

Exhibit 2: CEQA Documents

Notice of Determination

Form C

To: [X] Office of Planning and Research
PO Box 3044, 1400 Tenth Street, Room 212
Sacramento, CA 95812-3044
[X] County Clerk
County of Alameda
1106 Madison Street
Oakland, CA 94607

From: (Public Agency) Alameda County Resource
Conservation District (RCD), 3585
Greenville Rd., Ste.2, Livermore CA 94550
(Address)

FILED
ALAMEDA COUNTY
DEC 14 2004

Subject: PATRICK O'CONNELL, County Clerk
Filing of Notice of Determination in compliance with Section 21108 or 21152 of the Public Resources Code, Deputy

Alameda County Partners in Restoration Permit Coordination Program

Project Title

2004092032 Ivana Noell 925/371-0154/122
State Clearinghouse Number (If submitted to Clearinghouse) Lead Agency Contact Person Area Code/Telephone/Extension

Alameda County

Project Location (include county)

Project Description:

The project authorizes the Alameda County RCD and the USDA Natural Resources Conservation Service to assist private landowners in Alameda County watersheds in implementing a specific set of erosion control, water quality improvement, and habitat enhancement activities through a coordinated, multi-agency regulatory review and permitting process.

This is to advise that the Alameda County RCD has approved the above described project on December 3, 2004 and has made the following determinations regarding the above described project:

- 1. The project []will [X]will not have a significant effect on the environment.
2. [] An Environmental Impact Report was prepared for this project pursuant to the provisions of CEQA.
[X] A Negative Declaration was prepared for this project pursuant to the provisions of CEQA.
3. Mitigation measures []were [X]were not made a condition of the approval of the project.
4. A statement of Overriding Considerations []was [X]was not adopted for this project.
5. Findings [X]were []were not made pursuant to the provisions of CEQA.

This is to certify that the final EIR with comments and responses and record of project approval is available to the General Public at:
The Neg Declaration is available at 3585 Greenville Rd., Ste.2, Livermore, CA 94550

Signature (Public Agency) December 8, 2004 Executive Officer

CLERK'S CERTIFICATE OF POSTING, Pub.
Res. 21152: I certify that a copy of this document was posted at the Recorder's Office, Oakland, CA, for the period prescribed by law.
Executed at COUNTY CLERK
Oakland, CA
Date 1/14/05 By Deputy

Date received for filing at OPR:

ALAMEDA COUNTY RESOURCE CONSERVATION DISTRICT

FINAL NEGATIVE DECLARATION

FOR

THE PARTNERS IN RESTORATION

ALAMEDA COUNTY PERMIT COORDINATION PROGRAM

December 8, 2004

Prepared by

Alameda County Resource Conservation District
3585 Greenville Rd, Suite 2
Livermore, CA 94550-6707
Contact: Ivana Noell (925) 371-0154, ext. 122

This Report Has Been Prepared Pursuant to the
California Environmental Quality Act of 1970
State of California

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1.0 PROPOSED NEGATIVE DECLARATION

1.1 BACKGROUND INFORMATION

1. Project title: Partners in Restoration Alameda County Permit Coordination Program
2. Lead agency name and address:
Alameda County Resource Conservation District, 3585 Greenville Road, Livermore, CA 94550
3. Contact person and phone number: Ivana Noell, (925) 371-0154, ext. 122
4. Project location: Various parcels, Alameda County watersheds, Alameda County
5. Project sponsor's name and address:
Alameda County Resource Conservation District and USDA Natural Resources Conservation Service (Alameda County Conservation Partnership or ACRCDC/NRCS), 1996 Holmes St., Livermore, CA 94550
6. General plan designation: Numerous
7. Zoning: Numerous
8. Description of project:

The Alameda County Permit Coordination Program coordinates the regulatory review process for local landowners implementing conservation and restoration activities intended to reduce erosion, improve water quality, and enhance aquatic and terrestrial habitat. The Alameda County Resource Conservation District (ACRCDC) working with USDA Natural Resources Conservation Service (NRCS), as the Alameda County Conservation Partnership, would provide technical and cost-share assistance to private landowners and non-Federal and non-State public entities proposing to conduct voluntary conservation projects on their lands. These conservation projects would be limited to projects implementing one or more of 18 selected NRCS conservation practices.

9. Surrounding land uses and setting: Surrounding land uses for the majority of projects are grazing lands, rural private property, or rural/urban interface. However, some riparian restoration projects may occur along creeks in the urban, western portion of the county.
10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.)
 - U.S. Fish and Wildlife Service
 - NOAA Fisheries (National Marine Fisheries Service)
 - U.S. Army Corps of Engineers
 - California Department of Fish and Game
 - San Francisco Bay (Primary) and Central Valley (Secondary) Regional Water Control Boards
 - State Historic Preservation Office
 - Alameda County Public Works Agency

1.2 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

Aesthetics	Agriculture Resources	Air Quality
Biological Resources	Cultural Resources	Geology /Soils
Hazards & Hazardous Materials	Hydrology / Water Quality	Land Use / Planning
Mineral Resources	Noise	Population / Housing
Public Services	Recreation	Transportation/Traffic
Utilities / Service Systems	Mandatory Findings of Significance	

1.3 DETERMINATION

(To be completed by the Lead Agency) On the basis of this initial evaluation:

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

Signature

Printed Name Karen Sweet, Executive Officer

August 26, 2004

Date

DESCRIPTION

2.1 PROGRAM SPONSORS

The Alameda County Resource Conservation District

The mission of the Alameda County Resource Conservation District (ACRCD or District) is to provide leadership in Alameda County and the region about natural resources conservation and agricultural issues (the working landscape) through education, outreach, resource services, partnerships, and funding. The fundamental principles of natural resources conservation, the working landscape, and agricultural heritage guide District programs and activities. Since 1972, ACRCD has administered government and private foundation grants for watershed-wide planning, erosion control, and restoration projects. ACRCD continues to bring together state, federal, and local agencies with private landowners to conserve soil and water resources, with projects focusing on the following topics:

- Control of soil erosion
- Riparian habitat restoration
- Protection and improvement of water quality
- Education and outreach
- Conservation of rangeland and cropland
- Active support of the district's agricultural economy and heritage

The California Public Resources Code (PRC) specifically empowers any Resource Conservation Districts (RCD) to manage soil conservation, water conservation, erosion control, erosion prevention, or erosion stabilization projects (PRC §9415). The code also allows an RCD, with the consent of affected private property owners, to make improvements or conduct operations that will further water conservation and the prevention and control of soil erosion (PRC §9415).

ACRCD, the lead agency for the project's compliance with the California Environmental Quality Act (CEQA), has expended funds to staff and implement the program. As part of the program, ACRCD, working with the Natural Resources Conservation Service (as described below), will determine on an annual basis if conservation projects are the size, scale, and scope to qualify for coverage under the permit coordination program. They also have the expertise and funding to carry out the restoration practices and, and perhaps more importantly, state and federal mandates to protect our natural resources by working with private landowners.

The U.S. Department Of Agriculture Natural Resources Conservation Service

The Natural Resources Conservation Service (NRCS), ACRCD's federal partner for the program, provides technical assistance and cost-sharing to cooperators (private landowners working in partnership with the ACRCD/NRCS) to develop conservation systems uniquely suited to their land and individual way of doing business. NRCS, formerly the Soil Conservation Service, builds on the strength of more than 60 years of natural resource protection on private lands. The agency works closely with local RCDs and other agencies, organizations, and individuals to set conservation priority goals, work with people on the land, and provide assistance. NRCS sponsors important conservation incentive programs to preserve natural resources including Wildlife Habitat Incentives Program (WHIP), Conservation Reserve Program (CRP), and Environmental Quality Incentives Program (EQIP).

The Alameda County Conservation Partnership

ACRCD and NRCS form the Alameda County Conservation Partnership, a unique Federal-State partnership that has an established track record in providing technical and financial assistance to local landowners for voluntary resource protection and enhancement projects. ACRCD and NRCS staff have technical expertise and field experience to help land users solve their natural resource challenges and maintain and improve their economic viability. Employees bring a variety of scientific and technical skill to bear on resource planning, including soil science, fisheries biology, fluvial geomorphology, riparian botany, agronomy, biology, agro-ecology, range conservation, engineering, cultural resources, and economics. The technical support provided by the ACRCD/NRCS to agricultural operators is based on conservation systems designed to sustain and improve soil and water quality by addressing erosion control, pesticide and nutrient management, flood control, and stream bank stabilization. They use a watershed approach to conservation that utilizes ecological principles and resource science to evaluate and manage the aggregate effect of multiple individual land uses. The biotechnical enhancement of natural systems is achieved through installation of the conservation practices.

2.2 PROGRAM MODELS AND PARTNERS

Models

Our program is based on the successful Elkhorn Slough Watershed Partners in Restoration permit coordination program established in 1998. This model program was developed collaboratively by NRCS-Salinas, the Resource Conservation District of Monterey County, and Sustainable Conservation, a non-profit organization that works in partnerships to solve critical environmental problems. The difficult regulatory permitting process was preventing farmers from reducing erosion of their lands into biologically rich Elkhorn Slough. However, the Elkhorn Slough permit coordination program turned this situation around, and projects implemented during its first 4 years (1998-2001) have prevented an estimated 41,314 tons of soil from washing downstream in the sensitive wetlands of the slough. This amount of sediment is equivalent to a line of full-sized pickup trucks carrying soil and parked end to end from Salinas to Santa Rosa, a distance of 156 miles (USDA-NRCS 2002).

Established permit coordination programs modeled after Elkhorn Slough are Morro Bay, Navarro River, and Salinas River watersheds (Sustainable Conservation 2003). Descriptions of these programs and an overview of the Partners in Restoration Permit Coordination Program are available on Sustainable Conservation's website at <http://www.suscon.org/pir/index.asp>.

Partners

Sustainable Conservation is a key partner to the Conservation Partnership, providing training and ongoing mentoring in our development of the Alameda County permit coordination program. Our program will be the first permit coordination program under Sustainable Conservation's new training program, which is underway to train local watershed stewards (including RCD staff and watershed planners) to develop permit coordination programs locally. The training program evolved out of the success of established permit coordination programs. It is a response to statewide interest and need far exceeding Sustainable Conservation's staffing resources to deliver the program on a watershed-by-watershed basis. This training program will leverage Sustainable Conservation's resources and experience, augment and complement the technical capabilities of local RCD and NRCS staff, and provide widespread adoption of this important conservation tool (Sustainable Conservation 2003, California State Resources Board 2002).

Regulatory partners are U.S. Fish and Wildlife Service; NOAA Fisheries (National Marine Fisheries Service); U.S. Army Corps of Engineers; California Department of Fish and Game; San Francisco Bay (Primary) and Central Valley (Secondary) Regional Water Control Boards; and the Alameda County Public Works Agency. In April 2003, ACRCO/NRCS hosted a workshop, forum, and field trip for all federal, state, and county regulatory partners. The meeting achieved the following goals:

- To provide regulatory agencies with an overview of the proposed Partners in Restoration (PIR) permit coordination program for Alameda County and the opportunity to respond conceptually to the proposed program;
- To briefly describe proposed conservation practices and provide regulatory agencies the opportunity to view conservation practices in the field;
- To clarify agency jurisdictions and concerns regarding proposed conservation practices;
- And given the overall positive responses of the regulatory agencies, to identify potential approaches regulatory agency would like to use in working together to develop a permit coordination program for Alameda County.

Following on the success of the workshop/forum, ACRCO/NRCS and the regulatory agencies have continued work and coordination on the program over the intervening months. The various programmatic permits, agreements, and other types of approvals needed to finalize the program are either complete or nearing completion. These are described under Description and Development of Programmatic Permitting Mechanisms (pages 44-46).

2.3 NEED FOR THE ALAMEDA COUNTY PERMIT COORDINATION PROGRAM

A growing number of landowners in Alameda County are interested in restoring or enhancing the natural resource conditions of their property, but they are discouraged by the time, cost, and complexity of complying with the regulatory review process. To overcome these *disincentives* and to assist landowners with regulatory compliance, ACRCO/NRCS seek to offer the permit coordination program to agricultural and other landowners in Alameda County watersheds who work under their guidance to achieve important water quality and habitat conservation goals and thus protect the county's natural resources. The broader, statewide context and significance of ACRCO/NRCS's proposed permit coordination is aptly presented in *Removing Barriers to Restoration*, a report prepared by the California State Resources Board (2002) and available online at <<http://resources.ca.gov/publications/Barriers2002-full.pdf>>.

Alameda County watersheds have experienced impacts to water quality and to fish and wildlife habitat from a combination of overland and road runoff, stream bank erosion, and years of land use disturbance. Increased focus on non-point source pollution by federal, state, and local regulatory agencies presents ranchers and other private landowners with new management challenges (California State Resources Board 2002). The proposed permit coordination program is a critical component in assisting landowners. Without the program, landowners trying to meet these challenges will lose funding opportunities currently available through ACRCO and NRCS. The links between agricultural runoff, stream bank erosion, water quality, and fish and wildlife habitat in Alameda County are a concern for agricultural, conservation, and regulatory interests.

While the permit coordination program would cover the entire county, it would primarily serve the ranching community in the eastern, rural portion of Alameda County and landowners on creeks in rural-urban interface areas. Agricultural lands dominate the eastern portion of the county. Most are within the

Alameda Creek Watershed. Grazing on 200,000 acres of rangeland is the predominant agricultural land use followed by viticulture, which covers approximately 4,000 acres. Other significant land uses include field and vegetable crops and nursery products. Because the major watersheds of Alameda County—Alameda, San Lorenzo, and San Leandro—originate in and drain much of the eastern half of Alameda County, conservation activities there can lead to significant water quality improvements throughout the watersheds. The communities in Alameda County are poised to address the resource concerns and degradation in their watersheds.

Throughout the program area, ACRC/D/NRCS will work directly with landowners to promote voluntary actions that will improve water quality and enhance habitat. Ranch planning and the development of conservation systems are key components of this program. ACRC/D/NRCS have already prepared more than 70 conservation plans using NRCS's rigorous, codified conservation planning process (detailed below) to provide technical direction on conservation practices, several of which have required approval from regulatory agencies. As landowners see the success of their neighbors' projects, willingness to cooperate in voluntary conservation programs is expected to increase. Additionally, the 2002 Farm Bill provides increased funding from 2004 through 2008 for voluntary conservation and restoration projects; NRCS is responsible for administering the funding provisions of the Farm Bill and to see that these available funds are translated into on-the-ground conservation and restoration projects. By identifying and selecting conservation and restoration practices suitable for coordinated review and working with their regulatory partners to develop the Alameda County Permit Coordination Program, ACRC/D/NRCS are taking essential steps to see that these considerable opportunities for voluntary conservation projects are realized.

Although the program excludes all currently used anadromous fish streams and anadromous fish portions of streams from its geographic scope (as described below), it complements and ensures greater ultimate success to efforts under way to restore salmonid habitat and anadromous fish passage in several Alameda County creeks. The proposed conservation practices—even though installed upstream of barriers to anadromous fish passage—would serve to enhance potential salmonid habitat both by reducing sediment delivery to streams and by enhancing and restoring riparian habitats. Improved water quality, more favorable water temperatures, and more suitable resting and spawning areas for steelhead should result. Of equal importance, the design and installation of conservation practices in potential anadromous fish streams (in future when downstream barriers to fish passage are removed) will be consistent with California Department of Fish and Game's (2002) "Culvert Criteria for Fish Passage" and National Marine Fisheries Service Southwest Region's (2001) "Guidelines for Salmonid Passage at Stream Crossings."

ACRC/D and NRCS have established the relationships with individual landowners and the community that are necessary to the success of voluntary conservation projects. ACRC/D and NRCS also have the expertise and funding to carry out and support such projects, and, perhaps more importantly, state and federal mandates to protect our natural resources by working with private landowners.

2.4 GEOGRAPHIC SCOPE

The Alameda County Permit Coordination Program would cover the entire county but primarily serve the ranching community in the eastern, rural portion of Alameda County and landowners with properties on creeks in rural-urban interface areas (Figures 1 and 2). Alameda County encompasses an area of 469,400 acres and is situated in the greater East Bay region. The majority of the county's population lives in the highly urbanized area along the easternmost portion of San Francisco Bay. This western portion of

Alameda County includes the cities of Oakland, Hayward, Alameda, San Leandro, and Berkeley. The rural, eastern portion supports ranching, with an urban/suburban center located in the Tri-Valley region of Livermore, Pleasanton, and Dublin (Figure 2). The county is approximately 50% agricultural land and 50% urban lands.

Agricultural lands dominate the eastern portion of the county; most are within the Alameda Creek Watershed (Figures 2 and 3). Grazing on 200,000 acres of rangeland is the predominant agricultural land use followed by viticulture, which covers approximately 4,000 acres. Other significant land uses include field and vegetable crops and nursery products. Wind farms are situated in the vicinity of Altamont Pass near the eastern edge of Alameda County.

Excluded Areas and Habitats

The program would not include projects in any of the following habitats or areas:

- Streams currently used by anadromous fish and reaches of streams below barriers to anadromous fish migration:
 - Alameda Creek below the inflatable dams
 - San Lorenzo Creek below Don Castro and Cull Creek dams
 - San Leandro Creek below Chabot Reservoir
 - Codornices Creek – entire length
- Main stem of Alameda Creek
- Salt marsh and estuary projects in the Alameda County's bayfront area. This excluded bayfront area includes all land and waterways under the jurisdiction of the Bay Conservation and Development Commission.
- Vernal pool habitat
- Serpentine soils or alkali-sink habitat in the work area
- Soil types and habitat conditions typical of known pallid manzanita occurrences

Consequently, projects in the habitats and specific locations identified above would be excluded from the program. Landowners working with the Conservation Partnership on proposed projects in these particular areas and habitats would need to seek individual permits on a project-by-project basis.

