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STAFF RECOMMENDATION
ON CONSISTENCY DETERMINATION

RECORD PACKET COPY

Consistency Determination No. CD-051-98

Staff: SM-SC

File Date: April 20, 1998

45th Day: June 5, 1998

Commission Meeting: May 13, 1998

FEDERAL AGENCY: NATURAL RESOURCES CONSERVATION SERVICE (NRCS)

LOCATION: Elkhorn Slough Watershed, Monterey County (Exhibits A and 1)

DESCRIPTION: A five-year general consistency determination by the Natural Resources Conservation Service for the implementation of its Elkhorn Slough Watershed Project. This project involves the construction/installation of Best Management Practices (BMPs) for the control of polluted runoff on and adjacent to agricultural lands in order to enhance erosion control, pesticide and nutrient management, irrigation water management, wetlands conservation and restoration, wildlife habitat protection, flood control, and stabilization of streambanks. Specific development activities include the construction/installation of diversions, filter strips, grade stabilization structures, grassed waterways, sediment basins, streambank protection, stream channel stabilization, underground outlets, and water and sediment control basins, more specifically described on pages 5-7 of this staff report. These BMPs have been recommended by the U.S. EPA to meet the objectives of the federal Clean Water Act and the 1990 Coastal Zone Act Reauthorization Amendments.

FILE DOCUMENTS: Elkhorn Slough Watershed Project: Information for the California Coastal Commission (NRCS, January 7, 199[8]); Elkhorn Slough Watershed Project: Information for the Planning and Building Inspection Department, County of Monterey (NRCS, January 7, 199[8]); National Procedure for Compliance with the National Environmental Policy Act - Procedures for Soil Conservation Service Assisted Programs (Part 401 of Section 190 of the General Manual, March, 1984); The California Amendment for Compliance with the National Environmental Policy Act - Procedures for Soil Conservation Service Assisted Programs (Part CA 401.5 of Section 190 of the General Manual, August, 1984); Guidance Specifying Management Measures for Sources of Nonpoint Pollution In Coastal Waters (U.S. EPA, January 1993); Monterey County certified Local Coastal Program.

EXECUTIVE SUMMARY

On April 20, 1998, the Commission received a general consistency determination from the Natural Resources Conservation Service (NRCS) for the Elkhorn Slough Watershed Project. This project is designed to reduce the high levels of pesticides found in the Elkhorn Slough Watershed, which drains into the Elkhorn Slough National Estuarine Research Reserve and the Monterey Bay Sanctuary, by controlling sediments from agricultural land. In addition to improving coastal water quality, this project will reduce the degradation and loss of wetlands and riparian habitats resulting from sediment deposition, and maintain the prime and unique agricultural soils that are characteristic of this watershed. As a result, the project is consistent with the marine resources, habitat, and agricultural policies of the California Coastal Management Program (CCMP).

Development activities that will be implemented under this program consist of the construction and/or installation of Best Management Practices (BMPs) recommended by the U.S. EPA to meet the objectives of the federal Clean Water Act and the 1990 Coastal Zone Act Reauthorization Amendments (CZARA). These include diversions, filter strips, grade stabilization structures, grassed waterways, sediment basins, streambank protection, stream channel stabilization, underground outlets, and water and sediment control basins. A description of these BMPs is provided on pages 5-7 of this staff report.

To address potential cumulative impacts to sensitive habitats and coastal water quality associated with the construction and installation of the selected BMPs, the project includes environmental safeguards which are described on pages 12-18 of this staff report. These will ensure that the project conforms with policies of the Coastal Act protecting environmentally sensitive habitats and the quality and biological productivity of coastal waters. These measures also achieve project consistency with policies of the Monterey County certified Local Coastal Program, which can provide guidance to the Commission in determining the consistency of federal projects with the CCMP.

In addition, NRCS has agreed to notify the Coastal Commission and Monterey County staff of each individual project at least ten working days prior to implementation. This notice will include a description of the project, its location, and any mitigation measures to ensure that potential adverse impacts to coastal resources will be avoided; and provide the opportunity for Commission staff and Monterey County staff to confirm that each individual project conforms with this General Consistency Determination. NRCS will also provide an annual report that: (1) lists participating landowners; (2) describes each project purpose, area affected, natural biological enhancements, and amount of yardage, cut and slope of the work; (3) lists conservation benefits and any net gains in wetland and riparian areas; and (4) provides photo documentation of before and after site conditions. This annual report will update the Commission on the status of this project, and provide valuable information that can be applied to the implementation of BMPs throughout the California coastal zone. This information can also be applied to any subsequent reviews of this project at the conclusion of the 5 year period for this federal consistency determination.

Finally, it is important to note that this federal consistency review is an element of a greater interagency effort to streamline the regulatory review process in order to facilitate the implementation of BMPs for the control of polluted runoff, as further discussed on page 9 of this staff report.

STAFF SUMMARY AND RECOMMENDATION:**I. Staff Note/Procedures.**

The Natural Resources Conservation Service (NRCS) has submitted a general consistency determination for the implementation of Best Management Practices to reduce polluted runoff in the Elkhorn Slough Watershed. This consistency determination is programmatic rather than project specific, in that NRCS is asking for the Commission to concur with general types of activities rather than a specific project.

NRCS has made this consistency determination pursuant to Section 930.37(b) of the federal regulations implementing the Coastal Zone Management Act (15 CFR Section 930.37[b]). That section provides that :

In cases where Federal agencies will be performing repeated activity other than a development project (e.g., ongoing maintenance, waste disposal, etc.) which cumulatively has a direct effect upon the coastal zone, the agency may develop a general consistency determination thereby avoiding the necessity of issuing separate consistency determinations for each incremental action controlled by the major activity. A general consistency determination may only be used in situations where the incremental actions are repetitive or periodic, substantially similar in nature, and do not directly affect the coastal zone when performed separately. If a federal agency issues a general consistency determination, it must thereafter periodically consult with the State agency to discuss the manner in which the incremental actions are being undertaken.

A Commission concurrence with this consistency determination will allow the NRCS to construct and install EPA recommended Best Management Practices for the control of polluted runoff within the Elkhorn Slough Watershed without further coastal development review by the Coastal Commission or Monterey County. The NRCS has, however, agreed to notify Commission and Monterey County staff of each individual project prior to its implementation, so that they can be reviewed for compliance with this consistency determination. Any activities that do not fall within the scope of the Elkhorn Slough Watershed project and this consistency determination will be subject to normal coastal development permit requirements if located within the coastal zone.

II. Status of Local Coastal Program.

The standard of review for federal consistency determinations is the policies of Chapter 3 of the Coastal Act, and not the Local Coastal Program (LCP) of the affected area. If the LCP has been certified by the Commission and incorporated into the CCMP, it can provide guidance in applying Chapter 3 policies in light of local circumstances. If the LCP has not been incorporated into the CCMP, it cannot be used to guide the Commission's decision, but it can be used as background information.

The County of Monterey's LCP has been certified and incorporated into the CCMP, and therefore can provide guidance to the Commission in applying the Chapter 3 policies of the Coastal Act to this federal consistency determination in light of local circumstances. A detailed

analysis of the project's consistency with the Monterey County LCP is contained on pages 20 - 23 of this staff report.

As a federal project, the development activities that will be implemented are exempt from coastal development permit (CDP) requirements both within the Coastal Commission's and Monterey County's coastal permit jurisdictions. This is reflected by Section 20.70.120M of the Monterey County certified Implementation Plan (a component of the certified LCP), which exempts any project undertaken by a federal agency from CDP requirements. Federal consistency review is therefore an appropriate way for the Commission to evaluate the Chapter 3 consistency of federal projects that will take place within coastal zone areas of Monterey County and are currently exempt from CDP requirements. Commission concurrence with this federal consistency determination will satisfy all coastal development review requirements for this federal project both within the CDP jurisdiction of Monterey County as well as within the Commission's original jurisdiction. Any development activities that are not specifically authorized by this consistency determination will be subject to normal CDP requirements if located within the coastal zone. The Commission will have the opportunity to review this consistency determination at the conclusion of the 5 year period (May 13, 2004).

With respect to other State, and federal permits that may be required for the NRCS Elkhorn Slough Watershed project, an interagency effort to streamline the regulatory reviews and approvals triggered by this project was initiated in 1996. The status of these permits is discussed on page 9 of this staff report. The federal consistency review process is consistent with the streamlined approach being taken by the other participating regulatory agencies, as it consolidates coastal development review requirements for the many individual activities that will make up this larger project, thereby reducing the amount of paperwork, fees, and time that would otherwise be required if these projects were pursued by the landowners independent of the NRCS program.

III. Project Description.

The NRCS is requesting Commission concurrence for the construction and installation of ten Best Management Practices (BMPs) for the control of polluted runoff, recommended by the U.S. EPA in carrying out the federal Clean Water Act and CZARA. These practices are described in Table 1.

The process by which the above BMPs will be selected and implemented represents a cooperative approach between the NRCS and the participating landowner, who voluntarily agrees to install such improvements. At the request of the landowner or operator, NRCS reviews the particular problems and needs of the site, and recommends appropriate conservation practices which are then selected by the farmer. NRCS oversees the site specific design of the practices, applying appropriate mitigation measures to ensure that the project will not have an adverse impact on environmental resources (these mitigation measures are described on pages 12-18 of this staff report). NRCS then monitors the implementation and maintenance of the practices to assure successful performance and resource protection. In addition to technical support, NRCS may finance up to 75% of the cost of the project. The participating landowner has the option of financing the remaining 25% cost by providing in kind labor. NRCS operates the Elkhorn Slough Watershed Project under the Watershed Protection and Flood Prevention Act (16 U.S.C. 1001-1008) and provides cost share assistance to farmers

with federal funding through the federal Farm Bill, under the Environmental Quality Incentive Program (EQIP).

Table 1. BMPs identified in NRCS Elkhorn Slough Watershed Project (data source: NRCS, Information for the California Coastal Commission, January 7, 199[8])

BMPs (numbers in parenthesis are the BMP reference numbers used by the NRCS and the EPA)	BMP Descriptions	Dimensions
CRITICAL AREA PLANTING (342): Planting vegetation such as trees, shrubs, vines, grasses, or legumes, on highly erodible or critically eroding areas (does not include tree planting mainly for wood products).	This practice is used to stabilize the soil, reduce damage from sediment and runoff to downstream areas, and improve wildlife habitat and visual resources. Plants may take up more of the nutrients in the soil, reducing the amount that can be washed into surface waters or leached into ground water.	avg L: 200 feet max L: 2000 feet avg W: 15 feet max A: 1 acre
DIVERSION (362): An earth channel constructed across the slope with a supporting ridge on the lower side.	This practice will prevent sheet and rill erosion by controlling runoff on slopes. Sediment may also be reduced by the elimination of gullies. This will diminish the amount of sediment and related pollutants delivered to surface waters.	On-field upland application only
FILTER STRIP (393): A strip or area of vegetation for removing sediment, organic matter, and other pollutants from runoff and wastewater.	This practice is used on cropland at the lower edges of fields adjacent to streams, ponds, and lakes to remove sediment and other pollutants from runoff. Installation often requires soil manipulation to remove surface irregularities and prepare for planting. Filter strips remove pesticides and nutrients from runoff through infiltration, absorption, adsorption, decomposition, and volatilization, thereby protecting water quality downstream. However, they may not filter out some soluble or suspended fine-grained materials, especially during heavy rain events. Filter strips may also reduce erosion on the area on which they are constructed.	avg L: 50 feet max L: 500 feet avg W: 15 feet max W: 50 feet max A: 1 acre
GRADE STABILIZATION STRUCTURE (410): A structure built into the creek bed or channel bottom to control the grade and prevent head cutting in natural or artificial channels.	This practice refers to rock, concrete, or timber structures that do not control the rate of flow or water level in channels. Stream velocities will be reduced above and below the structure resulting in reduced streambank and streambed erosion. This will decrease the discharge of sediment and substances attached to sediments, thus improving downstream water quality.	avg L: 4 in 200 feet max L: 10 in 200 feet width of stream avg V: 4 cubic yards per GSS max V: 10 cubic yards per GSS

Table 1 (continued). BMPs identified in NRCS Elkhorn Slough Watershed Project (data source: NRCS, *Information for the California Coastal Commission, January 7, 199[8]*)

BMPs	BMP Descriptions	Dimensions
<p>SEDIMENT BASINS (350): Basins constructed to collect and store debris or sediment.</p>	<p>Sediment basins will trap sediment, associated materials, and other debris to prevent undesirable deposition on bottom lands and in waterways and streams. Basins are generally located at the base of agricultural lands adjacent to natural drainage or riparian areas. The practice does not treat the source of sediment but provides a barrier to reduce degradation of surface water downstream. Due to the detention of runoff in the basin, there is an increased opportunity for soluble materials to be leached toward the ground water. Basins may also increase groundwater recharge. The design of spillways and outlet works will include water control structures to prevent scouring at discharge point into natural drainage.</p>	<p>avg L: 100 feet max L: 1000 feet avg W: 15 feet max W: 20 feet for a compacted embankment: avg V: 200 cubic yards max V: 1,500 cubic yards</p>
<p>GRASSED WATERWAY (412): A natural or constructed channel that is shaped or graded to required dimensions and velocities, and established to suitable vegetation for the stable conveyance of runoff.</p>	<p>This practice is intended to reduce erosion in a concentrated flow area, such as in a gully or gullies, and thereby reduce the amount of sediment and substances delivered to receiving waters. Vegetation may act as a filter in removing some of the sediment delivered to the waterway, although this is not the primary function of a grassed waterway. Grassed waterways may be used to move runoff from agricultural lands into riparian or wetland areas.</p>	<p>avg L: 200 feet max L: 2000 feet avg W: 2 feet max W: 25 feet avg D: 2 feet max D: 4 feet</p>
<p>STREAMBANK PROTECTION (580): Using vegetation or structures to stabilize and protect banks of streams, lakes, estuaries, or excavated channels against scour and erosion.</p>	<p>The banks of streams and waterbodies are protected to (1) reduce sediment loads causing downstream damage and pollution, (2) improve fish and wildlife habitat, and (3) protect adjacent land from erosion damage. This practice can be applied to natural or excavated channels where banks are susceptible to erosion from water action, debris, or damage from livestock or vehicular traffic. The streambed grade must be controlled before most permanent types of bank protection can be considered feasible.</p>	<p>avg L: 200 feet max L: 2000 feet avg H: 5 feet max H: 15 feet avg V: 500 cubic yards max V: 1500 cubic yards</p>
<p>STREAM CHANNEL STABILIZATION (584): Stabilizing the channel of a stream with suitable structures.</p>	<p>This practice applies to stream channels undergoing damaging aggradation or degradation that can not be controlled with upstream practices. The design and installation of stream channel stabilization structures shall result in a stable stream bed favorable to wildlife and riparian growth.</p>	<p>avg L: 500 feet max L: 2000 feet width of stream avg V: 500 cubic yards max V: 1,500 cubic yards</p>

Table 1 (continued). BMPs identified in NRCS Elkhorn Slough Watershed Project (*data source: NRCS, Information for the California Coastal Commission, January 7, 199[8]*)

BMPs	BMP Descriptions	Dimensions
<p>UNDERGROUND OUTLETS (620): A conduit installed beneath the surface of the ground to collect surface water and convey it to a suitable outlet.</p>	<p>Excess surface water generated by farm land on steep terrain can be collected and conveyed to a sediment basin by installing pipe safely buried underground. Location, size, and number of inlets are determined to collect excess runoff and prevent erosive surface flow. This runoff is then discharged at a sediment basin where high velocity runoff is calmed and suspended sediment is trapped prior to releasing water into a natural drainage channel.</p>	<p>Energy dissipator at end of outlet: avg A: 4 feet by 4 feet max A: 6 feet by 12 feet</p>
<p>WATER & SEDIMENT CONTROL BASIN (638): Earthen embankment or combination ridge/ channel constructed across the slope and minor watercourses to form a sediment trap and water detention basin.</p>	<p>This practice traps and removes sediment and sediment-attached substances (e.g., salts, soluble nutrients, and soluble pesticides) from runoff preventing their release to surface waters. It is often located alongside riparian or wetland environments to buffer impact of upslope runoff and sediment prior to release to natural drainage. Basins can be used to reduce concentrated offsite flow and associated erosion following large storm events, and may also enhance groundwater recharge.</p>	<p>avg L: 100 feet max L: 1000 feet avg W: 15 feet max W: 20 feet avg V: 200 cubic yards max V: 1,500 cubic yards</p>

IV. Project Location.

The NRCS Elkhorn Slough Watershed Project includes the entire 44,900-acre Elkhorn Slough Watershed, although only a portion of this watershed is within the coastal zone (Exhibits A and 1). The watershed extends from Highway 101 near Prunedale on the east to Monterey Bay on the west, and from Castroville on the south to the town of Pajaro on the north. Elevations range from over 6 feet below sea level in the channel under Moss Landing road, to over 1,200 feet in the hills in the eastern part of the watershed. The following streams, creeks, and waterbodies are contained in the Elkhorn Slough Watershed: Paradise Canyon Creek, Long Canyon Creek, Strawberry Canyon Creek, Hidden Canyon Creek, Carneros Creek and its tributaries, Warner Lake and its tributaries, Moro Cojo Slough and its tributaries, McClusky Slough and its tributaries, Bennett Slough and its tributaries, Castroville Slough and its tributaries, and the lesser tributaries to the Elkhorn Slough. NRCS approximates that 25 percent of the watershed area is dedicated to agricultural operations, a large percentage of which is used for the production of strawberries.

