Staff Report to the Planning Commission

Application Number: 211073

Applicant: Resource Conservation District of Santa Cruz County
Owner: Various
APN: County-Wide

Agenda Date: Wednesday July 14, 2021
Agenda Item #: 7
Time: After 9:30 a.m.

Project Description: Application to extend the Master Permit for Environmental Enhancement Projects for a five-year period through April 13, 2026, with minor amendments to the practices covered by the permit, and allow the Permit to be extended every five (5) years thereafter, at a Level 3 approval.

Location: Countywide

Supervisorial District: All

Permits Required: Extension of a Master Permit, that includes coastal permit, riparian exception, grading permit, biotic approvals, and encroachment permit.

Staff Recommendation:

- Adopt the Addendum to the Mitigated Negative Declaration (MND)
- Approve Application 211073, based on the attached findings and conditions.

Exhibits

A. Revised Master Permit (211073)
B. Findings
C. CEQA Addendum to the Mitigated Negative Declaration
D. 10-year Program Review

History

On April 13, 2005, the Planning Commission approved the Santa Cruz County Resource Conservation District (RCD) application for a Master Permit to facilitate the implementation of small, environmentally beneficial projects, such as stream bank protection, gully stabilization, culvert repair/replacement, correcting erosion problems, exotic vegetation removal, and fish stream habitat improvement projects, primarily on private parcels throughout the unincorporated area of Santa Cruz County (# 03-0513) .

The Master Permit was originally approved for a three-year term, with an option to extend for an additional two years pending a Level 3 approval by the County Planning Department. In 2008, this two-year extension was granted by the Planning Department.

A subsequent five-year extension was allowed after a Level 6 approval before your Commission. On July 28, 2010, the Planning Commission approved the five-year extension of the Master Permit (101002). On April 13, 2011, an additional proposal (101121) to amend the Master Permit by adding several new practices, was also reviewed and approved by the Planning Commission. A subsequent single five-year extension was allowed at a Level 3 approval, which the Planning Department granted on April 13, 2015.

The permit was set to expire on April 13, 2020. In February of 2020, the RCD submitted a letter requesting to initiate a time-extension. Concurrently, the RCD requested a provisional one-year extension (from April 13, 2020 to April 13, 2021) to align the County's Master Permit extension dates with the other regulatory agencies participating in the program. This provisional extension was granted by the Planning Department through a Level 4 approval with public noticing in August of 2020. A Level 6 approval is now required for extending the Permit an additional five years and determining the level of approval required for future five-year time extensions.

Project Description

The Master Permit for Environmental Enhancement Projects (Master Permit) is part of the Countywide Partners in Restoration Permit Coordination Program (PIR Program) that partners local, state, and federal agencies to help private landowners address erosion problems and improve degraded habitat that would otherwise be cost prohibitive to undertake. The PIR Program grew out of a realization on the part of the RCD that an increasing number of landowners in Santa Cruz County are interested in restoring or enhancing the natural resource conditions of their property, but are discouraged from doing so because of the time, cost, and complexity of complying with the regulatory review requirements.

Under normal circumstances, landowners wanting to undertake an environmental enhancement project on their property would be required to individually apply for, and obtain separate County approvals, as applicable, for Coastal Development Permits, Riparian Exceptions, Grading Approvals, Biotic Approvals, Encroachment Permits, etc., in addition to other permits required by the responsible State and Federal agencies that are also participating in this program (e.g., U.S. Fish & Wildlife Service, NOAA Fisheries, Army Corps of Engineers, Regional Water Quality Control Board and Coastal Commission). The PIR Program provides an incentive to such landowners by consolidating administrative procedures and allowing the landowner to deal solely with the RCD, who is responsible for ensuring that all County, State, and Federal requirements are being met through following guidelines and conditions set forth in the Master Permit.

The Master Permit allows for a variety of authorized types of environmental enhancement projects to be implemented by the RCD under the PIR Program using practices detailed in the National Resource Conservation Service's (NRCS) National Handbook of Conservation Practices. The authorized project types include practices intended to create, restore, and/or enhance habitat for wildlife species; and/or protect and enhance water quality through various means of reducing or eliminating erosion. The Authorized Project Types are explained in detail in the attached Master Permit (Exhibit A).

Project Success in Santa Cruz County

The PIR Program has shown continued success throughout the 15 years since its conception, and there have been no significant violations or other problems with the Master Permit since its original approval in 2005. A 10-year evaluation of the Program was included with the RCD's 2020 request to initiate the permit extension. The 10-year Program Evaluation includes an overview of Program activities completed since 2010 and demonstrates success in a variety of projects implemented between 2010-2020. This document also identifies potential modifications to the Program that would improve Permit effectiveness and/or resource protection and enhancement. The 10-year Program Evaluation is included as Exhibit D.

The primary types of practices implemented under the Master Permit for the last 10 years were Planting, Access Road Improvement, Restoration and Management of Declining Habitats, and Structure for Water Control. These practices were utilized on 12, 38, 20 and 29 sites respectively. Obstruction Removal, Wetland Management, and Stream Habitat Improvement and Management were each used on 10 sites. Streambank Protection, Stream Channel Stabilization and Sediment basins were used on 9, 8 and 6 sites respectively. Grade Stabilization Structure, Grassed Waterway and Underground Outlet were used once on each site and Stream Crossing and Upland Wildlife Habitat Management were not used at all over the 10-year period. A summary of all practices and the number of sites at which they were implemented is included in Table 1 of the attached 10-year Program Evaluation (Exhibit D).

Access Roads Improvements (in combination with Structure for Water Control) were implemented in partnership with rural road associations with the assistance of funding provided under the RCD's Rural Roads Program. In addition, sediment basins captured agriculturally derived sediment and protected wildlife habitat. These projects resulted in preventing more than 12,000 tons per acre per year of sediment from impacting water quality, predominantly in the San Lorenzo River, Pinto Lake, and Pajaro watersheds.

In the last ten years, almost 10 miles of salmonid habitat was improved throughout Santa Cruz County utilizing the Fish Stream Habitat Improvement and Management and Streambank Protection practices. More than 90 acres of habitat was restored with the Restoration and Management of Declining Habitats and Planting practices, focusing on Watsonville Slough, Soquel Creek, Scotts Creek, and San Vicente Creek and tributaries to the San Lorenzo River, which provide habitat for Steelhead, Coho, tidewater goby, and foothill yellow legged frog.

Since its original approval in 2005, the Master Permit has facilitated 110 environmental enhancement projects completed under the PIR Program. Approximately 30 miles of salmonid habitat have been improved and a total of 165 acres of habitat have been restored.

Proposed Amendments

Based on the RCD's experience implementing the PIR Program during the last 15 years, as well as feedback from County Planning Staff, and other participating regulatory agency staff, the RCD has proposed several minor changes to the Master Permit to improve the overall functionality. Certain administrative and reporting procedures have been revised for efficiency and consistency with established protocols. The RCD is also proposing an increase in the size limits of several practices to maintain consistency with other practices and participating agency

requirements, and to facilitate more effective projects where existing size restrictions have been a limiting factor to overall project success.

New terms are also being proposed regarding the level of approval required for future five-year time extensions. The proposed Master Permit would allow future extensions to occur every five years at a Level 3 approval, pursuant to certain provisions and review by the Planning Department. Requests from the RCD to extend the duration of the Master Permit every five years must include data sufficient for the Planning Department to evaluate the continued effectiveness of Master Permit implementation, and each five-year time extension would only be granted if the PIR Program continues to operate under the terms of the Master Permit. Minor modifications to the Program and/or procedural changes to improve Permit effectiveness would be allowed at the time of each five-year extension, but any amendments or revisions to the Master Permit that require additional Environmental Analysis under the California Environmental Quality Act would require a Level 6 approval before the five-year extension is granted.

The attached 10-year Program Evaluation (Exhibit D) provides an explanation of the proposed Master Permit modifications and how each would improve permit effectiveness and/or resource protection and enhancement. All currently proposed changes to the existing Master Permit are included in track changes in Exhibit C.

Conditions of Approval

Due to the unique nature of this permit and the requirement that it be submitted to various state and federal agencies in addition to the County of Santa Cruz, the format of this Staff Report and Master Permit vary from the standard reports submitted by the Planning Department.

The Conditions of Approval are typically attached independently to a staff report. In this case they are contained within the Master Permit (Exhibit A). There are three levels of Conditions of Approval for this Master Permit and the practices it authorizes. The first level consists of conditions that apply to the Master Permit program as a whole and are detailed on pages 8-12 of the Master Permit. The second level consists of general conditions to protect the environment that apply to each of the individual practices implemented under the Master Permit. These general conditions are included as Exhibit A of the Master Permit. The third level consists of project type-specific conditions to protect the environment, and appear under "Additional Practice-Specific Measures" for each project-type in Exhibit B of the Master Permit.

Environmental Review

In order to comply with the requirements of the California Environmental Quality Act (CEQA), the Master Permit was originally reviewed by the County's Environmental Coordinator on March 1, 2005, and a Mitigated Negative Declaration (MND) was adopted by the Planning Commission on April 13, 2005. The 2005 MND is included as Exhibit I of the attached Master Permit.

Section 15164 of the CEQA Guidelines allows for the approval of an addendum to an existing Negative Declaration when a project covered by a previous Negative Declaration is subject to minor technical changes. The proposed amendments to the Permit and PIR Program involve minor technical changes that would not require additional environmental review or revisions to

the original MND. An Addendum to the 2005 MND has been prepared and is included as Exhibit C, and all currently proposed changes to the existing Master Permit are included with this Addendum.

Conclusion

The proposed extension of the Master Permit for environmental enhancement projects allows for the continuation of the successful PIR Program that partners local, state, and federal agencies to help private landowners address erosion problems and improve degraded natural habitat that would otherwise be cost prohibitive to undertake.

By reviewing the experience of the past fifteen years, Planning staff and the applicants are suggesting improvements to the Master Permit that will provide more opportunities for landowners across the County to engage in enhancing our natural resources.

Staff Recommendation

- **ADOPT** the Addendum to the Mitigated Negative Declaration
- **APPROVE** Application Number **211073,** based on the attached findings and conditions.

Supplementary reports and information referred to in this report are on file and available for viewing at the Santa Cruz County Planning Department, and are hereby made a part of the administrative record for the proposed project.

The County Code and General Plan, as well as hearing agendas and additional information are available online at: www.co.santa-cruz.ca.us

Report Prepared By: _____

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Report Reviewed By: _____

Matt Johnston
Principal Planner; Environmental Coordinator
Santa Cruz County Planning Department

Approval Date: _____

Effective Date: _____

Expiration Date: _____

Juliette Robinson
Project Planner

Matt Johnston
Principal Planner

Appeals: Any property owner, or other person aggrieved, or any other person whose interests are adversely affected by any act or determination of the Planning Commission, may appeal the act or determination to the Board of Supervisors in accordance with chapter 18.10 of the Sa

COUNTY OF SANTA CRUZ

PLANNING DEPARTMENT

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MASTER PERMIT
for
ENVIRONMENTAL ENHANCEMENT PROJECTS

I. Project Description:

This Master Permit for Environmental Enhancement Projects (Master Permit) implements the Santa Cruz Countywide Partners in Restoration Permit Coordination Program and is being issued to the Resource Conservation District of Santa Cruz County (RCD) for the implementation of small, environmentally beneficial projects, such as stream bank protection, gully stabilization, culvert repair/replacement, erosion control structures, exotic vegetation removal, and fish stream habitat improvement projects, primarily on private parcels throughout the unincorporated area (except within the "original jurisdiction" of the California Coastal Commission – i.e., primarily areas below the mean high tide line). This Master Permit constitutes County approval for the conduct of 15 specific types of conservation practices. Eligible projects implementing these practices are subject to size constraints and other limiting criteria, and shall be carried out under the auspices and oversight of the RCD and the U.S. Department of Agriculture's Natural Resources Conservation Service (NRCS).

This Master Permit incorporates all of the separate County permits that would otherwise be needed for the conduct of these qualifying environmental enhancement projects, including Coastal Zone approvals, riparian corridor exceptions, grading permits, erosion control plans, encroachment permits for projects impacting County right-of-way, and/or sensitive habitat reviews, as applicable (however separate Building Permits would be required for bridges and retaining walls over 3-feet in height).

A more detailed project description for the Santa Cruz Countywide Partners in Restoration Permit Coordination Program authorized by this Master Permit is provided in the California Environmental Quality Act (CEQA) Initial Study for the program (see Exhibit I).

Work performed according to the provisions of this Master Permit, as described and conditioned herein, are deemed to be consistent with the County General Plan and Local Coastal Program (LCP), and the requirements of the following County regulations:

- Encroachment Permit Regulations – County Code Chapter 9.70
- Zoning Ordinance – County Code Chapter 13.10
- Coastal Zone Regulations – County Code Chapter 13.20

- Grading Ordinance – County Code Chapter 16.20
- Erosion Control Ordinance – County Code Chapter 16.22
- Water Quality Control – County Code Chapter 16.24
- Riparian Corridor and Wetlands Protection Ordinance – County Code Chapter 16.30
- Sensitive Habitat Protection – County Code Chapter 16.32
- Significant Trees Protection Ordinance - County Code Chapter 16.34
- Native American Cultural Sites Ordinance – County Code Chapter 16.40
- Paleontological Resources Protection Ordinance – County Code Chapter 16.44
- Permit and Approval Procedures – County Code Chapter 18.10

II. Authorized Project Types:

Work authorized by this Master Permit falls into one or more of the following 15 project categories (see Exhibit B for more detailed descriptions of each category), subject to the general criteria listed in Exhibit A, and to project type-specific criteria including maximum dimensions and volumes as listed in Exhibit B:

1. **Access Roads:** Improvements to existing access roads to reduce or eliminate erosion.
2. **Plantings:** Installation of vegetation for erosion control and to improve wildlife habitat and visual resources.
3. **Stream Habitat Improvement and Management:** Implementing fish habitat enhancements (including removing/modifying barriers to fish passage).
4. **Grade Stabilization Structures:** Installation of structures to reduce or eliminate erosion, such as head cutting in gullies.
5. **Grassed Waterways:** Establishing grassed drainage channels to ensure stable conveyance of runoff.
6. **Obstruction Removal:** Removal and disposal of unnatural structures from waterways such as abandoned cars and appliances (but not including large woody debris).
7. **Restoration and Management of Declining Habitats:** Restoring and conserving rare or declining native vegetation communities by removing exotic, invasive plants and restoring native vegetation in the project area, to manage non-native habitats that provide critical habitat for special-status species, such as the monarch butterfly, and managing fuel loads in sensitive habitats, allowing treatment and maintenance of invasive species and noxious weeds, and revegetation of a treated area.
8. **Sediment Basins:** Installation of sediment basins, with (or without) water control and associated outlets and energy dissipating structures, tohelp stabilize downstream channel flows.
9. **Streambank Protection:** Using vegetation or structures for stream bank erosion protection.

10. **Stream Channel Stabilization:** Stabilizing a stream channel with a suitable structure and removing large amounts of accumulated sediment (from non-fish bearing streams).
11. **Stream Crossing:** Installing bridges, etc. when a barrier to fish passage has been removed.
12. **Structure for Water Control:** Installing certain types of water flow control structures, to reduce or eliminate erosion or flooding, and which do not create a barrier to fish passage.
13. **Underground Outlets:** Installing an underground conduit to collect surface water and convey it to a suitable outlet, to prevent erosion and downstream sedimentation.
14. **Upland Wildlife Habitat Management:** Creating, restoring, and/or enhancing upland habitat for wildlife species through the installation of infrastructure or manipulation of vegetation to sustain optimal habitat conditions.
15. **Wetland Management:** Restoring and enhancing wetland conditions similar to those that existed prior to modification for farming, grazing, or other land use, including managing water regime to improve habitat for desired species or for pest control.

