboldt County has a total land area of approximately 2.3 million acres, and approximately one third of this land base (~690,000 acres) is directed to some type of agricultural use. According to the Humboldt County Farm Bureau's website,<sup>4</sup> about 67,000 acres of land is classified as being under intensive farming (e.g., harvested cropland and cropland used only for pasture), while an estimated 605,000 acres of land is used primarily for grazing-related purposes (e.g., pastureland and rangeland). Traditional agriculture in the county consists of grazing beef cattle on coastal rangeland; dairy cows on rich pasture bottomlands around Humboldt Bay and the Eel River estuary; and row crops and orchards on terraced river floodplains. The region's mild and moist climate complements a growing nursery and bulb industry.

The high rainfall, deep, fertile soil, and marine climate make some of the County's agriculture land highly productive. Humboldt County agricultural products (excluding timber) had a market value of approximately \$131 million in 2008,<sup>5</sup> with the top four crops, by value, excluding timber, consisting of nursery stock (cut flowers, ornamental tree production, etc.), milk and milk products, livestock (beef cattle, dairy cows, sheep, etc.), and field crops (alfalfa, silage, range, etc.). Although Humboldt County agricultural production does not compare in quantity or economic value with California's leading agricultural counties, dairy and ranch lands are immensely important to the County's cultural, aesthetic, and ecological landscapes. The ranches that spread out across the vast pastureland surrounding Humboldt Bay, the Eel River, and Mad River deltas provide habitat for numerous wildlife and migrating waterfowl. These open spaces, both within the coastal zone and inland, represent a significant resource with a multitude of values.

The protection of the County's agricultural land in the coastal zone is a primary goal of the Humboldt County certified LCP. There is an estimated 32,500 acres of agricultural land (i.e., land designated and zoned for agricultural uses) in the County's coastal zone, approximately one third (10,600 acres) of which is within the Humboldt Bay Area Plan (HBAP) planning area (including approximately 6,500 acres of "transitional agricultural wetlands" or "farmed wetlands"). [The HBAP is one of six planning areas identified in the County's certified LCP and is the segment of the LUP associated with the subject site]. This land is either in active agricultural use or has the potential for such use. Livestock grazing and forage production comprise the primary uses of agricultural land in the Humboldt Bay area Eel River Delta.

Although the standard of review for this coastal development permit application is the Chapter 3 policies of the Coastal Act, the local government's certified LCP may be used as guidance. The area is planned and zoned for Agricultural Exclusive uses (AE) under the Humboldt County certified LCP. The LCP recognizes the importance and uniqueness of agricultural land in the Humboldt Bay planning area. The HBAP contains numerous policies requiring the protection of

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<sup>4</sup> <http://www.humboldtfarmbureau.org>

<sup>5</sup> Humboldt County Department of Agriculture Crop Report 2008.

both prime and nonprime agricultural lands. Sections 30241 and 30242 of the Coastal Act are directly incorporated into Section 3.24 of the HBAP as development policies. Section 3.24-B-1 and -2 of the HBAP require the protection of prime and non-prime agricultural lands outside the urban limit line (as is the case with the subject site) and specifically prohibit “*any use that would impair the economic viability of agricultural operations on such lands.*” In addition, Section 3.30-B-2 contains a number of policies related to allowable uses in “transitional agricultural lands” (which are defined as “wetlands” under the LCP and Coastal Act definitions).

### **Reclamation in Humboldt County: the historical establishment of agricultural land through conversion and fill of tidal wetlands**

Much agricultural land in the coastal zone of Humboldt County occurs on historic tidal marsh. Humboldt Bay supported nearly 10,000 acres of intertidal coastal marsh, and the Eel River Delta historically supported a comparable amount. Euro-American settlers diked and drained most of the marshes and sloughs in the area for agricultural use beginning in the late 19<sup>th</sup>-century. Encouraged by federal land use policies, this approach enabled increased pasture and hay production on thousands of acres, many of which are still in agricultural production today.

Earthen levees were constructed along the margins of marsh plains to a height of about 3 to 4 feet above the marsh plain using locally excavated mud. The associated borrow ditches were typically located on the bayward side of the dikes, creating narrow channels. To alleviate long periods of saturated ground in reclaimed agricultural fields, underground drainage tiles were placed on a few thousand acres around Humboldt Bay. These drainage tiles were effective for only a few years before becoming plugged. Alternatively, open ditches were excavated to facilitate drainage in some areas. Tidegates were installed to enable the enclosed basins to drain at low tide. There is a tide gate in the Fay Slough dike upstream of the eastern breach site.

These enclosed basins filled naturally by sedimentation, were filled actively, or both. Successful farming of these areas ensued for many years. Nevertheless, some areas proved more successful than others. As soil maps demonstrate, these diked former tideland areas are not the most productive in Humboldt County. Many were immediately compromised by poor soils. Others suffered from frequent inundation at high tides and during other unfavorable conditions. Eventually, productivity in these areas declined, and many farms and ranches in low-lying areas of former tidal marsh have been sold willingly to public entities for wildlife management purposes. Much of the Humboldt Bay National Wildlife Refuge and Department of Fish and Game properties around Humboldt Bay and the Eel River Delta have been so assembled.

### **Prime agricultural land determination**

As cited above, Coastal Act Sections 30241 and 30242 require the protection of prime agricultural lands and set limits on the conversion of all agricultural lands to non-agricultural uses. Coastal Act Section 30113 defines “*prime agricultural land*” through incorporation-by-reference of paragraphs (1) through (4) of Section 51201(c) of the California Government Code:

*“Prime agricultural land entails land with any of the follow characteristics: (1) a rating as class I or class II in the Natural Resource Conservation Service land use capability classifications; or (2) a rating 80 through 100 in the Storie Index Rating; or (3) the ability to support livestock used for the production of food and*



*fiber with an annual carrying capacity equivalent to at least one animal unit per acre as defined by the United States Department of Agriculture; or (4) the ability to normally yield in a commercial bearing period on an annual basis not less than two hundred dollars (\$200) per acre of unprocessed agricultural plant production of fruit- or nut-bearing trees, vines, bushes or crops which have a nonbearing period of less than five years.”*

The four different prongs of the definition of “prime agricultural land” relate to the value and utility of the land in terms of range of agricultural uses and productivity. The land use capability classification rates the utility of the land based on various physical factors (e.g., rock type, soil type, slope, erosion potential, etc.). The lower the rating the more utility the land is considered to have for various agricultural uses. The Storie Index Rating is based on soil characteristics that govern the land’s potential utilization and productive capacity (e.g., characteristics of the soil profile, surface texture, slope, drainage, nutrient level, acidity, alkalinity, etc.) independent of other physical or economic factors that might determine the desirability of growing certain plants in a given location. The third paragraph of the definition speaks to the number of “animal units” the land can sustain. An “animal unit” (AU) is a standardized measure of animals used for various agricultural purposes. A 1,000-pound beef cow is the standard measure of an animal unit. The dry matter forage requirement of one animal unit is 26 pounds per day. Animal unit equivalents are calculated for various other animals. A 700-pound steer is 0.80 animal units. A 1,300-pound horse is 1.20 animal units. A 120-pound sheep is 0.20 animal units. The amount of forage used by one animal unit in a month is an “animal unit month” (AUM). Finally, the fourth prong of the definition of prime agricultural land relates to the agricultural value of the land in terms of its capacity to generate a minimum commercial revenue of \$200 per acre. Land that meets any one of the four criteria in the definition is considered “prime” under the Coastal Act.

None of the land in the project area meets the statutory definition of prime agricultural land (Section 51201(c) of the California Government Code cited above). The soils in the area are classified primarily as “Occidental, 0-2% slopes.” This soil type has values that fall well below those required for classification as prime agricultural land. In general, the soil has severe limitations due to water in or on the soil that interferes with plant growth and cultivation. Due to chronic flooding and long-term ponding, the land is unavailable for agricultural use for at least half of every year. Thus, the land fails to qualify for rating as class I or class II in the Natural Resource Conservation Service land use capability classifications or for rating 80-100 in the Storie Index Rating, and the area is incapable of supporting one animal unit per acre as defined by the United States Department of Agriculture (instead it supports approximately one third of an AUM per acre). In other words, the agricultural land in the project area does not meet any of the first three prongs of the definition of “prime agricultural land” as cited in Section 51201(c) of the California Government Code.