The watershed also contains important wetland habitats, such as the Elkhorn Slough National Estuarine Research Reserve, the protection of which has been a long-term interest of the Coastal Commission. This objective is shared by numerous stakeholders within the region, and has culminated in the development of numerous plans and projects intended to preserve and enhance

the unique wetland resources of the Elkhorn Slough watershed. The NRCS Elkhorn Slough Watershed project is an important component to these efforts, as further discussed below.

IV. Project Background and Purpose.

The Elkhorn Slough Watershed Project was initiated to address a variety of challenges. First and foremost, the project was designed to reduce the high levels of agricultural pesticides found in the Elkhorn Slough Watershed, which drains into the Elkhorn Slough National Estuarine Research Reserve and the Monterey Bay National Marine Sanctuary. These pesticides are believed to be transported into the Slough and its tributaries on sediments from agricultural land.

Another major challenge to be addressed by the project are losses of wetland and associated riparian habitat resulting from sediment deposition. NRCS has identified 25 locations of freshwater ponds and pickleweed marshes in the watershed that are under immediate threat of burial by fans of sediment. Without appropriate action, NRCS anticipates the loss of approximately 60 acres of wetlands within the watershed.

Most significantly from the perspective of the agricultural community, soil erosion reduces the productivity of prime and unique farmland in the watershed. Compounding the challenge is the fact that socioeconomic factors continue to hinder the adoption of erosion control practices in the area. NRCS estimates that an average of 33 tons of sediment per acre per year is currently discharged via runoff from sloping strawberry fields, and an annual total of approximately 80,000 tons of sediment is transported into the surrounding waterbodies. Maintaining soil on site will not only reduce the loss of wetland habitat and the degradation of coastal water quality, but will also help maintain agricultural productivity.

In April 1994, a Final Watershed Plan and Environmental Assessment was completed by NRCS for the 44,900-acre watershed to meet these multifaceted challenges. The overall purpose of this plan is watershed protection. The other goals are to reduce erosion and sediment damage and nonpoint source pollution in the Elkhorn and Moro Cojo Sloughs and their tributaries. Consistent with these objectives, the Elkhorn Slough Watershed Project encourages voluntary improvements by land operators. One major benchmark of the project is to reduce sediment yield by 50 percent over an eight year period, which is also expected to reduce the loss and degradation of wetland and riparian habitat.

Full-time staffing for the Elkhorn Slough Watershed project was achieved in March 1995. A Project team now operates to provide technical assistance to growers on the implementation of land treatment practices to reduce erosion and resulting sedimentation and pesticide transport. Project activities include baseline identification, outreach and marketing, local participation, on-farm testing and delivery, institutional strengthening, and monitoring and evaluation. Special focus is given to assisting ethnic minority farmers and strawberry growers on the more than 150 small-scale agricultural operations in the Watershed.

The first two years (1995-1996) of the project resulted in dramatic reductions in soil loss on participating farms and a growing demand for technical assistance. During this period, five fully engineered projects were designed and installed and an additional 20 conservation recommendations were provided to owners or operators. Implementation of recommendations resulted in an erosion reduction of 2,667 tons per year on 166 acres or 16 tons per acre

treated. Nineteen farmers decided to participate in the program in 1996 as compared to three farmers in 1995. An additional 17 farmers have requested technical and financial assistance in 1997 through the new EQIP program, with project expenditures expected to be more than \$475,000. These numbers reflect the growing interest of farmers in the Elkhorn Slough Watershed to restore and enhance the natural resource conditions on their property.

In order to encourage and facilitate further implementation of BMPs, interagency stakeholder committees operating in the region, such as the Water Quality Protection Program (WQPP) of the Monterey Bay National Marine Sanctuary (Sanctuary), have identified the need to develop and implement a coordinated, expedited and seamless interagency permitting strategy for conservation practices that benefit both agricultural and environmental resources. Since 1996, NRCS, Sustainable Conservation (a non-profit environmental organization), and the WQPP have facilitated a streamlined interagency coordination and review process to be piloted in the Elkhorn Slough Watershed, and, if successful, applied in other watersheds of the Sanctuary.

Partners in development of the pilot program now involve local, state and federal agencies and non-profit environmental organizations including: the California Coastal Commission, the California Department of Fish and Game, Monterey County, Santa Cruz County, the Regional Water Quality Control Board, the United States Army Corps of Engineers, the United States Fish and Wildlife Service, and the Elkhorn Slough Foundation.

To date, the Elkhorn Watershed Project has obtained a water quality waiver from the Central Coast Regional Water Quality Control Board, and is in the process of finalizing a Memorandum of Understanding with the Department of Fish and Game regarding streambed alterations pursuant to 1601 of the Fish and Game Code (draft attached as Exhibit 2). With respect to compliance with the federal and state endangered species acts, the U.S. Fish and Wildlife Service is in the process of issuing a biological opinion for the project (expected to be released by May 26, 1998), which is also expected to satisfy the requirements of the California Endangered Species Act. The Corps of Engineers has issued a Public Notice (Exhibit 3) indicating its intention to issue a regional permit for the project once review by the U.S. Fish and Wildlife is completed pursuant to the federal Endangered Species Act. Letters to the Corps in support of the project from the U.S. EPA and the Department of Fish and Game are attached as Exhibits 4 and 5, respectively. As previously noted, the Elkhorn Slough Watershed project is exempt from Monterey County permit requirements because it is a federal project.

Consistent with project objectives and the programmatic approach being taken by other regulatory agencies, federal consistency review provides a streamlined process by which Coastal Act review can be achieved in a single action by the Commission; participants in this federal project will not be required to obtain the coastal development permits that would otherwise be required if they desired to implement these developments independently. Such streamlined regulatory reviews will help eliminate existing disincentives to implementing these environmentally and agriculturally beneficial projects.

V. Federal Agency's Consistency Determination.

The NRCS has determined the project consistent to the maximum extent practicable with the California Coastal Management Program.

VI. Staff Recommendation.

The staff recommends that the Commission adopt the following motion:

MOTION. I move that the Commission concur with the Natural Resources Conservation Service's consistency determination.

The staff recommends a **YES** vote on this motion. A majority vote in the affirmative will result in the adoption of the following resolution:

Concurrence

The Commission hereby **concurs** with the consistency determination made by the Natural Resources Conservation Service for the proposed project, finding that the project is consistent to the maximum extent practicable with the California Coastal Management Program.

VII. Findings and Declarations.

The Commission finds and declares as follows:

A. **Environmentally Sensitive Habitats.** The following policies of the Coastal Act protecting Environmentally Sensitive Habitat areas are applicable to this consistency determination:

Section 30240

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

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

Analysis

Currently, the sensitive wetland and riparian habitat values of the Elkhorn Slough Watershed, as well as the Monterey Bay National Marine Sanctuary, are jeopardized by the impacts of sedimentation, which smothers aquatic habitats, decreases water quality, and can introduce toxic substances to the food chain. A primary purpose of this project is to protect environmentally sensitive habitat areas from further degradation by improving the compatibility of adjacent agricultural development. Because the protection and enhancement of the sensitive wetland resources of the watershed are dependent upon the implementation of such improvements, it is consistent with Coastal Act Section 32040(a) to locate these best management practices within and adjacent to areas of environmentally sensitive habitats.

The Elkhorn Slough Watershed Project will result in improved control of agricultural runoff, and thereby reduce sedimentation and pollution of coastal waters, which adversely impact

environmentally sensitive habitat areas. This will enhance and restore environmentally sensitive habitat areas that have been adversely impacted by increased sedimentation and the associated loss of aquatic habitats and degradation of coastal water quality.

In addition, certain of the BMPs (e.g., Stream Channel Stabilization) involves the removal accumulated sediment from dry creek beds, which will increase the number of deep pools which are required by aquatic animals to survive the long, dry California summers. Other practices (e.g. critical area planting, and streambank protection) will provide shelter from predators, as well as breeding, foraging and basking sites for the unique rare or endangered wildlife species of the watershed. These practices will also improve fish habitat by stabilizing banks and increasing shading.

Other habitat benefits that will result from this project include: providing greater connectivity of habitat areas (e.g., revegetating unvegetated section of streambanks); and improved buffering of sensitive habitat areas (e.g., separating agricultural areas from habitat areas with filter strips). Furthermore, implementation of this project will improve general knowledge regarding the implementation and effectiveness of BMPs for the control of polluted runoff, thereby providing valuable insight as to how these practices can be best applied throughout the State to restore and enhance environmentally sensitive habitat areas.

Notwithstanding the beneficial impacts identified above, implementation of the practices, which in many instances will be within or near wetlands and riparian habitats, does have the potential to have temporary adverse impacts on environmentally sensitive habitats. These potential impacts include temporary disturbance of habitat, harassment of individual animals, and in certain cases, the mortality of individual special status plant or animal species. Project components that could result in such impacts include: soil excavation or grading, preparation of the ground for seeding and mulching, grade and stream stabilization, channel excavation, construction of earthen embankments, placement of fill, vegetation removal and trampling or crushing of vegetation from equipment or foot traffic.

The following chart indicates the special status plant and animal species within the watershed that could be adversely affected by these activities:

Table 2. Special status plant and animal species that may be affected by the Elkhorn Slough Watershed Project (data source: National Resources Conservation Service, Elkhorn Slough Watershed Project: Information for the California Coastal Commission, January 7, 199[8], which cites the California Natural Diversity Database as the source of this information)

Common Name	Latin Name	Status
Monterey spineflower	<i>Chorizanthe pungens</i> var. <i>pungens</i>	federal threatened
Robust spineflower	<i>Chorizanthe robusta</i> var. <i>robusta</i>	federal endangered
Sand gilia	<i>Gilia tenuiflora</i> spp. <i>arenaria</i>	federal endangered, state threatened
Santa Cruz tarplant	<i>Holocarpha macradenia</i>	federal candidate, state endangered

Table 2 (continued). Special status plant and animal species that may be affected by the Elkhorn Slough Watershed Project (data source: National Resources Conservation Service, Elkhorn Slough Watershed Project: Information for the California Coastal Commission, January 7, 199[8], which cites the California Natural Diversity Database as the source of this information)

Common Name	Latin Name	Status
Yadon's piperia	<i>Piperia yadonii</i>	federal proposed endangered
Eastwood's goldenbush	<i>Ericameria fasciculata</i>	federal species of concern
Cogdon's tarplant	<i>Hemizonia parryi</i> spp. <i>congdonii</i>	federal species of concern
California red-legged frog	<i>Rana aurora draytonii</i>	federal threatened
Santa Cruz long-toed salamander	<i>Ambystoma macrodactylum</i> <i>croceum</i>	federal endangered, state endangered
California tiger salamander	<i>Ambystoma californiense</i>	federal candidate
Black legless lizard	<i>Anniella pulchra nigra</i>	federal proposed
Bank swallow	<i>Riparia riparia</i>	state threatened

For most of these species, the areas where BMPs will be installed is not a primary habitat. For example, the spineflowers, sand gilia, and Black legless lizard are found principally in dune habitats bordering Monterey Bay which are not directly impacted by agricultural runoff. Similarly, Eastwood's goldenbush and the Yadon's piperia primarily occur in areas of the Del Monte Forest. Nonetheless, precautions remain necessary to address potential encounters with these species.

To protect these special species and the environmentally sensitive habitats they depend upon, the practices that the NRCS is proposing to implement have been customized in time and manner of implementation after consultations with the U.S. Fish and Wildlife Service, the California Department of Fish and Game, and Coastal Commission staff. Specifically, the project includes the following monitoring/mitigation measures:

- the implementation and maintenance of the BMPs will be limited to the period between June 15 to November 1, unless work outside this timeframe is specifically authorized by the U.S. Fish and Wildlife Service;
- prior to any earth moving activity, the sensitive habitat constraints of each site will be examined by a qualified individual approved by the U.S. Fish and Wildlife Service;
- no practices shall be implemented or maintained in ponded areas or flowing water areas without prior discussions with the U.S. Fish and Wildlife Service;

- no heavy equipment shall be used in a channel bottom without prior approval by the local California Department of Fish and Game warden;
- the implementation and maintenance of the practices are prohibited from resulting in sediment covering a clean stream bottom characterized by cobbles, gravel and small stones (1 to 6 inches in size); and
- any areas where animals are attempting to breed shall be avoided.

Additional mitigation/monitoring measures that will be implemented by NRCS to ensure that there will be no significant disruption of special status plants include:

- prior to implementation of each practice, NRCS will determine whether or not the project site contains any of the above listed plant species;
- any areas that are found to support special status plants shall not be disturbed, and a buffer of at least 20 feet shall be established around the area;
- no pesticides or fertilizers shall be used in the buffer zone; and,
- grading activities adjacent to the buffer area shall not alter surface or subsurface hydrologic processes to the detriment of the species.

To avoid potential impacts to the special status animal species identified above, the project includes the following mitigation/monitoring measures:

- prior to implementation of each practice, NRCS will determine whether or not there is any potential habitat for the above listed animal species in the vicinity of the project;
- to avoid or minimize impacts on the California red-legged frog, disturbance of vegetation near and on permanent and seasonal pools of streams, marshes and ponds, and shorelines with extensive emergent vegetation and/or weedy vegetation will be minimized;
- to avoid or minimize impacts on the Santa Cruz long-toed salamander and California tiger salamander, the underside of surface objects such as rocks, fissures, logs, terrestrial mammal burrows, mud cracks, and pond vegetation shall be inspected, and any salamanders found shall be translocated to the closest suitable habitat;
- to avoid or minimize impacts on the Black legless lizard, disturbance of sandy soils characteristic of lizard habitat will be minimized. In addition, surface vegetative cover and leaf litter in these areas shall be inspected, and if any lizards are found, they will be translocated to the closest suitable habitat.

Other, more general measures that have been incorporated into the project to ensure that it will not have an adverse affect on environmentally sensitive habitats include:

- the use of organic amendments to fertilize new plantings, and use of hand labor to control exotic vegetation, whenever possible. Where the use of herbicides become

necessary, their use will be according to registered label conditions, and the use of chemical fertilizers will be based on soil nutrient testing and shall utilize slow release or split applications to minimize runoff or leaching into waterbodies;

- the spread or introduction of exotic species will be avoided by preventing project activities from disturbing areas with established native vegetation. All areas that will be disturbed will be restored with appropriate native vegetation. Mechanical removal (hand tools, weed whacking, hand pulling) of exotic vegetation shall be done in preparation for the establishment of perennial plantings; and revegetation shall be implemented at the same time that removal of exotic vegetation occurs, whenever feasible. Post-project monitoring measures includes the control of exotic vegetation;
- prior to the onset of activities that have the potential to disturb habitats or individuals of any special status species, all project workers shall be given information regarding the listed species, a brief history of the species' natural history, the protection afforded the species by applicable environmental regulations, and the specific protective measures to be followed during implementation and maintenance of the practices;
- disturbance of existing grades and vegetation shall be limited to the smallest area possible;
- excavated material not used in the implementation of the practice shall be deposited on the agricultural portions of the property;
- there shall be no removal of trees 6 inches or greater dbh (diameter at breast height). This means that most mature willows will remain;
- annual status reviews of each practice shall be conducted to ensure that they are functioning according to their design standards and serving their intended purpose;
- disturbance of any nesting sites shall be avoided;
- where implementation or maintenance of sediment basins and water and sediment control basins create marshy conditions and attract nesting birds or other wildlife, maintenance to remove sediment and cattails shall occur from August 1 to November 1; and
- sediment basins and water and sediment control basins shall not be implemented or maintained in a creek or stream that supports a fishery (i.e., when there is flowing water).