III. Required Criteria for Eligible Projects:

A. General Criteria: All qualifying environmental enhancement projects must comply with the general required conditions set forth in Exhibit A. These conditions include limitations on:

- Timing of construction (e.g., limits on work during the wet season);
- Site disturbance (e.g., earthmoving and vegetation removal);
- Construction equipment;
- Revegetation and removal of exotic plants;
- Erosion generating activities;
- Work in streams, floodplains, wetlands and permanently ponded areas;
- Use of herbicides;
- Impacts to Special Status species;
- Impacts to floodwater conveyance patterns.

B. Project Specific Criteria: Exhibit B provides a detailed description of each type of eligible project, as well as the size/volume limitations and specific design criteria and standards for each conservation practice.

IV. Procedures for Review and Approval of Projects:

A. RCD/NRCS Role: Each qualifying environmental enhancement project must be carried out under the auspices and oversight of the RCD and NRCS, following the NRCS Conservation Planning Process (as described in Exhibit D). The RCD and NRCS will cooperatively maintain oversight of all qualifying projects/activities, and will use a nine-step conservation planning process (see Table D-1 in Exhibit D) to customize a management plan tailored for the unique conditions of each participating property and its owner/manager. A conservation plan describing the selected management system is prepared with the landowner/manager. In addition, prior to the onset of activities that result in the disturbance of habitat of any species listed under the Federal and/or California Endangered Species Acts, all project workers including RCD and NRCS staff and cooperating property owners/managers shall be given information on the listed species in the project area, by the RCD/NRCS, including a brief overview of the species' natural history, the protection afforded the species by the Federal and/or California Endangered Species Acts, and the specific protective measures to be followed during implementation of the practices.

The RCD and NRCS will administer the Santa Cruz Countywide Partners in Restoration Permit Coordination Program using *Procedures for Complying with Multiple Permits: A Guide for Conservation Planners*, a manual that will be designed specifically for the program. This manual will be prepared once all the permits from participating Federal, state and local agencies (including the Master Permit) have been finalized. The manual will contain all of the final permit conditions (as described in this Master Permit and all of the final approvals issued by the other regulatory agencies) and will be used by the RCD and NRCS staff to develop and implement the projects to be carried out under the Permit Coordination Program. The guidebook will specify the process for ensuring individual projects qualify for the program; list conservation practice selection, design, and implementation criteria and conditions required by the agencies in their individual permits; provide information on endangered species habitat; and detail the monitoring and reporting requirements of the program.

B. Pre-Construction Review by County: As described more fully in Exhibit C, each spring the RCD and NRCS will submit to the County a list of projects for that year as part of a Preliminary Pre-Construction Notification (PCN). County staff will review the submitted information to verify that the projects qualify under the Master Permit program; and will notify the RCD/NRCS if County staff determines there are projects that need to be reviewed in greater detail. The County will make every attempt to contact the RCD and NRCS, meet if needed, and resolve any outstanding issues within a fixed time frame, which varies by tier. County staff may conduct pre-construction site inspections during this period (or at other times), if necessary. The RCD/NRCS shall then submit a Final PCN incorporating any project revisions required by the County or other agencies, if changes are requested.

If no changes are requested, the draft PCN becomes final. No additional County approval is needed for projects that qualify under the Master Permit program, other than building permits for certain structures (e.g., bridges and retaining walls over 3-feet in height).

C. Pre-Construction Review by Other Agencies: The RCD and NRCS have coordinated with applicable state and federal regulatory agencies that have jurisdiction over natural resources that may be impacted by the projects approved under the Master Permit program (hereafter, "participating agencies"). The Santa Cruz Countywide Partners in Restoration Permit Coordination Program is designed to ensure that outside agency mandates are upheld and that permit conditions are feasible for the RCD, NRCS, and landowners participating in the program. To ensure this is the case, and as described more fully in Exhibit C, the PCN will be submitted each year to the participating agencies. Project conditions to protect resources are built into the various permits and/or agreements that are issued by these agencies. The regulatory approval mechanisms required by each State and Federal agency are summarized in the table below:

Regulatory Approvals Required from Other Agencies as Part of the Santa Cruz Countywide Partners in Restoration Permit Coordination Program

Agency	Approval Mechanism
California Coastal Commission	Master Permit issued through the County includes provisions for work in that portion of the Coastal Zone located within the County's delegated coastal permit jurisdiction, in compliance with the California Coastal Act (i.e., a County Coastal Permit is incorporated into Master Permit). This Master Permit does not cover development within the Coastal Commission's retained coastal permit jurisdiction.
California Dept. of Fish and Wildlife(CDFW)	CDFW Individual Streambed Alteration Agreement
U.S. Army Corps of Engineers	Regional General Permit, Section 404 and Section 10 of the Federal Clean Water Act
U.S. Fish and Wildlife Service	Federal Endangered Species Act Section 7 Consultation
NOAA Fisheries	Federal Endangered Species Act Section 7 Consultation
Regional Water Quality Control Board	Federal Clean Water Act Section 401 Certification

California Coastal Commission – *Coastal Development Permit (partially covered by the "Master Permit" issued by the County*

Under the California Coastal Act, coastal development permits are required for most types of development within the California coastal zone. The California Coastal Commission has certified the Santa Cruz County Local Coastal Program (LCP) and delegated most direct permit and enforcement authority within the County's coastal zone to the County (subject to Commission oversight, review, and in some cases, appeal of County coastal permit decisions). The Commission retains direct coastal permit jurisdiction over tidelands, submerged lands, and/or public trust lands (i.e., typically areas below the mean high tide line such as those along the immediate shoreline, tidal estuaries, lagoons, etc.). Thus, the Master Permit issued through the County can only allow for development consistent with it that is located within the County's coastal permit jurisdiction area. Any development located within the Coastal Commission's retained coastal permit (or "original") jurisdiction is not covered by the Master Permit and would require a coastal permit directly from the Coastal Commission.

California Department of Fish and Wildlife (CDFW) *– Individual Lake and Streambed Alteration Agreements, as needed.*

Under Section 1600 of the California Fish and Game Code, anyone proposing to carry out an action in a river, creek or stream must notify the Department of Fish and Wildlife, which is then responsible for determining if there is a need for a Streambed Alteration Agreement. A Streambed Alteration Agreement is a contract between the applicant and the CDFW regarding what will and will not be done in the riparian zone and stream course. CDFW Individual applications will be submitted for each applicable project.

U.S. Army Corps of Engineers (USACE)*-Regional General Permit (RGP)*

Under Section 404 of the Clean Water Act (CWA), a permit from the U.S. Army Corps of Engineers is required for discharge of dredged or fill material into all waters of the United States, including wetlands. Such activities include the modification of banks, filling of wetlands, and alteration of creeks or other waterways. Similar activities with the potential to impact navigable waters of the United State require a permit under Section 10 of the Clean Water Act. For the Santa Cruz Countywide Partners in Restoration Permit Coordination Program, the USACE will issue a Regional General Permit (RGP) for the program. The RGP authorizes reoccurring activities that do not have more than minimal impacts either individually or cumulatively on the aquatic environment at the regional level (within a certain geographical area).

U.S. Fish and Wildlife Service (USFWS) - *Section 7 Consultation under the Federal Endangered Species Act (ESA)*

A biological consultation with the Fish and Wildlife Service is required when a project is proposed to be undertaken in an area where Federally-listed endangered species are known to occur. Federal agencies engage in a consultation process provided for in Section (7)(a)(2) of the Federal ESA, which requires a consultation for any action that is "authorized, funded, or carried out" by a Federal agency that may affect listed species. Under the proposed program, a Section 7 Consultation is conducted through USFWS with the USACE as the requesting (Federal) agency. The result of the consultation process is a biological opinion, which prescribes measures for protecting endangered species and sets a limit on incidental take of species during project construction.

National Oceanic and Atmospheric Administration (NOAA) Fisheries (formerly National Marine Fisheries Service – NMFS) *- Section 7 Consultation under the Federal ESA*

The need for a consultation with NOAA Fisheries is triggered by the potential for listed anadromous species (including Coho salmon and Steelhead trout in Santa Cruz County) to be present in the area where a project is proposed. For the proposed program, ACOE as the federal lead, will obtain a Biological Opinion through a formal Section 7 process with the allowance for incidental take for listed salmonids in the project area.

Regional Water Quality Control Board (RWQCB) *- 401 Certification*

Under Section 401 of the Federal Clean Water Act, the Regional Water Quality Control Boards have the authority to issue, waive, or deny certification that a proposed activity is in conformance with state water-quality standards. (A Section 401 certification essentially is the issuance of National Pollutant Discharge Elimination System, or NPDES, permit for discharges to waterways that may occur during the construction phase of a project.) Alternatively, under the state Porter-Cologne Act, the Regional Water Quality Control Board has the authority to issue a water discharge requirement (WDR) specifying the concentration or load limits allowable for a particular activity. A need for a Section 401 certification or WDR is triggered by the potential for an activity to result in the release of waste material into a waterway. Thus, although the net result of the practices permitted under the proposed project is the reduction of sediment and pesticide delivery to streams, the initial implementation of these practices may result in discharges of sediments to waterways. For example, grading activities, stream bank restoration, preparations for planting, and construction of sedimentation ponds and underground drainage facilities may result in a short-term increase in erosion potential. All permits issued by the USACE for a project require 401 Certification by the RWQCB.

D. Post-Construction Monitoring and Reporting: As described more fully in Exhibit C end-of-season Annual Reports will be prepared and submitted for review to the County and participating agencies by the RCD/NRCS, describing the status of all environmental enhancement projects carried out under the Master Permit program until projects are installed and are functioning according to design standards and serving their intended purpose, and until all mitigation measure installment, monitoring obligations and success criteria, are met. This provides the agencies with the opportunity to review the status and progress of projects implemented under the Program and to determine whether further clarification and/or minor project modifications may be necessary to meet program objectives and/or meet the terms of the Master Permit.

The Annual Report will be distributed to the participating agencies (those listed in Section IV[C] above) by January 31st of each year. The Annual Report will list projects, and describe each project's purpose, area affected, natural biological enhancements, and amount of yardage, cut and slope of the work, etc. The Annual Report will assess the conservation practices in terms of their current condition, check the practices against the original plan, evaluate success criteria achievement, and provide recommendations for resolving any problems with the implementation of the practices and/or mitigation measures. The Annual Report will also list conservation benefits and any net gains in wetlands and riparian areas, describe actions taken to avoid adverse effects to listed endangered/threatened species and their habitats, and provide photo documentation of before and after site conditions. Consistent with the CEQA Mitigation Monitoring Plan in section VI below, the Annual Report shall also document progress made towards implementation of project mitigations and achievement of success criteria, including those listed in the CEQA Initial Study/Negative Declaration for the Santa Cruz Countywide Partners in Restoration Permit Coordination Program and, in situations where mitigation measures are not being sufficiently implemented, provide recommended remediation measures to meet individual project success criteria as well as strategies to improve their implementation in the future.

V. Conditions of Approval:

There are three levels of Conditions of Approval for this Master Permit and the projects it authorizes. The first level consists of conditions that apply to the Master Permit program as a whole (Conditions A-E below). The second level consists of general conditions to protect the environment that apply to each of the individual projects undertaken under the Master Permit, and appear in Exhibit A. The third level consists of project type-specific conditions to protect the environment, and appear under "Additional Practice-Specific Measures" for each project-type in Exhibit B. Failure to comply with the conditions of approval, including the terms of the mitigation monitoring program described in part C and section VI below, may result in permit revocation pursuant to Section 18.10.462 of the Santa Cruz County Code.

A. Outside Agency Approvals: Prior to exercise of this Master Permit, documentation shall be submitted by the RCD/NRCS, for review and approval by Environmental Planning staff, certifying that all required state and federal approvals have been obtained. Copies of any approval documents shall be provided to Environmental Planning staff (e.g., United States Fish and Wildlife Service [USFWS] Incidental Take Permit and Biological Opinion, National Marine Fisheries Service [NMFS] Section 7 consultation, California Department of Fish and Wildlife[CDFW] Stream Alteration Agreement, California Regional Water Quality Control Board [RWQCB] Water Quality Certification permit, etc.).

B. Compliance with County Regulations: All projects undertaken pursuant to the Master Permit must meet criteria set forth in County ordinances, including the following County Code Chapters, and must conform to the requirements of the requisite findings contained therein, as applicable:

- 9.70 – Encroachment Permit Regulations
- 12.10 – Building Regulations
- 13.10 – Zoning Ordinance
- 13.20 – Coastal Zone Regulations
- 16.10 – Geologic Hazards Ordinance
- 16.20 – Grading Regulations
- 16.22 – Erosion Control Ordinance
- 16.24 – Water Quality Control Ordinance
- 16.30 – Riparian Corridor and Wetlands Protection Ordinance
- 16.32 – Sensitive Habitat Protection Ordinance
- 16.34 – Significant Trees Protection Ordinance
- 16.40 – Native American Cultural Sites Ordinance
- 16.44 – Paleontological Resource Protection Ordinance
- 18.10 – Permit and Approval Procedures

Where other design criteria conflict with County ordinances the criteria given in the County ordinances shall apply. In some cases supporting information from a geotechnical or other civil engineer and special inspections may be required.

C. Reporting from RCD/NRCS to County: By May 15 of each year (or later upon written approval by all agencies with jurisdiction over that project), the RCD/NRCS shall circulate for review by the County and participating agencies, Preliminary Pre-Construction Notifications (PCNs) describing all projects proposed for that year (consistent with Section IV[B] above and Exhibit C). For Tier I and Tier II projects, PCN's may also be submitted by March 15th. A Final PCN describing any project revisions based on review of the Preliminary PCN shall be subsequently submitted to the County and participating agencies for final review, if revisions were requested during the review period. By January 31 of each year, the RCD/NRCS shall distribute an end-of-

the-season Annual Report for the previous year's projects (consistent with Section IV[D] above and Exhibit C). The PCN and/or the Annual Report (as applicable per Exhibit C, #6) shall document progress made towards implementation of project mitigation measures and achievement of success criteria, as required by the CEQA Mitigated Negative Declaration for the Santa Cruz Countywide Partners in Restoration Permit Coordination Program (as described in VI below and in Exhibit C). The Preliminary PCN, Final PCN, , and end-of-season Annual Report shall be consistent with, and subject to the detailed parameters for same identified in Exhibit C.

D. Duration of Master Permit: The Master Permit shall expire five (5) years after its effective date. This expiration date can be extended every five (5) years thereafter, at a Level 3 approval, provided the Permittee requests (by letter) said time extension within four (4) years and six (6) months of the previous permit effective date.

All requests to extend the duration of the Master Permit an additional five (5) years shall include data sufficient to evaluate the effectiveness of Master Permit implementation, including an identification of potential modifications to improve Permit effectiveness and/or resource protection and enhancement. The five (5) year time extension may only be granted on the condition that the Santa Cruz Countywide Permit Coordination Program is operating under the terms of the Master Permit and there have been no significant violations or other problems that have not been adequately addressed. If there are such violations and/or unresolved problems, amendments to the Master Permit may be required before the five (5) year extension is granted.

Minor modifications to improve Permit effectiveness or procedural changes to the program may be made at the time of the five (5) year extension. Any amendments or revisions to the Master Permit that require additional Environmental Analysis under the California Environmental Quality Act shall require a Level 6 approval before the five (5) year extension is granted.