Regarding the fourth prong of the definition cited above (...*the ability to normally yield in a commercial bearing period on an annual basis not less than two hundred dollars (\$200) per acre of unprocessed agricultural plant production of fruit- or nut-bearing trees, vines, bushes or crops which have a nonbearing period of less than five years*), the property is incapable of generating the minimum revenue required by paragraph (4) of Section 51201(c) of the Government Code. The value of hay produced on land subject to chronic saturation and

inundation is notoriously low both in terms of the nutritional value of the forage and in terms of harvestable quantity due to length of time each year that standing water is present. Based on calculations done for similar agricultural properties located on diked former tidelands around Humboldt Bay and the Eel River estuary (e.g., see adopted findings for CDP 1-10-032<sup>6</sup>), annual production value would be at most approximately \$120/acre from the most productive areas of the property. Therefore, the land does not generate the minimum revenue required to qualify it as “prime agricultural land” under Section 51201(c) of the California Government Code.

In conclusion, none of the agricultural land within the project area meets the statutory definition of “prime agricultural land” cited above.

### **Minimizing conflicts between agricultural and urban land uses**

As stated above, the proposed project will reduce the total amount of available agricultural land in the area by 16 acres. According to the County Farm Advisor for the U.C. Cooperative Extension in Eureka, this translates to a loss of less than five animal units per year. In addition, the applicant currently leases approximately 180 acres of the FSWA for grazing, which would not be affected by the proposed project.

Section 30241 requires that conflicts between urban and agricultural land uses be minimized through, among other things, limiting conversions of agricultural lands. Section 30241(b) limits conversions of agricultural lands around the periphery of urban areas to the lands where the viability of existing agricultural use is already severely limited by conflicts with urban uses or where the conversion of the lands would complete a logical and viable neighborhood and contribute to the establishment of a stable limit to urban development. Section 30241(c) permits the conversion of agricultural lands surrounded by urban uses where the conversion of the land would be consistent with Section 30250. Finally, Section 30241(d) requires the development of available lands not suited for agriculture prior to the conversion of agricultural lands.

The proposed conversion of 16 acres of agricultural lands in the project area constitutes a conversion of agricultural land in an area that is neither located around the periphery of urban areas nor surrounded by urban uses, and the viability of existing agricultural use at the site is not limited by conflicts with urban uses. The project site is located in an unincorporated area of the County outside of the urban limit line. Except for rural residential development along Walker Point Road north of the project area, all of the lands surrounding the project site are undeveloped and used for agricultural uses or natural resources uses. In addition, there are many areas of undeveloped land within the coastal zone around the Humboldt Bay region that are not suitable for agriculture that have yet to be developed. Moreover, although the proposed conversion will not affect any land that is currently in agricultural use, the Commission finds that the cumulative loss of agricultural lands in the general project vicinity through the course of various restoration projects over the past seven years is significant (e.g., CDPs 1-03-031, 1-05-017, 1-09-020, and 1-09-030).

Thus, given this location relative to adjoining land uses and the cumulative loss of agricultural

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<sup>6</sup> <http://documents.coastal.ca.gov/reports/2011/10/W10b-10-2011.pdf>

lands in the project vicinity, development of the restoration project on the currently grazed portions of the site would not be consistent with the limitation on conversion of agricultural lands of Section 30241(b), (c), and (d) and would not serve to minimize conflicts between agricultural and urban land uses.

For all of the reasons stated above, the Commission finds the permanent loss of the subject 16 acres of agricultural land is not consistent with the provisions of Section 30241 cited above.

#### **Conversion of “all other lands” suitable for agricultural use**

Coastal Act Section 30242 protects lands suitable for agricultural use that are not prime agricultural lands or agricultural lands on the periphery of urban areas from conversion to non-agricultural use unless continued agricultural use is not feasible, or such conversion would preserve prime agricultural land or concentrate development consistent with Section 30250.

The proposed restoration project will convert approximately 16 acres of non-prime agricultural land to restored tidal habitats. Although the land is not considered prime, it has not been demonstrated that continued agricultural use of the site is not feasible. Furthermore, conversion of the land to non-agricultural uses under the proposed project would not preserve prime agricultural land or concentrate development, which the Coastal Act prescribes as the basis for allowing conversion. For these reasons, the proposed conversion of agricultural lands in the project area would be inconsistent with the requirements of Coastal Act Section 30242.

#### **G. CONFLICT RESOLUTION**

Although the proposed project would result in the conversion of 16 acres of non-prime agricultural land inconsistent with the provisions of Sections 30241 and 30242, to not approve the project would result in a failure to restore marine resources and the biological productivity of coastal wetlands and waters necessary to maintain healthy populations of marine organisms, inconsistent with the mandates of Sections 30230 and 30231 of the Coastal Act. As discussed above, Sections 30230 and Section 30231 mandate that the biological productivity of coastal waters appropriate to maintain healthy optimum populations of marine organisms shall be maintained.

#### **The identification of a true conflict is normally a condition precedent to invoking a balancing approach**

The standard of review for the Commission’s decision whether to approve a coastal development permit in the Commission’s retained jurisdiction is whether the project as proposed is consistent with the Chapter 3 policies of the Coastal Act. In general, a proposal must be consistent with all relevant policies in order to be approved. Put differently, consistency with each individual policy is a necessary condition for approval of a proposal. Thus, if a proposal is inconsistent with one or more policies, it must normally be denied (or conditioned to make it consistent with all relevant policies).

However, the Legislature also recognized that conflicts can occur among those policies (Coastal Act Section 30007.5). It therefore declared that when the Commission identifies a conflict among the policies in Chapter 3, such conflicts are to be resolved “*in a manner which on balance is the most protective of significant coastal resources* [Coastal Act Sections 30007.5 and

30200(b)].” That approach is generally referred to as the “balancing approach to conflict resolution.” Balancing allows the Commission to approve proposals that conflict with one or more Chapter 3 policies, based on a conflict among the Chapter 3 policies as applied to the proposal before the Commission. Thus, the first step in invoking the balancing approach is to identify a conflict among the Chapter 3 policies.

### **Identification of a conflict**

For the Commission to use the balancing approach to conflict resolution, it must establish that a project presents a substantial conflict between two statutory directives contained in Chapter 3 of the Coastal Act. The fact that a proposed project is consistent with one policy of Chapter 3 and inconsistent with another policy does not necessarily result in a conflict. Virtually every project will be consistent with some Chapter 3 policy. This is clear from the fact that many of the Chapter 3 policies prohibit specific types of development. For example, section 30211 states that development “*shall not interfere with the public’s right of access to the sea where acquired through use or legislative authorization . . .*,” and subdivision (2) of section 30253 states that new development “*shall . . . neither create nor contribute significantly to erosion . . . or in any way require the construction of protective devices . . .*” Almost no project would violate every such prohibition. A project does not present a conflict between two statutory directives simply because it violates some prohibitions and not others.

In order to identify a conflict, the Commission must find that although approval of a project would be inconsistent with a Chapter 3 policy, the denial of the project based on that inconsistency would result in coastal zone effects that are inconsistent with some other Chapter 3 policy. In most cases, denial of a proposal will not lead to any coastal zone effects at all. Instead, it will simply maintain the *status quo*. The reason that denial of a project can result in coastal zone effects that are inconsistent with a Chapter 3 policy is that some of the Chapter 3 policies, rather than prohibiting a certain type of development, affirmatively mandate the protection and enhancement of coastal resources, such as sections 30210 (“*maximum access . . . and recreational opportunities shall be provided . . .*”), 30220 (“*Coastal areas suited for water-oriented recreational activities that cannot readily be provided at inland water areas shall be protected for such uses*”), and 30230 (“*Marine resources shall be maintained, [and] enhanced...*”). If there is ongoing degradation of one of these resources, and a proposed project would cause the cessation of that degradation, then denial would result in coastal zone effects (in the form of the continuation of the degradation) inconsistent with the applicable policy. Thus, the only way that denial of a project can have impacts inconsistent with a Chapter 3 policy, and therefore the only way that a true conflict can exist, is if: (1) the project will stop some ongoing resource degradation, and (2) there is a Chapter 3 policy requiring the Commission to protect and/or enhance the resource being degraded. Only then is the denial option rendered problematic because of its failure to fulfill the Commission’s protective mandate.