Conclusion

The above mitigation/management measures ensure that the localized short-term impacts on sensitive habitats that could result from the project will not have a significant adverse affect on environmentally sensitive habitats. For example, by limiting tree removal to specimens less than 6 inches in diameter, the proposed practices will not significantly disrupt the canopy of any willow grove or other riparian forest. Similarly, the Coast live oaks which are so characteristic of the upland areas of the Elkhorn Slough Watershed will be protected. The long-term impacts of the

project will benefit such resources by enhancing riparian vegetation and bank stability, providing additional habitat areas for foraging, breeding, and shelter, and by controlling erosion and pesticides from agricultural fields which will improve water quality and aquatic habitats. The project is therefore consistent with Section 30240 of the Coastal Act. Thus, the Commission finds that the NRCS's consistency determination is consistent with the environmentally sensitive habitat protection policies of the CCMP.

B. Marine Resources/Water Quality. The following Coastal Act policies regarding the Marine Environment apply to the subject consistency determination:

Section 30230

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

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

Section 30232

Protection against the spillage of crude oil, gas, petroleum products, or hazardous substances shall be provided in relation to any development or transportation of such materials. Effective containment and cleanup facilities and procedures shall be provided for accidental spills that do occur.

Section 30233

(a) The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following:

..... (7) Restoration purposes.

..... (c) In addition to the other provisions of this section, diking, filling, or dredging in existing estuaries and wetlands shall maintain or enhance the functional capacity of the wetland or estuary. Any alteration of coastal wetlands identified by the Department of Fish and Game, including, but not limited to, the 19 coastal wetlands identified in its report entitled, "Acquisition Priorities for the Coastal Wetlands of California", shall be limited to very minor incidental public facilities, restorative measures, nature study, commercial fishing facilities in Bodega Bay, and development in already developed parts of south San Diego Bay, if otherwise in accordance with this division.

(d) Erosion control and flood control facilities constructed on water courses can impede the movement of sediment and nutrients which would otherwise be carried by storm runoff into coastal waters. To facilitate the continued delivery of these sediments to the littoral zone, whenever feasible, the material removed from these facilities may be placed at appropriate points on the shoreline in accordance with other applicable provisions of this division, where feasible mitigation measures have been provided to minimize adverse environmental effects. Aspects that shall be considered before issuing a coastal development permit for such purposes are the method of placement, time of year of placement, and sensitivity of the placement area.

Section 30236

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

Analysis

As previously discussed, the project is designed to improve the control of agricultural runoff, which can contain sediments and pesticides that are detrimental to marine resources and coastal water quality. Soil eroded from cropland as sediment usually contains a higher percentage of fine textured clay particles than the parent soil on the cropland. These lighter soil particles have a much greater adsorptive capacity for pollutants than coarser grained particle sediments and therefore transport higher concentrations of nitrogen, phosphorous, and pesticides. The discharge of such materials into the marine environment not only results in sedimentation, or smothering, of existing benthic and intertidal habitats, but also contributes to the growth of algae which can have an adverse impact on such habitats by reducing the amount of available oxygen. The improved control of agricultural sediments and associated pesticides will therefore benefit marine resources and coastal water quality, consistent with the above Coastal Act policies.

Implementation of the BMPs, however, may have short-term impacts on these resources. For example, during activities associated with the installation of Critical Area Plantings or Grassed Waterways (e.g., grading, seedbed preparation, seeding, and mulching), quantities of sediment and associated chemicals could be washed into surface waters prior to plant establishment. In addition, use of herbicides may be necessary to control invasive non-native vegetation within project planting areas; as a result, some pesticides and herbicides could enter surface runoff.

To address these potential impacts, the project has incorporated the following mitigation/monitoring measures:

- when implementing or maintaining the Critical Area Planting practice, a filter fabric fence and/or hay bales shall be utilized wherever needed to keep soil from flowing into adjacent waterbodies. The fence and haybales shall be maintained until revegetation is sufficiently mature to provide effective erosion control;
- upon project completion, at sites where heavy equipment is authorized, compacted areas will be scarified to improve revegetation. Any work area left barren of vegetation as a result of installation of the practices shall be restored to a natural state through seeding or replanting with native species of trees, shrubs, and grasses as soon as possible upon completion of the project, but in no case beyond 30 days during the wet season (November 1 through June 15) and within one month prior to the wet season when work occurs in the dry season (June 15 through November 1);
- where it is necessary to use herbicides to control exotic vegetation, they will be applied according to registered label conditions. In situations where organic amendment will not guarantee adequate establishment of restoration vegetation, application rates for chemical fertilizers will be based on soil nutrient testing and shall utilize slow release or split applications to minimize leaching or runoff into water bodies;
- all petroleum products, chemicals, silt, fine soils, and any substance deleterious to fish, plant, or bird life shall not be allowed to pass into, or be placed where it can pass into, waters of the state;
- when implementing or maintaining a sediment basin, increases in suspended sediment turbidity at the basin outlet shall be kept below 10% of background; and
- all practices installed will be annually inspected to ensure affective functioning and to resolve any problems.

In addition to the mitigation/monitoring measures identified, above, the project includes the following measures for any grading that will occur adjacent to or within creeks, streams, wetlands, and sloughs:

- work will only occur in a dry or non-flowing channel, between June 15 and November 1;
- disturbance to existing grades and vegetation will be limited to the actual site of the management practice and necessary access route;
- equipment storage will not be within 50 feet of a stream channel;
- finished grades shall not exceed 2:1 side slopes;

- upon completion of grading, all disturbed slopes will be protected through a combination of permanent vegetative treatment, mulching, geotextiles, and/or rock; and,
- energy dissipators will be installed to protect channel bottom or sides from water discharges emanating from erosion control structures.

With these mitigation measures, the project has been designed to avoid potential adverse impacts that could result from the discharge of sediments during the implementation of the practices, consistent with Coastal Act Sections 30230, 30231, and 20232.

In addition to the requirements to protect the quality and biological productivity of the marine environment through, among other means, controlling the discharge of hazardous substances and polluted runoff, Sections 30233 and 30236 of the Coastal Act places limitations upon the construction of erosion control structures, flood control facilities, or any other structure that results in the diking, filling, or dredging of marine and wetland environments. This is in recognition of the fact that such structures can diminish the biological productivity of such areas, and that the control of sediment can reduce the sand supply of local beaches. Best Management Practices included within the project that may involve in-stream structures, such as Grade Stabilization Structures, Streambank Protection, and Stream Channel Stabilization must therefore be analyzed for conformance with these policies.

Section 30233 of the Coastal Act allows for the diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes for restoration purposes. Similarly, Section 30236 authorizes channelizations, dams, or other substantial alterations of rivers and streams in developments where the primary function is the improvement of fish and wildlife habitat. As previously discussed, the primary purpose of this project is to improve the control of agricultural runoff, in order to restore, protect, and enhance the sensitive environmental resources of the Elkhorn Slough Watershed. The project therefore qualifies as a restoration project that will improve fish and wildlife habitat, and as a result, may include development activities that are authorized under Coastal Act Section 30233 and 30236.

As required by these Coastal Act policies, such activities must be limited to situations where there is not a feasible, less environmentally damaging alternative and where the best mitigation measures feasible have been provided to minimize adverse environmental effects. With respect to the requirement that these activities be undertaken when there are no feasible, less environmentally damaging alternatives, the project has been designed to address streambank protection by controlling the streambed grade before more permanent, and potentially more damaging, types of engineered bank protection is installed. Regarding the need to minimize adverse affects on environmental resources to the greatest degree feasible, the aforementioned mitigation/monitoring measures that have been incorporated within the project appropriately satisfy this requirement. With these mitigation/monitoring measures, the short-term adverse impacts to marine resources that could result from project implementation will be avoided, and the project will have a long-term benefit to the biological productivity of the marine environment and the quality of coastal waters.

Section 30233 of the Coastal Act also requires that, whenever feasible, erosion control and flood control facilities facilitate the continued delivery of sediments to the littoral zone by placing material removed from these facilities at appropriate points on the shoreline in accordance with

other applicable provisions of this division. In the case of the subject project, the agricultural sediments that will be trapped by the proposed erosion control facilities are not suitable for beach replenishment purposes. This is because of the presence of pesticides, fertilizers and nutrients that could have an adverse affect on marine resources, as well as fine soils that would not be compatible with beach sands. Therefore, the project's placement of these sediments on agricultural land is consistent with the provisions of Coastal Act Section 30233, and will also help maintain agricultural productivity by maintaining prime soils on site, as further discussed below.

Conclusion

Consistent with Coastal Act Sections 30230, 30231, and 30232 the project is designed to maintain, restore, and enhance the biological productivity and quality of coastal waters. Because it is a restoration project, and because appropriate and feasible mitigation/monitoring measures have been incorporated into the project to ensure that it will not have a significant adverse impact on marine resources, is it also consistent with Section 30233 and 30236 of the Coastal Act.

C. Agricultural Resources. The following Coastal Act policies, requiring the protection of agricultural resources, apply to this consistency determination:

Section 30241

The maximum amount of prime agricultural land shall be maintained in agricultural production to assure the protection of the areas agricultural economy

Section 30242

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 conversion shall be compatible with continued agricultural use on surrounding lands.

Section 30243

The long-term productivity of soils and timberlands shall be protected, and conversions of coastal commercial timberlands in units of commercial size to other uses or their division into units of noncommercial size shall be limited to providing for necessary timber processing and related facilities.

Consistent with these Coastal Act policies, the project will help maintain the long-term agricultural productivity of agricultural soils in the watershed, primarily by reducing the loss of valuable top soil that may otherwise be lost through erosion. In addition, by improving the compatibility between agriculture land uses and the protection of sensitive habitat areas, the project will assist in preserving the long-term viability of both of these important resources.

There is the potential, however, that some small amounts of agricultural land, including prime agricultural soils, may need to be taken out of production in order to accommodate the Best

Management Practices that will be installed by the project. This is not, however, considered a conversion to non-agricultural use, as these facilities serve the agricultural purpose of controlling erosion. In addition, the beneficial impact of retaining significant amounts of soil on site that would otherwise be lost to erosion will greatly outweigh the minor loss in areas of production.

The Commission therefore concurs that the project is consistent with CCMP policies protecting agricultural resources.

D. Archaeological Resources. The following policies of the Coastal Act requiring the protection of archaeological resources are applicable to the subject consistency determination:

Section 30244

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

Analysis

According to the consistency determination, there is a high probability that Native American archaeological sites occur within the project area. In most cases, however, the Best Management Practices will take place on lands that have been previously cultivated, and will not exceed the depth, extent, or kind of previous agricultural activities that have already been undertaken. In instances where BMPs will be installed in areas that have not been cultivated, they typically do not involve any ground disturbance. As a result, the project is not expected to have a significant impact on archaeological or paleontological resources.

Nevertheless, according to the submitted consistency determination, NRCS is responsible for complying with the cultural resources provisions contained in the Programmatic Agreement (PA) between the Advisory Council on Historic Preservation and the National Council of State Historic Preservation Officers. NRCS actions which qualify as an "undertaking" by the PA triggers the need to: review the cultural resources data from the Northwest Information Center of the California Historical Resources File System, at Sonoma State University; and, complete a field inspection to relocate previously known cultural resources and/or possible locate previously undiscovered cultural resources. All NRCS field personnel that will be implementing this project will have completed the Natural Cultural Resources Training Program required by the PA.

The consistency determination also states that if unanticipated cultural resources are discovered, or it is determined that cultural properties will be affected in a previously unanticipated manner, then NRCS will protect such resources from damage to the fullest extent possible by halting actions affecting the resource, and notifying the NRCS Cultural Resources Coordinator. The consistency determination further states that if human remains are uncovered, the NRCS will follow procedures established by the Native American Heritage Commission, which includes the immediate cessation of work in the area and notifying the County coroner.

With these measures, the Elkhorn Slough Watershed project includes reasonable mitigation measures for the protection of archaeological and paleontological resources, and the Commission therefore finds the project consistent with Section 30244 of the Coastal Act.

E. LCP Consistency.

As previously noted, the County of Monterey's LCP has been certified and incorporated into the CCMP, and therefore can provide guidance to the Commission in applying the Chapter 3 policies of the Coastal Act to this federal consistency determination in light of local circumstances.

As a federal project, the development activities that will be implemented are exempt from coastal development permit requirements both within the Coastal Commission's and Monterey County's coastal permit jurisdictions. This is reflected by Section 20.70.120M of the Monterey County certified Implementation Plan (a component of the certified LCP), which exempts any project undertaken by a federal agency from coastal development permit requirements.

Nevertheless, the policies and ordinances of the Monterey County LCP that would be applied to similar projects if they were not being pursued by a federal agency provides guidance regarding this federal project's consistency with the Monterey County certified LCP, and thus the CCMP, in light of local circumstances.

Both the Coastal Commission's and Monterey County's long term interests in protecting the unique and valuable wetland resources within the Elkhorn Slough Watershed are reflected in the Monterey County certified LCP, particularly in North County segment of the LCP. The North County Land Use Plan describes the Elkhorn Slough as "the most significant natural features of the area", and notes that the area "east of the Elkhorn Slough...is a resource that has been affected by extensive land clearing and erosion" (emphasis added). It recommends "the need for effective management...due to erosion and land use practices." And strongly states, "effective resource management will be increasingly vital in protecting the coast's natural resources as stressed in the California Coastal Act of 1976. Areas of...environmentally sensitive habitats, prime agricultural value...will require special attention in order to protect the public welfare and preserve the delicate balance upon which many of the resources depend."

Towards this end, the specific provisions of Monterey County's Coastal Implementation Plan (IP) and the North County Land Use Plan (LUP) set forth development policies and regulations intended to address the sensitive resources of the watershed. For example, the certified IP establishes Resource Conservation Zoning Districts, to ensure the protection, enhancement, and restoration of sensitive resource areas in the County of Monterey (Chapter 20.36.010), as called for by LUP Policy 2.3.1, which states that the environmentally sensitive habitats of North County "shall be protected, maintained, and where possible enhanced and restored."

The Elkhorn Slough Watershed Project will involve the implementation of the 10 previously identified BMPs in the RC(CZ) and other zoning districts. In general, the RC(CZ) provisions of the IP are the most restrictive towards new development, because they are the ordinances which implement the resource protection policies of the certified LCP. Ordinance 20.36.040 of this chapter establishes the principal permitted use in RC(CZ) districts, which are limited to: "resource dependent educational and scientific research facilities uses, and low intensity day use recreation uses such as trails, picnic areas and boardwalks"; and, "restoration and management programs for fish, wildlife, or other physical resources". The Elkhorn Slough Watershed project, which constitutes a restoration program for fish, wildlife and soil resources, is one of the few types of uses which is permitted to be developed within RC(CZ) Districts.

Other provisions of the Monterey County certified LCP that are applicable to the project include:

- LUP Policy 2.3.2.8, which requires that where development is permitted in or adjacent to environmentally sensitive habitat areas (consistent with all other resource protection policies), the removal or indigenous vegetation and land disturbance (grading, excavation,...etc.) shall be restricted to the minimum amount necessary for structural improvements;
- LUP Policy 2.3.2.9, which requires the use of non-invasive plant species in proposed landscaping and encourages the use of appropriate native species or species that are compatible with native plants;
- LUP Policy 2.3.2.10, which states "construction activities...which would affect rare and endangered birds shall be regulated to protect habitat or rare, endangered, and threatened birds during breeding and nesting seasons..."
- LUP Policies 2.3.3 (A),(B), and (C), regarding: Terrestrial Plants and Habitats; Riparian, Wetland, and Aquatic Habitats; and, Terrestrial Wildlife. These policies require, among other things, that in these areas: public access should be limited; disruption minimized; conversion discouraged; protection provided through appropriate setbacks and siting; and that dredging, filling, and grading be restricted to flood control purposes and for the improvement of fish and wildlife habitat. These policies also require that development activities be carried out in such a manner as to minimize impacts from increased runoff and sedimentation, and state that when such activities require removal of riparian plant species, revegetation shall be required. The policies further require that oil and other toxic substances not be allowed to enter or drain into the estuarine system.
- LUP Policies 2.4.2, 2.4.3, and 2.4.4., which prevent reductions in the size, quantity, and biological productivity of remaining wetland habitat and require avoidance and minimization of significant disruption to marine, estuarine and wetland habitats. The policies also limit development to restorative measures and require that any disruption by these activities be restored.
- LUP Section 2.5, and associated policies, which call for the protection of groundwater supplies, appropriate management of agricultural runoff, effective control of erosion and sedimentation, and the restoration of watersheds experiencing excessive erosion.
- LUP Section 2.6 and associated policies, which call for the permanent preservation of prime agricultural soils exclusively for agricultural use, the protection of productive farmland, and require that adjacent development be compatible with agricultural uses.
- LUP Policy 2.8.3.B.5, which requires that where development of flood control measures are permitted, waterway banks and disturbed areas to be restored to a natural vegetative appearance, emphasizing the use of native plants and trees.