Alameda County Watersheds

The major watersheds are Alameda Creek, San Leandro Creek, and San Lorenzo Creek watersheds. Some smaller watersheds in Alameda County are Sausal Creek; Lion Creek; Ettie Pump Station; Strawberry Creek; Temescal Creek; San Antonio Creek (or Oakland Estuary); East Creek Watershed; Arroyo Viejo; Estudillo Canal; Mowry Slough; and Laguna Creek watersheds. These smaller watersheds are predominately located in urbanized areas.

Associated waterways and land uses for three major watersheds within Alameda County are described below and are shown in Figures 2 and 3. Leidy et al. (2003) is a primary source for these descriptions. The majority of projects under the permit coordination program would occur within these three watersheds, with all projects located above barriers to steelhead migration.

Alameda Creek (Alameda County portion)

The watershed spans 140,000 acres, from Contra Costa County, south past Mt. Hamilton and far into Santa Clara County with the majority located in Alameda County. It includes towns such as San Ramon, Dublin, Pleasanton, Livermore, Union City, Fremont, Newark, and Sunol. The land use in the area has been almost exclusively grazing for generations. Soil erosion and stream sedimentation are the main types of non-point source pollution that the program addresses.

The following are tributaries of Alameda Creek with smaller creeks in parentheses: Stonybrook Creek, Sinbad Creek, Arroyo de la Laguna, (Valecitos Channel, Arroyo Del Valle, Dry Creek, Arroyo Mocho, Dublin Creek, San Ramon Creek, Alamo Creek, Tassajara Creek, Cottonwood Creek, Collier Canyon Creek, Cayetano Creek, Altamont Creek, and Arroyo Seco), San Antonio Creek (Indian Creek), and Hetch Hetchy Aqueduct. Del Valle Reservoir, San Antonio Reservoir, and Calveras Reservoir, are also part of the Alameda Creek Watershed. Arroyo Hondo, Calveras Creek, Isabel Creek, and Smith Creek are located in Santa Clara County and stem from the Calveras Reservoir. This large network of creeks eventually drains to San Francisco Bay. No projects under the permit coordination program would be conducted on the main stem of Alameda Creek.

San Leandro Creek

San Leandro Creek is located on the eastern side of the Berkeley-San Leandro Hills and western slopes of Rocky Ridge near Moraga. The entire watershed encompasses 44 square miles including areas drained by Moraga, Indian, Redwood, Buckhorn, and Grass Valley creeks. Chabot Reservoir was constructed in 1874-1875 and Upper San Leandro Reservoir in 1926. Below Chabot Reservoir, San Leandro Creek passes through the highly urbanized city of San Leandro, entering Central San Francisco Bay at the southern end of the Oakland Estuary.

San Lorenzo Creek

Located in western Alameda County, the San Lorenzo Creek Watershed encompasses about 48 square miles. San Lorenzo Creek flows generally west, entering central San Francisco Bay near Roberts Landing, west of the city of San Lorenzo. Eight major sub-watersheds drain into San Lorenzo Creek: Cull, Crow, Eden Canyon, Hollis Canyon, Norris, Palomares, Castro Valley, and Chabot creeks.

The lower and middle watershed areas are highly urbanized, flowing through Castro Valley, Hayward, and San Lorenzo. A 4.6-mile concrete channel runs from the mouth upstream. The upper watershed, including areas tributary to Crow and Palomares creeks, is less urbanized. The Cull Creek and Don Castro dams constructed in the early 1960s created complete barriers to anadromous fish migration into large portions of the upper watershed.

Figure 1. Alameda County Permit Coordination Program Location Map
Not available in electronic file

Figure 2. Alameda County Creeks and Watersheds
Not available in electronic file

Figure 3. Vegetation Types and Land Use in Alameda County
Not available in electronic file

2.5 DESCRIPTION OF PROPOSED ACTION

Overview

The Alameda County Permit Coordination Program will provide the catalyst for high quality erosion control and habitat restoration in Alameda County watersheds. The program is based on a model of coordinated, multi-agency regulatory review that ensures the integrity of agency mandates but makes permitting more accessible to farmers, ranchers, and other private landowners than the traditional process.

In the proposed program, regulatory agencies issue master permits or programmatic agreements to the ACRC/ NRCS to cover specific, standardized conservation practices that will improve water quality, soil stability, and wildlife habitat. The conservation and restoration practices are relatively small in size, have demonstrated net environmental benefits, and are usually performed for erosion control or habitat restoration in and around waterways. Limitations on grading dimensions and volumes associated with each practice are found in Table 1 below.

Actions permitted under the auspices of the Alameda County Permit Coordination Program are limited to 18 conservation and restoration practices together with their associated environmental protection measures (protective measures) that serve to avoid or minimize impacts to natural resources during the installation and maintenance of the conservation practices. These protective measures are identified as general measures (apply to all individual projects); conservation-practice-specific measures; and species-specific measures. They form part of the program description because they are essential, inseparable components of the project-specific design and plan for the installation of a conservation practice

ACRC/ NRCS selected the following 18 NRCS conservation practices for inclusion in the program:

- Access Roads (Improvement)
- Critical Area Planting
- Diversion Structures = Overland Flow Interceptors for Use in Upland Areas
- Filter Strips
- Grade Stabilization Structures
- Grassed Waterways
- Obstruction Removal
- Pipeline
- Pond Restoration
- Riparian Forest Buffer
- Sediment Basins
- Spring Development
- Stream Bank Protection
- Stream Channel Stabilization
- Stream Habitat Improvement and Management (formerly identified as Fish Stream Improvement)
- Structure for Water Control
- Underground Outlets
- Water and Sediment Control Basins

Brief, summary descriptions of the NRCS practices, as they will be implemented in the Alameda County Permit Coordination Program, are given below. General reference descriptions of the 18 conservation practices are found in Appendix 1: *Statewide Standards and Specifications for the NRCS Conservation Practices Proposed for Inclusion in the Alameda County Permit Coordination Program* and in the NRCS *Field Office Technical Guide, Section IV* (USDA, NRCS 2000) (www.ca.nrcs.usda.gov/technical/efotg). The

conservation practices, including engineering designs, are drawn from established NRCS Conservation Practice Standards developed over the last 65 years. These statewide standards are designed to address a broad range of resource conservation needs by providing a framework under which more detailed, locally developed practice specifications are utilized. The Conservation Practice Standards and Specifications used in this program are specific to Alameda County and further refined to include only those elements of each standard that applies to the permit coordination program.

The selected conservation practices are designed to control erosion and sedimentation; stabilize eroding stream channels; improve water quality; and increase aquatic, riparian, and upland habitat values. The conservation practices included in the program are recommended by the U.S. Environmental Protection Agency, the California State Water Resources Control Board, and the California Department of Fish and Game as appropriate resource management practices to protect and restore fish and wildlife habitat and to maintain and improve water quality.

Individual projects under the program would be developed using a NEPA-compliant site-specific planning process described below (pages 47-49). Each project would consist of the installation of one or more of the 18 conservation practices according to a site-specific plan that incorporates all appropriate environmental protection measures developed by ACRC/ NRCS.

ACRC/ NRCS require landowners and land managers wanting to participate in the program and whose individual projects have met all program requirements to sign a cooperator agreement to follow conservation practice designs and specifications that include ACRC/ NRCS environmental protection measures. The cooperator agreement also requires landowners and land managers to comply with any additional agency requirements or conditions that may also be incorporated into each project-specific plan. The cooperator agreement also requires that landowners meet maintenance requirements and allow annual monitoring of each conservation project by ACRC/ NRCS.

The life of the program is 5 years. The estimated annual number of projects is 20, except for the first year (2004) when 4 projects are planned. The estimate of 20 conservation projects per year is based on ACRC and NRCS field office assessment of project need, landowner demand, and previous experience in Alameda County watersheds.

Each of the proposed 18 conservation practices with its practice-specific protective measures is described briefly below. ACRC/ NRCS have also developed general environmental protection (protective) measures that will be included as an integral part of every individual project (whether it consists of one or many conservation practices) under the program as well as species-specific protective measures that are incorporated into an individual project on the basis of site assessments and surveys that indicate the likely or actual presence of a federally listed or other special-status species at a project site.

The general protective measures are (1) project personnel education program; (2) project representative responsible for reporting take; (3) temporal limitations on construction; (4) limitations on earthmoving and habitat disturbance; (5) limitations on construction equipment; (6) removal of trash and project debris; (7) revegetation and removal of exotic plants; (8) site conditions requiring erosion control and appropriate erosion control measures; (9) limitations on work in streams and permanently ponded areas; and (10) limitations on use of herbicides and fertilizers in aquatic environments. These measures are detailed on pages 31-36.

The species-specific protective measures address (1) training of ACRC/ NRCS staff; (2) evaluation of habitat conditions in the pre-project planning process; (3) exclusion of specific sensitive habitats; (4)

authorization of biologists by the Service; (5) records of special-status species observations; and (6) measures to avoid and minimize adverse effects to the following federally listed and proposed plant and animal species: large-flowered fiddleneck, robust spineflower, Santa Cruz tarplant, Callippe silverspot butterfly, California red-legged frog, California tiger salamander, Alameda whipsnake, and San Joaquin kit fox, and to the following State species of special concern: western burrowing owl, western pond turtle, and western spadefoot toad. These measures are detailed on pages 36-44. The federal and state status of these species can be found in Environmental Checklist: Biological Resources on pages 56-57.

The program action presented in permit applications submitted to jurisdictional regulatory agencies—U.S. Fish and Wildlife Service, U.S. Army Corps of Engineers, San Francisco Bay Regional (Lead) and Central Valley (Secondary) Water Quality Control Boards—for review and permitting included the conservation practices and all the associated protective measures developed by ACRC/D/NRCS. While many of the protective measures are identical to and drawn from requirements and conditions typically placed on similar projects by regulatory agencies and have been developed through review and discussion with regulatory agencies, ACRC/D/NRCS have voluntarily developed and incorporated them, prior to agency final review, into the program description to avoid and minimize potential impacts of the installation and maintenance of the conservation and restoration practices. Under the annual notification procedures (described on pages 50-51), these protective measures may be slightly modified by regulatory agencies on a site-by-site basis to provide for greater resource protection and application of adaptive management.

For example, all protective measures (conservation-practice-specific, general, and species-specific measures) were included as components of the project description on which the U.S. Fish and Wildlife Service (Service) based formal consultation and the preparation of its programmatic biological opinion for the Alameda County Permit Coordination Program.

Permitting procedures with the California Department of Fish and Game (Department) are directed by the *Memorandum of Agreement between the California Department of Fish and Game, the Natural Resource Conservation Service, and Resource Conservation Districts Regarding the Partners in Restoration Permit Coordination Program and Streambed Alteration Notification and Agreements* (MOA) in Appendix 3. The MOA outlines the development of a template 1602 agreement specific to each Partners in Restoration permit coordination program, related procedures, and other pertinent matters. These are detailed under Description and Development of Programmatic Permitting Mechanisms on pages 44-46.

The MOA and draft template 1602 agreement for the Alameda County Permit Coordination Program are included in Appendix 3. It outlines general conditions that apply to all projects and special provisions or procedures that apply to specific conservation practices. In most instances, ACRC/D/NRCS's protective measures correspond to these conditions because, in developing these protective measures, ACRC/D/NRCS drew on conditions in earlier template agreements (e.g., Salinas River, Morro Bay, etc.) and from a source list of recommendations provided by the Department. The correspondence is outlined in Table 6 in Appendix 4.

Conservation Practices and Environmental Protection Measures

Each proposed conservation practice is described below with any associated practice-specific protective measures. The number in parenthesis refers to the NRCS Conservation Practice number in the *Field Office Technical Guide, Section IV* (USDA-NRCS 2000). (The electronic *Field Office Technical Guide* is available at <http://www.nrcs.usda.gov/technical/efotg/>).

Conservation Practices and Associated Practice-Specific Protective Measures

The General Environmental Protection Measures for All Projects are incorporated by reference into each conservation practice. These extensive and thorough measures (pages 31-36) ensure the avoidance and minimization of potential impacts during the implementation and maintenance of each conservation practice. Where appropriate, additional practice-specific protective measures have also been developed, as indicated below.

1. Access Road Improvement (560)

This practice would be used to improve existing travelways to reduce soil erosion, minimize the frequency of grading, and provide safe passage. No new roads would be established though new segments may be recommended to repair or replace improperly placed roads or failed locations. Existing roads would be improved (*e.g.*, graded, drainage structures installed, etc.) to move livestock, produce, or equipment, or to improve access for property management while controlling runoff to prevent erosion. Sound engineering practices would be followed to ensure that the road improvement design meets the requirements of the existing use and that maintenance requirements do not exceed operating budgets. Drainage structures (*i.e.*, culverts, bridges, or grade dips) would be incorporated into road improvement designs dependent on the runoff conditions to maintain or improve water quality. Roadside ditches, water breaks, water bars, or drop inlets would be used to control surface runoff when necessary. Road banks and disturbed areas would be vegetated as soon as possible, using site-specific revegetation plans. Watercourses and water quality would be protected during and after construction by erosion-control measures and regular maintenance. Associated filter strips, sediment and water control basins, and other conservation practices would be used and maintained as needed. Additionally, parking space as needed would be provided to keep vehicles off the road or from being parked in undesirable locations. Road improvements in Alameda County are modeled on "Low Maintenance Roads for Ranch, Fire, and Utilities Access: A Practical Field Guide" (Guenther n.d.).

2. Critical Area Planting (342)

This practice would be used to stabilize the soil, reduce damage from sediment and runoff to downstream areas, and improve wildlife habitat and visual resources. Trees, shrubs, vines, grasses, or legumes would be planted on highly erosive or critically eroding areas. The resulting vegetation cover would be expected to reduce the amount of soil nutrients washed into surface waters or leached into ground water.

In most circumstances, organic compost would be used to ensure successful establishment of restoration vegetation associated with the practices. Chemical fertilizers would not be used in the stream area to hasten or improve the growth of critical area plantings, except where organic composts would not guarantee adequate establishment of restoration vegetation. In these instances, fertilizers would only be used above normal high water mark and only during the year of planting. Application rates would be based on soil nutrient testing and would utilize slow-release or split applications to minimize leaching and runoff into water bodies. Pesticide use would be limited to the use of herbicides to control established

stands of non-native species including, but not limited to, cape ivy (*Senecio mikanioides*), English ivy (*Hedera helix*), Himalayan blackberry (*Rubus discolor*), periwinkle (*Vinca major*), and giant reed (*Arundo donax*). Herbicides would be applied to those species according to the registered label conditions. Herbicides would be applied directly to plants and would not be spread upon water.

Additional protective measures specific to critical area planting:

- a. A filter fabric fence or fiber/coir rolls will be used, if needed, to keep sediment from flowing into the adjacent water body during installation or maintenance of a critical area planting above the high water line.
- b. When vegetation is sufficiently mature to provide erosion control, it may be appropriate to remove the fence or fiber/coir rolls.
- c. The use of hay bales or of any erosion control materials containing plastic mesh will be prohibited to avoid the possible entrapment of federally listed or proposed amphibians and reptiles.
- d. Annual review, up to 5 years, by NRCS/ACRCD will occur until the critical area planting is established to control erosion.

3. Diversion Structures (Overland Flow Interceptors for Use in Upland Areas) (362)

The installation of overland flow interceptors (diversion structures) would involve constructing earth channels across a slope with supporting ridges on the lower side. This practice would assist in the stabilization of a hillside by decreasing the length of slope and thus reducing sheet and rill erosion and the formation of gullies. Consequently, the amount of sediment and related pollutants delivered to surface waters would be reduced.

Diversions established as a temporary measure would have a life span of less than two years and would be able to carry, at a minimum, the 2-year, 24-hour duration storm event. All other long-term diversion structures would have the capacity to carry the peak runoff from a 10-year frequency, 24-hour duration storm event at a minimum. Locations of the structures would be based on outlet conditions, topography, land use, agricultural operations, and soil type. Diversions would not be used below high sediment-producing areas unless land treatment practices or structural measures that are designed to prevent damaging accumulations of sediment in the channels are installed prior to or at the same time as the diversion structure. If movement of sediment into the channel is a significant problem, a vegetated filter strip (Conservation Practice 393) would be used where feasible (e.g., soil or climate does not preclude its use).

4. Filter Strips (393)

Filter strips or areas of vegetation would be used at the lower edges of fields, pastures, or other areas adjacent to streams, ponds, and lakes to remove sediment, organic matter, and other pollutants from runoff and wastewater. Installation often requires soil manipulation to remove surface irregularities and to properly address water movement through the filter strip. Pesticides and nutrients may be removed from runoff flowing through the vegetated filter strip by infiltration, absorption, adsorption, decomposition, and volatilization thereby protecting water quality downstream. Filter strips may also reduce erosion on the area on which they are constructed although they may not filter out some soluble or suspended fine-grained materials, especially during heavy rain events.

5. Grade Stabilization Structures (410)

This practice refers to the installation of grade stabilization structures into creek beds, pond spillways, channel bottoms, or gullies which would be used 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 scouring would be reduced above and below the structure resulting in reduced stream bank and streambed erosion. This would decrease the yield of sediment and sediment-attached substances. The reduction in sediment would improve downstream water quality.

If there is any flow when work is done, NRCS would require landowners to isolate or dewater the site. Water would be diverted by installation of a temporary barrier. All water above the barrier would be diverted downstream at an appropriate rate to maintain downstream flows during construction. When construction is completed, the barriers to flow would be removed in a manner that would allow flow to resume with the least disturbance possible to the substrate.