With respect to the second of those two requirements though, there are relatively few policies within Chapter 3 that include such an affirmative mandate to enhance a coastal resource. Moreover, because the Commission’s role is generally a reactive one, responding to proposed development rather than affirmatively seeking out ways to protect resources, even policies that are phrased as affirmative mandates to protect resources more often function as prohibitions. For example, Section 30240’s requirement that environmentally sensitive habitat areas “*shall be*

*protected against any significant disruption of habitat values*” generally functions as a prohibition against allowing such disruptive development, and its statement that “*only uses dependent on those resources shall be allowed within those areas*” is a prohibition against allowing non-resource-dependent uses within these areas. Similarly, Section 30251’s requirement to protect “*scenic and visual qualities of coastal areas*” generally functions as a prohibition against allowing development that would degrade those qualities. Section 30253 begins by stating that new development shall minimize risks to life and property in certain areas, but that usually requires the Commission to condition projects to ensure that they are not unsafe. Even Section 30220, listed above as an affirmative mandate, can be seen more as a prohibition against allowing non-water-oriented recreational uses (or water-oriented recreational uses that could be provided at inland water areas) in coastal areas suited for such activities. Denial of a project cannot result in a coastal zone effect that is inconsistent with a prohibition on a certain type of development. As a result, there are few policies that can serve as a basis for a conflict.

Similarly, denial of a project is not inconsistent with Chapter 3, and thus does not present a conflict, simply because the project would be less inconsistent with a Chapter 3 policy than some alternative project would be, even if approval of the proposed project would be the only way in which the Commission could prevent the more inconsistent alternative from occurring. For denial of a project to be inconsistent with a Chapter 3 policy, the project must produce tangible, necessary enhancements in resource values over existing conditions, not over the conditions that would be created by a hypothetical alternative. In addition, the project must be fully consistent with the Chapter 3 policy requiring resource enhancement, not simply less inconsistent with that policy than the hypothetical alternative project would be. If the Commission were to interpret the conflict resolution provisions otherwise, then any proposal, no matter how inconsistent with Chapter 3, which offered even the smallest, incremental improvement over a hypothetical alternative project, would necessarily result in a conflict that would justify a balancing approach. The Commission concludes that the conflict resolution provisions were not intended to apply based on an analysis of different potential levels of compliance with individual policies or to balance a proposed project against a hypothetical alternative.

In addition, if a project is inconsistent with at least one Chapter 3 policy, and the essence of that project does not result in the cessation of ongoing degradation of a resource the Commission is charged with enhancing, the project proponent cannot “create a conflict” by adding on an essentially independent component that does remedy ongoing resource degradation or enhance some resource. The benefits of a project must be inherent in the essential nature of the project. If the rule were to be otherwise, project proponents could regularly “create conflicts” and then demand balancing of harms and benefits simply by offering unrelated “carrots” in association with otherwise unapprovable projects. The balancing provisions of the Coastal Act could not have been intended to foster such an artificial and manipulatable process. The balancing provisions were not designed as an invitation to enter into a bartering game in which project proponents offer amenities in exchange for approval of their projects.

Finally, a project does not present a conflict among Chapter 3 policies if there is at least one feasible alternative that would accomplish the essential purpose of the project without violating any Chapter 3 policy. Thus, an alternatives analysis is a condition precedent to invocation of the balancing approach. If there are alternatives available that are consistent with all of the relevant

Chapter 3 policies, then the proposed project does not create a true conflict among Chapter 3 policies.

In sum, in order to invoke the balancing approach to conflict resolution, the Commission must conclude all of the following with respect to the proposed project before it: (1) approval of the project would be inconsistent with at least one of the policies listed in Chapter 3; (2) denial of the project would result in coastal zone effects that are inconsistent with at least one other policy listed in Chapter 3, by allowing continuing degradation of a resource the Commission is charged with protecting and/or enhancing; (3) the project results in tangible, necessary resource enhancement over the current state, rather than an improvement over some hypothetical alternative project; (4) the project is fully consistent with the resource enhancement mandate that requires the sort of benefits that the project provides; (5) the benefits of the project are a function of the very essence of the project, rather than an ancillary component appended to the project description in order to “create a conflict; ” and (6) there are no feasible alternatives that would achieve the objectives of the project without violating any Chapter 3 policies.

An example of a project that presented such a conflict is a project approved by the Commission in 1999 involving the placement of fill in a wetland in order to construct a barn atop the fill and the installation of water pollution control facilities on a dairy farm in Humboldt County (CDP 1-98-103, O’Neil). In that case, one of the main objectives of the project was to create a more protective refuge for cows during the rainy season. However, another primary objective was to improve water quality by enabling the better management of cow waste. The existing, ongoing use of the site was degrading water quality, and the barn enabled consolidation and containment of manure, thus providing the first of the four necessary components of an effective waste management system. Although the project was inconsistent with Section 30233, which limits allowable fill of wetlands to seven enumerated purposes, the project also enabled the cessation of ongoing resource degradation. The project was fully consistent with Section 30231’s mandate to maintain and restore coastal water quality and offered to tangibly enhance water quality over existing conditions, not just some hypothetical alternative. Thus, denial would have resulted in impacts that would have been inconsistent with Section 30231’s mandate for improved water quality. Moreover, it was the very essence of the project, not an ancillary amenity offered as a trade-off, that was both inconsistent with certain Chapter 3 policies and yet also provided benefits. Finally, there were no alternatives identified that were both feasible and less environmentally damaging.

### **The proposed project presents a conflict**

The Commission finds that the proposed project presents a true conflict between Chapter 3 policies of the Coastal Act. The proposed development will convert 16 acres of non-prime agricultural land inconsistent with Sections 30241 and 30242 of the Coastal Act. However, to not approve the project would result in significant adverse impacts to marine resources and water quality that would be inconsistent with the mandates of Sections 30230 and 30231 of the Coastal Act to maintain and restore marine resources and coastal water quality.

As discussed above in Finding IV-E, without the proposed project, salmonids and other sensitive fish species will continue to be at risk of being stranded in the isolated ponded area without the ability to re-access the slough channel following an overtopping event. In addition, the water

quality of Fay Slough will continue to be at risk of impacts associated with a sudden discharge of up to 48 acre-feet of potentially poor-quality ponded water into the slough from a dike failure incident. Furthermore, the biological productivity of Fay Slough would not be maintained or improved, including habitat value for a diversity of sensitive species and habitats associated with the intertidal environment.

Although the proposed project is inconsistent with the requirements of Section 30242 that protects productive agricultural land and limit the conversion of agricultural land, denial would preclude achieving Sections 30230's and 30231's mandates for protection and maintenance of marine resources and the biological productivity of coastal waters appropriate to maintain optimum populations of all species of marine organisms and protect human health. In addition, it is the very essence of the project, not an ancillary amenity offered as a trade-off, that is both inconsistent with certain Chapter 3 policies and yet also provides benefits. Finally, as discussed below, there are no alternatives identified that were both feasible and less environmentally damaging.

### **Alternatives analysis**

As noted above, a true conflict among Chapter 3 policies would not exist if there are feasible alternatives available that are consistent with all of the relevant Chapter 3 policies. Alternatives that have been identified that conceivably could accomplish the essential purposes of the project (i.e., tidal habitat restoration, water quality improvement, and fish habitat protection) include (1) alternative sites; (2) alternative methods; and (3) the "no project" alternative, as discussed below.