- LUP Section 2.9 and associated policies, which require the maintenance and protection of archaeological resources for their scientific and cultural heritage values; and
- Part 2 of the Monterey County Coastal Implementation Plan, which contains regulations for development in the North County Area that carry out the above LUP Policies.

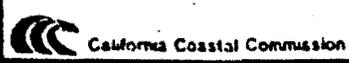
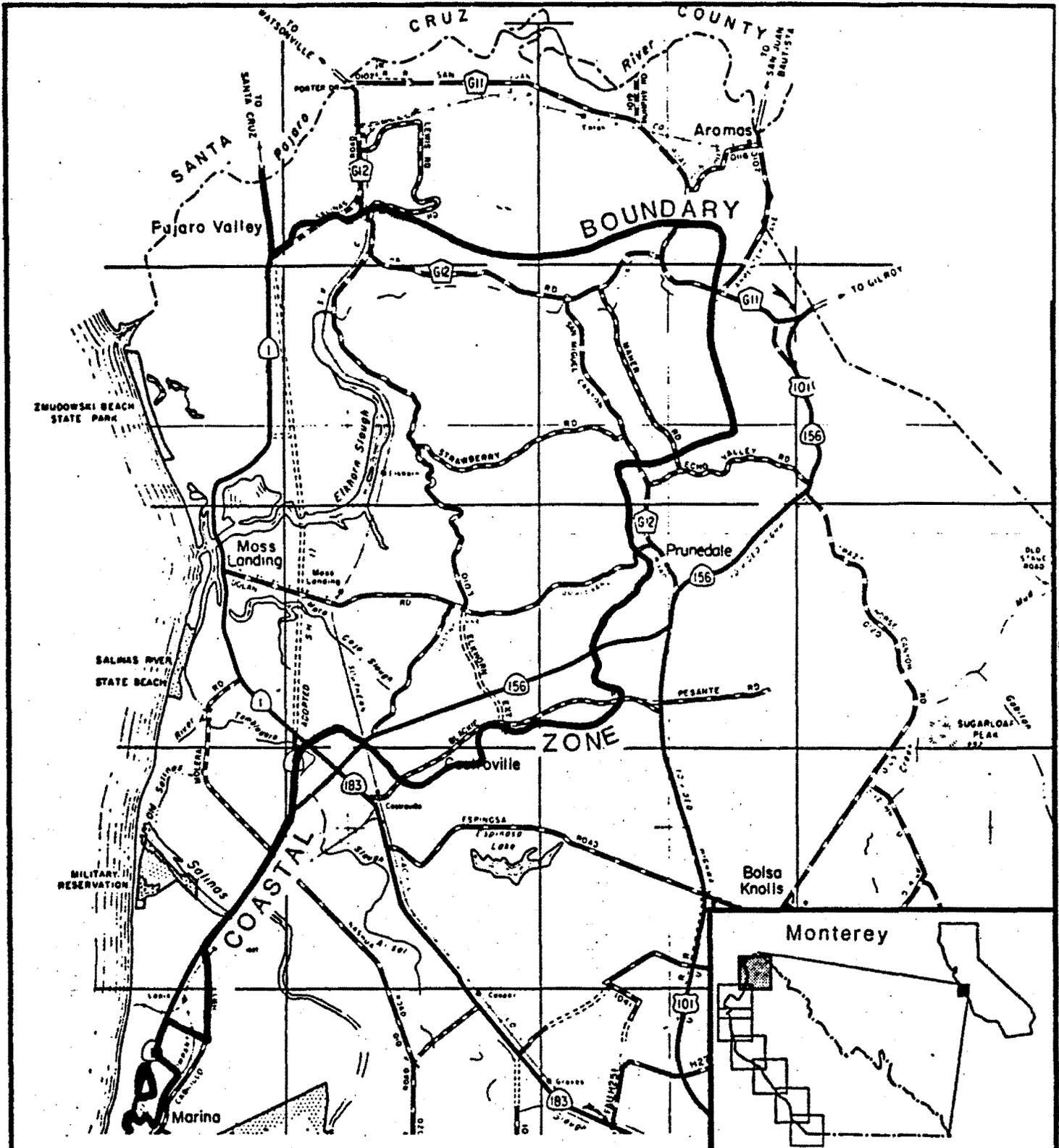
Analysis:

The above policies and ordinances of the Monterey County certified LCP generally mirror the Chapter 3 Coastal Act policies previously identified in this staff report, supplemented with more specific information and requirements to ensure such policies are effectively carried out in light of local circumstances. The environmental and agricultural benefits that will be accomplished through the implementation of NRCS's Elkhorn Slough Watershed project are consistent with the resource protection objectives articulated throughout the Monterey County LCP.

As a result of ongoing consultations between staff of NRCS, Monterey County, the Coastal Commission, and other resource agencies, the project has been designed so that the implementation of each BMP will occur in a manner that is generally consistent with the specific requirements of the Monterey County LCP. The mitigation/monitoring measures that have been incorporated into the project and are described in previous sections of this staff report represent the ways in which this conformance has been achieved.

Conclusion

The Elkhorn Slough Watershed project represents an opportunity to implement the environmental resource protection and enhancement objectives contained in both the Monterey County LCP and the Coastal Act. Because it is a federal project, its implementation is exempt from coastal permit requirements. Nonetheless, with the incorporation of the previously identified mitigation/monitoring measures, it is in general conformance with the LCP requirements that would be applied to such projects if they were undertaken by a non-federal entity. The guidance provided by the Monterey County certified LCP therefore supports Commission concurrence with the determination that the project is consistent with the CCMP to the maximum extent practicable. The Commission will also have the opportunity to review this consistency determination at the conclusion of the 5 year period (May 13, 2004), and consider any new circumstances (including changes to the certified LCP) that may affect his project's consistency with the CCMP.



LOCATION MAP



County of Monterey

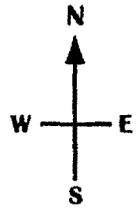
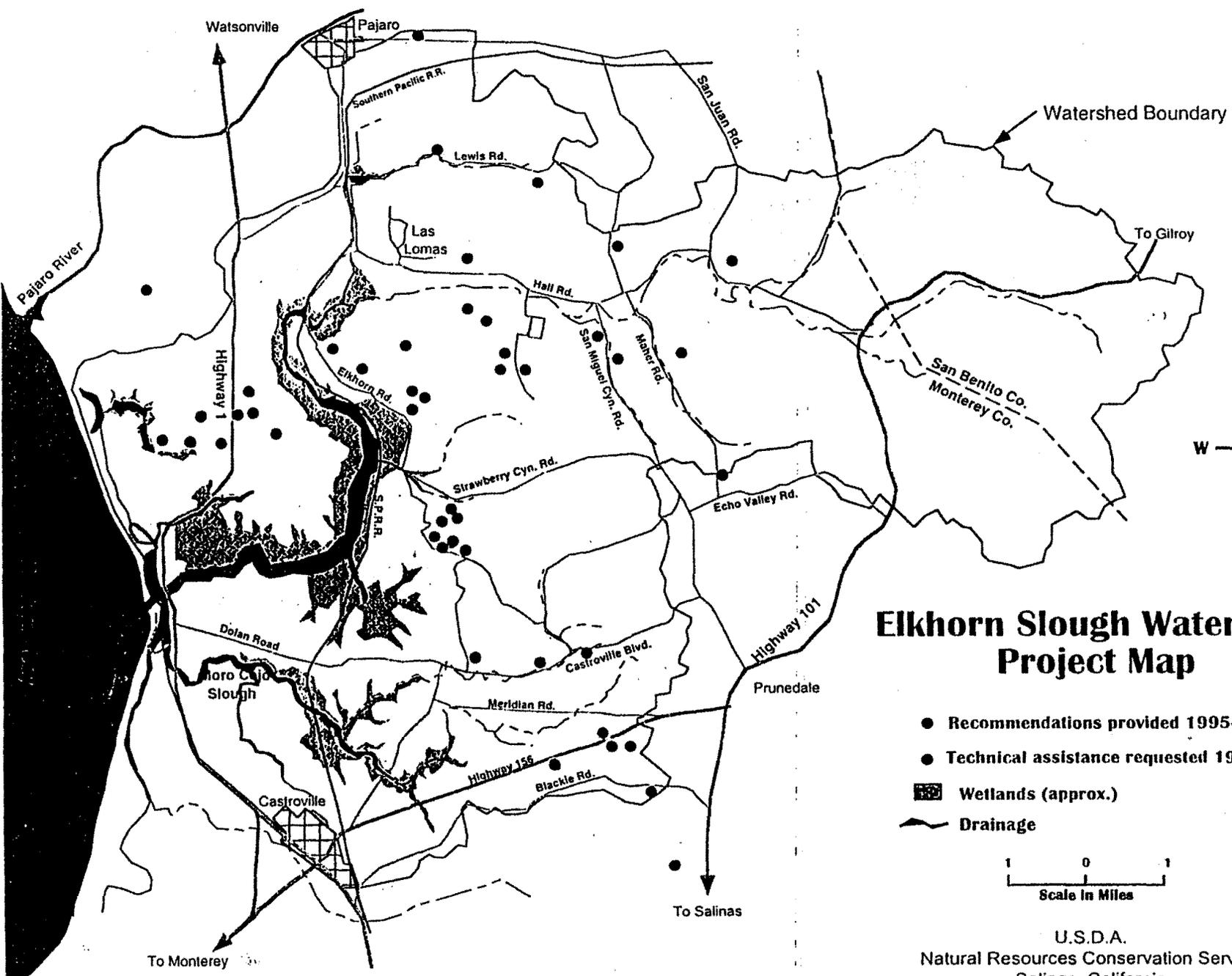
Sheet 1 of 7

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EXHIBIT A

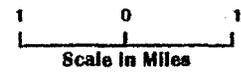
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EXHIBIT 1



Elkhorn Slough Watershed Project Map

- Recommendations provided 1995-1996
- Technical assistance requested 1996
- ▨ Wetlands (approx.)
- Drainage



U.S.D.A.
 Natural Resources Conservation Service
 Salinas, California

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APR 16 1998
CALIFORNIA
COASTAL COMMISSION
CENTRAL COAST AREA

MEMORANDUM OF UNDERSTANDING No.
BETWEEN
RESOURCE CONSERVATION DISTRICT OF MONTEREY COUNTY
UNITED STATES DEPARTMENT OF AGRICULTURE, NATURAL RESOURCES
CONSERVATION SERVICE
AND
CALIFORNIA DEPARTMENT OF FISH AND GAME

REGARDING THE STREAMBED ALTERATION NOTIFICATION ASSOCIATED WITH
IMPLEMENTATION AND MAINTENANCE OF CONSERVATION PRACTICES IN THE
ELKHORN SLOUGH WATERSHED SUBJECT TO FISH AND GAME CODE 1601

This Memorandum of Understanding (MOU) by and between the California Department of Fish and Game, hereinafter called "Department", the Resource Conservation District of Monterey County, hereinafter called "RCD", and the United States Department of Agriculture, Natural Resources Conservation Service, Salinas Field Office, hereinafter called "NRCS", is for the purpose of delineating and defining procedures for the implementation and maintenance of conservation practices (hereinafter called "practices") in creeks, rivers, streams, ponds, and lakes of the Elkhorn Slough Watershed, Monterey County and shall not require further notice and agreement in compliance with Section 1601 of the Fish and Game Code.

WHEREAS, the Department is charged with the protection and enhancement of the fish and wildlife resources of the State of California; and

WHEREAS, the protection of fish and wildlife resources depends largely upon the preservation of the quality and quantity of their respective habitats; and

WHEREAS, Fish and Game Code Section 1601 requires notification of the Department whenever a project will divert, obstruct, or change the natural flow or bed, channel, or bank of any river, stream, or lake designated by the Department in which there is at any time an existing fish or wildlife resource or from which these resources derive benefit; and

WHEREAS, Fish and Game Code Section 1601 allows the Department to propose reasonable modifications to the implementation and maintenance of specific conservation practices as would allow for the protection and continuance of existing fish and wildlife resources that may be substantially adversely affected by installation of those practices; and

WHEREAS, with regard to any project that involves the implementation and maintenance of practices for controlling soil erosion and improving water quality in the Elkhorn Slough Watershed, notice to, and agreement with, the Department is not required subsequent to this initial notification and agreement, unless the work as described in the agreement is substantially changed or conditions affecting fish and wildlife resources change, and the resources are adversely affected by the activity conducted under the agreement; and

WHEREAS, the implementation and maintenance of conservation practices are an integral part of the RCD and NRCS activities to control soil erosion and improve water quality through resource management in the

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Elkhorn Slough Watershed; and

WHEREAS, consistent with the policies of Fish and Game Code 1600 et seq., protection and conservation of fish and wildlife resources of California are of utmost public interest and fish and wildlife conservation is a proper responsibility of the State; and

WHEREAS, in order to achieve the environmental benefits of the practices, it is mutually advantageous to define the practices and to establish procedures to expedite their implementation and maintenance while providing for the protection and continuance of the existing fish and wildlife resources; and

WHEREAS, nothing in this agreement shall constitute a waiver of any future or current Department claims to the use and maintenance of natural conditions under the public trust doctrine; and

WHEREAS, nothing in this agreement shall constitute a waiver of RCD and NRCS claimed rights to implement or maintain practices in the agricultural and grazing lands of the Elkhorn Slough Watershed outside the river, stream, and lake areas designated by the Department; and

WHEREAS, this MOU is not intended to affect RCD and NRCS rights under Fish and Game Code Section 1601(f) to undertake emergency work necessary to protect life or property,

NOW THEREFORE, DFG, RCD, and NRCS agree as follows:

I. Definitions - The following definitions shall govern this MOU:

1. Management practices - specific practices included within the auspices of this MOU, if on a stream or streambank, are: critical area planting, filter strip, streambank protection, underground outlets, grade stabilization structure, stream channel stabilization, and water and sediment control basins. A description of the practices is provided in *Exhibit I*. Further procedures are defined herein for the implementation and maintenance of the practices in circumstances where a water body supports a fishery, *Section II, Authorized Activities, Part E*.
2. The Elkhorn Slough Watershed is defined as including: Paradise Canyon Creek, Long Canyon Creek, McClusky Slough and its tributaries, Strawberry Canyon Creek, Hidden Canyon Creek, Carneros Creek and its tributaries, Warner Lake and its tributaries, Moro Cojo Slough and its tributaries, Bennett Slough and its tributaries, Castroville Slough and its tributaries, and the lesser tributaries to the Elkhorn Slough, *Exhibit II*.
3. A water body is understood to be a creek, river, or stream with a defined bed and bank, or a pond or lake.
4. NRCS will define customers as ranchers, growers, and land managers.

II. Authorized Activities

Installation of the practices identified below, when performed in the Elkhorn Slough Watershed in accordance with the procedures described below, shall not require further notice to, or agreement with,

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the Department.