All County actions on the Master Permit, including initial approval and subsequent amendments, shall be appealable to the California Coastal Commission.

E. Indemnification: As a condition of this Master Permit for Environmental Enhancement Projects ("Master Permit") the Resource Conservation District of Santa Cruz County ("Permittee") is required to defend, indemnify, and hold harmless the County of Santa Cruz ("COUNTY"), its officers, employees, and agents, from and against any claim (including attorneys' fees), against the COUNTY, it officers, employees, and agents to attack, set aside, void, or annul this Master Permit of the COUNTY or any subsequent amendment of this Master Permit which is requested by the Permittee.

1. COUNTY shall promptly notify the Permittee of any claim, action, or proceeding against which the COUNTY seeks to be defended, indemnified, or held harmless. COUNTY shall cooperate fully in such defense. If COUNTY fails to notify the Permittee within sixty (60) days of any such claim, action, or proceeding, or fails to cooperate fully in the defense thereof, the Permittee shall not thereafter be responsible to defend, indemnify, or hold harmless the COUNTY if such failure to notify or cooperate was significantly prejudicial to the Permittee.

2. Nothing contained herein shall prohibit the COUNTY from participating in the defense of any claim, action, or proceeding if both of the following occur:

   a. The COUNTY bears its own attorney's fees and costs; and
   b. The COUNTY defends the action in good faith.

3. The Permittee shall not be required to pay or perform any settlement unless such Permittee has approved the settlement. When representing the COUNTY, the Permittee shall not enter into any stipulation or settlement modifying or affecting the interpretation or validity of any of the terms or conditions of the development approval without the prior written consent of the COUNTY.

F. Individual Project Conditions: All projects undertaken pursuant to this Master Permit must conform to the general conditions listed in Exhibit A and the project specific conditions and specifications listed in Exhibit B (under the "Additional Practice-Specific Protection Measures" listed for each project/practice type).

VI. CEQA Mitigation Monitoring Plan:

As required by the California Environmental Quality Act (CEQA), a CEQA Initial Study has been prepared by the County for the Santa Cruz Countywide Partners in Restoration Permit Coordination Program. Pursuant to the Initial Study's finding that the program will not generate significant unavoidable environmental impacts if certain mitigations are implemented, a CEQA Mitigated Negative Declaration has been prepared (State Clearinghouse No. 2004112063). The mitigations listed in the Mitigated Negative Declaration (Exhibit H) have been incorporated into sections 9 and 10 of Exhibit A (General Required Conditions for All Projects Authorized Under the Countywide Partners in Restoration Permit Coordination Program).

As required by Section 21081.6 of the California Public Resources Code, the implementation of the mitigation measures will be monitored for compliance according to the mitigation monitoring program described below, and this program is adopted as a condition of approval (as part of Condition of Approval C above) for this project. To implement the mitigation monitoring program for the Santa Cruz Countywide Partners in Restoration Permit Coordination Program, the RCD/NRCS shall provide a CEQA

mitigation implementation status report as part of each year's Pre-Construction Notification and/or Annual Report (as detailed in Exhibit C, #6). The Annual Report shall list each of the mitigations specified in the Mitigated Negative Declaration and provide a description of each mitigation's implementation status, as well as a description of any additional actions that may be needed to ensure that each mitigation is fully carried out and all success criteria are met, with a strategy for ensuring that such actions are taken in the following year. In describing the implementation status of each mitigation measure, the RCD/NRCS shall provide specific data for each applicable project (e.g., percent of plants established, percent of non-native invasives, documentation of pre- and post-project conditions, dates that applicable RCE/hydrologist reports were submitted to and approved by County staff, etc.). The purpose of this monitoring is to ensure compliance with the environmental mitigations during implementation and operation of the Master Permit program.

VII. Documents Incorporated by Reference:

Exhibit A: General Required Conditions for All Projects Authorized Under the Santa Cruz Countywide Partners in Restoration Permit Coordination Program (i.e., Master Permit)

Exhibit B: Conservation Practices Eligible Under the Santa Cruz Countywide Partners in Restoration Permit Coordination Program (i.e., Master Permit), with Allowed Dimensions, and Project-Specific Conditions

Exhibit C: Notification and Communication Procedures for the County Master Permit Program

Exhibit D: The NRCS Approach to Conservation

Exhibit E: Approved Non-Invasive Introduced Plant Species for Revegetation Use

Exhibit F: Approved Native Plant Species for Revegetation Use

Exhibit G: Prohibited Plant Species List

Exhibit H: Required Mitigation Measures for CEQA Negative Declaration

Exhibit I CEQA Initial Study and Negative Declaration

EXHIBIT A:

General Required Conditions for All Projects Authorized Under the Santa Cruz Countywide Partners in Restoration Permit Coordination Program (i.e., Master Permit)

1. Use of Least Environmentally Damaging Alternative	Where there are various possible points of access, approaches/designs, etc. use of the least environmentally damaging alternative shall be required (e.g., removing the least amount of vegetation possible, placing the least amount fill possible, etc.) unless there are extenuating circumstances as approved by the County. Whenever possible, conservation practices shall be located to fully avoid negative resource impacts, including impacts on potential habitats of sensitive species identified during site evaluations or discovered subsequently. In some cases, short-term disturbance to potential habitat may be necessary to prevent further degradation of the site and to improve habitat for the species of concern. In sensitive habitat areas (as defined pursuant to County Code Chapter 16.32), alternatives that minimize ground disturbance and/or vegetation removal shall be selected. In situations where ground disturbance and/or vegetation removal in such areas cannot be avoided, all conditions specified in the agreements/permits of the participating State and/or Federal resource agencies shall be followed to minimize negative impacts to State and/or federally listed animals and plants and their habitats during implementation of the conservation practices.
2. Temporal Limitations on Construction	The timing of project construction shall take into consideration wildlife usage in the project area. The construction season for activities carried out under the proposed Program shall be limited to between April 15 and October 15. Exceptions and/or further restrictions to this general timeframe include: • Revegetation may continue in upland habitats throughout the year. Revegetation may occur in riparian habitats between October 15 and April 15, (some earthmoving associated with preparation of the site for revegetation may occur within this time frame, but only as necessary for revegetation efforts), when rain conditions allow and if no known species occurrences are documented within the past two years or if protocol level surveys are conducted and no species are found. • Work in upland areas may begin on April 15. • For invasive species removal in upland habitat, work may continue throughout the year, if no known species occurrences are documented within the past two years or if protocol level surveys are conducted and no species are found. In riparian habitat, invasive species removal may occur between October 15 and May 30, when rain conditions allow and if no known species occurrences are documented within the past two years or if protocol level surveys are

	conducted and no species are found. If historical information is not available for the site, protocol levels surveys will be conducted in the area to determine presence or absence of listed species prior to the onset of work. If listed species are present (or assumed present based on habitat), a Service-approved individual will be present during work activities. All work in riparian habitat, during the wet season, will be completed by non-mechanized hand tools. Herbicide application will be hand-painted and carefully applied during non-windy days with no rain forecasted within 3-5 days All soils will be stabilized before a predicted rain event. • If working within 200 feet of established riparian vegetation (or other special status bird potential nesting habitats) and/or if constructing a sediment and/or water control basin, work may not begin until after August 1. If construction must occur during this period, a qualified individual approved by USFWS and/or CDFW shall conduct pre-construction surveys for bird nests or bird nesting activity in the project area. If any active nests or nesting behaviors are found (for species other than starlings and house sparrows), an exclusion zone of 75 feet shall be established to protect nesting birds (200 ft. for raptors) and maintained until the qualified individual (approved by USFWS and/or CDFW) verifies that birds have fledged or nest is abandoned. If any listed or sensitive bird species are identified, CDFW must be notified prior to further action. Take of active bird nests is prohibited. The RCD and NRCS may request exemptions to this requirement from CDFW on a project-by-project basis. • If suitable habitat for the California red-legged frog, California tiger salamander or the Santa Cruz long-toed salamander occurs in the project area, construction activities shall begin after April 15. • If potential habitat for the marbled murrelet occurs in the project area, work shall either begin after September 15 or the RCD/NRCS shall implement sound reduction measures to ensure that activities do not significantly raise noise levels above ambient levels. • If potential habitat for the Mount Hermon June beetle is present in the project area, construction activities shall begin after August 15 (unless USFWS gives prior approval to the RCD/NRCS in response to their pre-construction notification to begin work earlier than August 15). • If least Bell's vireos are discovered in Santa Cruz County during the life of the Program and are potentially present in the project area, construction activities shall begin after August 31 (Note: USFWS would notify RCD/NRCS if least Bell's vireo are discovered in Santa Cruz County during the life of the Program). Work beyond the allowed construction season end date may be authorized following consultation with agencies with jurisdiction over the specific project . Any proposed winter grading (i.e., for any grading between October

	30 and April 15), associated with construction work that extended beyond October 15, shall be subject to approval by Environmental Planning staff. Additional erosion control measures, as described below under **Conditions for Erosion Control**, shall be implemented for work conducted during the winter period (generally defined as October 15 through April 15). These measures shall be complete and in place by October 15. Where habitat for other Federal and/or State listed species not addressed above is identified on and/or adjacent to the project work site, construction and activities that may disturb the breeding, feeding, mating and sheltering of these species shall be limited to the maximum extent feasible to avoid potential impacts.
3. Limitation on Earthmoving and Vegetation Removal (Site Disturbance)	In addition to the limitations on the amount of grading that can be performed, as specified for each applicable project-type in Exhibit B, the following conditions apply to projects involving earthmoving and site disturbance: Disturbance to existing grades and vegetation shall be limited to the actual site of the conservation project and necessary access routes. Consistent with General Plan/LCP Policy 5.10.3, vistas from public roads and vista points shall be protected by minimizing disruption of landforms and aesthetic character caused by grading operations and/or vegetation. In many cases, project activities will utilize existing staging areas. In areas where new staging areas must be created, the size of the staging area including new access roads shall be less than 0.25 acres. Provisions of the Santa Cruz County Grading Ordinance (Chapter 16.20) shall be followed. Finished grades shall not be steeper than 2:1 side slopes unless pre-construction condition is so steep that site conditions prohibit a 2:1 slope on the final grade. Placement of temporary access roads, staging areas, and other facilities shall avoid and limit disturbance to habitat as much as possible. Any proposed winter grading (i.e., for any grading between October 15 and April 15), associated with construction work that extended beyond October 30, shall be subject to approval by Environmental Planning staff. Even though some authorized practices have grading limits greater than 1,000 cubic yards, in no case shall grading amounts exceed 1,000 cubic yards in areas within the Coastal Zone designated as Scenic Areas (as indicated on the County GIS maps). Installed practices shall be made to look as natural as possible and aesthetically pleasing when visible in the public viewshed (by using curvilinear shapes, natural undulations matching the surrounding landform, avoiding hard/constructed structures, using endemic vegetation, etc.).

	Disturbance of native shrubs, woody perennials or tree removal on the streambank or stream channel shall be avoided or minimized to the fullest possible extent. If trees over 6" dbh (diameter at breast height) are to be removed, they shall be replaced at a 3:1 ratio and maintained and monitored until established (unless the species readily replaces itself, e.g., Alder, or unless the site is being restored to historical or other designated habitat.). If riparian vegetation will be disturbed, it shall be replaced with similar and/or native riparian species (see discussion below under *Revegetation and Removal of Exotic Species and Revegetation of the Project Area and Removal of Exotic Plants*) As much as possible, project activities shall avoid thinning out stands of riparian vegetation to minimize potential for increased cowbird predation and minimize loss of canopy cover. If vegetation removal is required in or around stands greater than 0.5 acres, riparian vegetation shall be cleared by hand, leaving as much as possible of the root wad and base of plants intact (unless the project involves removal of exotic invasives such as *Arundo donax* or similar exotics that reproduce from cuttings or resprout). During or following completion of construction, poles and branches shall be replanted on banks. Subsequent maintenance of bio-technical plantings associated with implementation of the conservation practices may include hand labor to control spread outward of intended location (willows spreading into stream channel or cropped areas) or to maintain desired size (mowing of grasses to promote growth, pruning of willows to encourage dense cover rather than open woodland for bank protection, etc.). If potential wetlands are identified in the project area, wetland delineations shall be performed during the site evaluation stage of planning to assist in avoiding impacts to wetlands. The methodology for conducting delineations under the proposed program has been developed in coordination with the U.S. Army Corps of Engineers. For potential wetlands in the Coastal Zone, the Coastal Commission's definition of a wetland shall be used to avoid potential impacts[1]. Implementation of practices shall minimize all potential contributions of sediment to waterways. To the greatest extent possible, excavated materials shall be re-integrated on site. In the rare situations where excavated material is not used in the implementation of the practice it shall be removed and placed at sites that are not within riparian areas, wetlands, and/or the Federally identified floodway and/or floodplain. Any fill placed within the one hundred year floodplain shall be placed in a manner necessary to ensure there will be no rise in the base flood elevation and no flood related off site impacts. This "no rise" condition shall be verified by a registered civil

[1] The Coastal Commission considers a wetland to be any area that is wet enough long enough to support a preponderance of hydrophytic vegetation or to result in soil that is predominantly hydric. In other words, only one of the three primary indicators of wetlands need be demonstrated for an area to be identified as a wetland (California Code of Regulations, Section 13577).

	engineer. Upon completion of grading, slope protection of all disturbed sites shall be provided prior to the end of the construction season through a combination of permanent vegetative treatment, mulching, geotextiles, and/or rock[2] (where the preference is for "soft" materials, such as vegetation, woody debris, etc., as opposed to "hard" materials, such as concrete, gabions, large rock, etc.).
4. Limitations on Construction Equipment	The RCD and NRCS shall ensure that the use and/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). All workers shall be informed of the importance of preventing spills and of the appropriate measures to take should a spill occur. The following precautionary measures shall be adhered to: • All excavation and grading activities shall be scheduled for, and will occur during, dry weather periods. • A contained area shall be designated for equipment storage, short-term maintenance, and refueling. It shall be located at least 100-feet from all water bodies. If site conditions (property size) make this 100-foot distance infeasible, these activities shall occur at the maximum distance possible from aquatic areas. • Vehicles shall be inspected for leaks and repaired immediately. • Leaks, drips and other spill shall be cleaned up immediately to avoid soil or groundwater contamination. • Major vehicle maintenance and washing shall be done in a manner that protects the environment (at a minimum on a paved surface where all wash water, drippings, runoff, etc. is collected and properly disposed, and preferably offsite). • All spent fluids (including motor oil, radiator coolant, and/or other fluids) and used vehicle batteries shall be collected, stored, and recycled as hazardous waste off site. • All construction debris and sediments (if sediments are not incorporated on site) shall be properly disposed. Plans shall indicate the approved disposal site. • Dry cleanup methods (i.e. absorbent materials, cat litter, and/or rags) shall be used whenever possible. If water is used, the minimal amount required to keep dust levels down is used. • Spilled dry materials shall be swept up immediately. • All questionable motor oil, coolant, transmission fluid, and hydraulic fluid hoses, fittings, and/or seals on construction equipment shall be