This practice refers to the installation of grade stabilization structures into creek beds, pond spillways, channel bottoms, or gullies which would be used to control the grade and prevent head-cutting in natural or artificial channels. In the permit coordination program, this practice would be used primarily for gully repair and would not be installed in streams supporting anadromous fish. Such streams or portions of streams are excluded from the program and are specified in the section, Geographic Scope, above. This practice refers to rock, timber, or vegetative structures (such as a brush mattress) placed to slow water velocities above and below the structure. This practice is intended to promote biotechnical approaches, and because all projects under the permit coordination program are conservation and restoration projects, any use of rock would be designed to facilitate natural stream processes and dynamics with the purposes of achieving stream equilibrium between erosional and depositional processes and support habitat requirements of aquatic and terrestrial fauna. Structures installed under this practice would not impound water but rather allow water to be conveyed in a stable manner, resulting in reduced stream bank and streambed erosion. This will decrease the yield of sediment and sediment-attached substances and improve downstream water quality. It will also improve habitat for aquatic species, which would include Central California Coast steelhead in the future when existing barriers to anadromous fish passage are removed.

6. Grassed Waterways (412)

NRCS would use this practice for the control of runoff by shaping or grading natural or constructed channels and planting the area to grass. This practice may reduce erosion in areas of concentrated flow (*e.g.*, gullies) and result in the reduction 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 or move excess runoff from ponds to riparian areas. Native or non-persistent, non-invasive non-native plant species would be used where feasible

A grassed waterway is 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. This practice may reduce the erosion in a concentrated flow area, such as a gully. This may result in the reduction of sediment and substances delivered to receiving water. Vegetation may act as a filter in removing some of the sediment delivered to the waterway, although this is not typically the primary function of a grassed waterway. Grassed waterways may be used to move runoff from agricultural lands into riparian or wetland areas or into a sediment basin. Grading and seedbed preparation may result in some short-term soil loss prior to establishment of vegetative cover.

Additional protective measures specific to grassed waterways:

- Grassed waterways are designed to convey the runoff associated with the contributory area along a prescribed slope to avoid erosion caused by the concentrated flow.
- The waterway may not divert water out of the natural sub-watershed.

7. Obstruction Removal (500)

NRCS would use obstruction removal where existing obstructions and material at a project site prevent or hinder the installation of conservation practices or otherwise adversely affect the environment.

Obstructions may include, but are not limited to, concrete, asphalt, structural steel, trash, rock, or wood. Unwanted vegetative material such as hedgerows, non-native invasive species like eucalyptus, arundo, and other exotics are included in the practice. All material removed that could not be utilized or disposed of onsite would be removed and disposed of in an environmentally acceptable manner. Any areas where vegetation was removed would be replanted with native vegetation.

Additional protective measure specific to obstruction removal: Wherever possible, hand labor will be used; however, heavy equipment such as mechanical excavators may be employed in some projects, particularly where the project requires removal of larger items such as cars and appliances.

8. Pipeline (516)

Pipeline installation would be used to shift livestock to constructed water sources and away from streams and lake to reduce bank erosion, sediment yield, and manure deposition in watercourses. It includes the installation of pipelines for conveying water from springs or ponds to alternative locations. Occasionally, pipelines may cross streams or other watercourses.

Additional protective measure specific to pipeline: A pipeline that crosses a stream or other water course will be installed and maintained only when a streambed is dry or dewatered. Maintenance activities will be restricted to periods when the streambed is dry or dewatered.

9. Pond Restoration (378R)

For purpose of this program, pond restoration would be limited to the repair, improvement, and maintenance of existing farm pond structures. This practice would reduce soil erosion and sedimentation, improve and provide long-term habitat protection, and improve livestock water availability. This practice would be used to repair and improve emergency spillways, provide alternative pipe outlets for water flow, and desilt the pond. No new in-stream pond applications would be approved with this practice nor would restoration activities involve any increase in the original storage capacity of a pond.

10. Riparian Forest Buffer (391)

The establishment of riparian forest buffers would serve to reduce sediment, nutrient, and other contaminant loading to streams and water bodies and to improve wildlife habitat. This practice would be used to create shade to lower water temperatures, provide a source of detritus and large woody debris for fish and other aquatic organisms, and provide riparian habitat and corridors for wildlife. This practice would be applied on stable areas adjacent to water bodies and would consist of native vegetative plantings ultimately resulting in forest canopy and understory development.

Additional protective measures specific to riparian forest buffer:

- Riparian forest buffers will be planted with native plants characteristic of the local habitat type.

- Planting layout will be designed in such a way as to minimize maintenance and the potential for flooding.

11. Sediment Basin (350)

This practice would consist of the construction of basins to collect and store debris or sediment. Sediment basins would trap sediment, sediment-associated materials, and other debris to prevent undesirable deposition in waterways and other bottomlands. Basins would generally be located at the base of sloping agricultural lands adjacent to natural drainage or riparian areas. The practice would not treat the source of sediment but rather would provide a barrier to reduce degradation of surface water downstream. Although some ground water recharge may occur, little if any pollution hazard is expected. The design of spillways and outlet works would include water control structures, such as energy dissipaters, to prevent scouring at the discharge point into the natural drainage.

Additional protective measures specific to sediment basin:

- Sediment basins will not be constructed in a stream channel or other permanent water body.
- When construction of a sediment basin includes a pipe or structure that empties into a stream, an energy dissipater will be installed to reduce bank scour.
- Construction of sediment basins will occur on or after August 1 to avoid impacts to bird nesting sites. Maintenance may occur from August 1 to October 15 in areas where water and sediment control basins create conditions that attract nesting birds and other wildlife.

12. Spring Development (574)

Spring development would consist of capping or collecting water at a spring or seep and transporting it through pipelines to tanks or troughs to provide alternative livestock watering facilities. The area around the water source may be fenced to exclude livestock. This practice would facilitate better rangeland management by improving the distribution of water and would allow for the exclusion of livestock from streams, ponds, and lakes. Development would be confined to springs or seep areas that could furnish a dependable supply of water. Water flow from the spring or seep may be temporarily reduced during the construction period.

Additional protective measures specific to spring development:

- Spring developments will be designed in such a way as to allow all unused water to be released back into the spring in its natural condition.
- Float valves will be required in all tanks and troughs to ensure that only the water necessary for livestock consumption is removed from the spring.
- The design of a spring system would not adversely affect any wildlife species as determined on a site by site basis. Site-specific considerations that will be included in the design of each spring development will include, but will not be limited to, the maintenance or enhancement of the habitat value of the spring and its immediate area and the exclusion of livestock from the spring and immediate area while maintaining wildlife access.

13. Stream Bank Protection (580)

This practice would consist primarily of the use of vegetation or biotechnical structures to protect banks of streams, lakes, estuaries, or excavated channels against scour and erosion. All projects under the permit coordination program are conservation and restoration projects, and any use of toe rock in stream

bank protection would be minimal and would be designed and installed to allow water to be conveyed in a stable manner, resulting in reduced stream bank and streambed erosion.

This conservation practice would protect banks of water bodies, reduce sediment loads causing downstream damage and pollution, and improve fish and wildlife habitat; it would also protect adjacent land from erosion damage. NRCS would apply this practice to natural or excavated channels where streambanks are susceptible to erosion from the action of water or debris or to damage from livestock or human activities.

14. Stream Channel Stabilization (584)

This practice would consist of the use of suitable structures to stabilize stream channels and would be used for stream channels undergoing damaging aggradation (filling in of) or degradation that cannot be controlled by upstream practices. This practice would also improve riparian vegetative growth and provide more favorable habitat for wildlife. Examples of suitable structures are rock weir, log weir, notched log weir, and rock buried in the channel bed. This practice may also include the removal of accumulated sand or sediment.

If there is any flow when work is done, the site would be isolated or dewatered and the water above the barrier would be diverted downstream at an appropriate rate to maintain downstream flows during construction. At the completion of construction, the barriers to flow would be removed in a manner that would allow flow to resume with the least disturbance possible to the substrate. Details provided in General Environmental Protection Measure 9.

15. Stream Habitat Improvement and Management (formerly identified as Fish Stream Improvement) (395)

This practice would be used to create new fish habitat or to enhance an existing habitat. This practice would be used to improve or enhance aquatic habitat for fish in degraded streams, channels, and ditches by providing shade, controlling sediment, and restoring pool and riffle stream characteristics. Pools and riffles are formed in degraded stream sections through the strategic placement of logs, root wad, or natural rocks that reduces the flow velocity through the area. Coarse-grained sediments settle reducing the quantity of sediment delivered downstream. The dissolved oxygen content may be increased, improving the stream's assimilative capacity. Increased shading from shrub and tree plantings would decrease water temperature during the warm season. This practice may also be used for removal or modification of fish barriers such as flashboard dams or logjams. This practice may be used to remove culverts that pose barriers to fish passage.

Additional protective measure specific to stream habitat improvement and management: The stream habitat improvement and management conservation practice will be designed and implemented in accordance with the California Department of Fish and Game's *California Salmonid Stream Habitat Restoration Manual* (Flossi et al. 1998).

16. Structure for Water Control (587)

Water control structures would serve to properly convey overland flow or concentrated water flow into a drainageway or under a road, for example, as part of improvement designs for access roads (560). This practice applies to permanent structures needed to control the elevation of water and to modify water flow to provide habitat for fish, wildlife, and other aquatic animals. Practice specifications may include corrugated metal pipe (culverts).

Additional protective measure specific to structure for water control: Culverts in potential anadromous fish streams (in future when downstream barriers to fish passage are removed) will be consistent with California Department of Fish and Game's "Culvert Criteria for Fish Passage" (September 2001) and NOAA Fisheries (National Marine Fisheries Service) Southwest Region's "Guidelines for Salmonid Passage at Stream Crossings" (September 2001).

17. Underground Outlets (620)

This practice would consist of the installation of conduit beneath the surface of the ground to collect surface water and convey it to suitable outlets. Excess surface water from rangeland or other areas on steep terrain would be collected and conveyed to a sediment basin, pond, or stream by installing pipelines underground. Location, size, and number of inlets would be determined on a project-specific basis to collect excess runoff and prevent erosive surface flow

Additional protective measure specific to underground outlets: Where an underground outlet empties into a stream, an energy dissipater will be installed to reduce bank scour.

Additional note related to wetland protection: By law, NRCS cannot drain wetlands and is required to show a net gain on all practices associated with wetlands.

18. Water and Sediment Control Basin (638)

This practice would consist of the construction of earthen embankments or a combination ridge and channel across slopes or minor watercourses to form sediment traps and water detention basins. This practice would trap and remove sediment and sediment-attached substances from runoff. Trap control efficiencies for sediment and total phosphorous transported by runoff may exceed 90 percent for silt loam soils. Salts, soluble nutrients, and soluble pesticides would be collected with the runoff and would not be released to surface waters. Although some ground water recharge may occur, little if any pollution hazard is expected, as previously noted for Sediment Basins (Conservation Practice 350). Basins would usually be located alongside riparian or wetland environments to buffer the impact of runoff and sediment delivery prior to release to the natural drainage. Basins would reduce concentrated off-site flow and associated erosion by the metered release of runoff following large storm events.

Additional protective measures specific to water and sediment control basin:

- Sediment basins will not be constructed in a stream channel or other permanent water body.
- When construction of a sediment basin includes a pipe or structure that empties into a stream, an energy dissipater will be installed to reduce bank scour.
- Construction of sediment basins will occur on or after August 1 to avoid impacts to bird nesting sites. Maintenance may occur from August 1 to October 15 in areas where water and sediment control basins create conditions that attract nesting birds and other wildlife.

Limitations on Project Size

The conservation projects are limited in size based on the following chart. The estimates of average figures are based on typical projects installed in Alameda County watersheds in the last 10 years. These maximums are based on definitions of small projects from regulatory agencies.

Table 1. Grading Dimensions and Volume Associated with Installation of the Conservation Practices			
Conservation Practice	Maximum Length per Installation of the Conservation Practice	Maximum Area (Acreage) per Installation of the Conservation Practice	Maximum Volume per Installation of the Conservation Practice
<p>1. Access Roads* (Improvement (560)) <i>Includes repair or removal of culverts from non-fish bearing streams</i> *Access road improvements typically involve multiple installations spread out over a long reach of road.</p>	<ul style="list-style-type: none"> 2,000 feet of work over 2 miles average: 1,000 feet of work over 2 miles (average culvert removal: 20 foot length of culvert) 	<ul style="list-style-type: none"> 2 acres average: 0.5 acre 	<ul style="list-style-type: none"> 1,500 cubic yards average: 750 cubic yards
<p>2.. Critical Area Planting (342)</p>	<ul style="list-style-type: none"> 1 mile average: 500 feet 	<ul style="list-style-type: none"> 1 acre, except 0.25 acre in riparian areas average: 0.25 acre 	<ul style="list-style-type: none"> 800 cubic yards average: 500 cubic yards
<p>3. Overland Flow Interceptors for Use in Upland Areas (Diversion Structures) (362)</p>	<ul style="list-style-type: none"> 2,000 feet (assume 10 feet wide and 1 foot deep) average: 1,000 feet 	<ul style="list-style-type: none"> 2 acres average: 1 acre 	<ul style="list-style-type: none"> 1,500 cubic yards average: 1,500 cubic yards
<p>4. Filter Strip (393)</p>	<ul style="list-style-type: none"> 2,500 feet (along waterways) (assume 20 feet wide, 1 foot deep) average: 500 feet 	<ul style="list-style-type: none"> 1 acre (along waterways) average: 0.5 acre 	<ul style="list-style-type: none"> 2,000 cubic yards average: 500 cubic yards
<p>5. Grade Stabilization Structure (410)</p>	<ul style="list-style-type: none"> Average: 3 to 4 structures per 500 feet Max: 10 structures over length of gully = 1,000 feet 	N/A	30 cubic yards per structure Average: 100 cubic yards total
<p>6. Grassed Waterway (412)</p>	<ul style="list-style-type: none"> 2,000 feet average: 1,000 feet 	<ul style="list-style-type: none"> 2 acre average: 1 acre 	<ul style="list-style-type: none"> 2,000 cubic yards average: 1,000 cubic yards

7. Obstruction Removal (500)	Difficult to estimate total number of objects to be removed from stream (2000 feet – same for gullies, fish habitat, and streambank protection?)	N/A	N/A
8. Pipeline (516)	<ul style="list-style-type: none"> • 200 feet through riparian areas (includes 50 feet on each bank and across a stream or gully) • up to 2 miles through upland areas • average: 150 feet 	<ul style="list-style-type: none"> • 0.25 acre through riparian areas/crossing streams • average: 0.1 acre 	<ul style="list-style-type: none"> • 50 cubic yards through riparian areas • average: 25 cubic yards
9. Pond Restoration (378R)	N/A	<ul style="list-style-type: none"> • Average = 1 acre pond repair • Average spillway = 300 feet 	
10. Riparian Forest Buffer (391)	<ul style="list-style-type: none"> • 1 mile 	<ul style="list-style-type: none"> • Max. width (for each side of a stream): 150 feet from normal water line or the top of bank measured horizontally on a line perpendicular to the water body 	N/A
11. Sediment Basin (350)	N/A	<ul style="list-style-type: none"> • 2 acres • average: 1 acre 	<ul style="list-style-type: none"> • 1,500 cubic yards (compacted embankment) • average: 1,500 cubic yards
12. Spring Development (574)	N/A	<ul style="list-style-type: none"> • 0.05 acre • average: 0.05 acre 	<ul style="list-style-type: none"> • 50 cubic yards • average: 50 cubic yards
13. Streambank Protection (580)	<p>Vegetation:</p> <ul style="list-style-type: none"> • 2,000 feet • average: 1,000 feet <p>With Toe Rock:</p> <ul style="list-style-type: none"> • 500 feet • average: 300 feet 	<p>Vegetation:</p> <ul style="list-style-type: none"> • 3 acres • average: 1.5 acre 	<p>Vegetation:</p> <ul style="list-style-type: none"> • 1,500 cubic yards • average: 1,500 cubic yards <p>With Toe Rock:</p> <p>300 cubic yards average: 300 cubic yards</p>
14. Stream Channel Stabilization (584)	<ul style="list-style-type: none"> • 2,000 feet • average: 1000 feet 	<ul style="list-style-type: none"> • 2 acres • average: 1 acre 	<ul style="list-style-type: none"> • 1,500 cubic yards • average: 750 cubic

			yards
15. Stream Habitat Improvement and Management (395)	Not to exceed 20 structures at multiple bank locations over 2000 feet)	N/A	25 cubic yards per structure
16. Structure for Water Control (587)	N/A	N/A	N/A
17. Underground Outlets (620) (energy dissipator at outlet)	<ul style="list-style-type: none"> • 200 feet • In riparian: <100 feet (laid on surface) 	<ul style="list-style-type: none"> • 0.5 acre average: <003 acre (10 feet x 15 feet) 	<ul style="list-style-type: none"> • 70 cubic yards • average: 20 cubic yards
18. Water and Sediment Control Basin (638)	N/A	<ul style="list-style-type: none"> • 2 acres • average 0.5 acre 	<ul style="list-style-type: none"> • 1,500 cubic yards (compacted embankment) • average: 1,500 cubic yards

General Environmental Protection Measures for All Individual Projects

ACRCD/NRCS have developed the following general protective measures and will include them as part of every individual project, as appropriate, to avoid and minimize potential adverse effects. The correspondence with California Department of Fish and Game's (Department) conditions in the Template 1602 Agreement (Appendix 3) is shown in Table 6 in Appendix 4.

General Environmental Protection Measure 1: Project Personnel Education Program

A Service-approved biologist will conduct a training session for all project personnel before any construction activities begin at a project site. All project worker and persons associated with the project, including ACRCD and NRCS staff, landowners and managers (private and non-Federal and non-State public entities), will attend this training. The representative responsible for reporting take to the Service and the Department must be present. Personnel joining the project at a later date will receive the same training before accessing the site and engaging in any project activities. Training sessions will be conducted in all appropriate languages.