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A. General Procedures

1. Practices shall be implemented and annual maintenance conducted between April 15 to October 15. Work outside this time frame may be authorized following consultation with the local warden.
2. Work shall not be conducted in a flowing stream/creek or in permanent ponded areas without prior consultation with the local warden. Permanent ponded areas are understood to be areas where there is standing water most of the year. If it is deemed necessary to work in such areas, the site shall be dewatered and water above the barrier shall be reeled or pumped downstream at an appropriate rate to maintain downstream flows during construction. Upon implementation of the practice, the barriers to flow shall be removed in a manner that will allow flow to resume with the least disturbance to the substrate.
3. The implementation and maintenance of projects shall not result in sediment covering a clean bottom. A "clean" bottom is characterized by cobbles, gravel and small stones (1 to 6 inches in size).
4. No heavy equipment shall be used in the channel bottom without prior approval by the local warden.
5. Vegetation removal shall be the minimum necessary to complete the work.
6. Hand labor shall be used to trim vegetation in the channel bottom.
7. There shall be no removal of trees 6 inches or greater dbh (diameter at breast height).
8. Storage of equipment shall not be within 50 feet of a water body to avoid release of petroleum hydrocarbons into that water body.
9. Upon project completion at sites where heavy equipment use was authorized, the channel bottom shall be scarified from the work site to the equipment entrance, where activities have caused compaction of the channel bottom material. Any work area left barren of vegetation as a result of the installation of the practices shall be restored to a natural state by seeding, replanting, or other agreed upon means with native species of trees, shrubs, and grasses as soon as possible upon completion of project, but in no case beyond 30 days during the wet season (approximately October 16 through April 14) and within one month prior to the beginning of the wet season when work occurs during the dry season (April 15 through October 15).
10. All debris, sediment, rubbish, vegetation or other material removed from the channel banks or channel bottom shall be removed to a location where they shall not re-enter the waters of the state. Given the purposes of this MOU, sediments shall be disposed of on farm fields without tile drains. All petroleum products chemicals, silt, fine soils, and any substance or material deleterious to fish, plant, or bird life shall not be allowed to pass into, or be placed where it can pass into the waters of the state (Fish and Game Code 5650).

B. Procedures for Implementation and Maintenance of a Critical Area Planting

1. When implementing or maintaining a critical area planting a filter fabric fence and/or hay bales shall be utilized, if needed, to keep soil from flowing into the adjacent water body. At the time vegetation is sufficiently mature to provide erosion control it may be appropriate to

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remove the fence and hay bales. Annual review by NRCS shall occur until the critical area planting is established to control erosion. Except as noted below, no pesticides or fertilizers shall be used in the stream area to hasten or improve the growth of critical area plantings. Herbicides may be necessary to control established stands of Kikuyu grass (*Pennisetum clandestinum*), Bermuda grass (*Cynodon dactylon*), and Andean pampas grass (*Cortaderia jubata*). Herbicides shall be applied according to registered label conditions.

C. Procedures for Implementation and Maintenance of Sediment Basin, Water and Sediment Control Basins

1. A sediment basin shall never be implemented or maintained in a water body.
2. Where nesting sites occur, the practice shall be implemented or maintained to avoid nesting sites and depending on the species nesting seasons.
3. Where water and sediment control basins create marshy conditions and attract nesting birds and other wildlife, maintenance to remove sediment and cattails may occur from August 1 to October 15.
4. Where implementing or maintaining an outlet from a sediment basin involves out letting a pipe into a stream, an energy dissipater shall be installed.
5. When implementing or maintaining a sediment basin, increases in suspended solid turbidity in the stream (as measured by NTU) shall be kept below 10 percent of background.

D. Procedures for Implementation and Maintenance of an Underground Outlet

1. Increases in suspended turbidity in the stream (as measured by NTU) shall be kept below 10 percent of background when implementation and maintenance of an underground outlet occurs.

E. Procedures for Implementation and Maintenance of a Grade Stabilization Structure and a Stream Channel Stabilization

1. If a stream or creek supports a fishery, these practices shall not be implemented or maintained under this MOU when there is flowing water or summer refugia exists.
2. No creosote treated timbers shall be used for grade or channel stabilization structures within streams or creeks.

III. Time and Manner of Installation of Practices

Work shall be performed at a time and in a manner which shall minimize adverse impacts to fish and wildlife resources and their habitat. In this regard, this MOU is recognized as an equivalent Streambed Alteration Agreement.

IV. Reporting Requirements

NRCS, shall provide written notification in the form of an annual report to the Department's Regional Manager, Region 3, of projects completed. The report shall list participating landowners, describe each

project purpose, area affected, natural biological enhancements, and amount of yardage, cut and slope of the work. It shall list conservation benefits and any net gains in wetlands and riparian areas, and provide photo documentation of before and after site conditions. The report shall be based on NRCS Status reviews and shall be due January 31.

V. Fees

The Department has determined that the implementation and maintenance of the practices outlined in this MOU will provide a net benefit to the fish and wildlife resources of the Elkhorn Slough Watershed and therefore has waived all fees to NRCS for practices covered under this MOU.

VI. Amendments and Termination

This MOU cannot be amended or modified in any way except by written notification duly executed by the Department, RCD and NRCS. Any proposal for amendment or modifications must be delivered for review and approval by the Regional Manager or the official designee of the Regional Manager. This MOU may be terminated by either party following a 30-day written notice. Upon termination, the activities of the parties shall be governed by the applicable provisions of Fish and Game Code Section 1601. This agreement, notwithstanding the above provisions, shall remain until January 31, 2003.

All written notifications herein provided to be given or which may be given by either party to the other, shall be deemed to have been fully given when made in writing and deposited in the United States mail prepaid and addressed as follows:

Department of Fish and Game, Regional Manager
Region 3
P.O. Box 47
Yountville, CA 94599

President
Resource Conservation District of Monterey County
635 Sanborn Place, Suite 7
Salinas, CA 93901

Natural Resources Conservation Service
635 Sanborn Place, Suite 7
Salinas, CA 93901

VII. Remedies

Should disagreements arise between staff level personnel of the RCD, NRCS and the Department concerning the implementation of this MOU which cannot be resolved by their respective management level supervisors, the issue shall be elevated to the NRCS Area Conservationist and the Department Regional Manager for resolution. If resolution of this issue is not reached at this administrative level, the arbitration procedures specified in Section 1601 of the Fish and Game Code shall be initiated with participation and review by the

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NRCS State Conservationist.

VIII. Notification to Customer/Landowners

The terms and conditions from the Department shall be included with NRCS design standards and specifications for each relevant technical assistance and cost share project. Prior to implementation of the practices, the NRCS shall clearly notify the customer of these terms and conditions. If a customer does not carry out work consistent with NRCS design standards and specifications, including the terms and conditions from the Department, NRCS shall notify the customer and work directly with them to resolve the problem. If the customer still fails to conform, the NRCS shall notify the customer that their activities are inconsistent with the standards and specifications contained in the conservation plan or cost share contract and that the customer's actions are no longer covered by this MOU. NRCS shall have no further responsibility to enforce the conditions and shall not be held responsible as the permittee. The customer/landowner shall be held directly liable for all violations.

IX. Severability

In the event that the parties to this MOU have entered into discussions in an effort to resolve a disagreement pursuant to Article VII, activities necessary to carry out routine implementation and maintenance of the practices may continue at approved sites provided that neither the sites nor the activities in use are the subject of the disputes.

X. Consistency

If this MOU is found to be in conflict with other provisions of law, it shall be void unless amended to comply with all appropriate local, state and federal laws.

XI. Entire Agreement

This MOU, along with the exhibits attached hereto, constitutes the entire Agreement and understanding between the Department, RCD, and NRCS for the implementation and maintenance of management practices. This agreement supersedes all prior and contemporaneous maintenance activity agreements, representations, understandings, if any, whether oral or written.

XII. Other Environmental Laws, Statutes, or Regulations

This MOU does not constitute any form of authorization, permit, biological opinion, or compliance with the requirements of any other statute, regulation, requirement, or ordinance respecting the protection or conservation of fish and wildlife resources. These statutes include, but are not limited to, the Clean Water Act, California Environmental Quality Act, the California Endangered Species Act, the California Native Plant Protection Act, or the Federal Endangered Species Act.

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THIS MEMORANDUM OF UNDERSTANDING SHALL BE IN FULL FORCE AND EFFECT FROM THE DATE THE PARTIES HAVE SIGNIFIED AGREEMENT BY SIGNATURE OF THE DESIGNATED REPRESENTATIVE.

President
Resource Conservation District of
Monterey County

Area Conservationist
Natural Resources Conservation Service

Date: _____

Date: _____

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Mr. Brian Hunter
Regional Manager
Department of Fish and Game

Date: _____

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1601 STREAMBED ALTERATION AGREEMENT MOU: RCD and NRCS, Salinas Field Office, Elkhorn Slough Watershed Project

Prepared by:
Deborah Johnston
Department of Fish and Game
20 Lower Ragsdale Drive, Suite 100
Monterey, California 93940

Regional Contact:
Lieutenant Dave Fox
Department of Fish and Game
20 Lower Ragsdale Drive, Suite 100
Monterey, California 93940

The following regional functional supervisors have reviewed and concur with this MOU:

Wildlife Protection date

Approved by:

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Regional Manager date

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US Army Corps
of Engineers.

SAN FRANCISCO DISTRICT

COPY

PUBLIC NOTICE

NUMBER: 22941S

DATE: February 6, 1998

RESPONSE REQUIRED BY: March 6, 1998

Regulatory Branch
333 Market Street

San Francisco, CA 94105-2197

PROJECT MANAGER: Mark D'Avignon TELEPHONE: (415) 977-8446 Email: MD'Avignon@smtp.spd.usace.army.mil

1. Introduction: The Monterey County Resource Conservation District (MCRCD), 635 Sanborn Place, Salinas, CA 93901 (contact: Paul Binsacca, President, 408/385-5111) and the United States Department of Agriculture, Natural Resources Conservation Service (NRCS), Elkhorn Slough Watershed Project (Project), 635 Sanborn Place, Salinas, CA 93901 (contact: Daniel Mountjoy, Project Coordinator, 408/424-1036) have applied for a Department of the Army permit for a program to implement and maintain conservation practices on agricultural operations in the Elkhorn Slough Watershed (Watershed), Monterey County, CA. This application is being processed pursuant to the provisions of Section 10 of the Rivers and Harbors Act of 1899 (33 U.S. Code 403), and Section 404 of the Clean Water Act (33 U.S.C. 1344).

2. Project Description: As shown in the attached drawings and descriptions, the proposed project would serve customers (ranchers, farmers and land managers) who wish to participate in the *biotechnical* enhancement of natural systems on farms in the Elkhorn Slough Watershed through installation of ten conservation practices (practices). The purpose of this work is to reduce non-point source pollution and stream erosion and provide the associated benefits of streambank protection, flood control, groundwater recharge, and habitat enhancement. (See pages 10 and 11 for descriptions of the proposed conservation practices.)

3. State Approvals: The applicant states that they have notified the Regional Water Quality Control Board, Central Coast Region, to determine the need for State water quality certification. The RWQCB has determined that this project is consistent with the

California Water Quality Control Plan, Requirements adopted by the Regional Board and Sections 301, 302, 303, 306 and 307 of the Clean Water Act, and has issued a Section 401 waiver to the project proponent. Those parties concerned with any water quality problems that may be associated with this project should write to the Executive Officer, California Regional Water Quality Control Board, Central Coast Region, 81 Higuera Street, Suite 200, San Luis Obispo, California 93401-5427;

The applicant is also consulting with the California Coastal Commission (CCC) to ensure that the project is consistent with the State's coastal zone management program.

4. Environmental Assessment: Corps of Engineers has assessed the environmental impacts of the action proposed in accordance with the requirements of the National Environmental Policy Act of 1969 (Public Law 91-190), and pursuant to Council on Environmental Quality's Regulations, 40 CFR 1500-1508, and Corps of Engineers' Regulations, 33 CFR 230 and 325, Appendix B. Unless otherwise stated, the Preliminary Environmental Assessment describes only the impacts (direct, indirect, and cumulative) resulting from activities within the jurisdiction of the Corps of Engineers. The Environmental Matrix and other worksheets and supporting data used in the preparation of this Preliminary Environmental Assessment are on file in the South Section, Regulatory Branch, Corps of Engineers, 333 Main Street, San Francisco, California.

The Preliminary Environmental Assessment resulted in the following findings:

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IMPACTS ON THE AQUATIC ECOSYSTEM

(1) Physical/Chemical Characteristics and Anticipated Changes

Substrate - Implementation and maintenance of three conservation practices may effect the substrate. The grade stabilization structure practice will be built into a creek bed or channel bottom to control the grade and prevent head cutting in natural or artificial channels to reduce bank and bed erosion and decrease sediment yield. The streambank protection practice uses vegetation or structures to stabilize and protect banks of streams, lakes, estuaries and excavated channels to reduce sediment yield and improve fish and wildlife habitat. The stream channel stabilization practice involves stabilizing a stream with bioengineered structures in cases where the channel is undergoing damaging aggradation or degradation downstream to create a stable stream bed for wildlife and riparian growth.

Currents/Circulation - Two practices may improve currents and circulation. The grade stabilization structure practice involves reduction of stream velocity above and below the structure resulting in reduced streambank and streambed erosion. The grassed waterway practice involves shaping or grading a natural or constructed channel and planting suitable vegetation for stable conveyance of runoff to reduce sediment yield delivered to receiving waters.

Drainage Patterns - (See prior description "Currents/Circulation"). The sediment basin and water and sediment control basin practices also may improve drainage patterns. The practices are constructed adjacent to natural drainages to detain and buffer upslope runoff and sediments from developed lands. The design of spillways and outlet works include water control structures to prevent scouring at the discharge point into natural drainages. Basins will be used to reduce concentrated off-site runoff and associated erosion by increasing infiltration and metering run-off following large storm events into natural drainages.

Streamflow - See prior description of: grade stabilization structure, grassed waterway, streambank protection, and stream channel stabilization practices for information regarding the effects on streamflow.

Flood Control Function of Wetland - Two practices will effect the flood control functions of wetlands. The sediment basin and sediment and water control basin practices detain sediment that would otherwise enter wetlands and reduce their capacity for floodwater retention.

Aquifer Recharge - The sediment and water and sediment control basin practices detain runoff in the basins increasing the opportunity for groundwater recharge.

Baseflow - Two practices may effect base flow. Sediment basins and soil and water control basins will increase the opportunity for infiltration of rainfall runoff in the watershed which may extend the duration of seasonal stream flows.

Storm, Wave, Erosion Buffer of Wetland - The erosion buffer of wetlands will be enhanced by implementation and maintenance of the practices. The filter strip practice involves planting a strip or area of vegetation for removing sediment, organic matter, and other pollutants from runoff and wastewater. When the field borders are located such that runoff flows through the filter strip in sheet flow, coarser grained sediments are filtered and deposited. Filter strips may also reduce erosion on the area on which they are constructed. See prior descriptions of grassed waterways and streambank protection practices for discussion of the benefits of buffering erosion with wet areas.

Erosion/Sedimentation Rate - The rate of erosion and sediment will be reduced as a result of implementation and maintenance of the practices. The Elkhorn Slough Watershed Project was initiated in 1993 by the MCRCD to address water quality problems in the Elkhorn and Moro Cojo Sloughs

(Sloughs), both of which drain into the Monterey Bay National Marine Sanctuary (MBNMS) at Moss Landing, CA. The primary goal of the project is to reduce erosion and sedimentation into the Elkhorn Slough by 50% over an eight year period. At this time, an average of 33 tons of sediment per acre, per year flows from sloping strawberry fields. Without concentrated project action, total soil erosion into the sloughs and wetlands and transport into the surrounding waterbodies will average approximately 80,000 tons annually. Implementation and maintenance of the ten practices described in this notice are key to reducing erosion and off-site transport of sediments on more than 150 small-scale agricultural operations in the Watershed. In 1995-1996 alone the project achieved 2,667 tons of soil loss reductions.

During implementation of all practices there is the potential for quantities of sediment and associated chemicals to be washed into surface waters prior to plant establishment. Implementation of the critical area planting practice involves some initial grading, seedbed preparation, seeding, and mulching. Implementation of the filter strip practice involves planting a strip or area of vegetation at the lower edges of fields adjacent to waterbodies. This often requires soil manipulation to remove surface irregularities to prepare for planting. Implementation of the grassed waterway practice and diversion practices involves grading and seed bed preparation. The streambank stabilization practice involves control of the streambed grade before most permanent bioengineered types of bank protection can be considered feasible. Sediment basin construction results in temporarily unstable slopes until critical area seeding is established. (See prior description of the grade stabilization structure practice for discussion of its implementation). The stream channel stabilization practice involves work in a creek-bed or channel bottom to reduce aggradation or degradation in stream channels. This will decrease the sediment-yield and result in a stream channel favorable to wildlife and riparian growth.