[2] A list of suggested species for revegetation is included in Exhibits E and F

	replaced. All mechanical equipment shall be inspected on a daily basis to ensure there are no motor oil, transmission fluid, hydraulic fluid, and/or coolant leaks. All leaks shall be repaired in the equipment staging area or other suitable location (away from watercourses) prior to resumption of construction activity. • Hydraulic fluids in mechanical equipment working within the active stream channel shall not contain organophosphate esters. • During construction the operator shall not dump any trash and/or construction debris into the wetted channel; all trash and/or construction debris shall be collected and properly disposed. • During the project activities, all trash and food that may attract potential predators of salmonids (e.g. raccoons, piscivors, etc.) shall be properly contained, removed from the work site, and disposed of daily. • When working in and/or near fish-bearing streams[3], or their tributaries, oil absorbent and spill containment materials shall be located on site when mechanical equipment is in operation. If a spill occurs, (1) no additional work shall occur in-channel until mechanical equipment has been inspected and the leak has been prepared, (2) the spill has been contained, and (3) the CDFW and NOAA Fisheries are contacted to evaluate the impacts of the spill. Heavy equipment shall not be used in flowing or standing water, except to cross a stream or pond to access the work site. In fish-bearing streams or their tributaries, if it is necessary to repeatedly cross the stream (i.e. more than once prior to and once following completion of construction activities) with heavy equipment to access a work site, a temporary culvert crossing with clean gravel backfill, or other appropriate temporary crossing structure shall be installed and utilized. When possible, RCD/NRCS shall use existing ingress or egress points and/or perform work from the top of the creek banks. Use of heavy equipment shall be avoided in a channel bottom with rocky or cobbled substrate. If access to the work site requires heavy equipment to travel on a rocky or cobbled substrate, a rubber tire loader/backhoe is the preferred vehicle. Only if this option has been determined infeasible shall the use of tracked vehicles be allowed. The amount of time this equipment is stationed, working, or traveling within the creek bed shall be minimized. When heavy equipment is used, woody debris and vegetation shall be replaced to a similar density with native species. No staging shall occur in or directly adjacent to wetlands. If it is not feasible to completely avoid

[3] A "fish-bearing stream" is defined as a stream located within the range of the listed species (Central California Coast (CCC) Evolutionarily Significant Unit (ESU) Coho, the CCC steelhead, and South Central Coast ESU Steelhead) and/or designated critical habitat for these salmonids. The County of Santa Cruz and CDFW fisheries experts prepared a GIS-based summary of the existing information on salmonid distribution in Santa Cruz County streams "Steelhead and Coho Salmon Distribution", County of Santa Cruz, May, 2004. The NRCS and RCD will utilize this map during the initial project assessment to determine if the project is taking place in a fish-bearing stream.

	movement of construction vehicles through wetlands, whenever possible rubber tired vehicles shall be used or a protective mat shall be laid down prior to moving across these areas.
5. Revegetation of the Project Area and Removal of Exotic Plants	The project area vegetation shall be restored to pre-construction condition or better (including as directed by project specific success criteria), and shall be maintained until this goal and/or project specific success criteria have been met and plants have become established. Any stream bank area left barren of vegetation as a result of the implementation or maintenance of the practices shall be restored by seeding, replanting, or other agreed upon means with native trees, shrubs, and/or grasses prior to November 30 of the project year. Soil exposed as a result of construction, soil above rock riprap, and interstitial spaces between rocks shall be revegetated by live planting, seed casting, mulching or hydroseeding with non-invasive grass species prior to the close of the construction season (See Exhibits E and F for full list of suggested species for revegetation). If native vegetation is disturbed during project implementation, the native plant community shall be restored to pre-construction condition or better. Native plants characteristic of the local habitat type shall be the preferred alternative for revegetation, however non-invasive non-native species may be used if determined, during project planning, to be more feasible and/or resource protective (see Exhibits E and F for the full list of suggested native and non-native plant species and Exhibit G for prohibited species). If the native local ecotype is not commercially available, plants of the same species but different ecotype may be used, unless that species is identified in Exhibit F as being susceptible to genetic, pathogen or insect contamination. If the native local ecotype is not commercially available and/or that species is identified as susceptible to genetic, pathogen or insect contamination, another native species may be used in its place. Allowing the site to naturally revegetate is also allowed under the program. However, soil erosion must be managed, and the site must be actively revegetated after a reasonable time frame specific in the PCN, if the success criteria is not met thru natural recruitment. Revegetation of a native community may not occur if there is a concern that nursery stock will introduce diseases into a susceptible community and/or if the community itself can regenerate (e.g. Alders). In this case, an annual grass species may be used for one-year erosion control (see Exhibits E and F for full list of suggested species for use in revegetation efforts). Inspections for the purpose of assessing the survival and growth of revegetated areas and the presence of exposed soil shall be conducted by the RCD/NRCS until vegetation is established and the project is functioning as intended, and success criteria have been met. Revegetation success shall be documented in the Annual Report provided to the County and participating

	agencies each year. If the vegetative plantings are not becoming well established, an adaptive management plan that provides erosion control and habitat value at least equivalent to that which existed on the site prior to the project, and which considers cost and feasibility, shall be implemented. The spread or introduction of invasive plant species shall be avoided to the maximum extent possible by avoiding areas with established native vegetation during project activities wherever possible, restoring disturbed areas of native communities with native species where appropriate (as described above), and post-project monitoring and control of invasive species being treated as part of the project. Removal of invasive exotic species shall be strongly recommended. Mechanical removal (hand tools, weed whacking, hand pulling, brush raking) of exotics shall be done in preparation for establishment of plantings. To the greatest extent possible, vegetation shall be removed by hand. To the extent possible, revegetation should be implemented at the same time removal of exotic vegetation occurs. All plant material will be disposed of in a manner that will not allow re-establishment to occur.
6. Conditions for Erosion Control	Earthmoving activities shall be completed prior to October 30. Work beyond October 30 shall be specifically authorized in advance by the participating agencies, as per General Condition #2 above. Any proposed winter grading (i.e., for any grading between October 15 and April 15), associated with construction work that extended beyond October 30, shall be subject to approval by Environmental Planning staff. All inactive areas (defined as a five-day period) shall have all necessary soil stabilization practices in place two days after identification of inactivity and/or before a rain event, whichever comes first. All erosion control shall meet specifications in County of Santa Cruz Erosion Control Ordinance Chapter 16.22. Erosion control and sediment detention devices shall be incorporated into the project design and implemented at the time of construction**.** These devices shall be in place prior to October 15 and the onset of rains for the purposes of minimizing fine sediment and sediment/water slurry input to flowing water, and of detaining water to retain sediment on-site. These devices shall be placed at all locations where the likelihood of sediment input exists. Sediment collected in these devices shall be disposed of away from the collection site and outside riparian areas and flood hazard areas. Streambanks, ground and/or soil (except for soil in agricultural fields) exposed as a result of construction, and soil above toe-rock shall be revegetated by live planting, seed casting, or hydroseeding prior to November 30 of the project year. All debris, sediment, rubbish, vegetation and/or other material removed from waterway shall be removed to a location where they shall not re-enter the

	waters of the state including wetlands.
7. Limitations on Work in Streams, Wetlands, Floodplains, and Permanently Ponded Areas	If it is necessary to conduct work in or near a live stream, the workspace shall be isolated from flowing water to prevent sedimentation and turbidity. In those specific cases where it is deemed necessary to work in a flowing stream/creek, all the flowing water shall be temporarily diverted around the work site to maintain downstream flows during construction. Any temporary dam or other artificial obstruction constructed shall only be built from materials such as sandbags or clean gravel which will cause little or no siltation. Coffer dams and any stream diversion systems shall remain in place and functional throughout the construction period. If the coffer dams and/or stream diversion fail, they shall be repaired immediately. When construction is completed, the flow diversion structure shall be removed as soon as possible in a manner that shall allow flow to resume with the least disturbance to the substrate. If dewatering in a fish-bearing stream is proposed as part of a project implemented under the permit coordination program, the RCD/NRCS shall comply with the terms and conditions outlined for this project in the Biological Opinion(s) , and any subsequent conditions.. Given the potential adverse effects of dewatering on salmonid populations, in some instances and with NOAA approval, large wood will be installed within the active stream channel without dewatering. An approved biologist will be on-site during all activities to monitor for directly mortalities and/or adverse impacts to water quality. No creosote treated timbers shall be used for instream structures. No gabions or concrete shall be used in fish-bearing streams. In non-fish-bearing streams they may be used above the high-water mark only. If used, all concrete shall be allowed to cure for a minimum of 30 days before being exposed to stream water or water that may enter the stream, or all concrete shall be coated with a CDFW-approved concrete sealant. If sealant is used, water shall be excluded from the site until the sealant is dry. The implementation and maintenance of projects shall not result in sediment delivery to a clean bottom of stream channel. A “clean” bottom is characterized by natural stream substrate (cobbles, gravel and small stones or similar to background conditions). If the substrate of a seasonal pond, creek, stream or water body is altered during work activities and the alteration is not the goal of the practice being implemented (i.e. channel stabilization), it shall be returned to approximate pre-construction conditions after the work is completed, unless NOAA Fisheries or CDFW requests during their annual pre-construction review of projects that other measures be implemented.

	All debris, sediment, rubbish, vegetation, and/or other material removed from the channel banks, channel bottom, and/or sediment basins shall be removed to a location where they shall not re-enter the waters of the state. All petroleum products, chemicals, silt, fine soils, and/or any substance or material deleterious to fish, plant, or bird life shall not be allowed to pass into, or be placed where it can pass into the waters of the State. Wetlands shall only be disturbed when part of a project that will enhance the value of the wetland. No project shall divert water flow from one watershed into another. Any fill moved and/or placed within the one hundred year floodplain (i.e., FEMA Zone A) shall be accomplished in a manner to ensure that the flood capacity of the stream is not altered (i.e. downstream properties would not be threatened by a higher likelihood of flooding). No fill shall be placed in the flood hazard area (i.e., FEMA Zones A or V or Floodway) unless it is accompanied by an analysis (by a Registered Civil Engineer) showing that there shall be no rise in the base flood elevation and no off-site impact. Such fill includes footings, supports, approaches, and other elements of bridges that are below the base flood elevation (BFE), as well as materials placed to protect those elements, such as rip-rap or concrete aprons. Projects carried out under the Master Permit program shall not expose people or structures to a significant risk of loss, injury or death. Practices that include impoundment of water shall be limited in size (embankment height and volume) and designed to meet geo-technical and engineering standards and regulations.
8. Limitations on use of Herbicides	Except as noted below, no pesticides or soil amendments shall be used in the streambed or bank to hasten or improve the growth of plantings. Soil amendments shall only be used when the establishment of new plants is prohibited by poor soil conditions that cannot support new plantings. In most circumstances, organic amendments shall be used to ensure successful establishment of restoration vegetation associated with the practices. In situations where organic amendments will not guarantee adequate establishment of restoration vegetation, application rates for non-organic soil amendments shall be based on soil nutrient testing and shall utilize slow release or split applications to minimize leaching or runoff into water bodies. Use of soil amendments within 10 ft of a waterbody must be authorized in advance by CDFW. Where it is necessary to use herbicides to control established stands of exotics or to control the invasion of exotics into restoration plantings, the herbicides must be applied according to registered label conditions. Herbicides must be applied directly to plants and may not be spread upon

	any water or where they can leach into waterways in subsequent rains. Herbicides may be applied to control established stands of non-native species including *vinca*, ivy, and brooms. When herbicides are used near waterways an approved glyphosphate-based herbicide that is safe to use in or near aquatic habitats would be utilized.
9. Special Status Species Protection (CEQA Mitigation I)	In order to mitigate for potential incidental loss of special status species, to comply with the Federal and State endangered species acts and the California Environmental Quality Act (CEQA) and to minimize impacts on wildlife habitat, in addition to implementing the avoidance measures, best management practices, and minimization techniques given in the program description, the RCD/NRCS shall ensure that the following mitigations are implemented for all projects carried out under the Countywide Partners in Restoration Permit Coordination Program and authorized under the Master Permit: I.(A) Prior to exercise of this Master Permit, documentation shall be submitted for review and approval by Environmental Planning staff certifying that all required state and federal approvals have been obtained. Copies of the United States Fish and Wildlife Service (USFWS) Biological Opinion, National Marine Fisheries Service (NMFS) Section 7 RC Biological Opinion, Army Corps of Engineers Regional General Permit, and California Regional Water Quality Control Board (RWQCB) Water Quality Certification permit shall be submitted. I.(B) Plans for individual projects and practices shall incorporate all conditions and recommendations of the approvals mentioned in I.(A) above. All recommended methods to lessen "take" of protected plants, animals and habitats, including avoidance, shall be incorporated into the design of each practice or project completed under this permit. I.(C) Each specific project area disturbed by a project activity shall be monitored for increase in non-native plant cover. Non-native, invasive plants that have colonized the area or expanded shall be removed using BMPs designed to prevent re-establishment, unless the site is adjacent to an established, existing infestation that cannot reasonably be prevented from spreading on to the site without constant removal efforts. I.(D) Exhibits E and F will be used as reference for developing the revegetation plan. Preference will be given to salvage, plants propagated from on- site plants or plants very close to the site, or grown from seed collected from the site or plants very close to the site. Further, native plant materials that are grown at or delivered from a nursery shall be closely inspected for disease and pests prior to use.

	Natural recruitment is also allowed, in conjunction with erosion control and ensuring the site is properly revegetated. I.(E) Revegetation and non-native plant removal programs shall be monitored for three to five years and until success criteria are reached. If information has been submitted by a qualified individual that demonstrates that certain characteristics of the site and/or the revegetation plan indicate that the revegetation may be established more quickly than five years, and if success criteria are reached after only three years, then three years of periodic monitoring may be adequate. Revegetation success is defined as the site being restored to at least the same condition as existed prior to the project, or being restored to a better condition if identified success criteria for a particular project require as much. Measures of this success criterion may include: percent native plant cover, percent non native invasive cover, number of native and non native species present, plant health, and areal extent of shade provided to adjacent waters by overhanging vegetation. In addition, prior to the onset of activities that could result in the disturbance of habitat and/or individuals of any listed/special status species, all project workers including RCD/NRCS staff and growers/landowners and/or their employees/representatives shall be given information on the listed species in the project area, a brief overview of the species' natural history, the protection afforded the species by the Federal and California Endangered Species Acts, and the specific protective measures to be followed during implementation of the practices.
10. Floodwater Conveyance Patterns (CEQA Mitigation II)	To ensure that there is no detrimental impact from conservation practices/projects on conveyance of floodwater and the pattern of flooding, prior to the placement of fill within the floodplain or floodway the RCD/NRCS shall provide analysis from a Registered Civil Engineer or hydrologist for review and approval of Environmental Planning staff. The analysis shall show that the practice/project will not decrease storage of floodwaters, modify conveyance, increase base flood level, and/or otherwise create an adverse impact on the site, upstream or downstream.
11. West Nile Virus Vector Control	To minimize the spread of West Nile Virus, consultation with the County Mosquito Abatement and Vector Control District is required for any water control structure that will potentially hold water longer than 5-days.
12. Height Limits for Structures in Front Yard	Pursuant to County Code Chapter 13.10, no structure (e.g., retaining walls, bridge railings, fences, etc.) within a front yard setback area (which generally along the side of the parcel facing a street or road) may exceed 36" in height, unless in the case of bridges, a higher railing is required by the

Setback Areas	County Fire Marshall. Exceptions to the height limit for front yard fences in agricultural zones are provided for County Code subsection 13.10.525(c)3.
13. Building Permit Needed for All Bridges	A County building permit is needed for the installation/construction of any new bridge, however bridges installed/constructed under the Master Permit program are exempt from further environmental review and/or the need to obtain a Riparian Exception (both of which would normally be required for a new bridge), because the Master Permit has already undergone environmental (CEQA) review and the Master Permit includes a blanket Riparian Exception.
14. Coastal Commission Jurisdiction (i.e. State Tidelands) Restrictions	This Master Permit does not apply to projects conducted within Coastal Commission retained coastal permitting jurisdiction (e.g., all State tidelands, including any lands lying below the mean high tide line, submerged lands, filled areas that previously were below the mean high tide line, coastal lagoons/estuaries, public trust lands, etc.). Any qualifying environmental enhancement projects in these areas, while encouraged, shall require separate Coastal Commission approval.