#### **(1) Alternative sites**

Restoration of the former habitat conditions that existed on a site prior to manipulation by humans within the meaning of Sections 30230 and 30231 of the Coastal Act is inherently site specific. As discussed previously, implicit in the common definition of restoration is the understanding that the restoration entails returning something to a prior state. A site cannot be returned to a prior state by performing wetland enhancement or creation work at some other site. However, restoration is also defined as reestablishing ecological processes, functions, and biotic/abiotic linkages that lead to a persistent, resilient system integrated within its landscape that may not necessarily result in a return to historic locations or conditions with the subject wetland area. Thus, restoration of ecological processes, functions, and biotic/abiotic linkages at an alternative location within the landscape of the particular wetland system involved could under certain circumstances be found to be consistent with Sections 30230 and 30231 of the Coastal Act. However, no such feasible alternative location other than the project site exists in this case. Nearly the entire 484-acre project parcel is designated and zoned as agricultural land, and a large portion of this land has already been converted and restored to marine and other wetland habitats, so there is no other location on the parcel where the restoration could be carried out that would not result in a conversion of agricultural land inconsistent with Sections 30241 and 30242 of the Coastal Act. Similarly, if restoration of another site to restore estuarine habitats was considered, no feasible off-site locations that would not result in conversions of agricultural land inconsistent with Sections 30241 and 30242 have been identified. Much of the land surrounding Humboldt Bay that could support the habitat

types to be restored has been diked, drained, and cleared for agricultural purposes, and thus the proposed site is one of the few locations where the proposed restoration project could occur. Therefore, implementing the project at an alternative location is not a feasible alternative that is consistent with all relevant Chapter 3 policies.

**(2) Alternative project methods and designs**

The proposed restoration project could conceivably be implemented differently than proposed to achieve the same restoration objectives. For example, the applicant could excavate larger breach areas to increase tidal inundation in the restoration area, or it could excavate interior channels through the area to increase the tidal prism. Such alternative methods and design would achieve similar results but would not avoid conversion of agricultural lands to tidal habitat in a manner inconsistent with Sections 30241 and 30242 of the Coastal Act. In addition, alternative project methods and designs such as described above would have resulted in more significant short-term adverse environmental effects from excavation within wetland habitat areas, movement of equipment through wetland habitat, a longer construction window, and other impacts. Furthermore, the project is designed to ensure sufficient tidal action will be introduced to the site to restore all 16 acres to tidal habitat. **Special Condition No. 1** requires the applicant to monitor the success of the restoration project and includes requirements for remediation to ensure that the goals and objectives of the restoration project are met, including the standard that the site be sufficiently inundated by tidal waters to restore tidal habitat to all 16 acres.

Therefore, implementation of alternative methods and designs of the restoration project are not less environmentally damaging feasible alternatives that are consistent with all Chapter 3 policies.

**(3) “No project” alternative**

The “no project” alternative would maintain the *status quo* of the site and would not restore historic tideland habitats associated with Fay Slough, along with their associated benefits to sensitive fish and plant species, among other species, as proposed. Existing conditions on the project site consist of chronically saturated and inundated diked former tidelands that have not been used agriculturally for many years. Under the “no project” alternative, the land would continue to be diked and subject to recurring inundation during flooding and overtopping events, but there would be no restored and improved habitat for marine resources, and the biological productivity of the coastal wetlands and waters appropriate to maintain optimum populations of marine organisms would thus not be restored. Salmonids would continue to be at risk of stranding in the ephemeral pond with no way of re-accessing the slough channel if overtopped, and the water quality of Fay Slough would continue to be at risk of a sudden dike failure releasing ponded water into the slough to the detriment of its marine resources. Therefore, the Commission finds that the “no project” alternative would have significant impacts to coastal resources that would be inconsistent with Section 30230’s mandate to, where feasible, restore marine resources and maintain and improve biological productivity. Therefore, the “no project” alternative is not a feasible alternative that is consistent with all relevant Chapter 3 policies.



As discussed above, none of the identified alternatives to the proposed project would be both feasible and consistent with all relevant Chapter 3 policies. The Commission further finds that based on the alternatives analysis above, the proposed project is the least environmentally damaging feasible alternative.

### **Conflict resolution**

After establishing a conflict among Coastal Act policies, Section 30007.5 requires the Commission to resolve the conflict in a manner that is on balance most protective of coastal resources. In this case, the Commission finds that the impacts on coastal resources from not constructing the project would be more significant than the project's agricultural conversion impacts. Denying the project because of its inconsistency with Sections 30241 and 30242 would avoid the conversion of 16 acres of non-prime, inactive agricultural land. However, the agricultural land being converted is low quality, inactive, difficult to access, available only on a seasonal basis, and does not possess any of the characteristics of "prime agricultural land" as defined by Section 51201(c) of the California Government Code. In addition, as the proposed salmonid habitat and water quality enhancements will (a) protect salmonids from fish stranding, (b) avoid erosion and water quality impacts from a catastrophic failure if the dike breached naturally, and (c) maintain and enhance marine resources and the biological productivity of coastal waters appropriate to maintain optimum populations of all species of marine organisms and protect human health, the proposed improvements are mandated by the requirements of Sections 30230 and 30231. Therefore, the Commission finds that the restoration of tidal estuarine habitat just described, which would maintain and enhance marine resources necessary to maintain the biological productivity of existing degraded wetlands, maintain optimum populations of all species of marine organisms, and protect human health, would be more protective of coastal resources than the impacts of the conversion of 16 acres of non-prime, inactive agricultural land.

As discussed above in Finding IV-E, to ensure that the maintenance and enhancement of marine resources and of the biological productivity of coastal waters that would enable the Commission to use the balancing provision of Section 30007.5 is achieved, the Commission attaches **Special Condition 1**. This condition requires the applicant to submit a final restoration monitoring plan that includes the marine restoration goals of (a) ensuring that fish are unable to become stranded in the restoration area and have functional access between Fay Slough and the restoration area should fish enter the restoration area from the slough; and (b) achieving 16 acres of desired target tidal habitats within the restoration area (e.g., salt marsh, brackish marsh, tidal mudflats, and tidal channels). Furthermore, the condition requires the monitoring plan to include provisions for remediation to ensure that the goals and objectives of the restoration project are met. The Commission finds that without Special Condition 1, the proposed project could not be approved pursuant to Section 30007.5 of the Coastal Act.

### **Mitigation for agricultural impacts**

As stated above, the conflict resolution provisions of the Coastal Act require that the conflict be resolved in a manner that on balance is the most protective of significant coastal resources. To meet this test, in past actions where the Commission has invoked the balancing provisions of the Coastal Act, the Commission has found it necessary to mitigate adverse impacts on coastal

agricultural resources to the maximum extent feasible. The applicant has not proposed any mitigation to compensate for the loss of agricultural land caused by the project.

The Commission finds that in this particular case because (1) the project proposes to re-establish prior habitat conditions and the processes that create those conditions in a converted and degraded natural wetland (seasonal agricultural land/diked former tideland), and all of the agricultural land to be converted will be used solely for this purpose; (2) the project, as conditioned, will result in significant improvements in habitat value and diversity in a self-sustaining, persistent fashion independent of the need for repeated maintenance or manipulation to uphold the habitat function; and (3) the agricultural land being converted is low quality, inactive, difficult to access, available only on a seasonal basis, and does not possess any of the characteristics of “prime agricultural land” as defined by Section 51201(c) of the California Government Code, no agricultural mitigation is necessary to compensate for the conversion of 16 acres of non-prime agricultural land for the restoration of tidal estuarine habitats.

## **H. PROTECTION OF ARCHAEOLOGICAL RESOURCES**

Section 30244 of the Coastal Act states as follows:

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

The subject property has an Archaeological Resources Protection Combining Zone designation under the County’s certified LCP. The project area includes lands formerly occupied by the Wiyot tribe prior to Euro-American exploration and settlement in the area in mid 1800s. The ancestral Wiyot territory extended from the Little River (near McKinleyville) to the Bear River Mountains (near Ferndale) and inland approximately 15 miles to the first mountain ridgeline. Humboldt Bay (Wiki) was the central division of the territory. The pattern of Wiyot settlements, located along river terraces, the Humboldt Bay margin, and tidewater sloughs, means that much of the bay margin, tributary sloughs, and adjacent uplands have the potential to hold archaeological resources.