Several measures shall be taken to deal with short-term increases in erosion resulting from implementation of the practices. A filter fabric fence and/or hay bales shall be utilized, if needed, to keep soil from flowing into the adjacent waterbody. At the time vegetation is sufficiently mature to provide erosion control, the fence and hay bales may be removed. Annual Status Reviews of the practice shall be conducted for cost-share contracts which are typically five years in duration. Status Reviews shall be conducted for non-contract projects until projects are installed and are functioning according to design standards and serving their intended purpose. Status Reviews examine the practices in terms of their current condition, check the practices against the original plan and provide recommendations for resolving any problems with the implementation of the practices. When implementing or maintaining a sediment basin, increases in suspended solid turbidity (as measured by NTU) shall be kept below 10 percent of background. All debris, sediment, rubbish, vegetation or other material removed from the channel banks or channel bottom shall be removed to a location where they shall not re-enter the waters of the state. The creek-bed or stream channel shall be restored to its natural state by seeding, replanting, or other agreed upon means with species of trees, shrubs, and grasses as soon as possible upon completion of project.

Water Supply (Natural) - As discussed, the sediment and water and sediment control basin practices detain runoff in the basins increasing the opportunity for groundwater recharge and the natural supply of water.

Water Quality - The Elkhorn Slough Watershed Project was initiated, in part, to reduce the high levels of agricultural pesticides found in surface water. Soil eroded from cropland as sediment usually contains a higher percentage of fine textured clay particles than the parent soil on the cropland. These lighter soil particles have a much greater adsorptive capacity for pollutants than coarser grained sediments and therefore transport higher concentrations of phosphorus, nitrogen, and pesticides. Selective off-

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The erosion of these sediments from farm fields into flowing rivers, creeks, streams and sloughs can increase the overall delivery of pollutants into the waters of the MBNMS. As discussed, such sediment-borne pesticides reaching the sloughs and wetlands from the watershed will be reduced by 50%.

In most circumstances, organic amendments shall be used to ensure successful establishment of restoration vegetation associated with the practices. Hand labor shall be used to control exotic vegetation at that site. However, herbicides may be necessary to control established stands of Kukuya grass (*Pennisetum clandestinum*), Bermuda grass *Cortaderia jubata* and Pampass grass (*Cortaderia jubata*) or to control the invasion of exotics into restoration plantings. Where it is necessary to use herbicides to control established stands of exotics or to control the invasion of exotics into restoration plantings, the herbicides shall be applied according to registered label conditions. In situations where organic amendments will not guarantee an adequate establishment of restoration vegetation, application rates will be based on soil nutrient testing and shall utilize slow release or split applications to minimize leaching or runoff into water bodies.

(2) Biological Characteristics and Anticipated Changes

Wetlands (Special Aquatic Site) - Projects that impact wetlands will result in a net gain in quality, quantity, or permanence of wetland habitats.

Implementation and maintenance of the practices are expected to check the flow of sediments into these wetland areas. Without the project, twenty-five locations comprised of freshwater ponds, diked pickleweed marshes and undiked pickleweed are under immediate threat of burial by fans of sediment in the Watershed. Approximately 60 acres of wetlands around the Sloughs will be lost in the next years unless sediment is checked in this watershed.

By reducing pesticide transport on eroded soils, implementation and maintenance of the practices will protect wetland biota from toxic agricultural chemicals.

Mud Flats (Special Aquatic Site) - No impacts are indicated.

Vegetated Shallows (Special Aquatic Site) - No project will be initiated that results in a net loss in the quality, quantity and permanence of this habitat. Individual projects may result in temporary impacts to vegetated shallows at the margins of freshwater streams and ponds due to regrading of eroded banks, removal of accumulated sediments and stabilization of stream channels. Temporary disturbance will be minimized by preventing further sediment delivery and through restoration plantings.

However, implementation and maintenance of the practices are expected to check the flow of sediments into these sites enhancing the long-term functioning of the remaining or resulting habitat. Comparable to wetland sites, these areas are under threat of fill by sediment without the Project.

Pool and Riffle Areas (Special Aquatic Site) - The implementation and maintenance of practices shall not result in sediment covering a clean bottom. (A "clean" bottom is characterized by cobbles, gravel and small stones (1 to 6 inches in size)).

Wildlife Sanctuaries - The Elkhorn Slough Watershed Project is designed to reduce the high levels of sediments and pesticides found in the Watershed which drain into the Elkhorn Slough National Estuarine Research Reserve and the MBNMS.

Endangered Species - The applicant initiated a consultation with the United States Fish and Wildlife Service (the Service) pursuant to Section 7(a)(2)(b)(4) of the Endangered Species Act of 1973, as amended (Act) to consider the effects the NRCS may undertake with agricultural operators on the federally threatened California red-legged frog (*Rana*

aurora draytonii), the federally endangered Santa Cruz long-toed salamander (*Ambystoma macrodactylum croceum*), the federal candidate species the California tiger salamander (*Ambystoma californiense*), and the federally proposed Black legless lizard (*Anniella pulchra nigra*).

The consultation also considered the effects of implementation and maintenance of the practices on the federally threatened Monterey spineflower (*Chorizanthe pungens* var. *pungens*), the federally endangered Robust spineflower (*Chorizanthe robusta* var. *robusta*), the federal candidate species the Santa Cruz tarplant (*Holocarpha macradenia*), and the proposed federal endangered taxa Yadon's Piperia (*Piperia yadonii*).

The Service found the practices considered during these consultation may effect, but may only result in temporary and minor effects on the listed species and that the overall actions are beneficial to the species. For example, reduced surface water and increased sedimentation in waterbodies are two important reasons for the near disappearance of aquatic vertebrates. Certain of the conservation practices proposed for the Elkhorn Slough Watershed involve removing accumulated sediment from dry creek beds and seasonal wetlands and ponds. Removing sediment will increase the number of deep pools which are required by aquatic animals to survive the long, dry California summers. Practices which enhance riparian and bank vegetation may provide shelter from predators and breeding, foraging and basking sites. Control of erosion and pesticide runoff from farm fields will improve the quantity and quality of freshwater input to the creeks, streams, ponds, and sloughs and aid instream flow into the MBNMS thereby improving aquatic habitat. Removal and control of previously introduced non-native species may reduce the extent to which exotics displace native flora.

In certain cases, limited incidental take of individuals in the form of mortality may occur, however, the incidental take associated with the action is expected

to only cause harassment of individual animals. Additionally, a number of binding, reasonable and prudent alternatives or measures to avoid a likely jeopardy situation or to reduce the take of individual animals have been developed associated with implementation and maintenance of the practices. These alternatives and measures include: extensive pre-planning evaluation of individual site conditions, site inspections for characteristic habitat conditions of the named species, customizing the time and manner of implementation and maintenance of the practices to minimize impacts to fish and wildlife resources and their habitat, and education of all project workers regarding the species' natural history and the protection afforded the species by the Act. Disturbance to existing grades and vegetation will be limited to the smallest area possible at the actual site of the conservation project and in terms of the access route. Additionally, NRCS technical materials shall clearly stipulate the special conditions of this consultation and the level of attention that NRCS project staff is required to expend on design and monitoring duties for projects that may affect listed species.

Habitat for Fish, Other Aquatic Organisms, and Wildlife - (see prior description).

b. IMPACTS ON RESOURCES OUTSIDE THE AQUATIC ECOSYSTEM

(1) Physical Characteristics and Anticipated Changes

Air Quality - Project activity would have minor, short-term impacts on air quality in the vicinity of the project site. Based on the relative minor size of the proposed project and limited to an evaluation of air quality impacts only within Corps of Engineers' (Corps) jurisdictional areas, the Corps has determined that the total direct and non-direct project emissions would not exceed the de minimis threshold levels of 40 CFR 93.153. Therefore, the proposed project would conform to the State Air Quality Implementation Plan (SIP) for California.

Noise Conditions - Construction activity would have minor, short term impacts on the ambient noise levels in the project site vicinity.

Geologic Conditions - No impacts are indicated.

(2) Biological Characteristics and Anticipated Changes

Riparian Habitat (Not in Corps' Jurisdiction) - The quantity and quality of riparian habitat will be enhanced with implementation and maintenance of the critical area planting practice which involves planting vegetation such as trees, shrubs, vines, grasses, or legumes, on highly erodible or critically eroding areas (does not include tree planting mainly for wood products). Implementation and maintenance of the filter strip practice will increase riparian vegetation at the lower edges of fields adjacent to streams, ponds, and lakes. The streambank protection practice will be accomplished, in part, through establishment of permanent riparian vegetation.

Other Terrestrial Habitat - Where nesting sites occur, the practice shall be implemented or maintained to avoid nesting sites. There shall be no removal of trees 6 inches or greater diameter at breast height (dbh).

Special Wildlife Areas - No impacts are indicated.

(3) Socioeconomic Characteristics and Anticipated Changes

Aesthetic Quality - Bare degraded stream channels and agricultural field margins will be enhanced through the use of the critical area planting, streambank protection and filter strip practices.

Agricultural Activity - A long-term consequence of continuing to allow excess soil losses in the Elkhorn Slough Watershed will be to reduce farm productivity. The loss of valuable soils will be

arrested with voluntary implementation and maintenance of the practices by land operators supported by the Elkhorn Slough Watershed Project.

Commercial Fishing - Elkhorn Slough is an important natural nursery for young commercial fish species. Enhanced water quality and reduced sedimentation and turbidity resulting from the practices will serve to protect this economic function of the slough system.

Community Cohesion - Voluntary and improved natural resource management efforts by farmers proposed as part of this project may reduce environmental conflicts in the overall community.

Economics - Without implementation and maintenance of these practices economic losses resulting from uncontrolled soil erosion will continue to cause hardship for many growers in the Watershed. As small-scale agricultural operations continue to experience high erosion-related losses, they become less competitive with other farms. Although soil erosion is but one production constraint faced by these growers, this factor would tend to reduce the number of such farms. The project will decrease the production costs associated with farming steep slopes in the Watershed. A significant part of the local economy also depends on a viable agricultural sector in this location.

Additionally, the costs of clean up after large, erosive storms would go down. At this time, on-farm damage of \$1,720,000 annually occurs on strawberry fields. The estimated annual costs to Monterey County for roads is \$100,000 and traffic delays is \$14,000. With implementation of the project, damages to strawberry lands would be reduced an average of \$1,100,000 annually. Public road cleanup costs are expected to decline by \$64,000 per year. Traffic delay losses are projected to be reduced by \$9,000 annually. Unevaluated damages, such as those to private property would also be diminished.

Employment - No impacts are indicated.

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Energy - No impacts are indicated.

Mineral Resources - No impacts are indicated.

Population/Growth Inducement - No impacts are indicated.

Prime and Unique Agricultural Lands - Prime farmland in the watershed is generally on flat ground, where erosion rates are low. Farmland classified as unique includes some hillside cropland in the Watershed. This land would benefit with implementation and maintenance of the practices.

Public Health and Safety - Three distinct public safety hazards result from excess sediment deposition on county roads: 1) emergency vehicle access is impeded, 2) the risk of traffic accidents increases, and 3) traffic has to be rerouted. Such hazards would be substantially reduced with this project.

Recreational Opportunities - Recreation activities found in the Elkhorn Slough Watershed include nature visits to the Elkhorn Slough Estuarine Research Reserve and water related activities such as sailing, kayaking, bird watching and fishing. The present adverse conditions in the Slough reduce the value of these outdoor recreation activities. The project goal of sediment and pesticide reduction will improve environmental values associated with recreation.

Recreational Fishing - See commercial fishing description.

Silviculture - No impacts are indicated.

Traffic/Transportation - No impacts are indicated.

Transportation/Navigation - No impacts are indicated.

Water Supply (M&I) - No impacts are indicated.

Wild & Scenic Rivers - No impacts are indicated.

(4) Historic - Cultural Characteristics and Anticipated Changes

The NRCS Cultural Resources Coordinator conducted a cultural resources assessment of the Watershed. The California Archeological Inventory records a number of prehistoric or historic archeological sites in the area of potential impact. The NRCS policy developed to respond to potential impacts on historic or archeological sites follows:

NRCS technical assistance which does not result in any change to cultural resources or provided as information at the request and subsequent control of the landowner is not considered an undertaking as defined in the Programmatic Agreement (PA) between the Advisory Council on Historic Preservation and the National Council of State Historic Preservation Officers. This includes NRCS activities that are considered forms of non-intrusive data collection such as the original inventory prepared for the Elkhorn Slough Watershed.

The NRCS is responsible for cultural resources compliance in all actions where NRCS is considered the lead agency as with the Elkhorn Slough Watershed Project. NRCS activities would include when NRCS has legislated responsibility or designated Departmental authority to administer specific Federal programs or when providing to nonfederal participants direct, single agency actions of technical and/or financial assistance that may effect cultural resources.

Undertakings according to the PA include conservation practices with a higher potential to affect cultural resources when implemented or maintained according to standard NRCS criteria. Such practices are considered undertakings and cultural resource

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consideration is required. Certain conservation practices may or may not affect cultural resources. In these cases, the implementation and maintenance of the practice(s) will not exceed the depth, extent, or kind of previous cultivation(s) and if the land has not been previously cultivated, the implementation and maintenance of the practice(s) will result in no ground disturbance.

In situations where an undertaking may occur, NRCS shall fulfill its National Historic Preservation Act Section 106 requirements in accordance with its PA by:

1. determining if the proposed activity is considered an undertaking by the PA.
2. review the cultural resources data on known resources and surveys in the area of the proposed activity obtained from the Northwest Information Center of the California Historical Resources File System, Sonoma State University,
3. conducting a site visit to the location and complete a field inspection of the area to relocate previously known cultural resources and/or possibly locate new cultural resources.

The PA requires NRCS to provide training and informational materials to field personnel. All NRCS employees responsible for planning and implementing NRCS programs will have completed the training to the level designated in the Leader's Guide for the NRCS Natural Cultural Resources Training Program, Modules 1-8. Release of information from the Information Centers will not be made to those that have not completed the training. The NRCS Cultural Resources Coordinator, Davis, California, is responsible for scheduling the training and certifying individuals.

an unanticipated cultural resource is discovered, an unevaluated resource will be affected or it is determined that cultural properties will be affected in a previously

unanticipated manner after commencing installation of a conservation practice, NRCS will protect the resources from damage to the fullest extent possible. This will include requesting the landowner or sponsor direct that actions affecting the resource be halted in the area containing the resources being affected and notify the Cultural Resources Coordinator immediately.

If human remains are uncovered, the NRCS will follow procedures established by the Native American Heritage Commission. This includes the immediate cessation of work in the area and the notification of the County coroner.

c. SUMMARY OF INDIRECT IMPACTS

None have been identified.

d. SUMMARY OF CUMULATIVE IMPACTS

The ten practices provide for a number of long-term positive environmental benefits including:

1. Reduce rates of erosion and sediment delivery
2. Enhance Flood Control Function of Wet Areas
3. Recharge Aquifers and Improve Water Supply
4. Improve Water Quality
5. Enhance and Restore Habitat
6. Improve the Productivity of Agricultural Lands
7. Reduce Public Hazards
8. Improve Community Aesthetics and Recreational Activities

e. CONCLUSIONS AND RECOMMENDATIONS

Based on an analysis of the above identified impacts, a preliminary determination has been made that it will not be necessary to prepare an Environmental Impact Statement (EIS) for the subject permit application.

5. **Alternatives Analysis:** Evaluation of this activity's impacts includes application of the guidelines promulgated by the Administrator of the

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Environmental Protection Agency under Section 404(b) of the Clean Water Act (33 U.S.C. 1344(b)).

6. Public Interest Evaluation: The decision whether to issue a permit will be based on an evaluation of the probable impacts, including cumulative impacts, of the proposed activity and its intended use on the public interest. Evaluation of the probable impacts which the proposed activity may have on the public interest requires a careful weighing of all those factors which become relevant in each particular case. The benefits which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. The decision whether to authorize a proposal, and if so the conditions under which it will be allowed to occur, are therefore determined by the outcome of the general balancing process. That decision will reflect the national concern for both protection and utilization of important resources. All factors which may be relevant to the proposal must be considered including the cumulative effects thereof. Among those are conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership, and, in general, the needs and welfare of the people.