EXHIBIT B:

Conservation Practices Eligible Under the Santa Cruz Countywide Partners in Restoration Permit Coordination Program (i.e., Master Permit), with Allowed Dimensions and Project-Specific Conditions, and Summary of Tier System

(NOTE: Numbers in parentheses indicate the practice number as referenced in the *NRCS Field Office Technical Guide*)

Projects proposed through this Certification may on a case-by-case basis exceed the dimensions shown in this table upon written approval by all agencies with jurisdiction over that project.

1. Access Roads (Improvement) (560) *(NOTE: Access road improvements typically involve multiple installations spread out over a long reach of road*.)	Improvement of an existing road to provide access for property management while controlling runoff to prevent erosion and maintain or improve water quality. An example of this practice might include re-grading, outsloping, or the addition of a rolling dip to a road so that water is less erosive as it travels across the road. This practice may also be used for repair, removal, or addition of culverts. Ditch relief culverts that discharge onto slopes over 30% require additional measures. This practice is used only on existing roads. Some examples of practices from the California Department of Fish and Game's, *California Salmonid Stream Habitat Restoration Manual* that could be utilized during implementation of the Access Road (Improvement) practice includes Waterbars (p. VII-96).
Dimensions[2]	Length: Average: 1,000 linear feet of work spread out over 2 miles; Max: 10,000 linear feet of work spread out over 12 miles. Width: Average: 30'; Max: 30'. Area: Average: 0.8 acres; Max: 4.5 acres. Volume[3]: Average: 750 cu. yards; Max: 7,500 cu. yards (or 1,000 cu. yards in Coastal Zone Scenic Areas).
Additional Practice-Specific Protection Measures	Road improvements in Santa Cruz County are modeled on the "Handbook for Forest and Ranch Roads: A Guide for planning, designing, constructing, reconstructing, maintaining and closing wildland roads," by William Weaver and Danny Hagens. This manual contains

	descriptions of sound methods and designs to improve and maintain rural roads. Proper road planning, construction and maintenance of roads can correct problems associated with poor road placement and design that cause excess runoff, and erosion leading to many kinds of problems including polluted water supplies, increased flooding, landslides, destruction of fish habitat, and loss of vegetation and soil. Improvements to existing access roads under this practice shall not be carried out for the purpose of accommodating future development.
2. Planting (342, 612, 422, 391)	Planting of vegetation such as trees, shrubs, vines, grasses, or legumes (see Exhibits E, F and G for lists of suggested and prohibited species for revegetation), on highly erodible or critically eroding areas (does not include tree planting mainly for wood products). This practice is used to stabilize the soil, reduce damage from sediment and runoff to downstream areas, and improve wildlife habitat and visual resources. Plants may take up more of the nutrients in the soil, reducing the amount that can be washed into surface waters or leached into ground water. During grading, seedbed preparation, seeding, and mulching, quantities of sediment and associated chemicals may be washed into surface waters prior to plant establishment.
Dimensions	Area: Average: 1 acre; Max: 5 acres. Volume[3]: Average: 700 cu. yards; Max: 1,000 cu. yards.
Additional Practice-Specific Protection Measures	When implementing or maintaining a critical area planting above the "ordinary high water mark"[4], a filter fabric fence, fiber rolls and/or rice or straw bales shall be utilized, if needed, to keep sediment from flowing into the adjacent water body. When vegetation is sufficiently mature to provide erosion control, it may be appropriate to remove the fence, fiber rolls and/or rice/straw bales. Periodic review by RCD/NRCS shall occur until the critical area planting is established to control erosion.
3. Stream Habitat Improvement and Management(395)	Improvement of a stream channel to create new fish habitat or to enhance an existing habitat. The practice is 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. This practice may also be used for removal or modification of fish barriers such as flashboard dams. The modification of flashboard dams may involve cutting a notch in the dam to allow for fish passage. Complete removal of flashboard dams would also be covered under the program. This practice may be used for the removal or modification of logjams that present a complete barrier to all life stages of anadromous fish passage. If the logjam does not act as a complete barrier, logjam removal may be implemented no more than two times annually under the program, but only if the following circumstance exists: In situations where water is actively or potentially deflecting water to a bank, threatening further erosion, bank failure, destruction of conservation practices installed to stabilize the bank, or threatening damage to life and housing, the logjam may be modified to minimize this threat. This practice may be used to remove culverts that pose barriers to fish passage.. This practice may also be used to remove hardened crossings that pose barriers to salmonid passage such as culverts and simple fords that do not have complicated associated resource issues. While most activities will occur during the summer months when most areas are dry, dewatering may be required for some projects involving the fish stream improvement practices. Dewatering a portion of a stream during construction would involve isolating the work area using temporary structures such as cofferdams and the pumping of water around the worksite in order to maintain flows downstream. The Fish Stream Improvement practice will be designed and implemented in accordance with the California Department of Fish and Game's *California Salmonid*

	Stream Habitat and Restoration Manual or in coordination with NOAA Fisheries and CDFW Some examples of the practices that could be utilized during implementation of the Fish Stream Improvement practice include Digger Logs (p. VII-26 of the manual), Spider Logs (p. VII-27), and Log, Root Wad, and Boulder Combinations (p. VII-28).
Dimensions	Maximum Length: 1 mile with multiple structures at multiple bank locations. Maximum dimensions for a logjam to be modified: 30 ft by 50 ft (across channel). Maximum dimensions for a flashboard dam to be modified or removed: 30 ft by 60 ft (across channel) Maximum dimensions for hardened crossing (fords) be removed: 20 ft by 100 ft (across channel) Maximum and total area to be dewatered will not exceed 1,000 ft over the one mile maximum.
Additional Practice-Specific Protection Measures	The Fish Stream Improvement conservation practice will be designed and implemented in accordance with the California Department of Fish and Game's *California Salmonid Stream Habitat Restoration Manual* or in coordination with NOAA Fisheries and CDFW. No chemically-treated timbers shall be used for grade or channel stabilization structures, bulkheads or other instream structures.
4. Stream Crossing (578)*	To provide access on a site where a in-stream barrier has been removed. If a culvert or ford has been removed, a bridge or other suitable crossing that is protective of water quality may be installed.
Dimensions	Maximum bridge size to be installed: Max.100 ft (across stream) with 20 ft wide deck (20 ft is what the County of Santa Cruz prefers for emergency vehicles but it's more likely that most bridges installed under the permit coordination program would not exceed 16 ft in width)

	*Maximum and total area to be dewatered will not exceed 1,000 ft over the one mile maximum.
Additional Practice-Specific Protection Measures	Crossings will be consistent with California Department of Fish and Game's *"Culvert Criteria for Fish Passage"* (May 2002) and National Marine Fisheries Service Southwest Region's *"Guidelines for Salmonid Passage as Stream Crossings"* (September, 2001). If dewatering in a fish-bearing stream is proposed as part of a project implemented under the permit coordination program, the RCD/NRCS will comply with the terms and conditions outlined in the Biological Opinion, and any subsequent conditions, issued by NOAA Fisheries for this project.
4. Grade Stabilization Structure (410) (In non-fish bearing streams, primarily for gully repair)	Installation of a structure built into a gully to control the grade and prevent head cutting in natural or artificial channels. For the purposes of the Master Permit program, this practice will not be installed in fish bearing streams and would primarily be used for gully repair. This practice refers to rock, timber, or vegetative structures, such as a brush mattress, placed to slow water velocities above and below the structure, resulting in reduced erosion. This practice also involves earthmoving to reshape the area impacted by the gully. This will decrease the yield of sediment and sediment-attached substances and improve downstream water quality. An example of a practice from the CDFW California Salmonid Stream Habitat Restoration Manual that could be utilized during implementation of the Grade Stabilization practice is Brush Mattressing (p. VII-79).
Dimensions	Length: Average: 3 to 4 structures per 500' of gully, Max: 10 structures per 1,000' of gully. Area: Average: 0.5 acres; Max: 1.5 acres Volume[3]: Max: 30 cu. yards per structure; 300 cu. yards total. Flow Rate: Max: 300 cfs in the pipe.
Additional Practice-Specific Protection Measures	This practice will not be used in fish-bearing streams and will primarily be used for the repair of gullies. Construction and maintenance of any practice that results in a change in volume of flow in streams that support a

	fishery are not covered under this program. Construction and maintenance of Grade Stabilization Structures in streams or creeks that support a fishery are not covered under this program. Projects seeking to implement conservation practices in those circumstances must seek individual permits from appropriate public agencies. Grouted rock may be used for implementation of the Grade Stabilization practice at the head of gullies. Use of grouted rock will be minimized. Grouted rock would not be used on the bed or bank of a waterway. An example of a typical design from the CDFW California Salmonid Stream Habitat Restoration Manual that could be utilized during implementation of the Grade Stabilization practice is Brush Mattressing (p. VII-79).
5. Grassed Waterway (412)	Establishment of a natural or constructed channel that is shaped or graded to required dimensions and expected velocities, and establishment of 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 waters. 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 reduce the erosive force of 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.
Dimensions	Length: Average: 1,000’; Max: 2,000’. Width: Average: 20’; Max: 40’. Area: Average: 0.5 acre; Max: 2 acre. Volume[3]: Average: 1,000 cu. yards; Max: 4,500 cu. yards (except in Coastal Zone Scenic Areas where the maximum grading allowed is 1,000 cu. yards). Flow Rate: Max: 150 cfs.
Additional Practice-Specific Protection Measures	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.
6. Obstruction Removal (500)[5]	Removal and disposal of unwanted structures from waterways and/or other sensitive habitats, including cars, large appliances, and garbage (items that are anthropogenic and not natural to the system). Large objects such as cars and appliances would be removed unless their removal would result in a (net) detrimental effect. For example, cars will not be removed if the action would result in disturbance to an area beyond the maximum size identified for this practice or if the removal shall cause erosion in quantities deleterious to fish or other aquatic organisms. Structures would be removed when the stream channel is dry or during the lowest flows to minimize impacts. While most activities will occur during the summer months when most areas are dry, dewatering may be required for some projects involving removal of large objects such as cars and appliances. Dewatering a portion of a stream during construction would involve isolating the work area using temporary structures such as cofferdams and the pumping of water around the worksite in order to maintain flows downstream.
Dimensions[5]	Length: Max: 50'. Area: Average: 10' x 15'; Max: 0.2 acre.
Additional Practice-Specific Protection Measures	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. Large objects removed from the area will be lifted out of the area, ensuring the obstruction is kept upright during removal and will not be pulled, dragged, or pushed to minimize potential impacts to the aquatic and terrestrial habitats. If the obstruction is easily accessible and/or an access road is adjacent to the work site, equipment such as a boom would be used to lift the obstruction out of the area. Additional limitations on use of construction equipment are described in the General Project Conditions under Limitations on Construction Equipment.

7. Restoration and Management of Declining Habitats (643)	Restoring and conserving rare or declining native vegetated communities and associated wildlife species. This practice is used to restore land or aquatic habitats degraded by human activity; provide habitat for rare and declining wildlife species by restoring and conserving native plant communities; increase native plant community diversity; management of unique or declining native habitats (see Exhibits E, F and G for lists of suggested and prohibited species for revegetation). This practice may be used to remove invasive plant species in sensitive resource areas to improve the quality of the adjacent aquatic habitat or to manage non-native habitats that provide critical habitat for special status species, such as the monarch butterfly. This practice may also be used to manage fuel loads in sensitive habitats and allows treatment and maintenance of invasive species and noxious weeds, as well as revegetation of a treated area.
Dimensions	Length: Average: 500'; Max: 1 mile. Area: Average: 1 acre; Max: 5 acres. Volume[3]: Average: 50 cu. yards; Max: 1,000 cu. yards.
Additional Practice-Specific Protection Measures	When restoring or maintaining a rare or declining native plant community or wildlife habitat adjacent to and above the "ordinary high water mark"[4] of a water body, a filter fabric fence, fiber rolls and/or rice/straw bales shall be utilized, if needed, to keep sediment from flowing into the adjacent water body. When vegetation is sufficiently mature to provide erosion control, it may be appropriate to remove the fence, fiber rolls and/or rice or straw bales. Periodic review by RCD/NRCS shall occur until the native plant community or wildlife habitat planting is established to control erosion.
8. Sediment Basins (350) [with or without water control (638)]	Construction of basin(s) to collect and store debris or sediment. Sediment basins will trap sediment, sediment associated materials, and other debris and prevent undesirable deposition on bottomlands and in waterways and streams. Basins are generally located at the base of agricultural lands adjacent to natural drainage or riparian areas. Sediment basins shall not be constructed in a stream channel or other permanent water bodies. This practice may also involve designing the sediment basin to control water volumes leaving a site and releasing the water at a

	natural flow rate. If water control were recommended , an earth embankment or a combination ridge and channel design constructed across the slope and minor watercourses would be implemented to form a sediment trap and water detention basin. The practice does not treat the source of sediment but provides a barrier to reduce degradation of surface water downstream. Due to the detention of runoff in the basin, there is an increased opportunity for soluble materials to be leached toward the ground water. Basins may also increase groundwater recharge. The design of spillways and outlet works will include water control structures to prevent scouring at discharge point into natural drainage.
Dimensions	Area: Average: 0.1 acre; Max: 1 acre. Volume[3]: Average: 400 cu. yards; Max: 4,000 cu. yards (compacted embankment); in Coastal Zone Scenic Areas no more than 1,000 cu. yards total grading volume. Impoundment Volume: Average: 0.5 acre-foot; Max: 2 acre-feet. Impoundment Structure: Average: 6 ft embankment measured from the lowest point in the basin to the spillway at a 2:1 maximum slope; Max: 6 ft – 10 ft embankment measured from the lowest point in the basin to the spillway at a 2:1 maximum slope[6].
Additional Practice-Specific Protection Measures	Where water and sediment control basins create marshy conditions and attract nesting birds and other wildlife, maintenance may occur only after August 1st. If construction must occur during this period, a qualified individual approved by USFWS and/or CDFW will conduct pre-construction surveys for bird nests or bird nesting activity in the project area. Bird nesting sites shall be avoided as described above in Exhibit A (#2) General Project Conditions, Temporal Limitations on Construction. If the project has the potential to create standing water for longer than five (5) consecutive days, the County Mosquito Abatement and Vector Control District shall be consulted. Sediment basins shall not be constructed in a stream channel or other permanent water bodies. The work may involve grading along one shore of the stream to remove

	gullies or eroded banks prior to building a streamside basin. Where construction of a sediment basin includes a pipe or structure that empties into a stream (underground outlet), an energy dissipater shall be installed to reduce bank scour.
9. Streambank Protection (580)	Use of vegetation or structures to stabilize and protect banks of streams, lakes, or estuaries against scour and erosion. "Bioengineered" solutions using vegetation and soft materials (as opposed to concrete and rip rap, for example) are the preferred options where conditions are favorable for their use. The banks of streams and water bodies are protected by vegetation to reduce sediment loads causing downstream damage and pollution and to improve the stream for fish and wildlife habitat as well as protect adjacent land from erosion damage. Examples of this practice may include willow sprigging, brush mattressing, and live vegetative crib walls. This practice can be applied to natural or excavated channels where the stream banks are susceptible to erosion from the action of water or debris or to damage from livestock or vehicular traffic. The streambed grade must be controlled before most permanent types of bank protection can be considered feasible. Some examples of practices from the California Department of Fish and Game's *California Salmonid Stream Habitat Restoration Manual* that could be utilized during implementation of the Streambank Protection practice include Log Cribbing (p. VII-68), Live Vegetative Crib Wall (p. VII-69), Logbank Armor (p. VII-70), Riprap (p. VII-65), Native Material Revetment (p. VII-75), Willow Sprigging (p. VII-77), Brush Mattressing (p. VII-77), and Trenching (p. VII-80). While most activities will occur during the summer months when most areas are dry, dewatering may be required for some projects involving implementation of streambank protection measures. Dewatering a portion of a stream during construction would involve isolating the work area using temporary structures such as cofferdams and the pumping of water around the worksite in order to maintain flows downstream.
Dimensions	Length: Vegetation Average: 200'; Vegetation Max: 2,000'. Rock Max: 200' contiguous rock protection and