At a minimum, the session will include the following:

- the natural history of any federally listed or proposed species and state-listed or other special-status species (requested by the Service or the Department for inclusion in the training) that may occur on site.
- training on how to recognize these species and their habitats.
- special emphasis on listed and other special-status burrowing animals, such as the San Joaquin kit fox, California red-legged frog, California tiger salamander, and western burrowing owl (*Athene cunicularia hypugaea*), including the key role of non-listed rodents and other burrowing animals that may serve as prey or whose burrows may provide shelter for listed or other special-status species. California ground squirrels are an important example of such a non-special-status species. (68 Federal Register 28650).
- the protection afforded federally listed or proposed species by the Act;

- the measures to be followed during construction to protect them.
- the necessity of strict adherence
 - to the special requirements detailed in landowner-signed practice requirement sheet for each conservation practice.
 - to any additional conditions and requirements of Individual Agreements (issued by the Department and attached to the Cooperator Agreement.
 - and to all conditions and requirements of the Cooperator Agreement.
- the boundaries (work area) within which the project may be accomplished.

General Environmental Protection Measure 2: Project Representative Responsible for Reporting Take

A representative will be appointed by ACRD/NRCS as the contact for any person associated with the project (1) who might inadvertently kill or injure any of listed or proposed animal species; (2) who finds a dead, injured, or entrapped individual; and (3) who might inadvertently damage any of the federally listed plants. The representative's name will be provided to the Service prior to the initiation of ground disturbance activities. The representative will have the authority to stop any work if a listed or proposed animal species may be harmed.

General Environmental Protection Measure 3: Temporal Limitations on Construction

The general construction season will be from June 15 to October 15 (dry season); however, modifications to that time frame may be made on a site-specific and/or species-specific basis. The timing of construction for individual projects will take into consideration federally and State-listed and proposed fish, wildlife, and plants potentially occurring in a project area. Where habitat for listed and proposed species is identified on or adjacent to the project work site, the timing of construction and related activities will be restricted to avoid disturbance to the breeding, feeding, mating, and sheltering of these species. Work beyond the proposed construction period may be authorized following consultation with the Service and/or the Department, provided the work would be completed prior to first winter rains and stream flows.

If construction must occur in a riparian area before August 1, NRCS will conduct surveys for bird-nesting sites and provide the survey results to DFG for review and consultation. The Department may approve an earlier start date if results indicate that nesting sites or other evidence of breeding activity is not present.

General Environmental Protection Measure 4: Limitation on Earthmoving and Habitat Disturbance

The total area of a project site, including the number and size of access routes and staging areas, will be limited to the minimum necessary to achieve the project goal. Disturbance to existing grades and vegetation will be limited to the smallest areas possible. The limitations specific to a particular conservation practice are listed in Table 1: Grading Dimensions and Volume Associated with the Installation of Conservation Practices. Staging areas and other facilities will be located in areas that limit habitat disturbance as much as possible. Access routes will be clearly demarcated and will be outside of riparian, wetland, and other habitat wherever possible. Off-road travel outside of designated project areas will be prohibited. A speed limit of 20 miles per hour will be observed at all project sites and while accessing all project sites on unpaved roads (access roads and ranch and farm roads).

Native tree removal and disturbance of native shrubs or woody perennials adjacent to the streambank or stream channel will be avoided or minimized to the fullest extent possible. If native trees over 6-inch diameter at breast height are to be removed, they will be replaced at a 3:1 ratio. If riparian vegetation will be disturbed, it will be replaced with similar species. Finished grades will not be steeper than 2:1 side

slopes without approval of project design by the Department. Vertical streambanks existing prior to construction may be graded to the slopes described in the conservation practice or engineered design.

Protective measures will be implemented to minimize potential contributions of sediment to waterways. Excavated materials will be used on site whenever possible. In the rare situations where excavated material is not used in the implementation of a practice, it will be removed and moved out of the 100-year floodplain (e.g. soil spread onto agricultural fields on the same property).

General Environmental Protection Measure 5: Limitations on Construction Equipment

ACRCD/NRCS will ensure that contamination of habitat does not occur during routine operations. The use or storage of petroleum-powered equipment will be accomplished in a manner to prevent the potential release of petroleum materials into waters of the state (Fish and Game Code 5650). All workers will be informed of the importance of preventing spills and of the appropriate measures to take should a spill occur.

The following precautionary measures will be adhered to:

- a. Excavation and grading activities will be conducted only during dry weather.
- b. A contained area will be designated for equipment storage, short-term maintenance, and refueling. It will be located at least 50 feet from water bodies. If site conditions (property size) make this 50-foot distance infeasible, these activities will occur at the maximum distance possible from water bodies.
- c. Vehicles will be inspected daily for leaks and repaired immediately.
- d. Leaks, drips, and other spill will be cleaned up immediately to avoid soil or groundwater contamination.
- e. Major vehicle maintenance and washing will be done off site.
- f. All spent fluids including motor oil, radiator coolant, other fluids, and used vehicle batteries will be collected, stored, and recycled or disposed of as hazardous waste off site at appropriate sites or facilities.
- g. All construction debris and sediments will be taken to appropriate landfills. However, in some cases, sediments may be disposed of in upland areas on- or off-site, when appropriate.
- h. Dry cleanup methods (i.e. absorbent materials, cat litter, or rags) are used whenever possible. Cleanup materials for potential spills will be readily available on site.
- i. If water is used, the minimal amount required to keep dust levels down will be used.
- j. Spilled dry materials are swept up immediately.

Heavy equipment will perform work from the top of the creek banks and use existing ingress or egress points wherever possible. Heavy equipment will not enter flowing or standing water, except to cross a stream or pond to access the work site, where no other access is available.

General Environmental Protection Measure 6: Removal of Trash and Project Debris

During project activities, all trash will be properly contained, removed from the work site, and appropriately disposed of at an appropriate off-site disposal location. All trash that may attract predators will be securely covered at all times. Any construction-related trash and debris remaining at the completion of a project will also be removed from work areas and properly disposed of.

General Environmental Protection Measure 7: Revegetation and Removal of Exotic Plants

The project area vegetation will be restored to pre-construction condition or better. Native plants characteristic of the local habitat type will be used when installing and maintaining practices in natural areas. Locally collected native plant materials will be used for propagation and planting, where feasible. However, non-invasive, non-persistent grass species (i.e., barley grass) may be used as nurse crops or for their temporary erosion control benefits to stabilize disturbed slopes until natives are established.

The spread or introduction of exotic plant species will be avoided to the maximum extent possible by avoiding areas with established native vegetation during project activities, restoring disturbed areas with native species where appropriate, and conducting post-project monitoring and control of exotic species. Removal of invasive exotic species will be strongly recommended. Mechanical removal (hand tools, weed whacking, hand pulling) of exotics will be done in preparation for establishment of perennial plantings. To the extent possible, the site will be revegetated at the same time as exotic vegetation is removed. Giant reed or other invasive species that can establish from cuttings will be disposed of in a manner that will not allow re-establishment to occur.

General Environmental Protection Measure 8: Site Conditions Requiring Erosion Control And Appropriate Erosion Control Measures Erosion control and sediment detention devices will be placed at all locations where the potential for sediment input exists. Acceptable erosion control devices and practices include, but are not limited to, revegetation of disturbed areas (as described in the conservation practice Critical Area Planting and in General Measure 7 above); coir-fiber rolls; filter-fabric fence; or hay (not in bales). Unacceptable devices include, but are not limited to, hay bales or any erosion control materials with plastic netting. Acceptable devices and practices will be incorporated into the project design. They will be installed at the time of implementation of the conservation practice and prior to the onset of rains. They will be inspected regularly to ensure they are functioning properly. Collected sediment will be disposed of away from the collection site and, where appropriate, on site above the normal high-water mark.

Soil (except for agricultural fields), streambank, or ground exposed during construction will be revegetated by live planting, seed casting, or hydroseeding prior to the close of the construction season of the project year.

All debris, sediment, rubbish, vegetation, and other material removed from a waterway will be removed to a location where it will not re-enter the waterway. All petroleum products, silt, fine soils, and any substance or material deleterious to fish, other aquatic animal species, plant, or bird life will not be allowed to pass into, or be placed where it can pass into, the waters of the state.

The installation and maintenance of projects will not result in sediment delivery to a clean bottom of stream channel. A "clean" bottom is characterized by natural stream substrate, such as cobbles, gravel, and small stones.

General Environmental Protection Measure 9: Limitations on Work in Streams and Permanently Pondered Areas

If it is necessary to conduct work in or near a live stream, the workspace will be isolated from flowing water to prevent sedimentation and turbidity. Prior to construction activities, sandbag cofferdams, silt fences, culverts, or visquine will be installed to divert streamflow away from or around workspace at an appropriate rate to maintain downstream flows during construction. Excavating a channel for the purpose of isolating the workspace from flowing water is prohibited and will not be allowed.

A qualified biologist, with all necessary State permits and authorized under the biological opinion from the Service for the program, will relocate all fish, amphibians, and other native aquatic species (such as the western pond turtle) within the work site prior to dewatering. They will be moved to the nearest appropriate site on the stream. Fish refers to non-anadromous native fish species, such as California roach, suckers, and sculpin. As stated earlier, all streams currently used by anadromous fish and all reaches of streams below barriers to anadromous fish migration are excluded from the program. During the dewatering period, the qualified biologist will check for stranded aquatic life as the water level drops. All reasonable efforts will be made to capture and move all stranded aquatic life observed in the dewatered areas. Capture methods may include fish landing nets, dip nets, buckets, and by hand. This condition does not allow for the take or disturbance of any State or federally listed species. A record will be maintained of all fish, amphibians, and other native aquatic species captured and moved, and the record will be provided to DFG (c/o 1600 program, P.O. Box 47, Yountville, California 94599) with the appropriate Stream Bed Alteration Notification number.

All bullfrogs detected during pre-construction or construction surveys will be disposed of in a manner that is consistent with California Department of Fish and Game regulations.

Sediment removal from the stream channel or ponds may occur if it will improve biological functioning of the stream and restore channel capacity. Sediment removal would not occur in a flowing stream or standing water.

No creosote treated timbers will be used for grade or channel stabilization structures, bulkheads, or other instream structures. Concrete will not be used in streams supporting native non-anadromous fish species and would only be used above the high water mark. The use of grouted rock will be minimized and will not be used in the bed of a waterway.

Construction or maintenance activities associated with the practices covered under this program will not result in increases in turbidity in the stream (as measured by NTU) of more than 10 percent of upstream background.

General Environmental Protection Measure 10: Limitations on Use of Herbicides and Fertilizers in Aquatic Environments

No pesticides or soil amendments will be used in the streambed or bank to hasten or improve the growth of critical area plantings or riparian forest buffers, with the exception that soil amendments may be used on stream banks above the normal high water mark during the year of planting.

Organic amendments will be used in most circumstances. Non-organic soil amendments would be used if organic amendments would not allow for adequate establishment of restoration vegetation. The application rate for non-organic amendments will be based on soil nutrient testing and will utilize slow release or split applications to minimize leaching or runoff into water bodies.

If necessary, a glyphosate-based herbicide may be used to control established stands of exotics, including, but not limited to, Himalayan blackberry (*Rubus discolor*), Cape ivy (*Senecio mikanioidides*), and giant reed (*Arundo donax*), or invasion of exotics into restoration plantings. Herbicides will be applied to those species according to the registered label conditions. Herbicides will be applied directly to plants and not spread upon any water or where they can leach into waterways during rains. Herbicide use would be coordinated with the Service.

Species-Specific Environmental Protection Measures

ACRCD/NRCS will carryout the following general measures to avoid adverse effects to federally listed and proposed species during installation and maintenance of conservation practices.

1. ACRCD/NRCS staff will be trained and familiar with the preferred habitats of all federally and State-listed and proposed species and the species of concern addressed in this biological assessment.
2. ACRCD/NRCS staff will identify and evaluate characteristic habitat conditions in proposed work areas during the NRCS pre-project planning process.
3. ACRCD/NRCS will avoid vernal pool habitat. Any proposed project that contains vernal pool habitat will not be included in the Alameda County permit coordination program.
4. ACRCD/NRCS will avoid areas with serpentine soils. Projects proposed for areas that contain serpentine soils in the work area will not be included in the permit coordination program.
5. ACRCD/NRCS will avoid areas with alkali-sink habitats. Projects proposed for areas that contain alkali-sink habitats in the work area will not be included in the permit coordination program.
6. ACRCD/NRCS will avoid areas with known populations of pallid manzanita and the soil and habitat conditions (as described in Service 2002) characteristic of those populations: bare, sterile, siliceous mineral (silica rich) soil indicative of the shale-chert formation soil series, which include (1) Middle Miocene cherts and shales of the Monterey Group (mapped as Millsholm series in the Soil conservation Service Soil Survey of Contra Costa County), (2) Pinehurst Shale and Joaquin Miller Formation, and (3) an unspecified soft sandstone but within the maritime influence of summer fog. Pallid manzanita appears to be absent on the same substrates where summer air and soil temperatures are higher. Projects proposed for areas that contain either pallid manzanita or

the above combination of soil types and habitat conditions in the work area will not be included in the permit coordination program.

7. At least 15 days prior to the onset of the activities for which authorization is requested, ACRC/D/NRCS will submit for review and approval by the Service the credentials of qualified individuals under consideration for conducting species-specific surveys, translocation of federally listed and proposed species, biological monitoring, and training sessions.
8. The ACRC/D/NRCS monitor will maintain a record of all observations of listed and proposed species during project activities, as follows:
 - a) date, time, and circumstances of observation and the species and numbers of individuals observed
 - b) Responses of the observed individuals to project activities
 - c) Responses of observed individuals to harassment, if any occurs
 - d) Unusual circumstances or behavior of individuals observed

In addition to the general measures, more specific measures are given below for specific federally listed or proposed species.

Measures to Avoid and Minimize Adverse Effects to Federally Listed and Proposed Plant and Animal Species During Installation and Maintenance of Conservation Practices:

1. ACRC/D/NRCS will implement the following specific actions to avoid or minimize adverse effects to the **large-flowered fiddleneck, robust spineflower, and Santa Cruz tarplant**:
 - a. During the project assessment and planning stages, ACRC/D/NRCS will (a) assess the proposed project site for suitable habitat for these plant species and survey for occurrences and (b) use survey results in project planning and design (Steps 3 through 6 of NRCS's conservation planning process outlined in Table 2).
 - b. If a listed plant species occurs on site, ACRC/D/NRCS will contact the Service to develop site-specific protective measures that may include, but are not limited to, any of the following measures:
 - i. Determination of the appropriateness and effectiveness of a buffer zone around concentrations of listed plants will be made on an individual site basis. Buffer width, effect of project design on hydrology, connectivity with other occurrences, movement of pollinators/dispersers, and other factors affecting the occurrence will be considered in making this determination. Particular attention will be directed to alterations in surface and subsurface hydrological processes due to grading activity.
 - ii. Limitations on the use of pesticides or fertilizers in the buffer zone (if established).
 - c. Disturbance of high-quality potential habitat will be avoided, to the maximum extent possible.
 - d. No sod-forming or non-native invasive plants will be planted.
 - e. The removal of invasive, non-native plants will be strongly recommended.

2. ACRC/D/NRCS will implement the following specific actions to avoid or minimize adverse effects to the **Callippe silverspot butterfly**:
- a. During project assessment and planning (Steps 3-6 of NRCS's conservation planning process outlined in Table 2), a Service-approved biologist shall survey the proposed site for habitat for the Callippe silverspot butterfly. If seasonally appropriate, the biologist shall survey the larval host plant (*Viola pedunculata*), and nectar plants used by adult butterflies. Nectar plants used by adults include California buckeye (*Aesculus californica*), thistles (*Cirsium* spp., *Carduus* spp., *Silybum marianum*) and coyote mint (*Monardella villosa*). Hilltops that may be used by adult butterflies for courtship and display will be considered an important habitat feature. Surveys to detect the presence of *Viola pedunculata* are best conducted during the blooming season (March to May). Surveys to detect the presence of butterflies are best conducted during the flight period of adults (mid-May to mid-July). The Service-approved biologist will assess the presence of the three habitat components (larval food plant, hilltops for mating activities, and adult nectar plants) and determine their quality and function for the Callippe silverspot butterfly on an area basis rather than a site basis. The Callippe silverspot butterfly is a strong flier and may use habitat components up to a mile distance from each other.
 - b. ACRC/D/NRCS staff conducting reconnaissance-level surveys will be trained by a Service-approved qualified biologist prior to conducting field surveys. If ACRC/D/NRCS staff lacks the expertise to conduct reconnaissance-level surveys for Callippe silverspot butterflies and *Viola pedunculata*, then the ACRC/D/NRCS shall use consultants with expertise such as NRCS Technical Service Providers.
 - c. If the butterflies are found, project design will avoid disturbance of the portions of the site providing habitat. If this type of design is not possible, the project will be designed to allow only temporary habitat disturbance and to minimize such disturbance. In either case, the following protective measures d - i (which also serve as protective measures for the listed plants) will be incorporated into the project design. Construction activities would not be allowed until after July 15.
 - d. If no butterflies are found but the Service-approved biologist determines that moderate to good habitat is present indicating the potential presence of the Callippe silverspot butterfly, then the following measures 2.e – j will be incorporated into the project design and implementation.
 - e. Determination of the appropriateness and effectiveness of a buffer zone around concentrations of this species and habitat features will be made on a site-by-site basis. Possible buffer width, effect of project design on hydrology, connectivity with other occurrences, movement of pollinators/dispersers, and other factors affecting the occurrence will be considered in making this determination.
 - f. Grading of adjacent portions of the project site will not alter surface and subsurface hydrologic processes to the detriment of the larval host plant and nectar plants.
 - g. No herbicides, pesticides, or fertilizers will be applied in areas that are occupied by *Viola pedunculata*.
 - h. Disturbance of high-quality potential habitat will be avoided, to the maximum extent possible.