Because the proposed breaching activity for which the applicant is seeking after-the-fact authorization was limited to the existing dike structure itself, which was constructed after Wiyot settlement of the area, the project as proposed and constructed would not adversely impact archaeological or paleontological resources.

Although the Fay Slough dike was partially constructed as early as 1895, the dike in the project area is not the original dike but rather is a later addition to the Fay Slough dike system. Nonetheless, the Fay Slough dike system has been deemed a historic resource by archaeologists and historians in the area (according to a 2006-2007 cultural resources investigation completed by archaeologist Ann King Smith and historian Susie Van Kirk for a 240-acre enhancement area that included the subject site). The dike system is part of a larger and significant rural historic cultural landscape which is bound by Ryan and Freshwater Sloughs to the south, Highway 101 to the west, Walker Point to the north, and Old Arcata Road to the east.

An historical resource refers to any object, building, structure, site, area place, record, or manuscript which is historically or archaeologically significant. Although archaeological resources may be historic resources under this definition, the reverse is not true. Not all historic resources are old enough or of a nature to be considered “archaeological resources.” Section 30244 of the Coastal Act specifically refers to the protection of archaeological and paleontological resources, not historic resources. Therefore, the Commission does not have a basis to require mitigation for potential impacts to historic resources that do not qualify as archaeological or paleontological resources.

Even if the Commission did have a Coastal Act basis to require mitigation for potential impacts to the dike as an historic resource that does not qualify as an archaeological or paleontological resource, which it does not, the project as proposed would not significantly affect the historic significance of the Fay Slough dike system since (1) the combined length of the two breaches affects far less than one percent of the overall dike system, (2) the limited breaching will not eliminate examples of the physical characteristics of the dike that convey historical significance to the Fay Slough cultural landscape, (3) the limited breaching of the dike in the project area will not impair the ability of the Fay Slough cultural landscape to meet the requirements for eligibility for inclusion in the California Register of Historical Resources, and (4) implementing the limited breaching and drainage will serve to preserve the remainder of the historic dike in the area by eliminating the possibility of a larger uncontrolled breach with adverse impacts to the overall dike system.

No evidence of archaeological or paleontological resources has been found at the site and the development will not affect potential archaeological or paleontological resources. Therefore, the Commission finds that the proposed project is consistent with Coastal Act Section 30244.

## **I. FLOOD HAZARDS**

Coastal Act Section 30253 states, in relevant part, the following:

*New development shall do all of the following: (a) Minimize risks to life and property in areas of high geologic, flood; and fire hazard. (b) 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...*

The subject property has a Flood Hazard Area Combining Zone designation under the County’s certified LCP, and the entire project area is located within the FEMA-mapped 100-year floodplain. Although the project will increase tidal inundation to a 16-acre area, because the area is contained on three sides by an existing dike and on the fourth (north) side by an upland hillside that rises 40 feet in height to Walker Point Road, the project as proposed minimizes flood hazard risks to areas adjacent to the project site.

Nevertheless, given that the applicant has chosen to implement the project despite the identified flooding risks, the applicant must assume the risks. Therefore, the Commission attaches **Special Condition 2**. Special Condition No. 2 notifies the applicant that the Commission is not liable for damage as a result of approving the permit for development. The condition also requires the applicant to indemnify the Commission in the event that third parties bring an action against the Commission as a result of the failure of the development to withstand the hazards. As conditioned, the Commission finds the development is consistent with Section 30253 of the Coastal Act.

#### **J. PUBLIC ACCESS**

Coastal Act Sections 30210, 30211, and 30212 require the provision of maximum public access opportunities, with limited exceptions. Coastal Act Section 30210 requires in applicable part that maximum public access and recreational opportunities be provided when consistent with public safety, private property rights, and natural resource protection. Section 30211 requires in applicable part that development not interfere with the public's right of access to the sea where acquired through use (i.e., potential prescriptive rights or rights of implied dedication). Section 30212 requires in applicable part that public access from the nearest public roadway to the shoreline and along the coast be provided in new development projects, except in certain instances, such as when adequate access exists nearby or when the provision of public access would be inconsistent with public safety. In applying Sections 30211 and 30212, the Commission is limited by the need to show that any denial of a permit application based on these sections or any decision to grant a permit subject to special conditions requiring public access is necessary to avoid or offset a project's adverse impact on existing or potential public access.

The project site is located between Highway 101 and Old Arcata Road, inland from the margin of Humboldt Bay. The FSWA is open and accessible to the public. As discussed above, the area is a "Type C" wildlife area, which allows for passive recreational uses such as bird-watching and wildlife viewing. No camping is allowed in the area, but camping and motel accommodations are available for visitors to the area at several nearby locations in Eureka and Arcata.

The proposed project does not involve any changes or additional restrictions to existing public access that would interfere with or reduce the amount of area public access and recreational opportunities. In fact, public use of the project site for bird-watching and wildlife viewing may increase, as the proposed enhancements are expected to benefit waterfowl and other water-associated wildlife.

Therefore, the Commission finds that the proposed project would not have an adverse effect on public access and that the project as proposed is consistent with the requirements of Coastal Act Sections 30210, 30211, and 30212.

#### **K. ALLEGED VIOLATION**

Although certain development has taken place at the project site without the benefit of a coastal development permit (including excavating the existing dike in two locations to convert a 16-acre freshwater wetland to restored tidal function), consideration of the application by the Commission has been based solely upon the Chapter 3 policies of the Coastal Act. Approval of this permit does not constitute a waiver of any legal action with regard to the alleged violations

nor does it constitute an admission as to the legality of any development undertaken on the subject site without a coastal development permit.

**L. CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)**

The applicant served as the lead agency for the project for CEQA purposes. The applicant determined that the project qualified for a CEQA Categorical Exemption under Class 33 Small Habitat Restoration Projects.

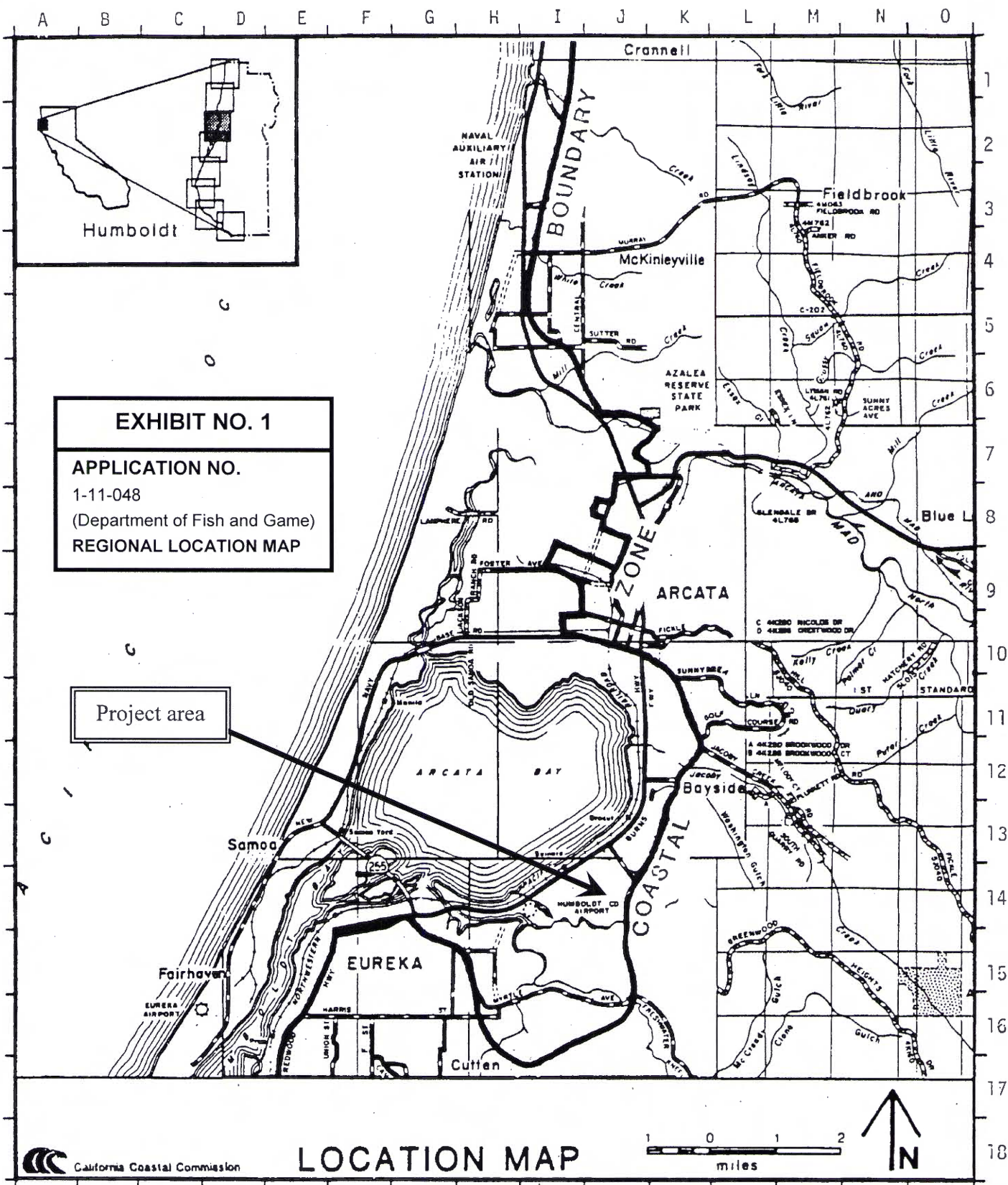
Section 13906 of the Commission's administrative regulation requires Coastal Commission approval of coastal development permit applications to be supported by a finding showing the application, as modified by any conditions of approval, is consistent with any applicable requirements of the California Environmental Quality Act (CEQA). Section 21080.5(d)(2)(A) of CEQA prohibits a proposed development from being approved if there are 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 Coastal Act consistency at this point as if set forth in full. As discussed above, the proposed project has been conditioned to be consistent with the policies of the Coastal Act. The 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 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 other 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 project, as conditioned to mitigate the identified impacts, can be found consistent with the requirements of the Coastal Act to conform to CEQA.