	500' of non-contiguous protection over 2,000' of bank. Width: Vegetation Average: 20'; Vegetation Max: 50'. Rock Average: 4'; Rock Max: 15'. Area: Average Vegetation: 0.1; Max Vegetation: 2.5 acre. Rock Protection Max: 0.1 acre Volume[3]: Average Vegetation: 500 cu. yards; Max Vegetation: 4,000 cu. Yards[7] (or 1,000 cu. yards in all Coastal Zone Scenic Areas). Average Rock: 100 cu. yards; Max Rock[8]: 800 cu. yards. Flow Rate: Vegetation Max: 2,000 cfs instream.
Additional Practice-Specific Protection Measures	No fill will be placed in the flood hazard area unless it is accompanied by an analysis (by a civil engineer) showing that there will be no rise in the base elevation and no off-site impact.
10. Stream Channel Stabilization (584)	Stabilization of the channel of a stream with suitable structures. "Bioengineered" solutions using vegetation and soft materials (as opposed to concrete and rip rap, for example) are the preferred options where conditions are favorable for their use. This practice applies to stream channels undergoing damaging aggradation or degradation that cannot be reasonably controlled with upstream practices (establishment of vegetative protection, installation of bank protection, or by the installation of upstream water control measures). The design and installation of grade stabilization structures produce a stable streambed favorable to wildlife and riparian growth. The Master Permit program does not cover projects that involve installation of grade stabilization structures in fish bearing streams. In non-fish bearing streams, this practice may be utilized to remove accumulated sand or sediment that have caused the channel to become plugged due to a large storm event or bank failure. This practice would not be used in fish-bearing streams or for routine maintenance involving dredging of a waterway. This practice would be used to remove sediment that has accumulated behind a dam or as a result of a catastrophic event such as a flood, and would only be used once at a given location under this program. While most activities will occur during the summer

	months when most areas are dry, dewatering may be required for some projects involving installation of the stream channel stabilization practices. Dewatering a portion of a stream during construction would involve isolating the work area using temporary structures such as cofferdams and the pumping of water around the worksite in order to maintain flows downstream.
Dimensions	Length: Average: 200'; Max: 2,000'. Width: Average: 20'; Max: 100'. Area: Average: 0.1 acre; Max: 4.5 acre. Volume[3]: Average: 200 cu. yards; Max: 7,500 cu. yards (1,000 cu. yards in Coastal Zone Scenic Areas). Flow Rate: Max: 400 cfs.
Additional Practice-Specific Protection Measures	Sediment removal will not occur in fish-bearing streams. Sediment removal from non-fish bearing stream channels may occur if it will improve biological functioning of the stream and restore channel capacity. Sediment removal would occur as a one-time event and not a repeated maintenance practice. Sediment removal may not occur in a flowing stream or standing water. Sediment will not be stored in wetlands or waterways (including floodplains and floodways).
12. Structure for Water Control (587)	Installation of a structure in an irrigation, drainage, or other water management system, including streams and gullies, that conveys water, controls the direction or rate of flow, or maintains a desired water surface elevation, such as culverts, pipe drops or chutes within gullies, debris screens, etc. Structures for water control includes treatment systems, such as bioreactors, that improve on-site and/or downstream water quality. Structure for water control is used to replace or retrofit existing culverts that are either not functioning properly or are a barrier to fish passage. The placement of new culverts, when environmentally beneficial, is also covered. By controlling the velocity of water running through an area, this practice reduces erosion and prevents down cutting of stream channels. Culverts will be consistent with California Department of Fish and Game's "Culvert Criteria for Fish Passage" (April 2003) and National Marine Fisheries Service Southwest Region's "Guidelines for Salmonid

	Passage as Stream Crossings" (September, 2001).
Dimensions	Flow Rate: 80 cfs
Additional Practice-Specific Protection Measures	Crossings will be consistent with California Department of Fish and Game's *"Culvert Criteria for Fish Passage"* (May 2002) and National Marine Fisheries Service Southwest Region's *"Guidelines for Salmonid Passage as Stream Crossings"* (September, 2001). If dewatering in a fish-bearing stream is proposed as part of a project implemented under the permit coordination program, the RCD/NRCS will comply with the terms and conditions outlined in the Biological Opinion, and any subsequent conditions, issued by NOAA Fisheries for this project. If the project has the potential to create standing water for longer than five (5) consecutive days, the County Mosquito Abatement and Vector Control District shall be consulted.
13. Underground Outlets (620)	Installation of a conduit beneath the surface of the ground to collect surface water and convey it to a suitable outlet. This practice is typically, although not always, associated with a sediment basin (with or without water control). Excess surface water generated by farmland on steep terrain can be collected and conveyed to a sediment basin by installing pipe safely buried underground. Location, size, and number of inlets are determined to collect excess runoff and prevent erosive surface flow. This runoff is then discharged at sediment basin where high velocity runoff is calmed and suspended sediment is trapped prior to releasing water into natural drainage channel. The basin is designed to release water at a natural rate of flow.
Dimensions	Length: Max. in Riparian Areas: 50'. Width: Max. in Riparian Areas: 20'. Area: Max. in Riparian Areas:1,000 sq. ft. Volume[3]: Max. in Riparian Areas: 10 cu. yards[9]. Flow Rate: Max. in Riparian Areas: 60 cfs.
Additional Practice-Specific Protection Measures	If a pipe or structure that empties into a stream (underground outlet), a properly sized energy dissipater shall be installed to reduce bank scour and bank erosion.

14. Upland Wildlife Habitat Management (645, 382, 614, 516)	This practice will be utilized to create, restore, and/or enhance upland habitat for wildlife species. This practice may be used to install shelter, cover, and food, establish vegetation for shelter, food, and enable movement, and for manipulating vegetation to sustain optimal habitat conditions. This practice may include the creation of infrastructure to accomplish the intended purpose of the practice, including a livestock pipeline, fence, and watering facility. Use of a pipeline for conveying water from an existing source of supply to points of its use for livestock; to shift livestock to constructed waters sources and away from streams and lakes. This practice is designed to reduce bank erosion, sediment yield, and manure entering watercourses. Occasionally, a pipeline may cross streams or water courses. The Watering Facility practice is limited to the device that actually holds the water. It is not the well, spring, or other source of undeveloped water. The construction a fence across a riparian corridor or in a sensitive habitat may be utilized to improve grazing and land use management to achieve restoration goals
Dimensions	Length: Average: 50'; Max: 200' through riparian areas (includes 50' on each bank and across a stream or gully), and up to 10,000' through the upland areas. Width: Average 15'; Max: 20'. Area: Max: 4,000 sq. ft. through riparian areas/crossing streams Volume[3]: Average: 15 cu. yards; Max: 50 cu. yards through riparian areas[4]. Pressure: Max: 300 psi (Highest capacity for a pipeline would not exceed 300 pounds per square inch). The

[4] A "fish-bearing stream" is defined as a stream located within the range of the listed species

	maximum livestock pipeline diameter would be 3 inches.
15. Wetland Management* (657, 659, 356, 587, 644)	To restore and enhance wetlands conditions similar to those that existed prior to modification for farming, grazing, or other land use. This practice includes minor reshaping to restore topographic relief of the site, hydrological enhancement (increasing season of inundation or saturation), and vegetative enhancement to remove any undesired species that did not originally exist on the site or to plant native species. To actively manage the water regime to improve habitat for desired species or to be able to manage for pest control (i.e. mosquitoes), dike and Structure for Water Control may be used. Once constructed, the maintenance of the practice(s) is allowable, including management of water levels and a wide range of vegetation management activities to maintain or improve the vegetative composition on a site.
Dimensions	Area: 5 acres max (waters of the state); 18 acres max. Volume[3]: 1,000 cyd. (scenic coastal areas); 7500 cyd max
Additional Practice-Specific Protection Measures	Activities will seek to emulate the functions of undisturbed conditions and will not result in significant loss of vegetation or disturbance which would negatively impact species' habitat, cover, food, etc.

1. A "fish-bearing stream" is defined as a stream located within the range of the listed species (Central California Coast (CCC) Evolutionarily Significant Unit (ESU) Coho, the CCC steelhead, and South Central Coast ESU Steelhead) and/or designated critical habitat for these salmonids. The County of Santa Cruz and CDFW fisheries experts prepared a GIS-based summary of the existing information on salmonid distribution in Santa Cruz County streams "Steelhead and Coho Salmon Distribution", County of Santa Cruz, May, 2004. The RCD and NRCS will utilize this map, and any subsequent updates to it, during the initial project assessment to determine if the project is taking place in a fish-bearing stream.
2. Dimensions refer to actual area of improvement.
3. Volume of soil disturbed, based on practice installation and representing the volume of soil excavated and used as fill or removed from site, or soil imported as fill.
4. The "ordinary high water mark" on non-tidal rivers is defined by the line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank; shelving; changes in the character of soil; destruction of terrestrial vegetation; the presence of litter and debris; or other appropriate means that consider the characteristics of the surrounding areas. Some indicators of the ordinary high water mark include water staining, shelving, and evidence of debris, among other potential indicators.

5. Actual objects rarely exceed 10 ft. x 15 ft. Access to an object may involve disturbance of up to 50' in length. It is difficult to estimate the total number of separate objects to be removed from a stream. Maximum disturbance per project is limited to .2 acres.
6. Embankment heights exceeding 6 ft will be accompanied by additional technical information that has been reviewed and approved by County Geologist and County Civil Engineer. At a minimum, all engineered practices shall be designed/sized to accommodate a 10-year storm event.
7. For vegetation treatments, soil disturbance is assumed to be a maximum of 700' of 2,000' maximum reach. The average depth of soil grading (cut or fill) is 3'.
8. Numbers provided for rock armoring refer to actual areas and volume of rock placed only. Total soil disturbance limits are same as for vegetative treatments since remainder of work area will be vegetated. Rock placed would be used at the toe of the bank in conjunction with bioengineering techniques. RSP for bank protection is limited to approximately 300 cyd. Up to 800 cyd of rock is allowable if the majority of rock will be used for fish-friendly practices, such as rock vanes, j-hooks, root wad anchoring, etc.
9. Area of practice within riparian area includes a 50' length and a 20' wide work area for equipment. Volume of soil is based on a 2' wide trench over 50' with pipe buried to an average depth of 2'.

At a minimum, all engineered practices shall be designed/sized to accommodate a 10-year storm event.

* Where this practice involves replacement of a fish passage barrier with a bridge, bridge plans will be designed by a civil engineer and soil information will be supplied to the County by a civil engineer or geotechnical engineer.

Also, per the County of Santa Cruz requirements, a registered civil engineer (RCE) would be responsible for signing designs for projects where the following conditions exist:

- When grading exceeds 2000 cubic yards or the County geologist/engineer determines that the project warrants further investigation;
- When the embankment heights for a sediment basin exceeds six feet; or
- If project involves placement of fill in the FEMA identified flood hazard area (Zones A, V, or floodway), including footings, supports, approaches, erosion protection and other elements of bridges.

Lastly, if a ditch relief culvert outlets to a slope greater than 30%, a letter will be provided with the PCN documenting the stability of the slope.

Summary of Activities for Each Tier.

COMPLEXITY OF PROJECT AND REGULATORY REQUIREMENTS
LOWEST➔➔➔➔➔➔➔➔➔➔➔➔➔➔➔➔➔➔➔➔➔➔➔➔➔➔➔➔HIGHEST

	TIER I	TIER II	TIER III
Summary	Projects in upland areas only. •No work in stream channels or riparian habitat. •No projects where special status species or their habitat occurs.	Projects in streams or riparian areas; work may require temporary water diversion and dewatering. •No projects where threatened or endangered species or their habitat occurs. •No streambank rock riprap protection of any kind.	Projects in streams or riparian areas; work may require temporary water diversion and dewatering. Projects where threatened or endangered species or their habitat occurs, including in jurisdictional wetlands. • For projects involving streambank rock riprap protection or removal of in-stream barriers, early coordination with agencies will occur.
Timing	•Projects that occur in upland areas may occur year-round. •The Permittee shall consider wildlife usage in the project area. •Tier I projects, such as invasive species removal, can occur throughout the year, if there is no documented occurrence of special status species within the past two years or if protocol level surveys are conducted and no species are found. •Bare soil and areas where invasive plant species are removed must be stabilized before a Predicted Rain Event.	•Portions of the project that occur below top of creek banks or in riparian areas shall be stabilized for the winter prior to October 15 of each year, either by completing construction of those portions of the project (including installation of permanent erosion control measures) or by implementing winterization stabilization measures capable of effectively stabilizing the area and preventing erosion under winter rain and flow conditions generated by the 10-year 24-hour storm event. •No construction activities (other than manual, on foot, revegetation/erosion control actions) shall be conducted below top of creek banks or in other waters of the State during the winter period (October 15 – May 30), unless	All restrictions for TIER II apply, AND: Where special status species could be impacted by construction activities, work seasons will be further restricted by agency permits.: •If special status species are present (based on protocol-level surveys), or assumed present based on habitat, invasive species removal may occur after early consultation with USFWS and CDFW has occurred. •Bare soil and areas where invasive plant species are removed must be stabilized before a Predicted Rain Event.

	TIER I	TIER II	TIER III
		prior written approval has been obtained from Central Coast Water Board staff. Work outside this period may be authorized by agency staff on a site-specific basis.• Bare soil and areas where invasive plant species are removed must be stabilized before a Predicted Rain Event. •The Permittee shall consider wildlife usage in the project area. •Manual revegetation (revegetation that does not require the use of heavy equipment in the waterbody) may occur when rain conditions allow per the winter period text above. •Work shall be timed to avoid disturbing breeding birds in native habitat. Projects that could affect breeding birds shall not begin until August 1 or until a qualified individual determines that a) the birds have fledged and are no longer reliant on the nest or parental care for survival, or b) the nest is abandoned.	
Notification	•Notifications shall include information specified in the PCN template •Tier I PCNs shall be submitted to regulatory agencies with regulatory authority over project activities no more frequently than two times per year (by March 15th and May 15th). •Projects may begin 10 working days after PCNs have been submitted to the	•Tier II PCNs shall be submitted to regulatory agencies with regulatory authority over project activities no more frequently than two times per year (by March 15th and May 15th). •Projects may not begin until 30 days after submittal of the PCN or until May 31st, whichever is later, unless the Permittee is contacted by the	• Notifications shall include information specified in the PCN template. Tier III PCNs shall be submitted one time per year by May 15th, unless a late submittal is approved by all agencies with regulatory authority over project activities. •Projects may begin 30 days

	TIER I	TIER II	TIER III
	regulatory agencies, unless the RCDSCC is contacted by the agencies.	regulatory agencies. If contacted, the Permittee shall not begin work until after the PCN is re-submitted incorporating agency recommendations into the project description and until May 31. •The PCN shall flag (mark for attention) projects that exceed the dimensions identified in the Conservation Practices table. •For Tier II projects that exceed the dimensions identified in the Conservation Practices table, the Permittee shall submit the PCNs by February 21st to allow time for additional review.	after the PCNs have been submitted and no sooner than May 31, unless the Permittee is contacted by the regulatory agencies. •If the regulatory agencies require modifications, the Permittee shall prepare and circulate a Final PCN for final project approval. •Work may begin 10 working days after the Final PCN is sent and no sooner than May 31. •The PCN shall flag (mark for attention) projects that exceed the dimensions identified in the Conservation Practices table above. •For Tier III projects that exceed the dimensions identified in the Conservation Practices table above, the Permittee shall submit the PCNs by March 15th to allow time for additional review.