- i. No sod-forming or non-native invasive plants will be planted.
 - j. The development of plans to control invasive, non-native plants that threaten habitat supporting the larval host plant will be strongly recommended. In the case of the non-native thistles that serve as nectar plants for the adults, the timing and extent of control activities will be developed on a site-specific basis. NRCS will solicit the recommendations of species experts in developing these plans.
3. ACRC/ NRCS will implement the following specific actions to avoid or minimize adverse effects to the **California red-legged frog and the California tiger salamander**:
- a. During the planning process for an individual project under the program, ACRC/ NRCS will assess each proposed project site to determine if suitable habitat is present on site for the California red-legged frog and/or the California tiger salamander. If habitat is present, the assessment will also identify suitable, potential release sites should the need arise during project activities to move California red-legged frogs and/or California tiger salamanders out of harm's way.
 - b. ACRC/ NRCS staff conducting reconnaissance-level surveys will be trained by a Service-approved qualified biologist prior to conducting field surveys. If ACRC/ NRCS staff lacks the expertise to conduct reconnaissance-level surveys for California red-legged frogs or the California tiger salamander, then the ACRC/ NRCS will use consultants with expertise such as NRCS Technical Service Providers.
 - c. At sites where suitable habitat is present, a Service will conduct a pre-construction survey no more than 48 hours before the start of construction activities. Surveys for California red-legged frogs will consist of searches during daylight hours for egg masses, tadpoles, or adults, and searches during nighttime hours for adults and sub-adults. The Service-approved biologist will also evaluate the likelihood of use of the site by California red-legged frogs and California tiger salamanders.
 - d. The Service-approved biologist will contact the Service for technical assistance if California red-legged frogs and/or California tiger salamanders are observed during the pre-construction surveys.
 - e. A Service-approved biologist will be present on site during all grading, dewatering, riparian or aquatic vegetation removal, in-stream construction activities, and relocation of California red-legged frogs and California tiger salamanders. After instruction of project personnel, relocation of California red-legged frogs and California tiger salamanders, and the activities listed above have been completed, the contractor or permittee will designate a person to monitor on-site compliance. The Service-approved biologist will ensure that this individual receives the training specified in general protective measures 1 and 2 (Project Personnel Education and Individual Responsible for Reporting Take, respectively) and is competent in the identification of California red-legged frogs and California tiger salamanders.
 - f. If biological monitoring is needed during construction, a qualified individual approved by the Service will have the authority to halt work activities that may affect adults, tadpoles or egg masses of California red-legged frogs or California tiger salamanders until they can be moved out of harm's way.

- g. Only Service-approved biologists will capture, handle, and relocate California red-legged frogs and tadpoles and California tiger salamanders.
- h. Nets or bare hands may be used to capture California red-legged frogs. Service-approved biologists will not use soaps, oils, creams, lotions, repellants, or solvents of any sort on their hands before and during periods when they are capturing and translocating California red-legged frogs and California tiger salamanders.
- i. To avoid transferring disease or pathogens between aquatic habitats during the course of surveys or handling of California red-legged frogs and California tiger salamanders, Service-approved biologists will follow the Declining Amphibian Population Task Force's Code of Practice.
- j. Service-approved biologists will limit the duration of handling and captivity of California red-legged frogs and California tiger salamanders. While in captivity, individuals of these species will be kept in a cool, moist, aerated environment, such as a bucket containing a damp sponge. Containers used for holding or transporting adults of these species will not contain any standing water.
- k. Projects will be designed to minimize disturbance of vegetation near and on permanent and seasonal pools of streams, marshes, ponds, and shorelines with extensive emergent vegetation, or weedy vegetation.
- l. No hay bales or plastic mono-filament erosion control matting will be used for erosion control near riparian habitat, along the perimeter of ponds, or near other aquatic habitat that may provide habitat for California red-legged frogs and California tiger salamanders.
- m. If a project site is to be temporarily de-watered by pumping, pump intakes will be completely screened with wire mesh not larger than five millimeters to prevent red-legged frog or tiger salamander larvae from entering the pump system. Water will be released or pumped downstream at an appropriate rate to maintain downstream flows during construction. Upon completion of construction activities, any barriers to flow will be removed in a manner that will allow flow to resume with the least disturbance to the substrate.
- n. Construction activities will be conducted during daylight hours, to the maximum extent practicable.
- o. Heavy equipment will be allowed within a 1500-foot radius of aquatic salamander habitat only during the daylight hours from June through October 15 (or the first rainfall depositing more than 0.25 inch). No heavy equipment will be used within a 1500-foot radius of aquatic salamander habitat between October 15 (or the first rainfall depositing more than 0.25 inch) and May 1.
- p. No chemical herbicides or pesticides may be used from October through May. Pesticides or herbicides applied from June to September must be applied during daylight hours.
- q. Restoration activities at ponds occupied by red-legged frogs or tiger salamanders will take place between August 31-October 15 (or the first rainfall of the season depositing more than 0.25 inch) when larval development of red-legged frogs and tiger salamanders is likely to be complete and ponds have less water present unless restoration activities do not impact pond vegetation or water.

4. ACRCDD/NRCS will implement the following specific actions to avoid or minimize adverse effects to the **Alameda whipsnake**:
 - a. During the planning process for an individual project, ACRCDD/NRCS will assess each proposed project site to determine if habitat for the Alameda whipsnake occurs on site and, if present, to determine its quality and function for the whipsnake.
 - b. ACRCDD/NRCS staff conducting reconnaissance-level surveys will be trained by a Service-approved biologist prior to conducting field surveys. If ACRCDD/NRCS staff lacks the expertise to conduct reconnaissance-level surveys for whipsnakes, then ACRCDD/NRCS will use consultants with expertise such as NRCS Technical Service Providers.
 - c. If habitat is present, the assessment will also include identification of suitable, potential release sites should the need arise during project activities to move whipsnakes out of harm's way.
 - d. On project sites where suitable habitat occurs, ACRCDD/NRCS will design projects to avoid whipsnake core habitat. Within their home ranges, Alameda whipsnakes have one or more "core areas," which are areas of concentrated use in open or partially open-canopy scrub on east, southeast, south, and southwest-facing slopes or nearby grassland habitats with similar aspects (Swaim 1994). Rock outcrops are an important feature of most core areas. No rock outcroppings will be removed in whipsnake habitat.
 - e. A Service-approved biologist will conduct pre-construction surveys (visual or trapping, depending on habitat and size of project). If whipsnakes are found, they will be relocated to sites approved by the Service and the California Department of Fish and Game.
 - f. At sites where whipsnakes are present, the Service-approved biologists will consult with Service biologists to determine if the installation of exclusion fencing with exit funnels and if the hand excavating of burrows within the footprint of project grading is appropriate.
 - g. If biological monitoring is needed during construction, a qualified individual approved by the Service will have the authority to halt work activities that may affect whipsnakes until they can be moved from the project site.
 - h. Only Service-approved biologists will capture, handle, and relocate whipsnakes.
5. ACRCDD/NRCS will implement the following specific actions to avoid or minimize adverse effects to the **San Joaquin kit fox**:
 - a. All grasslands, oak savanna, fallow agricultural fields, and orchards in the eastern portion of Alameda County will be considered San Joaquin kit fox habitat.
 - b. NRCS staff biologist will conduct a reconnaissance-level survey of each proposed project site to determine if the site has suitable San Joaquin kit fox foraging or breeding habitat. If suitable habitat is present, a qualified biologist will conduct a pre-construction survey for dens greater than 4 inches in diameter, scat, tracks, or any other sign to indicate presence of the species.

- c. NRCS staff conducting reconnaissance-level surveys will be trained by a Service-approved biologist prior to conducting field surveys. If NRCS staff lacks the expertise to conduct reconnaissance-level surveys for whipsnakes, then ACRC/CD/NRCS will use consultants with expertise such as NRCS Technical Service Providers.
- d. If San Joaquin kit fox sign or active dens are found within the proposed work area, the NRCS biologist will contact the Service. Construction activities will not proceed until approval from the Service has been received. NRCS and the Service will develop site-specific methods prior to construction activities to prevent the unlikely harm or death of any San Joaquin kit fox within the work area.
- e. No fencing will be installed that would limit movement of San Joaquin kit fox.
- f. The Service's *Standardized Recommendations for the Protection of the San Joaquin Kit Fox Prior to or During Ground Disturbance* will be implemented for any project within potential habitat for San Joaquin kit fox.

Species-Specific Measures to Avoid and Minimize Adverse Effects to Other Special-Status Species During Installation and Maintenance of Conservation Practices. The three species addressed in this section are identified as Species of Concern by the California Department of Fish and Game (Department).

- 7. NRCS will implement the following specific actions to avoid or minimize adverse effects to the **western burrowing owl**:
 - a. During the planning process for an individual project under the program, NRCS/ACRC/CD will assess each proposed project site to determine if suitable habitat for the western burrowing owl occurs on site. If habitat is present, a qualified biologist will survey the proposed project site, including a 150 meter (approximately 500 feet) buffer, (where possible and appropriate, based property boundaries and habitat) to assess the presence of burrowing owls and their habitat. This survey will be conducted according to the survey guidelines described in the Burrowing Owl Survey Protocol and Mitigation Guidelines (Burrowing Owl Consortium n.d). It will be conducted during the nesting season in advance of the development of engineered designs or detailed plans for the conservation project. A report of survey results will be provided to the Department within 2 weeks of the survey. In addition, preconstruction surveys will be conducted no earlier than 30 days prior to any ground-disturbing activities on the site regardless of whether or not nesting owls were observed during the protocol surveys.
 - b. If burrowing owls are found during the survey in advance of project development on or adjacent (within the 150-meter buffer as defined above) to the project site, the project design and implementation plan will be developed to avoid impacts to the species.
 - c. If burrowing owls are found during the preconstruction survey, the Department will be notified prior to disturbance so that appropriate buffer zones and/or passive relocation measures can be determined.
 - d. If the project cannot be designed, reconfigured, or seasonally restricted (measures 7.b. and c. above) or to avoid impacts to burrowing owls, it will be excluded from the permit coordination program.

- e. Impacts are defined as follows (Burrowing Owl Consortium n.d.):
1. Disturbance or harassment within 50 meters (approximately 160 feet) of occupied burrows.
 2. Destruction of burrows and burrow entrances. Burrows include structures such as culverts, concrete slabs, and debris piles that provide shelter to burrowing owls.
 3. Degradation of foraging habitat adjacent to occupied burrows.
8. NRCS will implement the following specific actions to avoid or minimize adverse effects to the **western pond turtle**:
- a. During the planning process for an individual project under the program, NRCS/ACRCD will assess each proposed project site to determine if suitable habitat for the western pond turtle occurs on site. If habitat is present, a qualified biologist will survey the proposed project site to assess the presence of western pond turtles and their habitat. In addition, preconstruction surveys to determine the presence of the western pond turtles will be conducted no earlier than 30 days prior to any ground-disturbing activities on the site regardless of whether or not western pond turtles were observed during the protocol surveys.
 - b. If any western pond turtles are found in the area during the pre-construction survey, they will be relocated to suitable habitat outside of the work area by a qualified biologist with all required permits. This relocation of western pond turtles will be done no sooner than 48 hours prior to construction. The results of the survey will be sent to the Department within one week of survey completion.
 - c. As part of its review of Draft Agreements (per Agreement Item 5 of MOA) for individual projects that contain suitable western pond turtle habitat, the Department will provide a list of additional measures, if any, that it may require if western pond turtles are found on a site during the pre-construction surveys but were not present during the surveys conducted during the planning process. The Department will provide this list with the Individual Agreements returned to NRCS and ACRCD so that it can be included in requests for bids and with other contracting information.
9. NRCS will implement the following specific actions to avoid or minimize adverse effects to the **western spadefoot toad**:
- a. During the planning process for an individual project under the program, NRCS/ACRCD will assess each proposed project site to determine if suitable habitat for the western spadefoot toad occurs on site. If habitat is present, a qualified biologist will survey the proposed project site to assess the presence of western spadefoot toads and their habitat. In addition, preconstruction surveys to determine the presence of the western spadefoot toads will be conducted no earlier than 30 days prior to any ground-disturbing activities on the site regardless of whether or not spadefoot toads were observed during the protocol surveys.
 - b. If any western spadefoot toads are found in the area during the pre-construction survey, they will be relocated to suitable habitat outside of the work area by a qualified biologist with all required

permits. This relocation of spadefoot toads will be done no sooner than 48 hours prior to construction. The results of the survey will be sent to the Department within one week of survey completion.

- c. As part of its review of Draft Agreements (per Agreement Item 5 of the MOA) for individual projects that contain suitable western spadefoot toad habitat, the Department will provide a list of any additional measures that it may require if western spadefoot toads are found on a site during the pre-construction surveys but were not present during the surveys conducted during the planning process. The Department will provide this list with the Individual Agreements returned to ACRC/NRCS, as described in Agreement Item 5 of the MOA, so that it can be included in requests for bids and other contracting information.

3.0 PLANNING PROCESSES AND PERMITTING MECHANISMS

3.1 DESCRIPTION AND DEVELOPMENT OF PROGRAMMATIC PERMITTING MECHANISMS

The development of the Alameda County Permit Coordination Program involves obtaining approval or agreements from all local, state, and federal agencies with jurisdiction over one or more of the conservation practices included in the project. In April 2003, all agencies attended the regulatory workshop, forum, and field trip presented by ACRC/NRCS in Alameda County. The meeting achieved the following goals:

- To provide regulatory agencies with an overview of the proposed Partners in Restoration (PIR) permit coordination program for Alameda County and the opportunity to respond conceptually to the proposed program;
- To briefly describe proposed conservation practices and provide regulatory agencies the opportunity to view conservation practices in the field;
- To clarify agency jurisdictions and concerns regarding proposed conservation practices;
- To identify potential approaches regulatory agency would like to use in working together to develop a permit coordination program for Alameda County.

The following list identifies participating agencies, with a brief description of the type of coordination process and programmatic permit or approval for each agency. It also gives some key dates in the process as well as its current status for each agency.

U.S. Fish and Wildlife Service (Service)

(Contact: Mary Hammer, Fish and Wildlife Biologist, U. S. Fish and Wildlife Service, Sacramento Fish and Wildlife Office, Sacramento, California)

The coordination process with the Service began in March 2003 with a meeting initiating informal consultation. The formal consultation process under section 7 of the Endangered Species Act was initiated on December 29, 2003, and concluded on August 12, 2004, when the Service completed a programmatic biological and conference opinion for the program.

NOAA Fisheries – National Marine Fisheries Service (NOAA Fisheries)

(Contact: Maura E. Moody, Fisheries Biologist, NOAA Fisheries (National Marine Fisheries Service, Santa Rosa Office, Santa Rosa, California)

The coordination process with NOAA Fisheries consisted of informal consultation under section 7 of the Endangered Species Act. It concluded on May 28, 2004, with NOAA Fisheries' letter of concurrence with NRCS's determination that the permit coordination program is not likely to adversely affect the Central California Coast steelhead.

U.S. Army Corps of Engineers (Corps)

(Contact: Holly Costa, Project Manager, U.S. Army Corps of Engineers-San Francisco District, San Francisco, California)

The coordination process with the Corps consists of ongoing discussions and information exchange by phone, mail, and email; a joint coordination meeting on June 2, 2004, with San Francisco Bay Regional Water Quality Control Board (Board); and submission of an application on June 6, 2004, for a Department of Army permit under the Clean Water Act, §404. This coordination process will conclude with the Corps's preparation of a regional general permit (RGP) for the permit coordination program. Prior to finalizing the RGP, the Corps must receive the final Waste Discharge Requirements or Clean Water Act §401 Certification from the Board. The Corps incorporates any conditions and requirements of the Service and Board into the RGP. As an example, the RGP for the Salinas River Watershed Permit Coordination Program can be found at <http://www.spn.usace.army.mil/regulatory/permitnumber8.pdf>.

California Department of Fish and Game (Department)

(Contact: Marcia Grefsrud, Central Coast Region, California Department of Fish and Game, Yountville, California, and Scott Wilson, Habitat Conservation Supervisor, Central Coast Region, California Department of Fish and Game, Yountville, California)

The coordination process with the Department consists of ongoing information exchange and document development initiated at a meeting in December 2003. Permitting procedures for Partners in Restoration permit coordination programs with the California Department of Fish and Game are directed by the *Memorandum of Agreement between the California Department of Fish and Game, the Natural Resource Conservation Service, and Resource Conservation Districts Regarding the Partners in Restoration Permit Coordination Program and Streambed Alteration Notification and Agreements (MOA)*. The MOA (Appendix 3) outlines the permit coordination programs in general and the procedural requirements specific to a program under the MOA. These procedural requirements include, but are not limited to, the following:

- the development of a template 1602 agreement specific to a Partners in Restoration permit coordination program
- requirements of the Cooperator Agreements for individual projects
- procedures for annual notification, reporting, and Department review of individual projects
- fees

It also outlines MOA amendment procedures and other roles and responsibilities of the signatories.

The draft template 1602 agreement for the Alameda County Permit Coordination Program is included in Appendix 3. It outlines general conditions that apply to all projects and special provisions or procedures that apply to specific conservation practices. ACRCD/NRCS's environmental protection measures correspond to these conditions and provisions. This correspondence is outlined in Appendix 4.

Currently, the MOA is undergoing revision. The revised MOA will include the Alameda County Permit Coordination Program and the Santa Cruz County Permit Coordination Program.

As a State agency, the Department cannot finalize its approval until the CEQA process is completed.