**APPENDIX A: SUBSTANTIVE FILE DOCUMENTS**

- Application File for Coastal Development Permit 1-11-048, received December 21, 2011
- Adopted Findings for Coastal Development Permit 1-00-025, approved with conditions July 11, 2001
- Adopted Findings for Coastal Development Permit 1-00-025-A1, approved with conditions March 17, 2004
- Fay Slough Wildlife Area Management Plan, October 1993
- County of Humboldt Local Coastal Program





County of Humboldt

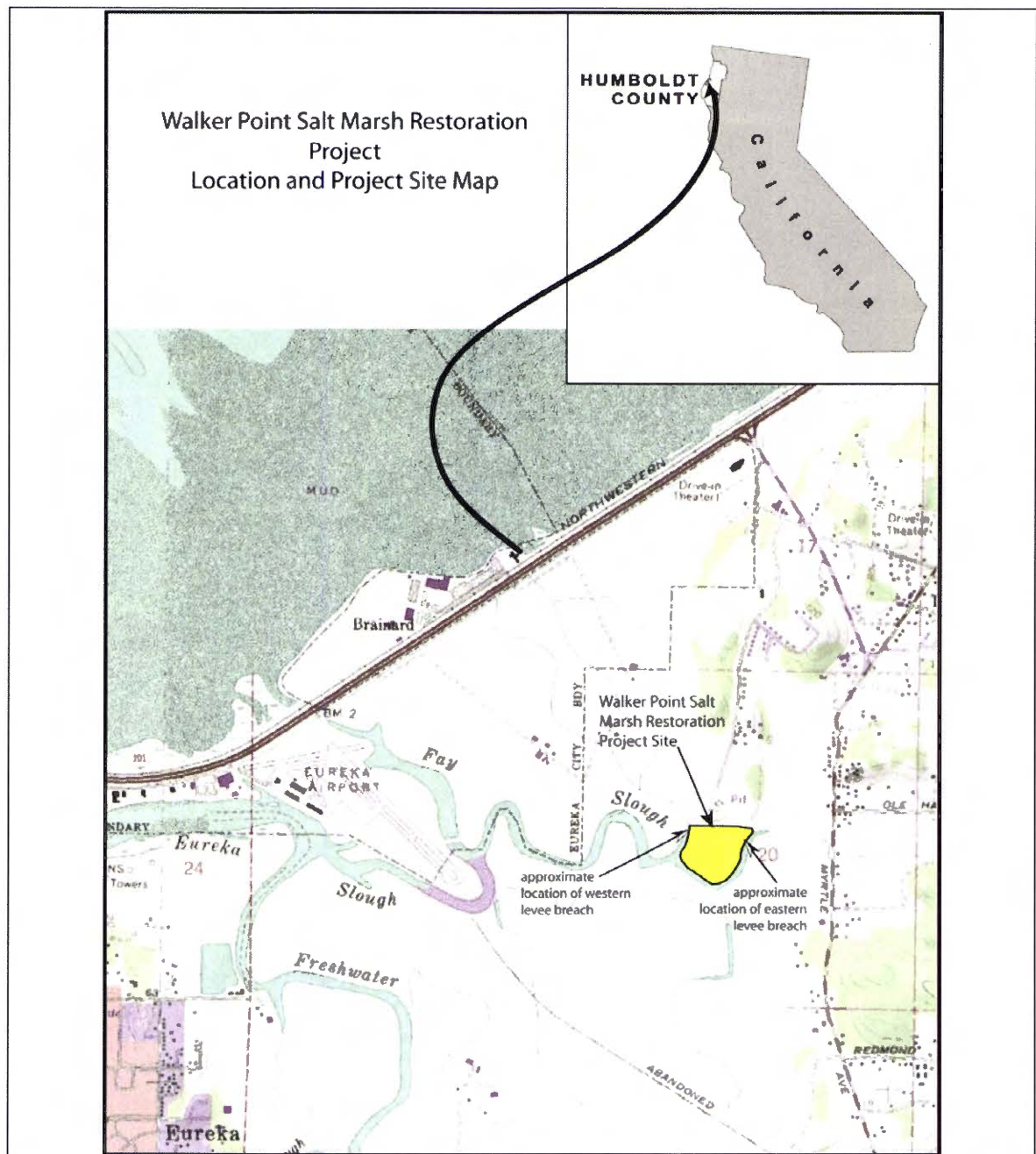


Figure 1. Fay Slough Wildlife Area-Walker Point project location map (RCAA, 2011).

EXHIBIT NO. 2

APPLICATION NO.