Description of Conservation Practices and Tier System

CONSERVATION PRACTICE (FOTG PRACTICE CODE)	TIER	PURPOSE AND COMMON USES
Access Road Improvement (560)	I, III,	Road projects for which grading exceeds 100 cyd in upland habitat would fit in tier I; projects with T&E species, or their habitat would fit in tier III.
Planting (342, 612, 422, 391)	I, II or III	Projects for which grading exceeds 100 cyd in upland habitat would fit in tier I; planting projects within a riparian corridor would fit in tier II; projects with T&E species, or near or in their habitat would fit in tier III.
Stream Habitat Improvement and Management (395)	II, III,	Projects within a riparian corridor would fit into tier II; projects with T&E species, or their habitat would fit into tier III..
Stream Crossing (578)	II, III	Activities without listed species would fit into tier II; projects with T&E species, or their habitat would fit into tier III.
Grade Stabilization Structure (410)	I or III	Projects for which grading exceeds 100 cyd in upland habitat would fit in tier I; projects with T&E species, or their habitat would fit in tier III.
Grassed Waterway (412)	I or III	Projects for which grading exceeds 100 cyd in upland habitat would fit in tier I; projects with T&E species, or their habitat would fit in tier III.
Obstruction Removal (500)	II ,III	Projects within a riparian corridor would fit into tier II; projects with T&E species, or their habitat would fit into tier III.
Restoration and Management of Declining Habitats (643)	I, II or III	Projects for which grading exceeds 100 cyd in upland habitat would fit in tier I; projects within a riparian corridor would fit in tier II; projects with T&E species, or their habitat would fit in tier III.
Sediment Basin (350) [with or without Water Control (638)]	I or III	Projects for which grading exceeds 100 cyd in upland habitat would fit in tier I; projects with T&E species, or their habitat would fit in tier III.
Streambank Protection (580)	II ,III	Streambank restoration activities, without listed species, would fit into tier II; projects with T&E species, or their habitat would fit into tier III.
Stream Channel Stabilization (584)	II, III	Stream channel activities, without listed species, would fit into tier II; projects with T&E species, or their habitat would fit into tier III.
Structure for Water Control (587)	I, II, III	Projects for which grading exceeds 100 cyd in upland habitat would fit in tier I; projects within a riparian corridor would fit in tier II.
Underground Outlet (620)	I, II or III	Projects for which grading exceeds 100 cyd in upland habitat would fit in tier I; projects within a riparian corridor would fit in tier II; projects with T&E species, or their habitat would fit in tier III.
Upland Wildlife Habitat Management (645, 382, 614, 516)	I or III	Projects for which grading exceeds 100 cyd in upland habitat would fit in tier I; projects with T&E species, or their habitat would fit in tier III.
Wetland Management (657, 659, 356, 644)	II or III	Projects within a wetland, without T&E species or their habitat would fit in tier II; projects with T&E species, or habitat would fit in tier III.

EXHIBIT C:

Notification and Communication Procedures for the Countywide Partners in Restoration Permit Coordination Program (i.e., Master Permit)

Preliminary Pre-Construction Notification:

Tier I. The RCD will provide an electronic Pre-Construction Notifications (PCN) for each project to County Planning Department (attn: Environmental Planning) no more frequently than 2 times per year; March 15th and May 15th. Tier 1 notifications will include the following information:

- Project identification and location, including location map.
- Nature of work and description of project need.
- Approved practices to be installed.
- Environmental setting – surrounding habitat, adjacent land use.
- Photos of the project area and immediate surroundings annotated to describe the project area and any applicable site features.
- The volume of any proposed grading, including the offsite location to which the fill will be exported (if location is not a municipal landfill), and a valid grading permit (and, if in the coastal zone, a coastal permit) authorizing placement of the fill at the receiving site in such cases. Where grading exceeds 2,000 cubic yards, or as otherwise requested by the Planning Director, certification that plans have been designed and signed by a Registered Civil Engineer (RCE) practicing in accordance with the standards of the State of California (to be indicated by marking a checkbox on the PCN form).
- The compaction requirements and finished maximum cut and fill slopes, as applicable.
- 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.
- Information and justification about the plant species to be used for revegetation (checkboxes).
- Potential presence of listed species (i.e., indication that CNDDB map has been consulted for species) (checkbox).
- Indication that County archeological and paleontological resources maps have been consulted to determine if the project is located in an area where such resources may be impacted (checkbox); with certification that the NRCS Cultural Resources Coordinator or the USACE Regulatory Project Manager has been notified of any projects potentially impacting archeological resources (checkbox).
- If any projects will take place within Coastal Zone, certification that the PCN has been circulated to the California Coastal Commission, Central Coast District office (checkbox).
- For projects within the Coastal Zone, certification that the plans for such projects have been circulated to the California Coastal Commission, Central Coast District office (checkbox). All such plans should include:

- Location map.
- Site plan and cross-section/elevation views (if applicable);
- Plans/maps showing property lines, as providing by the County of Santa Cruz GIS website and APNs (RCD and NRCS will provide agencies with a key linking up the APNs for project locations and the landowner names);
- Indication of any easements or other restrictions applicable to the project area. RCD and NRCS shall inform participating landowners that: (1) landowners are responsible for providing the RCD and NRCS with accurate information about any easements and/or other restrictions affecting that portion of their property where the project would occur; (2) if landowners indicate that there are no such easements and/or restrictions when in fact this is inaccurate, or if they fail to identify all such easements and/or restrictions, and if project implementation leads to a conflict with the terms and conditions of any such easement(s) and/or restriction(s), then the involved landowner(s) shall be held responsible for rectifying the problems created by the project consistent with the terms and conditions of such easements and/or restrictions. When any easements and/or restrictions are identified, RCD and NRCS shall review such easements and/or restrictions (including coordinating with any third-party easement/restriction holders if there are any) to ensure that the project is consistent with them. The RCD and NRCS shall document recommendations on how the project should be modified, if necessary, to ensure consistency with any such restrictions and communicate this information to the landowner. If the landowner moves forward with project implementation and fails to incorporate such recommendations resulting in a conflict with any existing easements/restrictions, the landowner shall be held responsible for rectifying the problems consistent with the terms and conditions of such easements and/or restrictions. As described in the Project Description, and in the Cooperator Agreement itself, if a landowner (or Cooperator) does not carry out work consistent with project design standards and specifications, the RCD and NRCS shall notify the landowner and work directly with them to resolve the problem. If the landowner still fails to conform to the standards set forth in this Program, the NRCS or RCD shall notify the Cooperator that their activities are inconsistent with the standards and specifications contained in the Project Plans and Specifications and that the Cooperator's actions are no longer covered by the Program's permits and agreements. This easement/restriction language shall be included in the Cooperator Agreement signed by the participating landowners.

- For projects in Coastal Zone, a map showing trees that will be disturbed or removed, with description of how findings in County Code Chapter 16.34 (Significant Trees Protection) will be met for any proposed removal of a "significant tree" as defined in County Code Section 16.34.030.
- Indication if any part of the project area is within 40-feet of a County right-of-way.

- For any project that potentially could impact County rights-of-way and for which DPW Encroachment Permits would normally be needed, certification that plans for such projects have been circulated to the County Department of Public Works (DPW) (checkbox).
- Certification that site is not on list of hazardous materials sites cited in the CEQA Initial Study (checkbox).
- Proposed strategies for implementation of CEQA mitigations and other requirements, as specified in the Initial Study and Mitigated Negative Declaration for the Countywide Permit Coordination Program.
- Description of the criteria that will be used to measure success for each project, and the time frame to be used to monitor the identified success criteria. If identified success criteria are to be monitored for less than five years initially, then information and a rationale supporting such a decreased monitoring time-frame shall be provided.
- Indication that landowner access consent has been obtained for the project site and any properties that must be crossed to implement the project (checkbox).
- For all other project types requiring RCE review/approval, as indicated in Exhibit B (i.e., for practices designated with two asterisks in Exhibit B, or as indicated in the endnotes of Exhibit B), certification that an RCE has reviewed, analyzed, and/or designed the project (checkbox).
- Applicable information regarding CEQA mitigation monitoring, as described in #6 below.

Tier II. The RCD will provide an electronic Preliminary PCN for each project to County Planning Department (attn: Environmental Planning) no more frequently than 2 times per year; March 15th and May 15th. Notifications will include all Tier I information, as well as the following:

- Identification of those projects with in-stream work, and those potentially directly or indirectly impacting fish bearing streams[5].
- Estimated number of creek crossings and type(s) of vehicle(s) to be used.
- A description of proposed water diversion or silt control, if working in a perennial stream and if flows will be isolated from the workspace.
- Presence of barriers to aquatic species migration.
- Indication that County FEMA map has been consulted to determine if the project is located in a FEMA identified flood hazard area (Zones A, V, or floodway) (checkbox).
- For all projects with the potential to impact a floodway or floodplain, the written analysis of a Registered Civil Engineer (RCE), or licensed hydrologist, indicating that the project will not decrease floodwater storage, modify floodwater

[5] A "fish-bearing stream" is defined as a stream located within the range of the listed species (Central California Coast (CCC) Evolutionarily Significant Unit (ESU) Coho, the CCC steelhead, and South Central Coast ESU Steelhead) and/or designated critical habitat for these salmonids. The County of Santa Cruz and CDFW fisheries experts prepared a GIS-based summary of the existing information on salmonid distribution in Santa Cruz County streams "Steelhead and Coho Salmon Distribution", County of Santa Cruz, May, 2004. The NRCS and RCD will utilize this map, and any subsequent updates to it, during the initial project assessment to determine if the project is taking place in a fish-bearing stream.

conveyance, increase base flood elevation, or otherwise create an adverse impact either on the site, or upstream or downstream of the site.

Tier III. By May 15th of each year, the RCD will send an electronic Preliminary PCN to the County Planning Department (attn: Environmental Planning) for each project planned for the upcoming construction season. Notifications will include all Tier II information, as well as the following:

- Description of any proposed wetland disturbance, including description of how project/practice will increase functional capacity of said wetland, and a description of the wetland delineation methodology (checkbox).
- Information on special status species/habitat present in relation to the work area, potential impacts to special status species/habitat, and all applicable environmental protection and mitigation measures.

All PCNs will include a cover sheet signed by the NRCS and the RCD certifying that each proposed project meets the criteria to qualify under the Santa Cruz Countywide Partners in Restoration Permit Coordination Program (i.e. Master Permit).

Review of Preliminary PCN and Issuance of Final PCN:

1. For Tier I, projects may begin 10 working days after electronic notifications have been emailed, unless the RCD is contacted by the County Planning Department.

2. For Tier II projects, County Planning Department staff will provide comments or recommended revisions within 30 working days of receipt of a PCN. RCD/NRCS will incorporate agency recommendations into the project description and may begin work without circulating a Final PCN. If discussions concerning recommended modifications are necessary, RCD/NRCS will prepare and circulate a Final PCN for final project approval; work may begin 10 working days after the Final PCN is sent.

3. After reviewing the Preliminary PCN, if County staff determines there are projects that require further review and/or modification to meet the criteria established by the Master Permit, the County will contact the RCD/NRCS to discuss those specific projects and resolve the outstanding issues. During these discussions, if the County determines that additional protection measures or other project revisions are required, they will work with the RCD/NRCS to determine how these measures/revisions will be incorporated into the project. The County and RCD/NRCS will attempt to achieve resolution of outstanding concerns within 30 days of the receipt of the Preliminary PCN. Following discussions with the County and other participating agencies, the RCD/NRCS will send a revised PCN (Final PCN) to the County and other participating agencies, incorporating any revisions necessary to meet the criteria established by the Master Permit that resulted from the County and participating agencies' review of the Preliminary PCN. If no comments are made on a DRAFT PCN, that PCN becomes final and is not resent to County staff.

4. Winter Grading Approvals: Every attempt shall be made to finish all grading and to install erosion control measures prior to the October 15 cutoff date. Any additional grading work beyond October 30 must be pre-approved by the County (i.e., Environmental Planning).

5. Annual Report: By January 31 of each year, the RCD/NRCS shall submit a status report for review to the County (i.e., Environmental Planning) and participating agencies in the form an end-of-the-season Annual Report documenting all projects. The Annual Report shall list currently active projects, and describe each project's purpose, area affected, environmental enhancements accomplished, amounts/volumes of yardage and cut/fill, finish slopes, etc. It shall also list conservation benefits and any net gains in wetlands and riparian areas, describe actions taken to avoid adverse effects to and enhance habitat of listed species, and provide photo documentation of before and after site conditions.

6. Mitigation Monitoring Program: Consistent with the CEQA Mitigation Monitoring Plan included as Section VII of the Master Permit, the PCN and/or the Annual Report (as indicated below) shall include documentation of progress made towards implementation each of the Master Permit program mitigations as specified in the CEQA Initial Study and Mitigated Negative Declaration for the Master Permit/Countywide Partners in Restoration Permit Coordination Program, including listing any additional actions that may be needed to fully implement the CEQA mitigations and meet success criteria, with proposed strategies for ensuring that such actions are taken in the upcoming or following year. For all situations where mitigation measures are not being sufficiently implemented and/or success criteria are not being timely met, the Annual Report shall provide recommended remediation measures (and an implementation schedule for them) designed to meet mitigation targets and/or individual project success criteria. The County and/or the participating agencies may require additional and/or different changes as necessary to ensure that the projects continue to meet the criteria of the Master Permit.

   In describing the implementation status of each mitigation measure and related aspects of the project (such as the project specific criteria), the RCD/NRCS shall provide specific data for each applicable project (e.g., percent of plants established, percent of non-native invasives, documentation of pre- and post-project conditions, dates that applicable RCE/hydrologist reports were submitted to and approved by County staff, etc.), as specified below:

   A. Mitigation Measure: I.A (also appears in General Condition #9 in Exhibit A).

      Monitoring Program: Prior to exercise of the Master Permit, documentation shall be submitted for review and approval by Environmental Planning staff certifying that all required state and federal approvals have been obtained. Copies of the United States Fish and Wildlife Service (USFWS) Biological Opinion, , Army Corps of Engineers Regional General Permit, and California Regional Water Quality Control Board (RWQCB) Water Quality Certification permit shall be submitted as part of the first Pre-Construction Notification (PCN).

B. Mitigation Measure: I.B. (also appears in General Condition #9 in Exhibit A).

Monitoring Program: Plans for individual projects and practices shall incorporate all conditions and recommendations of the approvals mentioned in Mitigation Measure I.A. above. All recommended methods to lessen "take" of protected plants, animals and habitats, including avoidance, shall be incorporated into the design of each practice or project completed under this permit. For each project with the potential to impact a state or Federally-listed species, the PCN and the Annual Report shall indicate what measures are being taken to avoid take of such species.