San Francisco Bay and Central Valley Regional Water Quality Control Boards

(Contact: Brian Wines, Water Resources Control Engineer, California Environmental Protection Agency- San Francisco Bay Regional Water Quality Control Board, Oakland, California)

Initiated at a meeting on August 4, 2003, the coordination process with the San Francisco Bay Regional Water Quality Control Board (Board) consists of ongoing discussions and information exchange by phone, mail, and email. On April 1, 2004, ACRCDD submitted an application to the Board for 401 Certification and/or Report of Waste Discharge (under the Clean Water Act and Porter-Cologne Act, respectively). A duplicate copy was submitted to the Central Valley Regional Water Quality Control Board (CVRWQCB), with a request for clarification if a separate application was needed. On April 21, 2004, CVRWQCB responded that a separate application was not required as most of the project is in region 2's (San Francisco Bay RWQCB) jurisdiction. A joint coordination meeting with the Board and the Corps was held on June 2, 2004. In July 2004, following review of a draft of this Initial Study and Proposed Negative Declaration, the Board provided preliminary comments to ACRCDD/NRCS. ACRCDD and NRCS are working with the Board to incorporate its responses into the description of the program.

As a State agency, the Board cannot finalize its approval until the CEQA process is completed.

An example of a waste discharge requirements and water quality certification for a permit coordination program (Navarro River Watershed) can be found at

<http://swrcbnt3.swrcb.ca.gov/rb1/orders/042303NavarroWDR.pdf> .

County of Alameda Public Works Agency (ACPWA)

(Contact: Gary Moore, Permits/Grading Supervisor, County of Alameda Public Works Agency, Hayward, California)

The coordination process with ACPWA, Grading Division, consists of ongoing information exchange by phone, mail, and email as well as a scoping meeting on January 22, 2004, and a decisional meeting on May 14, 2004. At the latter meeting, Gary Moore stated that, following his review of the Alameda County Permit Coordination Program, he concluded that it was appropriate to grant the program an exemption from the Grading and Watercourse Protection Ordinances of Alameda County according to the rules of these ordinances and that he would provide ACRCDD/NRCS a written statement of his decision, pending review by County Counsel. At a meeting on December 3, 2004, ACRCDD agreed to provide ACPWA with a letter noting ACRCDD's agreement to assume full responsibility for the work and to provide construction control throughout the life of the project in response to the understanding inherent in sections 15.36.040 and 15.36.050, Part B, of ACPWA's grading ordinances.

Local Municipalities

If a project is to occur within the boundaries of a municipality, site-specific permits will be obtained from that municipality.

3.2 PLANNING PROCESS, PERMITTING MECHANISM, AND NEPA COMPLIANCE FOR INDIVIDUAL PROJECTS

NRCS Conservation Planning Process

ACRCDD/NRCS utilizes a rigorous planning process before offering recommendations to cooperators. As a federal agency, NRCS must ensure project works are compliant with the National Environmental Policy Act (NEPA). NRCS is required to conduct an Environmental Evaluation for assistance it provides according to the NRCS-NEPA rules (7CFR 650), which became effective in 1979 and as updated by

California Amendment CA4 in 2000. This rule prescribes the assessment procedures under which NRCS-assisted actions are to be implemented. The procedures are designed to insure that environmental consequences are considered in decision-making and to allow NRCS to assist individuals and non-federal public entities to take actions that protect, enhance, and restore environmental quality.

ACRCD/NRCS uses the NRCS 9-step conservation planning process to customize a management plan unique to the conditions of a local property and its manager. A conservation plan describing the selected management system is prepared for the cooperators, and a NEPA-compliant Environmental Assessment Worksheet is completed as part of each conservation plan to document potential short-term, long-term, and cumulative effects of the proposed actions as well as the on-site and off-site impacts. The NRCS planning steps and the associated checklists, inventory forms, and other planning documents are listed below in Table 2. Copies of the forms and planning documents are provided in Appendix 2. Alternatives are evaluated by the cooperators and NRCS, which result in a specific land use plan including detailed recommendations and an engineered plan, if necessary.

TABLE 2: NRCS Conservation Planning Process

	NRCS PLANNING STEP	DOCUMENT USED	RESULTS
Step 1	Consultation		Identify resource problems with the cooperators (land operator) and other specialists.
Step 2	Determine objectives		Identify, agree on, and document the cooperators' objectives.
Step 3	Inventory the resources	<i>Checklist of Resource Problems or Conditions.</i>	The checklist prompts the inventory team to provide quantitative or qualitative data in several resource categories: Soils, Water, Air, Plants, Animals, and Human (social, economic, and cultural).
Step 4	Analyze resource data	<i>Site Specific Practices Effect Worksheet</i>	Each of the resource problems or concerns identified during the inventory is itemized in a matrix. All current resource management practices and all potential improved practices are also listed in the matrix. The anticipated negative or positive effects of each of the listed practices on each of the resource concerns are evaluated in the matrix using a three-point scale.
Step 5	Formulate alternative solutions	<i>Resource Management System (RMS) Guidesheet.</i>	Groups of practices ('resource management systems') that result in a significant positive improvement in all resource problem categories are identified as alternative systems in the guidesheet. Other groups of practices are also listed as additional alternatives as long as they do not result in a negative effect on resource problems. This process is also known as an "alternatives analysis." Ideally the minimal number of practices that can collectively address all resource problems provides the most efficient and economical alternative for the cooperators.
Step 6	Evaluate alternative solutions	<i>Conservation Effects Worksheet</i>	To assist the cooperators in selecting an alternative system, the NRCS staff may choose to present each alternative resource management system (RMS) in contrast with current management conditions in the worksheet. The net effects of implementing the RMS can be shown in terms of resource protection, crop production improvements, economic costs or other terms of interest to the cooperators.

			decision-maker.
Step 7	Cooperator determines course of action	<i>Conservation Plan and Environmental Assessment Worksheet</i>	Select optimal set of conservation practices to maximize resource protection and enhancement. NRCS prepares conservation plan and specifications and project Environmental Assessment Worksheet.
Step 8	Cooperator implements plan		Practices are implemented according to NRCS recommended design, standards, and specifications and with NRCS on-site technical support, if needed.
Step 9	Evaluation of results of plan		Evaluate effectiveness of plan and make adjustments as needed.

ACRCD and NRCS evaluate the impacts of proposed projects to ensure a net environmental gain. Funding for NRCS's Environmental Quality Incentives Program (EQIP) is competitive, awarded on the basis of environmental improvements. The projects that rank the highest in terms of environmental benefits are most likely to be awarded funds.

Projects with potential to result in significant adverse environmental impacts are not permitted under this coordinated permit project. If significant adverse environmental impacts are expected to result from a proposed project, the cooperator will be encouraged to consider alternative actions. If no acceptable alternative can be identified, the landowner will be directed to prepare a project-specific Environmental Impact Statement (EIS) and CEQA document and to obtain project-specific permits.

Establishing Permit Conditions

The permits issued for the program will establish specific conditions for the implementation of the conservation practices. These conditions may include temporal or seasonal constraints, limitations on the size or general location of the specified practices, and/or pre-construction notification for specific activities. These types of conditions will avoid or minimize the impact of the work on water quality, special-status species, and sensitive habitats and will ensure that the regulatory agencies' mandates are honored. The terms and conditions from regulatory agencies will be included with project design standards and specifications for each technical assistance and cost-share project implemented under this project.

Projects that do not qualify for the permit coordination project (either because they use practices other than the 18 listed practices or cannot meet the size limits or permit conditions) use the traditional permit mechanism wherein the cooperator is responsible for obtaining individual permits from each regulatory agency for the proposed work.

Maintenance and Monitoring of Conservation Practices

The erosion repairs to be installed will be designed to not need replacement or additional capital costs. As part of their Cooperator Agreement, landowners agree to monitor the conservation practice, and

ACRCD/NRCS will monitor on-site compliance with all permit requirements until implementation of practices is complete.

Pre-construction and construction monitoring of ACRCD-sponsored conservation practices will consist of surveys and/or inspections, as needed, to ensure on-site compliance with all permit requirements until implementation of practices is complete. ACRCD/NRCS, in consultation with the U.S. Fish & Wildlife Service (Service), will determine the expertise needed by the monitor. Some environmental protection measures, including but not limited to the relocation of California red-legged frogs, can only be carried out by a qualified individual whose credentials have been reviewed and approved by the Service.

Post-construction monitoring of ACRCD-sponsored conservation practices will consist of erosion control inspections to determine if the system is still functioning as planned, photo-documentation, and preparation of an annual report to regulators discussed in the Notification and Reporting section below. Photographs are taken from staked photo points before construction and annually thereafter throughout the term of the monitoring program. Photographs include both close-up and long-range shots. All construction sites are inspected at least twice during the first rainy season after installation. Each site will also be inspected once at the end of the rainy season for the first 5 years following construction. In many cases, monitoring and maintenance will continue beyond the life of the program because monitoring and maintenance of NRCS conservation practices is required for the life of a conservation practice. The average life for most conservation practices included in the program is 10 years.

Additional maintenance /corrective actions would be based on the results of (1) annual status reviews and (2) site surveys following storm events to evaluate structures, channel stability and functioning of erosion control methods/materials. Any problems would trigger maintenance or corrective actions.

Procedures for Complying with Permits

ACRCD will administer the project using a manual designed specifically for the Alameda County permit coordination program. The guidebook creates a process for ensuring individual projects qualify for the program; lists conservation practice selection, design, and implementation criteria and conditions required by the agencies in their individual permits; provides information on endangered species habitat; and details the program monitoring and reporting requirements..

Training for ACRCD/NRCS staff working on this program will clearly stipulate the special conditions of this program and the level of attention that ACRCD/NRCS project staff is required to expend on design and monitoring duties for individual projects that may affect listed species. A project personnel education program (General Environmental Protection Measure 1) will be conducted prior to the implementation of any individual project. Details of this education program are given on pages 31-32.

Compliance and Non-Compliance

Prior to implementation of the practices, ACRC/D/NRCS will clearly notify the cooperator of the permit terms and conditions through a signed Cooperator Agreement. If a cooperator does not carry out work in compliance with project design standards and specifications, including the previously agreed upon terms and conditions, ACRC/D or NRCS will notify the cooperator and work directly with them to resolve the problem. If the cooperator still fails to comply, ACRC/D or NRCS will notify the cooperator that their activities are inconsistent with the standards and specifications contained in the conservation plan or cost-share contract and that the cooperator's actions are no longer covered by the project's permits and agreements. The cooperator will then be responsible for obtaining regulatory review and individual permits from the appropriate regulatory agencies and will be held liable for all violations.

Notification and Reporting

By late spring each year of the program, ACRC/D/NRCS will notify permitting agencies of the individual conservation projects planned for construction that year under the permit coordination program. This notification procedure provides for review of individual projects and the incorporation of additional environmental protection measures by regulatory agencies on a project-by-project basis to ensure full resource protection and application of adaptive management.

Annual Notification of Proposed Projects

Annually, ACRC/D/NRCS will provide regulatory agencies, including but not limited to the U.S. Fish and Wildlife Service, U.S. Army Corps of Engineers, San Francisco and Central Valley Regional Water Quality Boards, California Department of Fish and Game, and Alameda County Public Works Agency, with written notification of the projects proposed for the construction season. Notification will be presented in a table containing the following site-specific information for each project:

- Project identification and location
- Nature of work and description of project need.
- Approved practices to be installed.
- Location of work to be performed.
- Project dimensions (width, length, volume and slope, if applicable).
- Approximate volume of discharge below the ordinary high water mark (OHWM).
- When native vegetation will be removed and revegetation will occur, a visual assessment of dominant native shrubs and trees, approximate species diversity, and approximate coverage
- Environmental setting – surrounding habitat, adjacent land use.
- Potential presence of listed species
- Estimated number of creek crossings and type of vehicle.
- Presence of barriers to aquatic species migration.
- Name and telephone number of the ACRC/D/NRCS project manager who will receive calls from citizens with questions regarding the project

Upon receipt of the annual notification list, regulators will review the individual design and construction specification for each proposed project. They may request a meeting or site visit to review the projects. They will verify consistency of individual projects with the goals and conditions of the program and may require additional project-specific conditions be added to the Cooperator Agreement, which will then be included as part of the conservation and restoration plan for the individual project.

Annual Reporting

ACRCD/NRCS will report the status of all projects to permitting agencies in the form of an annual post-construction report due January 31 of each year. The report will list participating landowners, describe each project purpose, area affected, natural biological enhancements, and amount of yardage, cut, and slope of the work. It will list conservation benefits and any net gains in wetlands and riparian areas, describe actions taken to avoid adverse effects to listed species, and provide photo documentation of before and current site conditions.

4.0 ENVIRONMENTAL CHECKLIST

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
I. AESTHETICS -- Would the project:				
a) Have a substantial adverse effect on a scenic vista?				X
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				X
c) Substantially degrade the existing visual character or quality of the site and its surroundings?				X
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?				X

Discussion of Aesthetics: The project will improve area aesthetics by enhancing and restoring native California vegetation along riparian corridors and wetlands at project sites. Short-term impacts on the scenic vista and visual character of project sites that may occur during construction of restoration and conservation projects will be immediately mitigated by the planting of native vegetation and grasses in disturbed areas. When completed, the restoration and conservation projects will result in long-term, improved area aesthetics.

Finding: No Impact

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
II. AGRICULTURE RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-				X

agricultural use?

- | | |
|---|---|
| b) Conflict with existing zoning for agricultural use, or a Williamson Act contract? | X |
| c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use? | X |

Discussion of Agricultural Resources: Implementation of the conservation practices will not adversely impact agricultural values and will not result in a substantial alteration in the present or planned land use of the area or a reduction in the acres devoted to agriculture. One purpose of the project is to improve agricultural sustainability and operations in the watersheds through stabilization of eroding soils and control of sediment discharges from agricultural land to watercourses. Several of the practices are specifically designed to remove pollutants from agricultural runoff before they enter the stream system and to limit livestock presence in and around watercourses.

Finding: No Impact.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
III. AIR QUALITY -- Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?				X
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?				X
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?				X
d) Expose sensitive receptors to substantial pollutant concentrations?				X
e) Create objectionable odors affecting a substantial number of people?				X

Discussion of Air Quality: Although project activities may involve short-term emissions from construction equipment, implementation of the conservation practices will not have a significant affect on air quality and will not create odors.

Finding: No impact.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES -- Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?			X	
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?			X	
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				X
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				X
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				X
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				X

Discussion of Biological Resources:

The intent of the permit coordination program and the associated conservation practices is to reduce erosion and sedimentation and enhance habitat values in Alameda County watersheds. Project implementation would contribute to the health of the natural resources and agricultural sustainability in Alameda County. As a result of these proposed conservation activities, wildlife habitat values on private land would be increased, listed species protected, and water quality improved in Alameda County streams.

Each individual project included under the permit coordination program will receive careful planning utilizing NRCS's nine-step conservation planning process (pages 46-49). As detailed in the Description of the Proposed Action (pages 19-44), ACRC/ NRCS have incorporated a full-range of environmental protection measures (general; conservation-practice-specific; and species-specific measures) into the program. These measures are essential, inseparable components of the specific design and plan for each individual project and will prevent significant impacts and will minimize any temporary, highly localized, and minor impacts that may occur during installation and maintenance of the conservation practices.

The program also includes an annual notification procedure providing review and the addition or modification of protective measures by regulatory agencies so as to provide for greater resource protection and the application of adaptive management on a project by project basis. Only slight modifications are expected because ACRC/ NRCS environmental protection measures are both detailed and comprehensive. Furthermore, the Service's analysis of the effects of the permit coordination program on federally listed and proposed species is based on the incorporation of ACRC/ NRCS's protective measures into the project description. The correspondence of the protective measures with conditions required by the California Department of Fish and Game is outlined in Appendix 4.

a) Protection of Species Identified as Candidate, Sensitive, or Special Status Species in Local or Regional Plans, Policies, or Regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service

Implementation and maintenance of the conservation practices will be conducted in the minimum footprint possible. Additionally, habitat disturbance and other construction-related effects to the federally and state-listed species will be limited to periods that federal and state wildlife agencies indicate would have negligible impact on the migration, breeding, sheltering, or feeding of the species. Project activities that have potential to result in short-term impacts include soil excavation, 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 burial, trampling or crushing of vegetation from equipment and foot traffic. Numerous environmental protection measures will be incorporated into the project to avoid and minimize any of these potential adverse effects. The effects analysis in the U.S. Fish and Wildlife Service's programmatic biological and conference opinion, issued on August 12, 2004, is based on the inclusion of these measures in the description of the program action. The programmatic opinion provides an incidental take statement to cover specific project activities on federally listed and proposed species that may occur in the program area (Table 3). The 18 conservation practices selected by ACRC/ NRCS for inclusion in the permit coordination program are designed to result in enhanced habitat values for both plant and animal populations, thus providing net environmental benefits to federally listed and other special status species.

On a long-term basis, all practices provide for improved aquatic, riparian, and/or upland habitat and decreased sedimentation in water bodies to benefit fish, amphibians, reptiles, resident and migratory birds, and many other species. For example, the stream channel stabilization practice involves removing accumulated sediment from dry creek beds, which will increase the number of deep pools. Aquatic animals, such as the California red-legged frog, require these pools to survive the long, dry California summers. Practices that enhance riparian vegetation and development of habitat values (including, but not limited to, critical area planting, filter strips, riparian forest buffer, stream habitat improvement and management, stream channel stabilization, and stream bank protection) will provide shelter from predators and breeding, rearing, foraging, and basking sites for special status species known to occur in the watersheds. The proposed program would also result in the repair and maintenance of suitable pond habitat for the California tiger salamander. Upland species and aquatic species that use upland habitats

during aestivation and dispersal may be favored by better livestock distribution through spring development and by control of overland runoff. These species include the Callippe silverspot butterfly, California tiger salamander, California red-legged frog, Alameda whipsnake, and San Joaquin kit fox. (Also, see Item b regarding NOAA Fisheries concurrence that the permit coordination program is not likely to adversely affect the Central California Coast steelhead.)