1-11-048

CALIFORNIA DEPARTMENT  
OF FISH & GAME

VICINITY MAP



EXHIBIT NO. 3

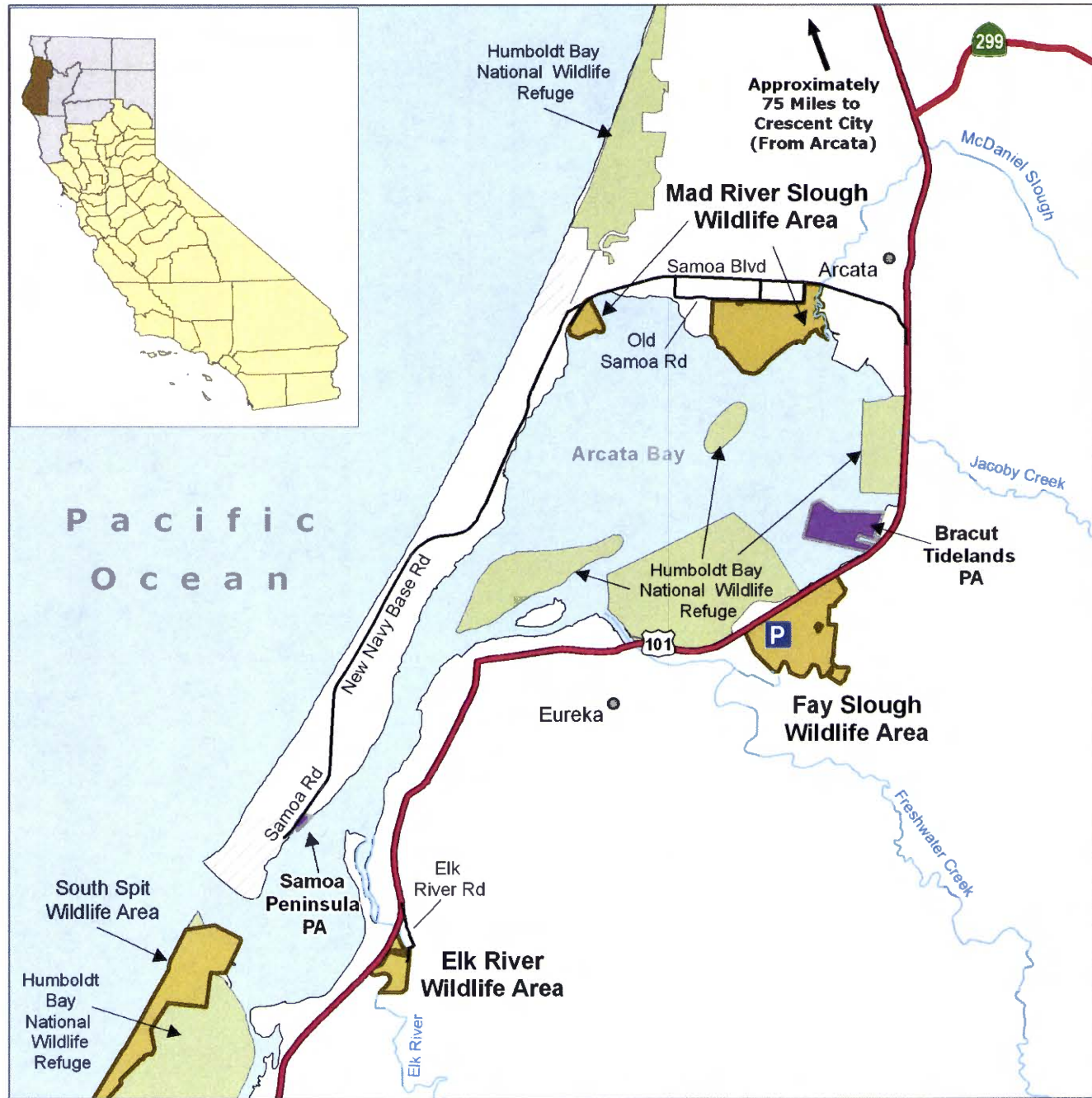
APPLICATION NO.

1-11-048

CALIFORNIA DEPARTMENT  
OF FISH & GAME

NEARBY WILDLIFE AREAS

**California Department of Fish and Game**  
**Northern Region**  
**ELK RIVER WILDLIFE AREA**  
**FAY SLOUGH WILDLIFE AREA**  
**MAD RIVER SLOUGH WILDLIFE AREA**  
**Humboldt County**



Wildlife Area	Bureau of Land Management	Parking
Public Access	U.S. Highway	
National Wildlife Refuge	State Highway	

0 0.5 1 2 Miles

EXHIBIT NO. 4

APPLICATION NO.

1-11-048

CALIFORNIA DEPARTMENT  
OF FISH & GAME

FAY SLOUGH WILDLIFE  
AREA OVERVIEW MAP

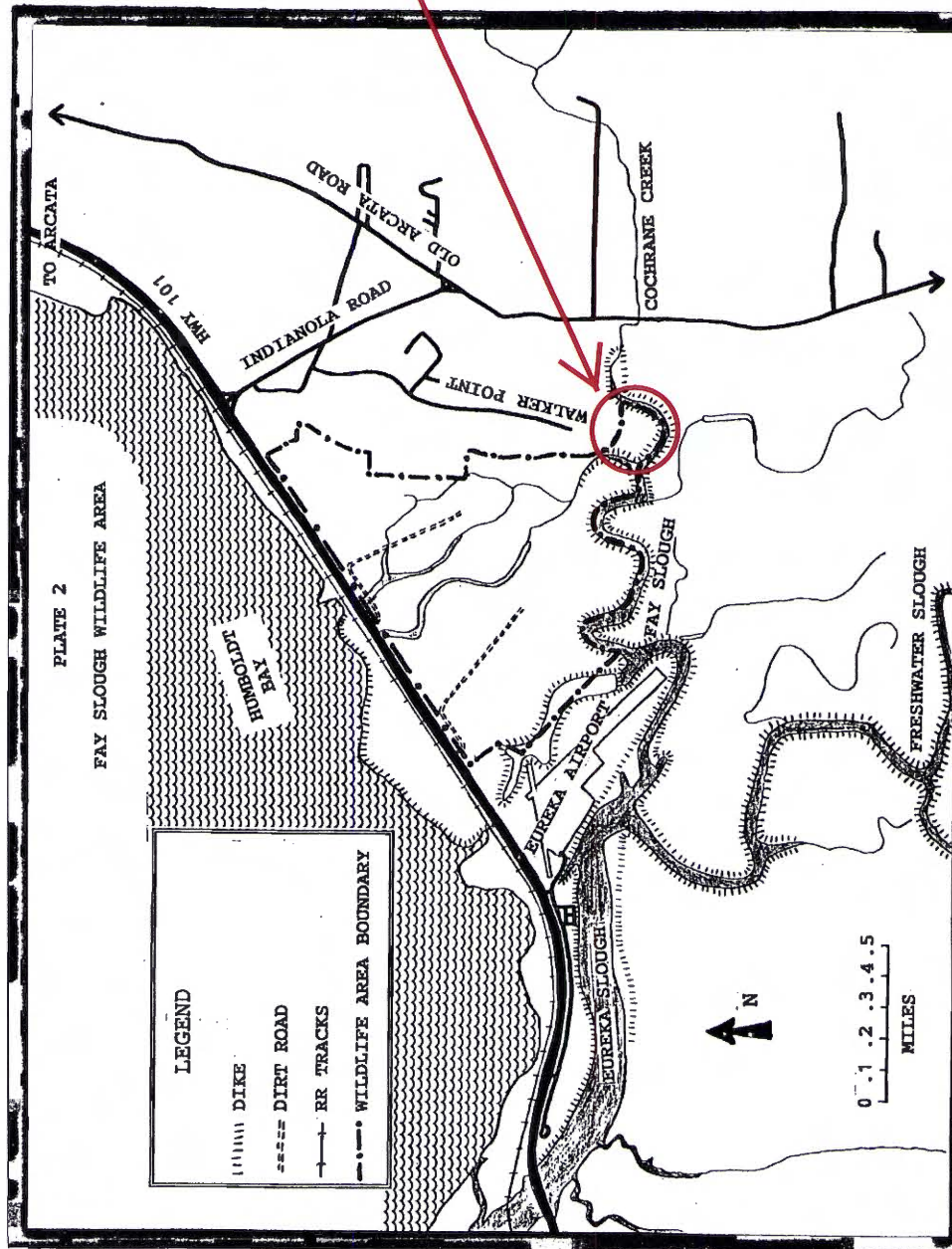






Image date: June 7, 2011

EXHIBIT NO. 5

APPLICATION NO.

1-11-048

CALIFORNIA DEPARTMENT  
OF FISH & GAME

SITE PLAN



Repeated flooding in the area over time has decreased the utility of the land for agricultural purposes.