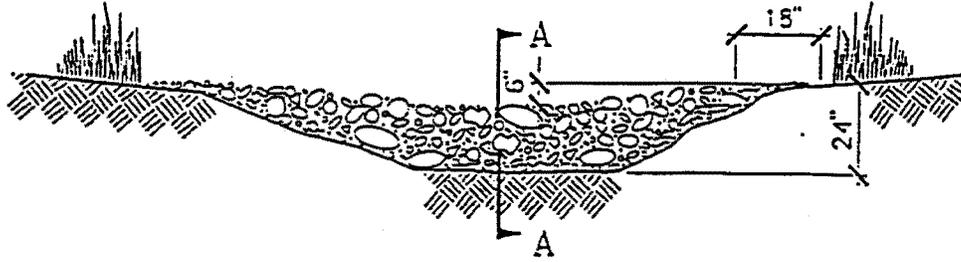
7. Consideration of Comments: The Corps of Engineers is soliciting comments from the public, Federal, State and local agencies and officials, Indian Tribes, and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed

above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

8. Submission of Comments: Interested parties may submit in writing any comments concerning this activity. Comments should include the applicant's name, the number, and the date of this notice and should be forwarded so as to reach this office within the comment period specified on page one of this notice. Comments should be sent to: Lieutenant Colonel Richard G. Thompson, District Engineer, Attention: Regulatory Branch. It is Corps policy to forward any such comments which include objections to the applicant for resolution or rebuttal. Any person may also request, in writing, within the comment period of this notice that a public hearing be held to consider this application. Requests for public hearings shall state, with particularity, the reasons for holding a public hearing. Additional details may be obtained by contacting the applicant whose address is indicated in the first paragraph of this notice, or by contacting Mark D'Avignon of our office at telephone (415)977-8446. Details on any changes of a minor nature which are made in the final permit action will be provided on request.

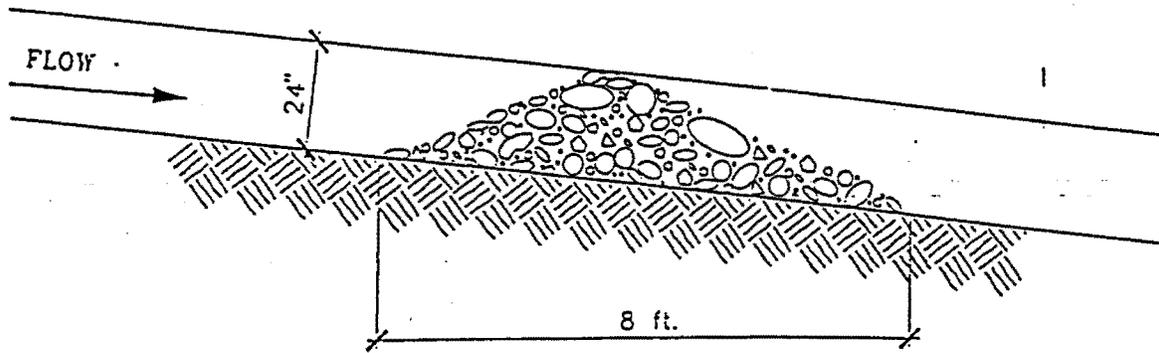
EXHIBIT 3

CD-051-98



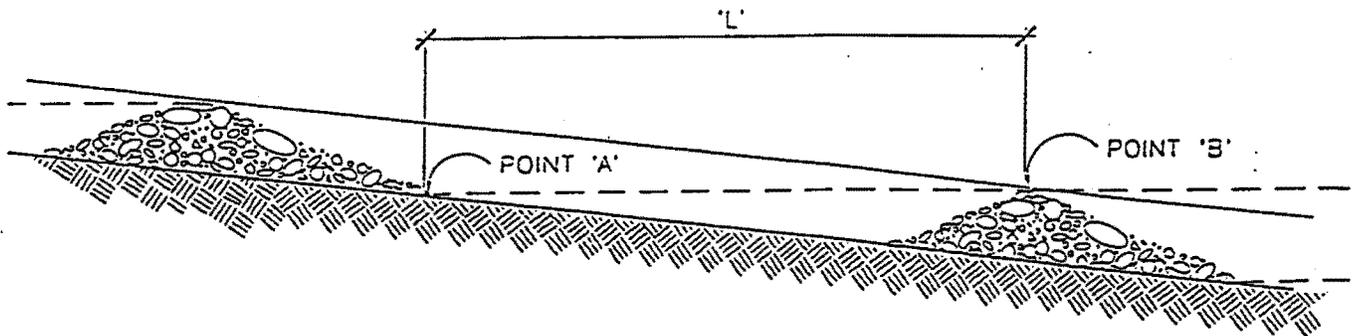
VIEW LOOKING UPSTREAM

NOTE:
 KEY STONE INTO THE DITCH BANKS
 AND EXTEND IT BEYOND THE ABUTMENTS
 A MINIMUM OF 18" TO PREVENT OVER
 FLOW AROUND DAM.



SECTION A - A

'L' = THE DISTANCE SUCH THAT POINTS 'A' AND
 'B' ARE OF EQUAL ELEVATION.



SPACING BETWEEN CHECK DAMS

ROCK CHECK DAM

Typical Rock Grade Stabilization Structure

USDA - NRCS

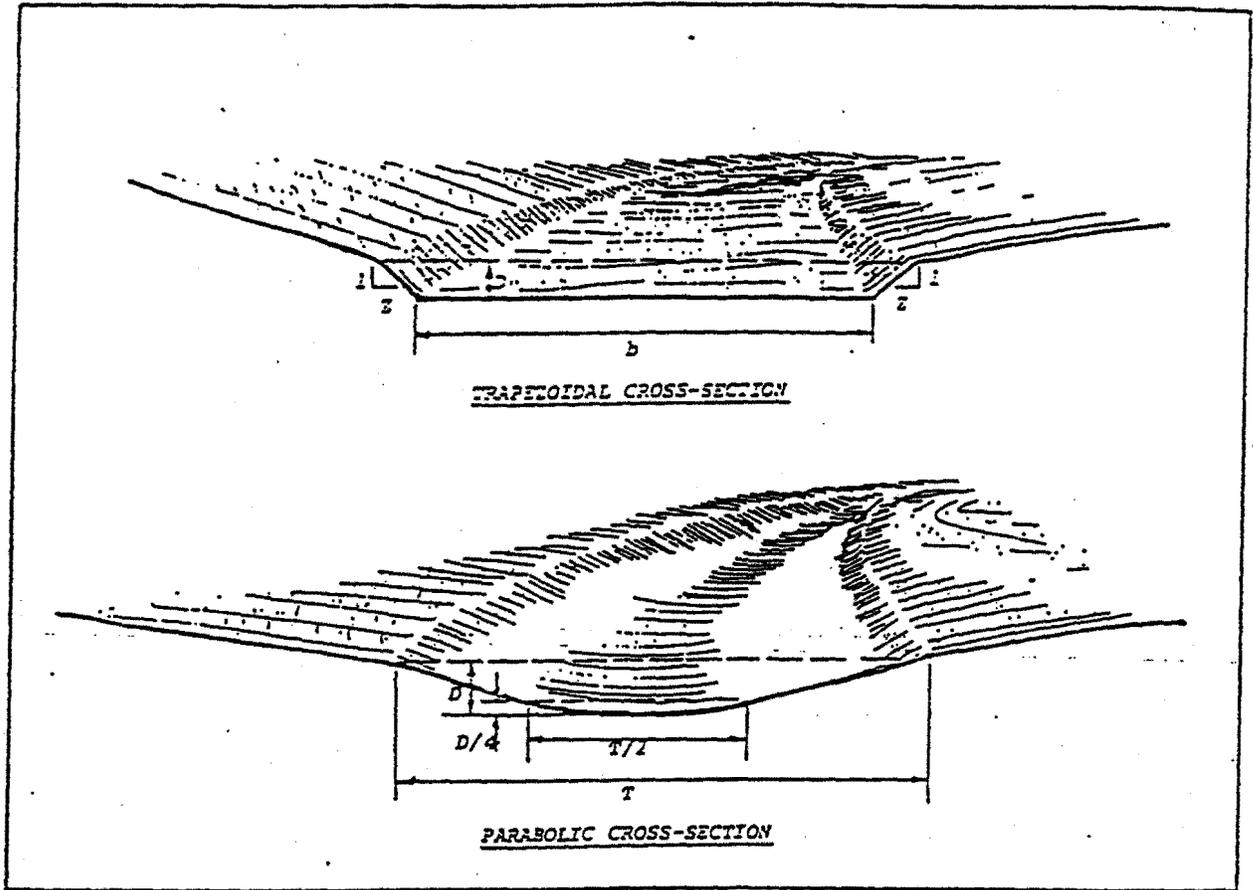
Elkhorn Slough Watershed Project

Sheet 1 of 12

EXHIBIT

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Sample Drawing: Grassed Waterway



(adapted from USDA, Soil Conservation Service, College Park, Maryland. Standards and Specifications for Soil Erosion and Sediment Control in Developing Areas. July 1975.)

EXHIBIT 3

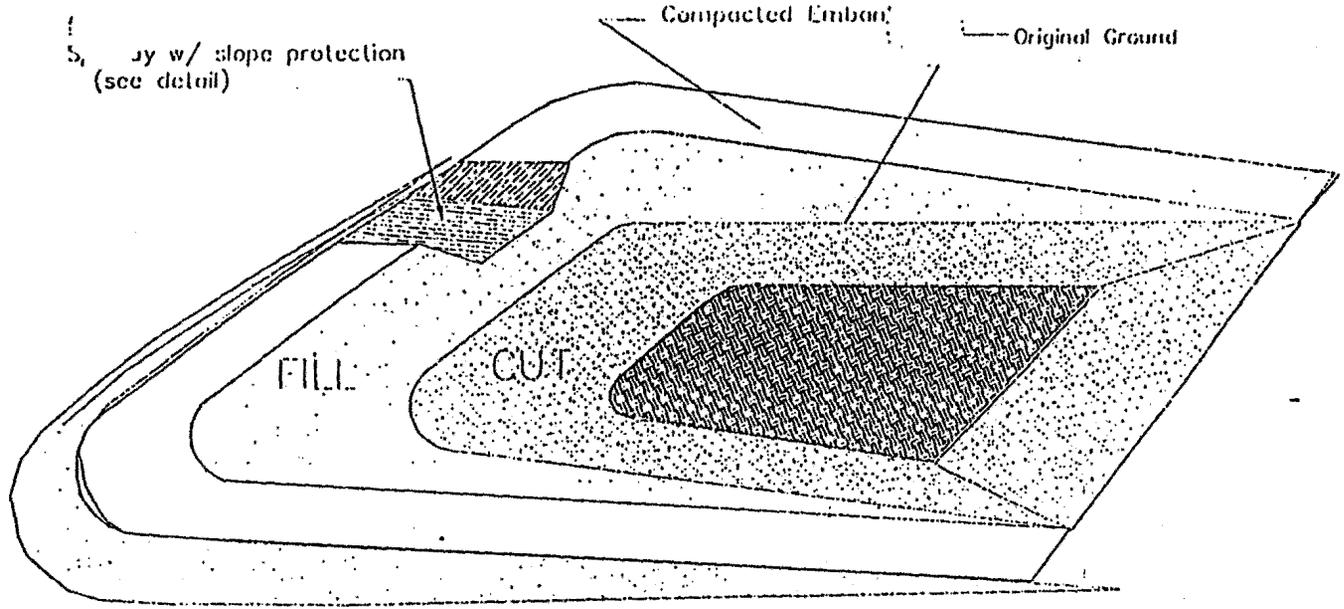
Typical Grassed Waterway Cross Section

USDA - NRCS

Elkhorn Slough Watershed Project

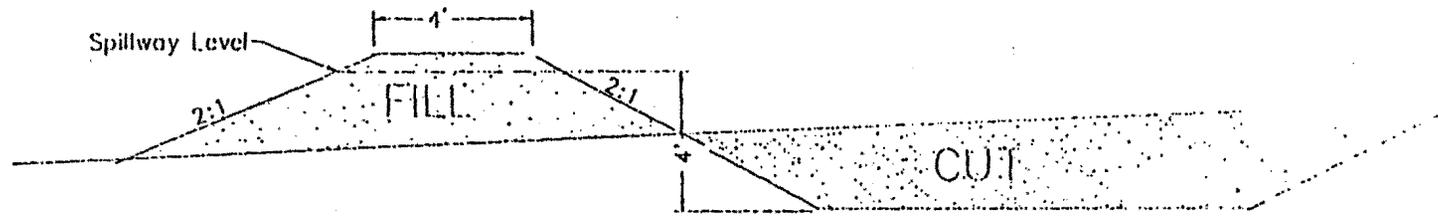
Sheet 3 of 12

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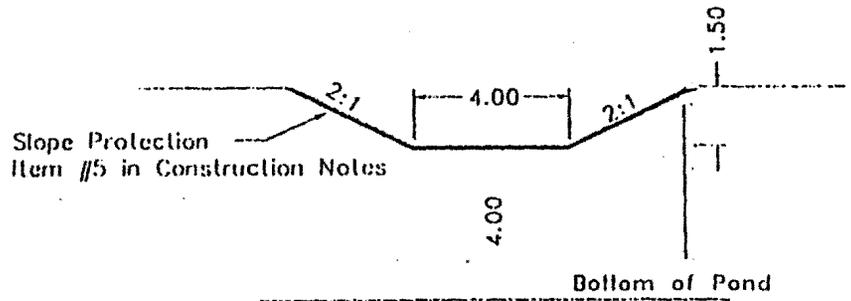


- Top of Ber.
- Compacted Embankment
- Excavation Below Ground
- Bottom

ORTHOGRAPHIC VIEW OF DETENTION POND
(SHAPE MAY VARY)



PROFILE OF DETENTION POND



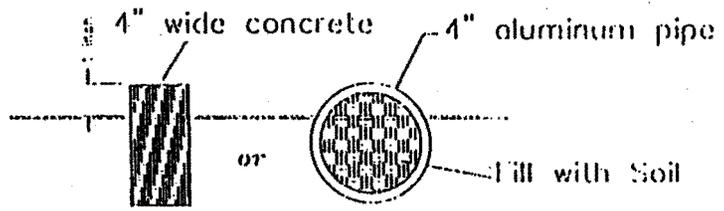
DETAIL OF SPILLWAY

Typical Water & Sediment Control Basin
 USDA - NRCS
 Elkhorn Slough Watershed Project
 Sheet 5 of 12

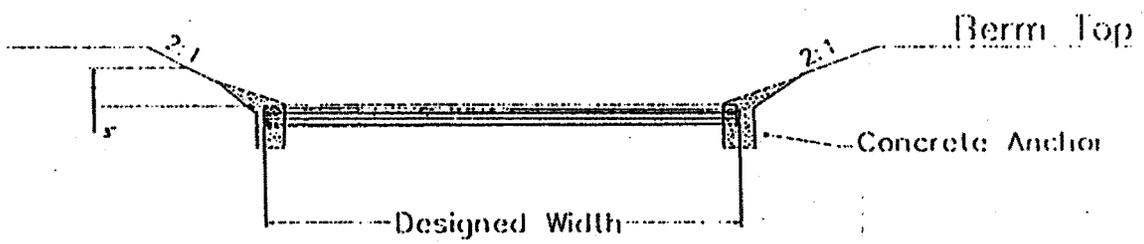
EXHIBIT 3

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(All Views Are Not to Scale)