Control of erosion (See VI: Geology and Soils) and polluted runoff will improve the quantity and quality of freshwater input into the creeks, streams, and ponds. Removal and control of non-native plant species will reduce the extent to which exotics invade habitat and displace native flora. The net conservation benefits that will result from implementation and maintenance of the conservation practices for species include creating high quality aquatic, riparian, and upland habitat values; reducing habitat fragmentation and increasing connectivity; maintaining or increasing species populations; and buffering sensitive areas.

The federally and state-listed and proposed species with potential to occur in the program area are shown in Table 3. Table 3 also includes three additional state species of concern: western spadefoot toad, western pond turtle, and western burrowing owl. Species-specific environmental protection measures for each species included in Table 3 are detailed on pages 36-44. Table 4 identifies those species with no or very low potential to occur in the program area.

Table 3. Federally Listed and Proposed Species and Selected State Species of Concern with Potential to Occur in the Alameda County Permit Coordination Program Area		
Common Name	Scientific Name	Status
PLANTS		
Large-flowered fiddleneck	<i>Amsinckia grandiflora</i>	Federally endangered, State endangered
Robust spineflower	<i>Chorizanthe robusta</i> var. <i>robusta</i>	Federally endangered
Santa Cruz tarplant	<i>Holocarpha macradenia</i>	Federally threatened, State threatened
INVERTEBRATES		
Callippe silverspot butterfly	<i>Speyeria callippe callippe</i>	Federally endangered
AMPHIBIANS		
California red-legged frog	<i>Rana aurora draytonii</i>	Federally threatened, State species of concern
California tiger salamander	<i>Ambystoma californiense</i>	Federally proposed threatened, State species of concern
Western spadefoot toad	<i>Spea hammondi</i>	State species of concern
REPTILES		
Alameda whipsnake	<i>Masticophis lateralis euryxanthus</i>	Federally threatened, State threatened
Western pond turtle	<i>Clemmys marmorata</i>	State species of concern
BIRDS		
Western burrowing owl	<i>Athene cunicularia hypugaea</i>	State species of concern
MAMMALS		
San Joaquin kit fox	<i>Vulpes macrotis mutica</i>	Federally endangered, State threatened

Key for Tables 3 and 4:

Federally Endangered - Listed (in the Federal Register) as being in danger of extinction.

Federally Threatened - Listed as likely to become endangered within the foreseeable future.

Federally Proposed - Officially proposed (in the Federal Register) for listing as endangered or threatened.

NOAA Fisheries - Species under the jurisdiction of NOAA Fisheries ([National Marine Fisheries Service](http://www.nmfs.gov)).

State Endangered - Listed as endangered in the California Code of Regulations, Title 14, Section 670.5).

State Threatened - Listed as threatened in California Code of Regulations, Title 14, Section 670.5).

State Fully Protected - May not be taken or possessed without a permit from the Fish and Game Commission

State Species of Concern (SSC) - Applies to animals not listed under the federal Endangered Species Act or the California Endangered Species Act, but which nonetheless 1) are declining at a rate that could result in listing, or 2) historically occurred in low numbers and known threats to their persistence currently exist. SSC share one or more of the following criteria:

1. occur in small, isolated populations or in fragmented habitat, and are threatened by further isolation and population reduction;
2. show marked population declines. Population estimates are unavailable for the vast majority of taxa. Species that show a marked population decline, yet are still abundant, do not meet the Special Concern definition, whereas marked population decline in uncommon or rare species is an inclusion criterion;
3. depend on a habitat that has shown substantial historical or recent declines in size. This criterion infers the population viability of a species based on trends in the habitats upon which it specializes. Coastal wetlands, particularly in the urbanized San Francisco Bay and south-coastal areas, alluvial fan sage scrub and coastal sage scrub in the southern coastal basins, and arid scrub in the San Joaquin Valley, are examples of California habitats that have seen dramatic reductions in size in recent history. Species that specialize in these habitats generally meet the criteria for Threatened or Endangered status or Special Concern status;
4. occur only in or adjacent to an area where habitat is being converted to land uses incompatible with the animal's survival;
5. have few California records, or which historically occurred here but for which there are no recent records; and
6. occur largely on public lands, but where current management practices are inconsistent with the animal's persistence.

Table 4. Federally Listed and Proposed Species Whose Habitats are Excluded from the Program Area and Therefore with No or Low Potential to Occur in the Alameda County Program Area		
Common Name	Scientific Name	Status
PLANTS		
Pallid manzanita (=Alameda or Oakland Hills manzanita)	<i>Arctostaphylos pallida</i>	Federally threatened, State endangered
Contra Costa goldfields	<i>Lasthenia conjugens</i>	Federally endangered
Presidio clarkia	<i>Clarkia franciscana</i>	Federally endangered, State endangered
Palmate-bracted bird's-beak	<i>Cordylanthus palmatus</i>	Federally endangered, State endangered
Showy Indian clover (likely to be extirpated from Alameda County)	<i>Trifolium amoenum</i>	Federally endangered
INVERTEBRATES		
Bay checkerspot butterfly	<i>Euphydryas editha bayensis</i>	Federally threatened
Longhorn fairy shrimp	<i>Branchinecta longiantenna</i>	Federally endangered
Vernal pool fairy shrimp	<i>Branchinecta lynchi</i>	Federally threatened
Vernal pool tadpole shrimp	<i>Lepidurus packardi</i>	Federally threatened
FISH		
Central California Coast steelhead (steelhead)	<i>Oncorhynchus mykiss</i>	Federally threatened (NOAA Fisheries)
BIRDS		
Bald eagle	<i>Haliaeetus leucocephalus</i>	Federally threatened, State

	endangered, State fully protected
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ACRCD/NRCS actions covered by the proposed Alameda County Permit Coordination Program would be designed, planned, installed, and maintained in a manner to result in net environmental benefits to federally listed and proposed species and other special status species.

b) Protection of Riparian Habitat or other Sensitive Natural Communities

Restoration of riparian habitats is central to the purpose of the project. The conservation practices that increase the quantity and improve the quality of riparian habitat include, but are not limited to, critical area planting, pipeline installation, riparian forest buffer, spring development, stream habitat improvement and management, stream bank protection, and stream channel stabilization. These practices improve the quality of riparian habitat by stabilizing eroding soils, enhancing and restoring native riparian vegetation, preventing cattle from grazing in riparian areas, and managing sources of erosion that deliver sediment to streams and ponds.

Many of ACRCD/NRCS's environmental protection measures are designed to avoid and/or minimize disturbance to riparian areas during installation and maintenance of the conservation practices.

Additionally, the correspondence of ACRCD/NRCS's measures with California Department of Fish and Game's (DFG) conditions required by the Memorandum of Agreement/ Draft 1602 Template Agreement (Appendix 3) is outlined in Table 6 (Appendix 4). Table 5 shows three examples.

Table 5: Three Examples Of Correspondence Between ACRCD/NRCS's Measures And California Department Of Fish And Game's Template 1602 Conditions

	<u>ACRCD/NRCS Environmental Protection Measure</u>	DFG General Condition (GC) Number	<u>DFG General Condition (See Appendix 3B.)</u>
Ex. 1	<u>General Environmental Protection Measure 4:</u> Limitation on Earthmoving and Habitat Disturbance (p. 32)	DFG GC11	Except with approval from the department staff, there shall be no cutting or removal of native trees 4 inches or greater dbh (diameter at breast height), except willows, for which there shall not be cutting or removal of trees 6 inches or greater dbh. for any permitted removal of any native tree, the root structure of the tree shall be left in tact unless authorized by the department staff.
Ex. 2	<u>General Environmental Protection Measure 5:</u> Limitations on Construction Equipment (p.33) <u>Measure Specific to Stream Habitat Improvement and Management (p. 27):</u> This practice will be designed and implemented in accordance with the California Department of Fish and Game's <i>California Salmonid Stream Habitat Restoration Manual</i> (Flossi et al. 1998)	DFG GC12	The use or storage of petroleum-powered equipment shall be accomplished in a manner to prevent the potential release of petroleum materials into waters of the state (Fish and Game Code 5650).
Ex. 3	<u>General Environmental Protection Measure 8:</u> Conditions for Erosion	DFG GC5	The implementation and maintenance of projects shall not result in sediment deposition in downstream areas.

Control (p. 34)

**Environmental Protection Measure
Specific to Stream Habitat**

Improvement and Management (p. 27): This practice will be designed and implemented in accordance with the California Department of Fish and Game's *California Salmonid Stream Habitat Restoration Manual* (Flossi et al. 1998)

On May 28, 2004, NOAA Fisheries issued a letter of concurrence with NRCS's determination that the program is not likely to adversely affect Central California Coast steelhead (Contact: Maura E. Moody, Santa Rosa Office). Even though the program excludes all streams in Alameda County currently used by anadromous fish and all reaches of streams below barriers to anadromous fish migration, it holds future, long-term benefit for steelhead because it would result in improvements to riparian habitats and water quality in historic and potential salmonid streams. These improvements would benefit the Central California Coast steelhead once barriers to migration are removed. They complement the numerous plans and efforts for salmonid restoration in Alameda County. One example is the Zone 7 Water Agency Stream Management Master Plan that outlines plans to remove fish passage barriers in Arroyo Mocho, Arroyo del Valle, and Arroyo de la Laguna (<http://www.zone7water.com/Smmp.html>).

Sedimentation in Alameda County watersheds has been identified as negatively impacting instream conditions for steelhead trout, such as water temperature, substrate, and water depth. Many of the processes and factors that contribute to sedimentation—agricultural inputs, streambank erosion, and lack of vegetation and canopy—would be addressed by the program. Individual conservation projects under the program would include well-designed embankments and other structures to reduce or eliminate sediment run-off and bank erosion. Streams and creeks will be repaired and protected to prevent bank erosion, degradation, or collapse and thus reduce the delivery of sediment delivery to potential spawning habitat for steelhead. NOAA Fisheries noted in its letter of concurrence that all habitat improvement and conservation practices installed in streams that may become accessible in the future to anadromous steelhead will be designed and installed in accordance with the California Department of Fish and Game's *California Salmonid Stream Habitat Restoration Manual* and NOAA Fisheries *Guidelines for Salmonid Passage at Stream Crossings*.

c) Protection of Wetlands

Projects in tidally-influenced wetlands and vernal pools are not included in the permit coordination program, and only a very small amount of program activities would occur in other types of federally protected wetlands as defined by Section 404 of the Clean Water Act.

The ACRC/CD/NRCS conservation planning process uses the California Environmental Assessment Worksheet to determine effects on wetlands. (The ACRC/CD/NRCS planning documents are provided in Appendix 2 of this document.) Short-term impacts to wetlands may take the form of 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 burial, trampling, or crushing of vegetation from equipment and foot traffic.

Benefits to wetlands from the conservation practices include the following:

- restoring natural wetland functions
- stabilizing erodible soils to prevent soil accumulation in wetlands and waterways
- collecting sediments before they enter waterways and wetlands
- providing watering areas for livestock away from sensitive habitats

NRCS is required to show a net gain on all practices associated with wetlands.

d) Movement of Native or Migratory Fish or Wildlife

By increasing habitat connectivity, the project will result in improved aquatic, riparian, and upland movement opportunities for many species.

e) Avoiding Conflict with Local Policies or Ordinances

The project has been reviewed for consistency and is consistent with local ordinances including the Alameda County Zoning Ordinance and Alameda County General Plan. The Alameda County Public Works Agency has exempted individual projects implemented under the program from the Grading and Watercourse Protection Ordinances.

f) Conflict with Provisions of an Adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other Approved Local, Regional, or State Habitat Conservation Plan.

The project has been reviewed for consistency with adopted Habitat Conservation Plans, Natural Community Conservation Plans, or other approved local, regional, or state habitat conservation plans. No adopted Habitat Conservation Plans or Natural Community Conservation Plans are currently in place in the program area.

Finding: Less than significant impact

Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
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V. CULTURAL RESOURCES -- Would the project:

- | | |
|---|---|
| a) Cause a substantial adverse change in the significance of a historical resource as defined in '15064.5? | X |
| b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to '15064.5? | X |
| c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? | X |
| d) Disturb any human remains, including those interred outside of formal cemeteries? | X |

ACRCD and NRCS policies (General Manual 420, Part 401) ensure that the effects of conservation activities on historic properties are considered in the earliest planning stages and that cultural resource protection is accomplished as efficiently as possible. As with all ACRCD/NRCS conservation projects, including those covered by the watershed-based permits, ACRCD/NRCS identifies, examines, considers, and avoids potential impacts to cultural resources. Any conservation or restoration activities that would cause an adverse impact on cultural resources do not qualify for the Alameda County Watersheds Permit Coordination Project. All projects implemented under this project operate under 36 CFR 800.

Finding: No impact

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
VI. GEOLOGY AND SOILS -- Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				X
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				X
ii) Strong seismic ground shaking?				X
iii) Seismic-related ground failure, including liquefaction?				X
iv) Landslides?				X
b) Result in substantial soil erosion or the loss of topsoil?			X	
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?				X
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?				X
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				X

b) Discussion of Geology and Soils

The risk of slope failure, liquefaction, or structural failure is addressed during the planning process. ACRD's federal partner, NRCS (formerly the Soil Conservation Service), produces the Soil Survey of Alameda County and specializes in soil science interpretations. NRCS engineers consider soil physical factors when selecting and designing conservation measures. The ACRCD/NRCS planning process and policies require all projects to be evaluated for soil hazards and mitigated if appropriate. ACRCD/NRCS

do no work in areas of known geologic instability without approval of a certified engineer. Therefore, there is no potential for a negative impact to geology or soils.

Best management practices will be utilized during construction to prevent soil loss and polluted runoff (See discussion in the Environmental Protection Measures section above). For example, when implementing or maintaining a critical area planting above the high water line, coir rolls will be utilized, if needed, to keep sediment from flowing into the adjacent waterbody. Annual review by ACRD/NRCS will occur until the critical area planting is established to control erosion.

b) Net Reduction in Sediment Delivery to Streams Every conservation practice covered by this project has been determined by the ACRCD and its federal partner, NRCS, to have a net environmental benefit, observable in the first year after construction. Activities in the program have the stated purposes of reducing or preventing erosion and sediment delivery to waterways and restoring riparian areas. Furthermore, ACRCD and NRCS, in discussion with regulatory agencies, have developed the many environmental protection measures described above to avoid and minimize impacts during installation of the conservation practices. These protective measures function to prevent construction-related erosion and sediment release to waterbodies. Reduced erosion and consequent improvement in water quality of Alameda County streams are primary objectives and benefits of the Alameda County permit coordination program; however, some temporary, construction-related increase in sediment would occur. The following estimates compare the long-term reduction in sediment delivery to Alameda County streams and reservoirs resulting from instream projects and the installation of upland detention basins with the short-term increases from construction. These estimates show that any contributions of sediments from construction are offset within the first year by the reduction in sediment delivery over the 5-year life of the permit coordination program.

Projections for the sum of the effects in terms of estimated sediment reduction (positive) and construction-related sediment release (negative) for the estimated number of instream projects (17 over a course of five years) and installation of upland detention basins (12 over a course of five years) are shown in Figures 1 and 2 below. The estimates are based on the following assumptions:

1. The estimate of 17 instream projects and 12 upland detention basins is based on ACRCD and NRCS field office assessment of project need, landowner demand, and previous experience in other watersheds.
2. Instream projects are estimated to reduce soil loss by 162 cubic yards the first year they are installed. This is based on evaluation of topography, hydrology, and erodibility of soil in likely project areas. The estimated average area of destabilized soil in and around an instream project site is 30,000 square feet. Untreated, these areas will typically suffer between 0.5 and 3.25 inches of scour erosion per year. An average of 1.75 inches per year across the destabilized area is used to estimate the prevented soil loss.
3. The benefits of instream projects in their second and subsequent years are estimated at 80% of the benefits realized in the first year. This allows for a 20% loss of functioning as a result of less than perfect maintenance. Thus, a project resulting in a benefit of 160 cubic yards in the first year is expected to result in a benefit of 128 cubic yards for each subsequent year.
4. Estimates of sediment detained in upland basins are related to the capacity of basins, which are designed for the 25-year storm event. The average capacity of a basin is 16,000 cubic feet, or 592 cubic yards. Twenty-five year storm events occur in 1 out of every 4 years on average, so basins

would fill in approximately 4 years. Thus, the estimate for the average reduction in sediment release the first year a basin is in place is 25% of the basin capacity, or 148 cubic yards.

5. Thus, instream projects are estimated to reduce sediment release to Alameda County streams and reservoirs by 6,338 cubic yards over the life of the program, and upland detention basins are estimated to reduce sediment release by 1,776 cubic yards over the life of the program.

The estimated aggregate benefit of project work is 8,114 cubic yards of sediment reduction.

6. Estimates for short-term, construction-related impacts are based on destabilized soil surface areas described for instream (item 2 above) projects. For stream-related work, an estimate of 0.25” of soil loss, due to stream scour of newly vegetated slopes in the first winter, is used. This would result in a potential disturbance of 23 cubic yards per project, with an estimate of 17 instream projects installed over the life of the program.

Potential soil loss from upland detention basins is estimated to be 0.125” on newly placed embankments. This soil loss is due to direct rainfall impact and will be eliminated in subsequent years as vegetation becomes established. The potential loss on upland sites is 1.5 cubic yards per project, with an estimate of 12 upland detention basin projects installed over the life of the program.

The estimated aggregate negative impact of project work is 391 cubic yards for instream projects (1 instream project for the first year and 4 instream projects during the last 4 years each contributing 23 cubic yards during the year of construction) and 18 cubic yards for upland detention basins (12 detention basins each contributing 1.5 cubic yards during the year of construction), with no ongoing impact. The combined (instream and upland) estimated total for construction-related sediment release is 409 cubic yards. Therefore, the estimated net benefit is a reduction of 7,705 cubic yards in sediment released to Alameda County streams and reservoirs.

Finding: Less than significant impact

Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
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VII. HAZARDS AND HAZARDOUS MATERIALS -- Would the project:

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?		X	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or			X

proposed school?