EXHIBIT NO. 6

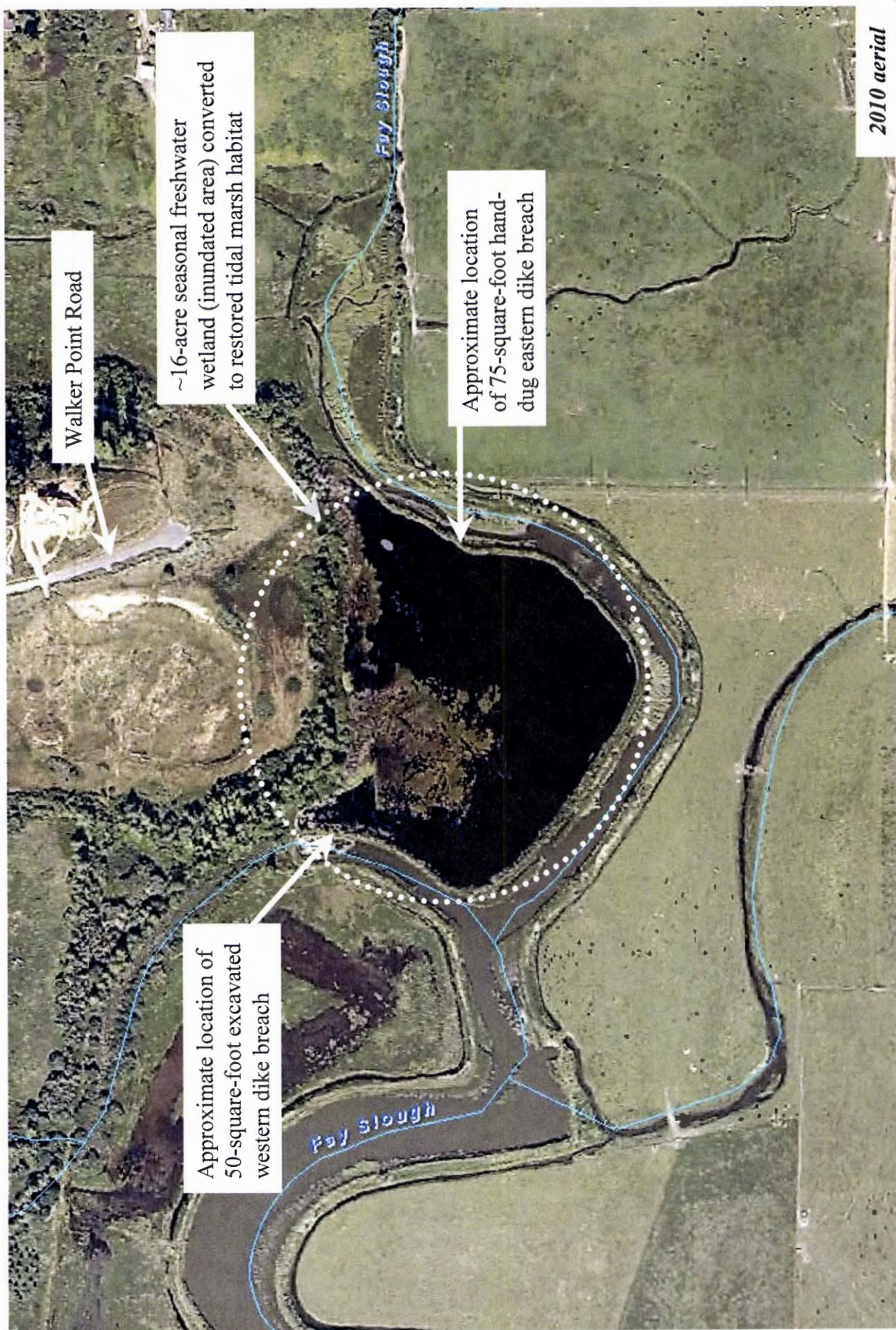
APPLICATION NO.

1-11-048

CALIFORNIA DEPARTMENT  
OF FISH & GAME

AERIAL PHOTOS (1 of 3)





2010 aerial

2 of 3





2010

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## Fay Slough Project Area Biological Habitat Units

APPLICATION NO.

CALIFORNIA DEPARTMENT  
OF FISH & GAME

\_\_\_\_\_

-  Salt Marsh  
 Brackish marsh  
 Freshwater marsh  
 Seasonal marsh  
 Riparian woodland  
 Coastal scrub  
 Coastal forest  
 Mudflat  
 Exotic  
 Human disturbance  
 Open water





**Figure 4. Inundated Walker Point project area (A. Laird, March 2011).**



**Figure 5. Standing water approximately 3 ft. deep (A. Laird, March 2011).**

EXHIBIT NO. 8
APPLICATION NO. 1-11-048 CALIFORNIA DEPARTMENT OF FISH & GAME SITE PHOTOS (1 of 4)





**Figure 7. West-side dike breach by backhoe (D. Allan, May 2011).**



**Figure 8. East side breaching by CCC crew (D. Allan, May 2011).**

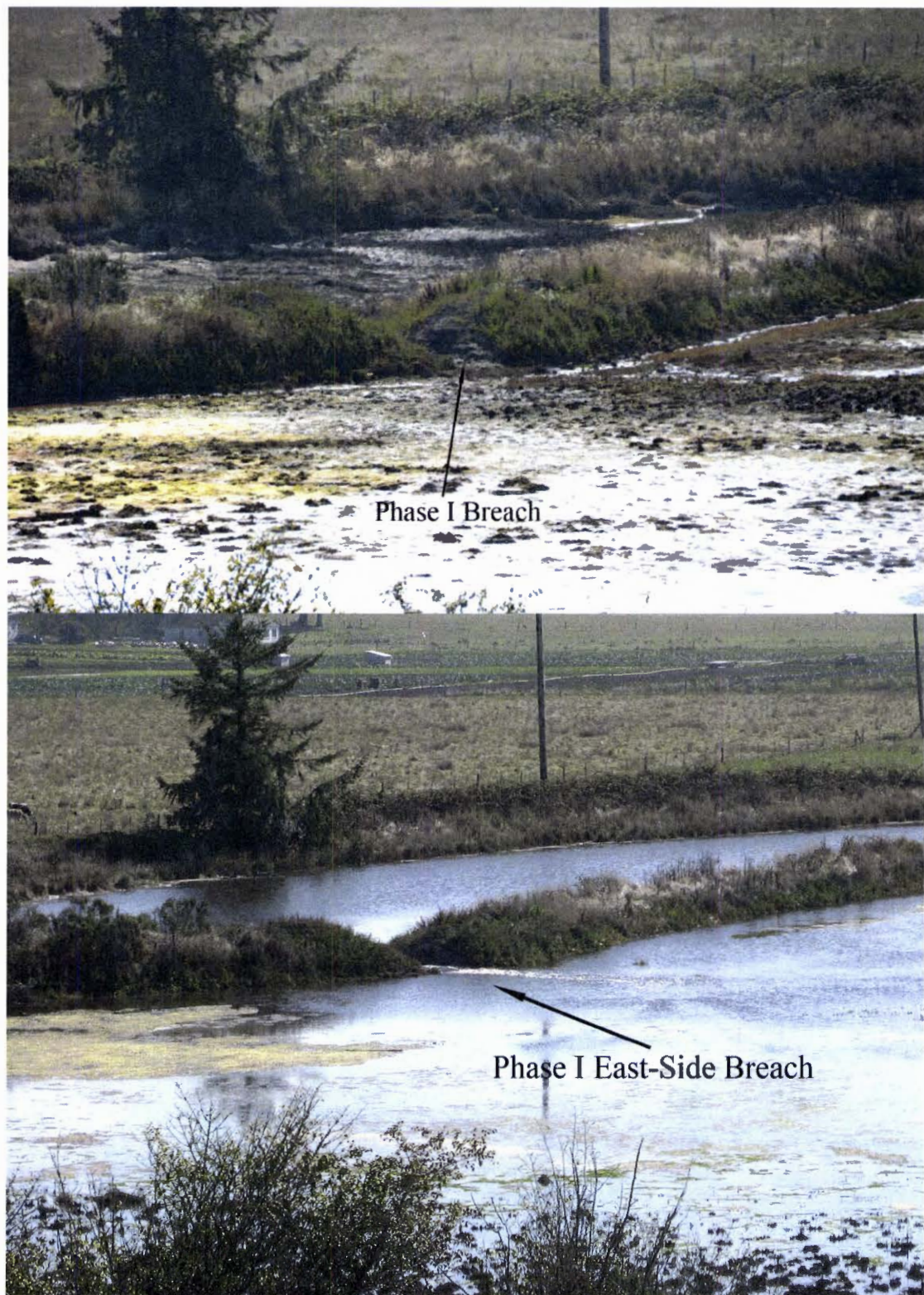
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**Figure 9. East side breach by CCC crew (D. Allan, May 2011).**

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**Figure 24. Phase I east-side breach, low and high tide, (D. Allan 2011).**

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