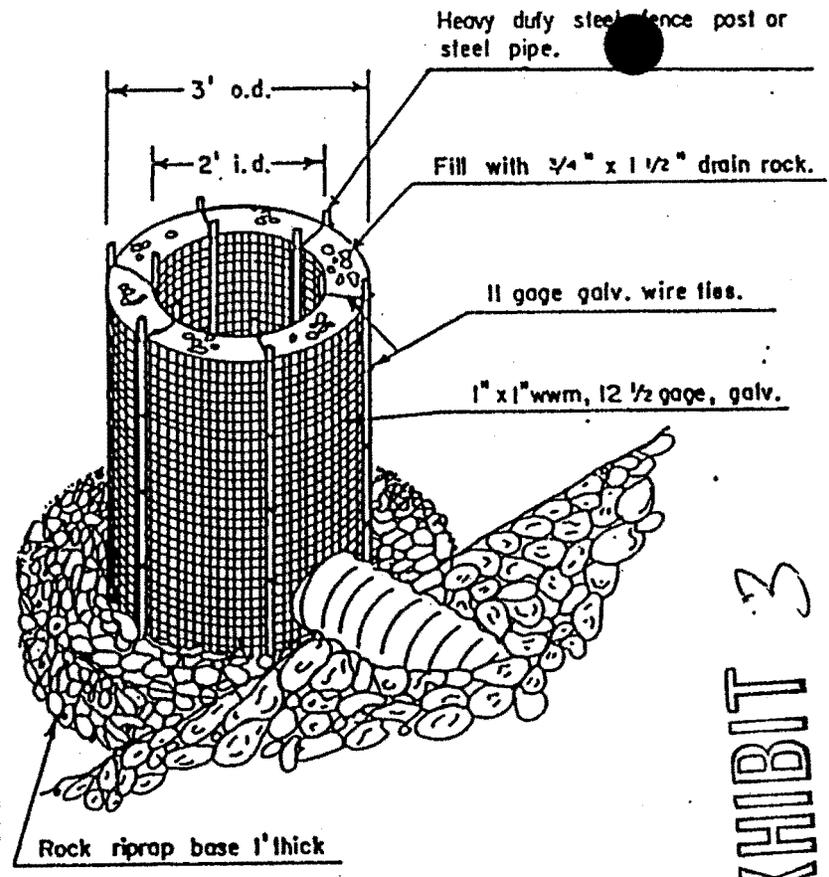


Options for Sill



Longitudinal View Along
Emergency Spillway or Sill
(not to scale)

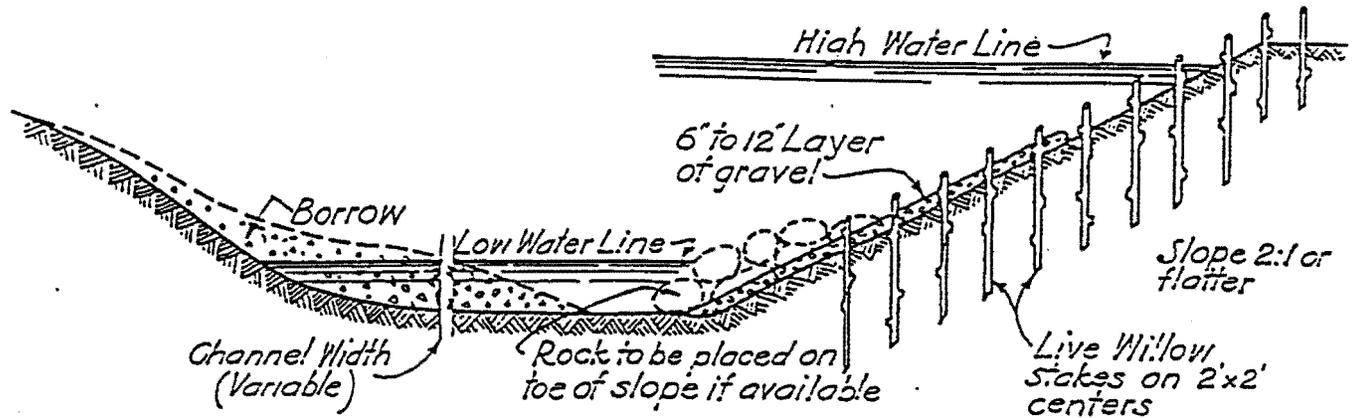
SPILLWAY OR SILL DETAIL



INLET RISER DETAIL

EXHIBIT 3
CD-051-98

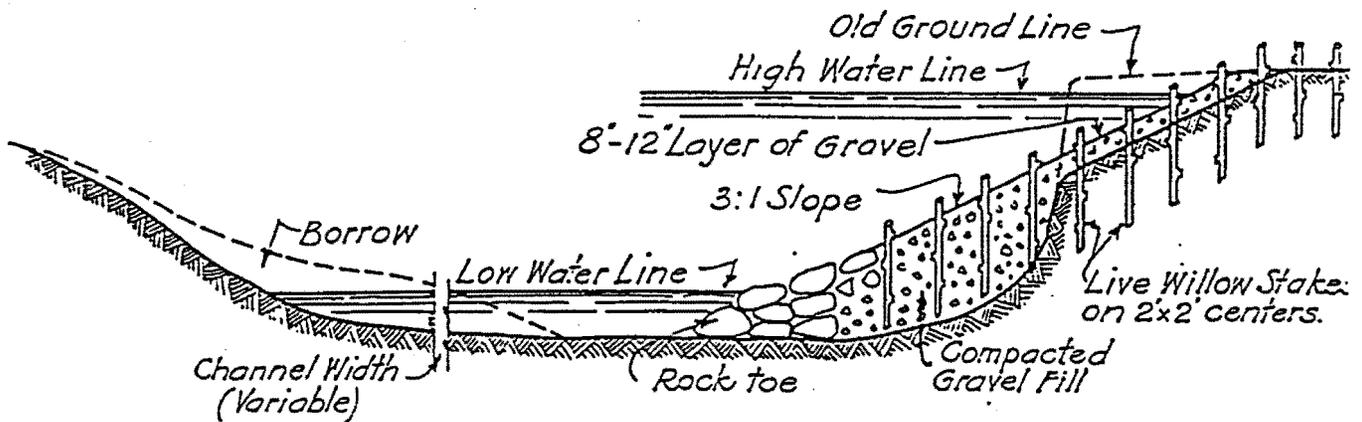
WILLOW-GRAVEL BANK PROTECTION Cut Slope



X-SECTION OF CHANNEL

WILLOW-GRAVEL BANK PROTECTION Filled Slope

Note:-All gravel fill is susceptible to erosion in high velocity streams.



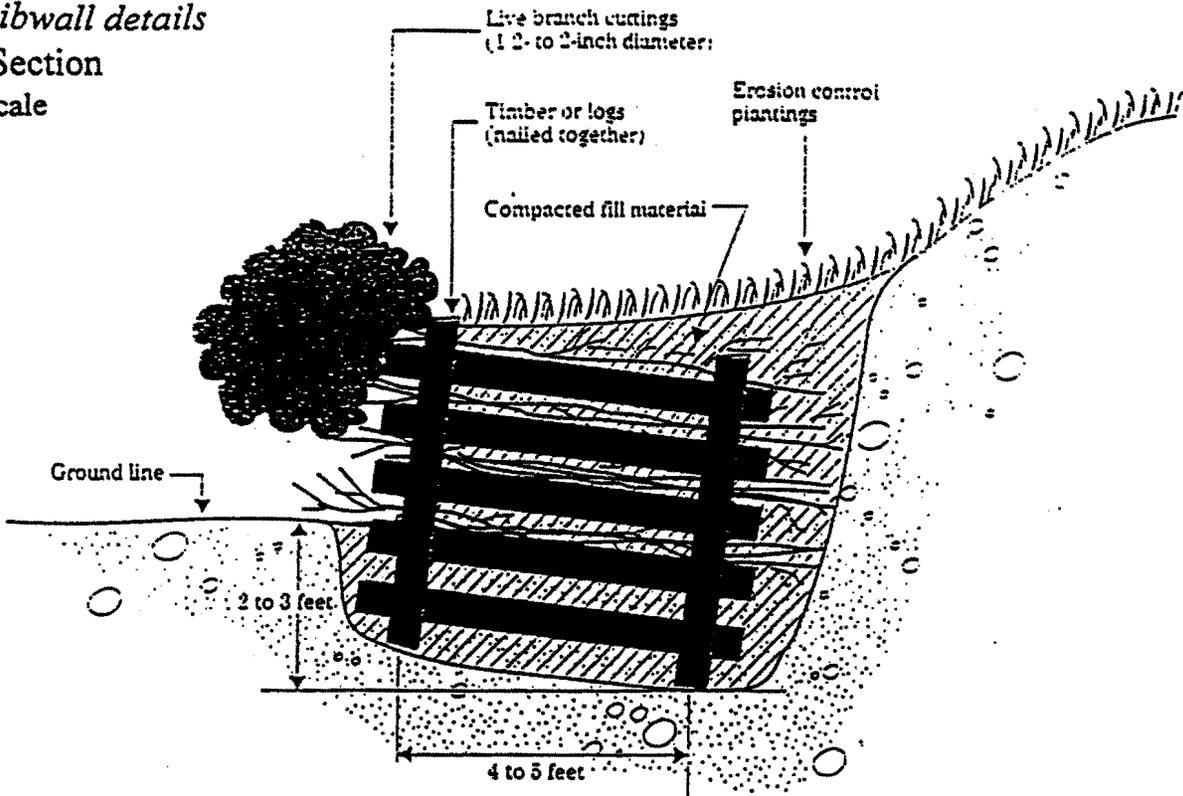
X-SECTION OF CHANNEL

EXHIBIT 3

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Typical Streambank Protection
 USDA - NRCS
 Elkhorn Slough Watershed Project
 Sheet 9 of 12

Live cribwall details
Cross Section
 Not to scale



Note:
 Rooted/leafed condition of the living plant material is not representative of the time of installation.

Vegetated rock gabion details
Cross Section
 Not to scale

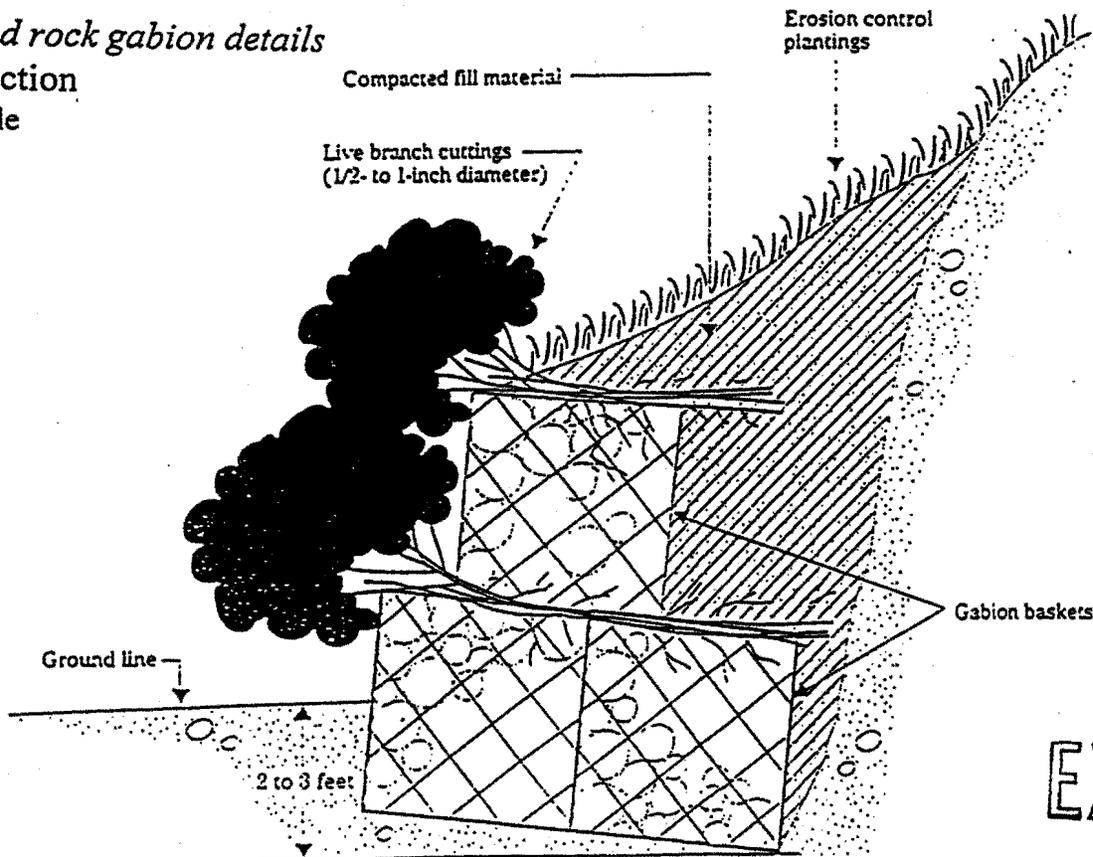


EXHIBIT 3

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Note:
 Rooted/leafed condition of the living plant material is not representative of



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

75 Hawthorne Street
San Francisco, CA 94105-3901

February 26, 1998

Lieutenant Colonel Richard G. Thompson, District Engineer
Attention: Mark D'Avignon, Regulatory Branch
333 Market Street, 8th Floor
San Francisco, CA 94105-2197

COPY

RE: PN 229141S, 2/6/98, Monterey County RCD, Monterey County, CA

229415

Dear Colonel Thompson:

It is a pleasure to send this letter of support for the Monterey County Resource Conservation District and the Natural Resources Conservation Service (NRCS), Elkhorn Slough Watershed Project's Army Corps of Engineer permit application to implement and maintain conservation practices on agricultural operations in the Elkhorn Slough Watershed, Monterey County, CA. It is especially rewarding to have this opportunity to send a letter of support, as compared with the typical letter of concern for permit applications we send to your agency.

The application represents a collaborative effort by NRCS to promote a streamlined permitting application within a watershed framework, for the purposes of accomplishing on-the-ground work efficiently while ensuring that all public and environmental interests are met. The Best Management Practices (BMP's) described in the application are consistent with our agency's Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters, issued under the authority of Section 6217(g) of the Coastal Zone Act Reauthorization Amendments of 1990, dated January 1993. The BMP's are needed to control excessive erosion which is currently impacting beneficial uses and water quality.

We commend the applicant for their effort in developing a watershed permit application that can serve as a model for other practitioners doing restoration and pollution control work for the purposes of improving water quality.

Sincerely,

for Nancy Woo
Chief, Wetlands Regulatory Office

cc: Daniel Mountjoy, NRCS, Elkhorn Slough Watershed Project
RWQCB 3
USFWS, Ventura
CDFG, Monterey

EXHIBIT 4

OPTIONAL FORM 99 (7-90)

FAX TRANSMITTAL

of pages **4**

To Lynn Dwyer From Daniel Mountjoy

CD-051-98



State of California - The Resources Agency
DEPARTMENT OF FISH AND GAME

http://www.dfg.ca.gov
POST OFFICE BOX 47
YOUNTVILLE, CALIFORNIA 94599
(707) 944-5500

PETE WILSON, Governor

COPY

February 26, 1998

OPTIONAL FORM 99 (7-90)

FAX TRANSMITTAL

of pages 1

To <i>Lynn Dwyer</i>	From <i>Daniel Mountjoy</i>
Dept./Agency <i>Sust. Conserv.</i>	Phone # <i>408 424-1036</i>
Fax # <i>415 288-0387</i>	Fax # <i>424-1027</i>
NSN 7540-01-317-7388	5089-101 GENERAL SERVICES ADMINISTRATION

Lt. Col. Richard G. Thompson
U. S. Army Corps of Engineers
Regulatory Branch
333 Market Street, 8th Floor
San Francisco, California 94105-2197

Attention Mr. Mark D'Avignon

Dear Col. Thompson:

Public Notice Number 22941S
Monterey County

Department of Fish and Game personnel have reviewed Public Notice Number 22941S. The Natural Resources Conservation Service (NRCS) proposes to implement and maintain conservation practices on agricultural operations in the Elkhorn Slough watershed in Monterey County.

Our Department has been working with the NRCS to write a Memorandum of Understanding (MOU) which would allow the implementation of this project. We believe this work will benefit the fish and wildlife resources of Elkhorn Slough through riparian enhancement, control of sedimentation and streambank protection. In addition, having the NRCS apply for and receive all the appropriate permits will streamline the regulatory process for the landowners, many of whom might not otherwise undertake these enhancement projects. We believe having the NRCS as the lead will also ensure increased compliance with our MOU and other permits.

The Department supports the efforts of the NRCS and recommends the Corps issue a permit for this proposal.

If you have questions, or need additional information, please contact Ms. Terry Palmisano, Associate Wildlife Biologist, at (408) 848-2576; or Mr. Carl Wilcox, Environmental Services Supervisor, at (707) 944-5525.

Sincerely,

Brian Hunter
Regional Manager
Region 3

CD-051-98

cc: Mr. Daniel Mountjoy
Natural Resources Conservation Service
635 Sanborn Place
Salinas, California 93901

EXHIBIT 5