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

- e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area? X

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

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

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

Discussion of Hazards and Hazardous Materials: Conservation actions with the potential to release hazardous materials into waterways are not covered by the program. Some use and storage of earthmoving equipment at the site will occur during the implementation of the practices. ACRC and NRCS have incorporated many protective measures into the proposed action to ensure that adverse impacts do not occur during routine operations. General Environmental Protection Measure 5 outlines limitations on construction equipment that will be implemented to ensure that contamination of habitat does not occur during routine operations. This measure (page 33) limits construction equipment use and maintenance and ensures that the use or storage of petroleum-powered equipment will be accomplished in a manner to prevent the potential release of petroleum materials into waters of the state (Fish and Game Code 5650). As described in General Environmental Protection Measure 10 (page 35) the use of herbicides, pesticides, and chemical fertilizers will be avoided to the greatest extent possible. If necessary, a glyphosate-based herbicide may be used to control established stands of exotics, including, but not limited to, Himalayan blackberry, Cape ivy, and giant reed, or invasion of exotics into restoration plantings. Herbicides will be applied to those species according to the registered label conditions. Herbicides will be applied directly to plants and not spread upon any water or where they can leach into waterways during rains. Herbicide use would be coordinated with the Service.

Finding: Less than significant impact

Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
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VIII. HYDROLOGY AND WATER QUALITY -- Would the project:

- | | |
|---|---|
| a) Violate any water quality standards or waste discharge requirements? | X |
| b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)? | X |
| c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site? | X |
| d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site? | X |
| e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff? | X |
| f) Otherwise substantially degrade water quality? | X |
| g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map? | X |
| h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows? | X |
| i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam? | X |
| j) Inundation by seiche, tsunami, or mudflow? | X |

Discussion of Hydrology and Water Quality.

Design criteria, implementation, and maintenance of the ACRC/ NRCS conservation practices are specific to the hydrologic conditions of Alameda County watersheds. The conservation practices selected

for coverage by this permit coordination program have a proven ability to result in improvement in hydrology and water quality. They are specifically designed to stem and resolve erosion and sediment problems, to minimize runoff from agriculture, which may contain nutrients, fertilizers, pesticides, and herbicides, and to be installed in such a manner that there is low to no risk of causing environmental impacts. Best management practices and erosion control measures are used both during construction and in the permanent erosion control measures to avoid adverse impacts to adjacent watercourses, hydrology, and water quality.

As described on pages 19-44, ACRC/D/NRCS's environmental protection measures are part of the project description and prevent or reduce to below a level of significance any potentially significant impacts to water quality during construction. These environmental protection measures correspond to the conditions of the Streambed Alteration Agreement MOA/Draft Template 1602 Agreement (Appendix 3) with the Department. This correspondence is outlined in Appendix 4.

a) Adherence to Water Quality Standards or Waste Discharge Requirements

The conservation practices included in the program will adhere to water quality standards and the programmatic federal Clean Water Act §401 Conditions and/or Waste Discharge Requirements. Typical examples of waste discharge prohibitions from the San Francisco Bay and Central Valley Regional Water Quality Control Boards that will apply to installation of the conservation practices include, but are not limited to, the following:

- Discharge of storm water from a facility or activity that causes or contributes to the violation of water quality standards or water quality objectives (collectively Water Quality Standards) is prohibited.
- Creation of a condition of pollution, contamination, or nuisance, as these terms are defined in California Water Code Section 13050(d), is prohibited.
- Discharge of soil, bark, slash, sawdust, or other organic and earthen material from any construction or associated activity of whatever nature into any stream or watercourse in quantities deleterious to fish, wildlife, or other beneficial use is prohibited.
- Placing or disposal of soil, silt, bark, slash, sawdust, or other organic material from any construction or associated activity of whatever nature at locations where such material could pass into any stream or watercourse in the basin in quantities that could be deleterious to fish, wildlife, or other beneficial uses is prohibited.
- Discharge of decant water from any on-site temporary sediment stockpile or storage areas or any other discharge of construction dewatering flows to surface waters outside of the active dredging site is prohibited.
- Maintenance activities that result in the direct or indirect discharge of waste, other than that authorized by this Order, as described in Section 13050(d) of the California Water Code, to surface waters or surface water drainage courses are prohibited unless authorized by separate permit action.

Compliance with prohibitions provided by the local Regional Water Quality Control Boards will mitigate any potential adverse water quality impacts. Implementation and maintenance of best management

practices for stormwater pollution prevention will ensure that construction-related pollutants of concern, such as sediment and petroleum products, do not adversely affect water quality.

b) Groundwater

The Alameda County Permit Coordination Project will not result in depletion of groundwater. Some conservation and restoration activities (such as installation of grade stabilization structures, instream and channel restoration work, stream channel stabilization work, restoration work relating to road stream crossings, and water control structures) may result in minor, short-term changes in the course and direction of surface water movement during construction, which could have a temporary, minor adverse impact on the local groundwater level. However, all listed conservation and restoration activities are designed to enhance both soil and water conditions, providing higher ecological functioning in the watershed. Therefore, long-term impacts are expected to be highly beneficial

c) Drainage Patterns and Erosion

Although there may be some short-term changes in the course or direction of water movement in fresh waters, there will be an overall improvement to hydrology and water quality in the project area. The grade stabilization structure practice involves reduction of stream velocity above and below the structure on a temporary basis to control grade. Improvements to existing farm and ranch roads through the access roads practice will redirect runoff from roads into safer outlets using water bars and/or outsloping.

d) Drainage Patterns and Flooding Rainfall and irrigation runoff and downstream flooding will be reduced as a result of implementation and maintenance of the conservation practices. ACRC and NRCS compute hydrologic runoff estimates for existing land use and management prior to selecting conservation practices. The practices are designed to reduce runoff to the natural background level that would have occurred on the property prior to development of agricultural operations or impervious surfaces. These design objectives are achieved either through improved infiltration or through detention of peak flows. Infiltration is improved through the use of increased vegetative cover of bare soils (critical area planting, filter strips, grassed waterways) and improved agricultural soil and crop management (cover crops, irrigation management). Flooding that could result from the alteration of the course of a stream or river will be avoided through the selection of conservation practices to be applied to watercourses. Work along watercourses covered by this project will promote the use of biotechnical streambank protection. These practices increase the roughness of stream banks, thereby slowing the rate of discharge into downstream streams and rivers. Localized flooding associated with slower discharge would be avoided by increasing the cross-sectional area of the channel or providing for a flood flow terrace as part of the design. Stream channel stabilization that involves sediment removal will increase the capacity of the channel, thereby reducing localized flooding. All work in stream channels will involve the use of NRCS hydrological and engineering procedures and manuals.

e) Runoff and Stormwater Drainage

See discussion in Sections a, c, and d above.

f) Degradation of Water Quality

One of the stated purposes of the project is improvement in water quality. No project will be implemented that will result in long-term degradation. Construction or maintenance activities for the conservation practices will not result in increases in turbidity in the stream (as measured by Nephelometric Turbidity Unit (NTU)) of more than 10% of the upstream background.

g) Housing in the Floodplain

No housing construction is authorized as part of this project.

h) Placement of structures in the 100-year flood hazard area which would impede or redirect flood flows.

Only vegetative or toe rock structures designed to stabilize erosion will be placed in 100-year flood hazard areas. Most of these structures run parallel to watercourses and, therefore, do not pose a risk for redirecting flows away from the flood hazard area. The permit coordination program promotes biotechnical approaches, and because all projects under the permit coordination program are conservation and restoration projects, any use of rock would be designed to facilitate natural stream processes and dynamics with the purposes of achieving stream equilibrium between erosional and depositional processes. Placement of structures that would impede flood flows is not authorized by this program.

i) Flood Risk

Failure of structures included in the permit coordination project poses little to no risk to life and property due to their small size and placement in rural agricultural areas. Levees and dams are not authorized by this permit coordination project. The water and sediment control basin practice can be used to reduce concentrated off-site flow and associated erosion by metering out runoff following large storm events.

j) Inundation by seiche, tsunami, or mudflow

The conservation and restoration projects of the Alameda County Permit Coordination Program do not pose a threat of causing and inundation by seiche, tsunami, or mudflow, or being inundated by such events.

Sources Used: The evidence for the conclusions is drawn from the NRCS Field Office Technical Guide Practice Standards and Specifications (FOTG), the NRCS National Engineering Handbook, and the Engineering Field Manual. Each practice has been developed and field-tested over the past 65 years by NRCS engineers, geologist, biologists, agronomists, and other specialists to arrive at the current national standards and specifications. Modifications for California conditions have been made for some practices, as needed. The expected environmental impacts of each practice under California conditions have been assessed and documented in Conservation Practices Physical Effects included in the NRCS FOTG.

Additionally, NRCS has a programmatic Environmental Impact Statement for conservation planning activities under the National Environmental Policy Act (NEPA). The NRCS has adopted an environmental evaluation procedure for implementation of NEPA for NRCS-assisted actions that do not individually have a significant impact, but which cumulatively may have an environmental impact. Step 3 of the NRCS planning process (pages 46-49) includes the preparation of an environmental assessment worksheet for each project. This document (Appendix 2) inventories and estimates the potential effects on the human environment of alternative solutions to resource problems.

Finding: Less than significant impact

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
IX. LAND USE PLANNING -- Would the project:				
a) Physically divide an established community?				X
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?				X
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?				X

Discussion of Land Use Planning Not Applicable to this project.

The program will not alter existing land uses. However, it is anticipated that installation of the conservation and restoration practices will result in increased agricultural sustainability and improved water quality will provide region-wide benefits. All conservation and restoration activities carried out under the Alameda County Permit Coordination Program will have all required permits and other approvals prior to the implementation of the activity (item b). No adopted Habitat Conservation Plans or Natural Community Conservation Plans are currently in place in the program area (item c).

Finding: No impact

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
X. MINERAL RESOURCES -- Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				X
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan				X

or other land use plan?

Discussion of Mineral Resources: Not applicable to this program.

Finding: No impact.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
XI. NOISE -- Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?				X
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?			X	
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?				X
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?			X	
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				X
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				X

Discussion of Noise:

Temporary ambient noise levels in the program vicinity will not exceed existing noise generated by common agricultural management. Many ranchers currently use earthmoving equipment to retrieve eroded soil, smooth eroded landscape features, and conduct routine agricultural cultivation. It is expected that many of the program activities will reduce erosion and loss of soil and the need for noisy clean-up operations.

Finding: Less than significant impact

Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
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XII. POPULATION AND HOUSING --

Would the project:

- a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? X
- b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere? X
- c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere? X

Discussion of Housing: The Alameda County Permit Coordination Program will not directly or indirectly induce population growth, displace any existing housing or job supply. Most project sites will be located in rural, agricultural areas.

Finding: No impact

Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
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XIII. PUBLIC SERVICES

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

- Fire protection? X
- Police protection? X
- Schools? X

Parks?	X
Other public facilities?	X

Discussion of Public Services:

The Alameda County Permit Coordination Program will not require any additional public services, nor require new governmental facilities.

Finding: No impact

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
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XIV. RECREATION --

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				X
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				X

Discussion of Recreation: The Alameda County Permit Coordination Program will not increase the use of any recreational facility, nor will it include the construction or expansion of such facilities.

Finding: No impact

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
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XV. TRANSPORTATION/TRAFFIC -- Would the project:

a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?			X	
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for				X

designated roads or highways?

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

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

e) Result in inadequate emergency access? X

f) Result in inadequate parking capacity? X

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

Discussion of Transportation and Traffic:

Additional traffic associated with individual project construction is likely, however the increase will be minor and not exceed the capacity of the street system. The proposed conservation activities will reduce or eliminate many threats to traffic safety such as sediment on roads, plugging of road culverts, and associated localized flooding. By reducing the likelihood of these traffic hazards there will be less need for County Public Works crews and equipment to be on the roads to clean up sediment and flooding problems.

Finding: Less than significant impact



Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
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XVI. UTILITIES AND SERVICE SYSTEMS

-- Would the project:

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

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

c) Require or result in the construction of new

storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	X
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	X
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	X
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	X
g) Comply with federal, state, and local statutes and regulations related to solid waste?	X

Discussion:

The Alameda County Permit Coordination Program will not create wastewater nor will it require wastewater treatment facilities. While impacts from stormwater are addressed by approvals issued by the Regional Water Quality Control Board, the project does not require the construction of new stormwater drainage facilities or the expansion of such facilities. The program does not require new water supplies. Waste materials may be taken to appropriate landfills. Such disposal would constitute a tiny fraction of any landfill capacity and would have no impact on landfill capacity.

Finding: No Impact

Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
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XVII. MANDATORY FINDINGS OF SIGNIFICANCE --

a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	X
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively	X

considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

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

X

Discussion of Mandatory Findings of Significance:

The Alameda County Permit Coordination Program will not degrade the quality of the environment, substantially reduce habitat for fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory. Such a potential does not exist because the program will be implemented in such a manner as to avoid short-term impacts to sensitive resources. The program has no potential to adversely impact cultural resources or human beings. The program does not have the potential for adverse cumulative impacts. The program will result in improvement in water quality, natural habitat functioning, and agricultural sustainability.

Finding: Less than significant impact

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List of Contacts

R.A. Arnold, Entomologist, Entomological Consulting Services, Ltd., Pleasant Hill, California

Phillip Blake, District Conservationist, USDA-NRCS, Napa Field Office, Napa, California

Karen Borrmann, P.E., Principal Civil Engineer, Alameda County Public Works Agency, Hayward, California

Daniel Buford, Chief of the Coast-Bay-Delta Branch, U.S. Fish and Wildlife Service, Sacramento Fish and Wildlife Office, Sacramento, California

Holly Costa, Project Manager, U.S. Army Corps of Engineers-San Francisco District

Brian L. Cypher, Research Ecologist, Endangered Species Recovery Program, California State University, Stanislaus Foundation, Fresno, California

J. Didonato, Wildlife Program Manager, East Bay Regional Parks District, Oakland, California

Frank Dietz, Cultural Resources Specialist, USDA-NRCS, State Office, Davis, California

W. Ferren, Curator, Herbarium, University of California at Santa Barbara, and co-author of the treatment of the genus *Suaeda* in the Flora of North America Project

Marcia Grefsrud, Environmental Scientist, California Department of Fish and Game, Central Coast Region, Yountville, California

Janice Gan, Biologist, California Department of Fish and Game, Central Coast Region

Mary Hammer, Fish and Wildlife Biologist, U. S. Fish and Wildlife Service, Sacramento Fish and Wildlife Office, Sacramento, California

Diane Holcomb, State Resources Conservationist, USDA-NRCS, State Office, Davis, California

Hyun-Jae (Andy) Cho, Assistant Engineer, Development Services/Grading/Permits, Alameda County Public Works Agency, Hayward, California

Patrick Gillum, Environmental Scientist, California Environmental Protection Agency-Central Valley Regional Water Quality Control Board, Rancho Cordova, California

Emily Hanson, Executive Officer, Resource Conservation District of Monterey County, Salinas, California

J. Krause, Wildlife Biologist, California Department of Fish and Game

Margy Lindquist, District Conservationist, USDA-NRCS, Templeton Service Center, Templeton, California

Danny Marquis, Resource Conservationist, USDA-NRCS, King City Local Partnership Office, King City, California

Nicole. Martin, Project Manger, Partners in Restoration, Santa Cruz County-wide Permit Coordination Program, Sustainable Conservation, San Francisco, California

Daniel Mountjoy, Resource Conservationist, Natural Resources Conservation Service-Salinas Area Office, Salinas, California

Maura E. Moody, Fisheries Biologist, NOAA Fisheries (National Marine Fisheries Service, Santa Rosa Office, Santa Rosa, California

Paul Modrell, Alameda Flood Control and Water Conservation District, Alameda County Public Works Agency, Hayward, California

Gary Moore, Permits/Grading Supervisor, Alameda County Public Works Agency, Hayward, California

Tom Moore, Cluster Biologist, USDA-NRCS, Dixon Service Center, Dixon, California

Martin Y. Musonge, Water Resources Control Engineer, California Environmental Protection Agency-San Francisco Bay Regional Water Quality Control Board, Oakland, California

Bob Neale, Director, Sustainable Conservation, San Francisco, California

Carolyn Remick, Senior Project Manger, Partners in Restoration Program, Sustainable Conservation, San Francisco, California

Dave Riensche, Wildlife Resource Analyst, East Bay Regional Parks District (EBRPD), Oakland, California

Connie Rutherford, Botanist, U.S. Fish and Wildlife Service, Ventura Fish and Wildlife Office, Ventura, California

Tom Schott, District Conservationist, USDA-NRCS, Ukiah Service Center, Ukiah, California

Carla Schultheis, Water Resources Engineer-Scientist, Alameda County Urban Runoff Clean Water Program, Alameda County Public Works Agency, Hayward, California

Nancy Scolari, Executive Director/Watershed Coordinator, Marin Resource Conservation District, Point Reyes Station, California

John Short, California Environmental Protection Agency-North Coast Region Water Quality Control Board, Santa Rosa, California

Gary Stern, Fisheries Biologist, NOAA Fisheries (National Marine Fisheries Service), Santa Rosa Office, Santa Rosa, California

Karen Swaim, Species Expert for the Alameda Whipsnake and Consulting Biologist, Swaim Biological Consulting, Livermore, California

Glenn Wilcox, Resource Conservationist, Natural Resources Conservation Service-Salinas Area Office, Salinas, California

Scott Wilson, Habitat Conservation Supervisor, Central Coast Region, California Department of Fish and Game, Yountville, California

Brian Wines, Water Resources Control Engineer, California Environmental Protection Agency-San Francisco Bay Regional Water Quality Control Board, Oakland, California

Cheryl Zelus, Soil Conservationist, USDA-NRCS, Templeton Service Center, Templeton, California