C. Mitigation Measure: I.C. (also appears in General Condition #9 in Exhibit A).

Monitoring Program: Each specific project area disturbed by a project activity shall be monitored for increase in non-native plant cover, and the results of this monitoring shall be reported in each year's Annual Report. The Annual Report shall also document efforts to remove non-native, invasive plants that have colonized the area or expanded, including use of BMPs designed to prevent re-establishment, or shall document that the site is adjacent to an established, existing infestation that cannot reasonably be prevented from spreading on to the site without constant removal efforts.

D. Mitigation Measure: I.D. (also appears in General Condition #9 in Exhibit A).

Monitoring Program: The Annual Report shall document that revegetation efforts have referenced the lists of suggested plant species given in Exhibits E and F, or that certain native plants that do not appear on these lists have been collected from the site, propagated from on- site plants or plants very close to the site, or grown from seed collected from the site or plants very close to the site. The Annual Report shall also document that any native plant materials that were grown at or delivered from a nursery were thoroughly inspected for disease and pests prior to use.

E. Mitigation Measure: I.E. (also appears in General Condition #9 in Exhibit A).

Monitoring Program: The Annual Report shall document that revegetation and non-native plant removal programs are monitored for three to five years and until success criteria are reached. The Annual Report shall also document any information submitted by a qualified individual that demonstrates that certain characteristics of the site and/or the revegetation plan indicate that the revegetation may be established more quickly than five years, and if success criteria are reached after only three years, that three years of periodic monitoring is adequate. Revegetation success shall be defined as the site being restored to at least the same condition as existed prior to the project. Measures of this success criterion may include: percent native plant cover, percent non-native invasive

cover, number of native and non native species present, plant health, and areal extent of shade provided to adjacent waters by overhanging vegetation.

a. Mitigation Measure: I (also appears at end of General Condition #9 in Exhibit A).

Monitoring Program: The PCN and Annual Report shall document that, prior to the onset of activities that result in the disturbance of habitat or individuals of any listed/special status species, all project workers including RCD/NRCS staff and growers/landowners and/or their employees/representatives will be have been given information on the listed species in the project area, a brief overview of the species' natural history, the protection afforded the species by the Federal and California Endangered Species Acts, and the specific protective measures to be followed during implementation of the practices.

G. Mitigation Measure: II (also appears in General Condition #10 in Exhibit A).

Monitoring Program: To ensure that there is no detrimental impact from conservation practices/projects on conveyance of floodwater and the pattern of flooding, prior to the placement of fill within the floodplain or floodway the RCD/NRCS shall provide analysis from a Registered Civil Engineer or hydrologist for review and approval of Environmental Planning staff (as part of the PCN). The analysis shall show that the practice/project will not decrease storage of floodwaters, modify conveyance, increase base flood level, or otherwise create an adverse impact on the site, upstream or downstream. The Annual Report shall also include documentation that this report was submitted to the County as part of the PCN.

EXHIBIT D:

The NRCS Approach to Conservation

The Resource Conservation District of Santa Cruz County (RCD) is proposing to lead this Program with Natural Resource Conservation Service (NRCS) as a technical partner. The NRCS will assist Program participants by providing technical assistance and administers Farm Bill cost sharing programs to cooperators (private landowners working in partnership with the NRCS). NRCS assists landowners in developing a conservation plan for their property. 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 Resource Conservation Districts and other agencies, organizations and individuals to set conservation priority goals, work with people on the land, and provide technical assistance.

NRCS and RCD staff have technical expertise and field experience to help land users address their natural resource concerns and maintain and improve their economic viability. Employees bring a variety of scientific and technical skills to support resource planning, including soil science, agronomy, biology, agroecology, range conservation, engineering, water quality, cultural resources, and economics. The technical support provided by the NRCS and RCD 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 streambank 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. Farmers and ranchers are stewards of much of the nation's privately owned land. They work voluntarily with the NRCS and RCD to protect and improve the natural resources on and adjacent to their property. With their technical experience and landowner relationships, the NRCS and RCD arein a unique position to provide dependable technical advice to landowners to ensure the conservation of natural resources for current and future generations.

In Santa Cruz County, the NRCS operates out of a Program Delivery Point Office in Capitola shared with the RCD. NRCS resources are also available through the Salinas Service Center and Salinas Area Office located in Monterey County. The agency is available to provide resource information and technology including:

1. Soil resource data for the County through the Soil Survey;
2. Conservation systems to sustain and improve soil and water quality by addressing erosion control, pesticide and nutrient management, irrigation water management, wetlands conservation and restoration, wildlife habitat improvement, flood control, and streambank stabilization;

3. A watershed approach to conservation that utilizes ecological principles and resource science to evaluate and manage the aggregate effects of many individual land uses;
4. A plant material program that introduces new ways to use native and introduced plants to protect and restore water quality and wetlands, and reduce soil erosion; and
5. Techniques for assessing and predicting erosion, agricultural nonpoint-source water pollution, and the effects of agricultural practices and management decisions on farm and ranch economics.
6. Individual experts: soil scientist, Central Coast agronomist, water quality specialist, civil engineer, range specialist, and a roads engineer, as well as additional geologists, biologists and engineers out of the State NRCS Office.

The NRCS Conservation Planning Process

Under the proposed program, the NRCS' Proven Conservation Planning Process will be followed as described below for all projects carried out under the program. For all Farm-bill funded projects, the NRCS will ensure project works are compliant with the National Environmental Policy Act (NEPA) and will 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 2010. This rule prescribes the assessment procedures under which NRCS-assisted actions are to be implemented. For all non-NRCS funded projects, as the federal lead, USACE will ensure compliance with NEPA. Agency procedures are designed to ensure that environmental consequences are considered in decision-making, and to allow RCD/NRCS to assist individuals and non-federal public entities to take actions that protect, enhance, and restore environmental quality.

The NRCS nine-step conservation planning process is used 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 with the customer.

The planning steps and the associated planning documents are listed below in Table D-1. Not all of the planning documents are generated anew for each property, but are based on templates that exist for each major land use or cropping system in California. Modifications to the templates and the resulting conservation plan are based on the assessment of site-specific conditions. Alternatives are evaluated by the client and the NRCS and result in a specific land use plan including detailed recommendations and an engineered plan if necessary.

Table D-1. Conservation Planning Process

	NRCS PLANNING STEP	DOCUMENT USED	RESULTS
Step 1	**Consultation**		Identify resource problems with the client (land operator) and other specialists.
Step 2	**Determine objectives**		Identify, agree on, and document the client's objectives.
Step 3	**Inventory the resources***	***Checklist of Resource Problems or Conditions***.	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**	***Quality Criteria***	For each of the resource problems or concerns identified, consult quality criteria to determine if resource is significantly impaired.
Step 5	**Formulate alternative solutions**	***Site Specific Practices Effect Worksheet***	All significantly impaired resources are itemized in a matrix. A brainstorm of practices which could be used to treat each impaired resource concerns are evaluated for anticipated negative or positive effects in the matrix using a three-point scale.
Step 6	**Evaluate alternative solutions**	***Resource Management System (RMS) Guidesheet***.	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."
Step 7	**Client determines course of action**	***Conservation Plan***	Assist cooperator in selecting a system of optimal conservation practices to maximize resource protection and enhancement. Prepare a conservation plan and specifications.
Step 8	**Client implements plan**	***Standards, Specifications, Practice Requirement Worksheet***	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.

***Additional Documents Consulted:** 7.5" topographic maps, aerial photos, soil survey: LCC, prime soils, soils of statewide importance, unique soils, HEL, hydric conditions, 303(d) list, Cultural Resources, NWI, EPA: ozone and PM10, National Range and Pasture Handbook, Rarefind Database

During the interdisciplinary planning process, all potential impacts of the preferred alternative are documented. This document is then placed in the project case file. The document identifies all short term, long term, and cumulative effects of the proposed actions as well as the on-site and off-site impacts.

If significant adverse environmental impacts are expected to result from a project, the land user is encouraged to consider alternative actions, or may be directed to prepare a project specific Environmental Impact Statement (EIS). RCD/NRCS staff discourages projects that require an EIS. Typically, for small conservation projects, the assessment indicates that there are no significant adverse impacts or that long-term beneficial impacts outweigh short-term adverse impacts, and the conservation planner is directed to proceed with the plan of work.

Protection of Cultural Resources

Cultural Resources Review

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. For all conservation projects covered by the proposed permit coordination program, the potential impacts to cultural resources will be identified and examined and no significant adverse effects will result.

All projects implemented under the Program will be subject to an NHPA assessment to ensure potential impacts to cultural resources are minimized. NRCS (Farm Bill funded projects) and USACE (non Farm Bill funded projects) will follow procedures which comply with the conditions outlined in agreements with the California State Historic Preservation Office (SHPO). The agreements create a process for assessing potential impacts, reviewing local, State and national records and literature, and consulting with tribal authorities, historical societies and other interested parties. If the proposed site for a project lies within designated, culturally sensitive areas, a site inspection for cultural resources is conducted. If it is determined that impacts to cultural resources cannot be avoided, the project would not proceed under the permit coordination program.

Both agencies policy of protection is based on special measures that go into effect when a conservation activity qualifies as an “undertaking.” An undertaking is any project, activity or program under the direct or indirect jurisdiction of a Federal Agency that can result in changes or use of historic properties. An undertaking may be determined to have no effect, no adverse effect, or an adverse effect on historic resources. This recognizes that practices that involve excavation and earthmoving (such as critical area planting and sediment basin) have a higher chance of impacting resources than practices affecting areas where tillage and cultivation have already been performed. If the project involves no ground disturbance or will not exceed the depth, extent, or kind of previous cultivation, the project will not qualify as an undertaking.

The NRCS California state office has a Cultural Resources Coordinator who provides resources and guidance to the District Conservationists and field staff. The Cultural Resources Coordinator provides training and informational materials to field personnel and other interested parties for the consideration of cultural resources; provides policy and procedural guidance for considering and managing cultural resources and historic properties; provides oversight and quality control for cultural resources program; conducts cultural resources investigations and evaluations; and develops treatment plans for mitigation.

For all Farm Bill funded projects covered under the permit coordination program, the NRCS serves as the lead agency to ensure protection of cultural resources in the project area. For all non-Farm Bill funded projects covered under the permit coordination program, the USACE serves as the lead agency to ensure protection of cultural resources in the project areas.

Discovery of Cultural Resources or Human Remains

If, during the course of installing a conservation practice, the risk of affecting cultural resources increases (e.g., if an unanticipated resource is discovered, if an unevaluated resource will be affected, or if it is determined that cultural properties will be affected in a previously unanticipated manner), the RCD/NRCS will respond immediately. This will include requesting the landowner to halt actions in areas with potential to affect cultural resources and notify the appropriate individuals immediately.

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

EXHIBIT E:

Suggested Plant Species for the Santa Cruz Countywide Partners in Restoration Permit Coordination Program

Approved Non-Invasive ***Non-Native*** Species

(Numbers in right columns refer to NRCS practice number)

				1/	2/			3/		
Scientific Name	***Common Name***	***Tree Shrub Grass Forb***	***Ann/ Per***	**342**	**342**	**393**	**412**	**342**	**393**	**412**
Atriplex semibaccata	Australian Saltbush	F	P	X	X			X		
Brassica rapa	Common Mustard	F	A/Bi	X	X			X		
Medicago sativa	Alfalfa	F	P		X			X		
Trifolium fragiferm	Strawberry Clover	F	P		X			X		
Vicia atropurpurea	Purple Vetch	F	A	X	X			X		
Vicia dasycarpa	Lana Woolypod Vetch	F	A	X	X	X	X	X	X	X
Agropyron intermedium	Intermediate Wheatgrass	G	P			X		X	X	
Avena sativa	Oats	G	A	X	X	X	X	X	X	X
Echinochloa crusgalli	Barnyard Grass	G	A					X	X	
Elytrigia intermedia	Luna Wheatgrass	G	P				X			X
Festuca ovina glauca	Sheep fescue	G	P			X			X	
Hordeum vulgare	Common Barley	G	A	X	X	X	X	X	X	X
Lippia	Matgrass	G	P	X	X	X	X	X	X	X
Lolium rigidum	Wimmera-62 ryegrass	G	A					X		
Poa annua	Annual Bluegrass	G	A		X[a]	X[a]	X[a]			
Secale cereale	Cereal Rye	G	A	X	X	X[b]		X	X	
Sorghum sudanese	Sudangrass	G	A			X		X		
Trifolium incarnatum	Crimson Clover	F	A	X	X					
	"Merced" Cereal Rye	G	A			X		X	X	
	Red Oats	G	A	X	X	X		X	X	
	Sterile Rye	G	A	X	X			X		
	Sterile Wheat	G	A	X	X	X		X	X	
Arbutus unedo	Strawberry Tree	S	P		X			X		
Callistemon citrinus	Lemon Bottlebrush	S	P		X			X		
Rosemarinus officinalis	Dwarf rosemary	S	P		X			X		

1. Natural Areas Definition: Areas where primary goal is restoration to native conditions and ecological functions.

2. Natural-Working Land Interface Definition: Area where primary purpose is to buffer natural areas from impact of working landscapes. Periodic management and/or disturbance may be required to sustain function (e.g., sediment removal, replanting, harvesting biomass and nutrients, mowing, etc.)

3. Farmscaping Definition: Working land area where the primary goal is crop production for harvest. Intensive management and regular disturbance occurs though some non-crop plants are established to protect crops (e.g. erosion-control, insect habitat, wind or dust control)

a/ Use in combination with secale cereale or hordeum vulgare

b/ Use in combination with other species

EXHIBIT F:

Suggested Plant Species for the Santa Cruz Countywide Partners in Restoration Permit Coordination Program

Approved ***Native*** Species

(Numbers in right columns refer to NRCS practice number)

				1/	2/			3/		
Scientific Name	***Common Name***	***Tree Shrub Grass Forb***	***Ann/ Per***	342	342	393	412	342	393	412
Achillea millefoleum	Yarrow	F	P	X	X			X	X	
Anaphalis margaritacea	Pearly Everlasting	F	P	X	X			X		
Asclepias fascicularis	Milkweed	F	P	X	X			X		
Aster chilensis	Aster	F	P	X	X	–	–	X	–	–
Atriplex patula	Fat-Hen Saltbush	F	A	X	X			X		
Euthemia occidentalis	Goldenrod	F	P	X	X	X		X	X	
Heliotropium curassivicum var. oculatum	Heliotrope	F	P	X	X			X		
Potentilla gracilis	Slender Cinquefoil	F	P					X		
Stachys ajugoides or Stachys bullata	Hedgenettle	F	P	X	X			X		
Agrostis densiflora	Calfiornia Bentgrass	G	P	X			X			X
Agrostis exerata	Spike Bentgrass	G	P	X						X
Deschampsia caespitosa[b]	Tufted Hairgrass	G	P	X				X		
Deschampsia elongata[b]	Slender Hairgrass	G	P	X				X		
Deschampsia holciformis[b]	Pacific Hairgrass	G	P	X			X	X		X
Distichlis spicata	Seashore Saltgrass	G	P	X				X		
Elymus glaucus[b]	Blue Wildrye	G	P	X	X	X	X	X	X	X

				1/		2/			3/	
Scientific Name	***Common Name***	***Tree Shrub Grass Forb***	***Ann/ Per***	**342**	**342**	**393**	**412**	**342**	**393**	**412**
Elymus trachycaulus	Slender Wheatgrass	G	P	X	X	X	X	X		X
Festuca idahoensis[b]	Idaho Fescue	G	P	X	X	X		X	X	
Festuca occidentalis[b]	Western Red Fescue	G	P	X		X			X	
Festuca rubra[b]	Creeping Red Fescue	G	P	X	X			X		
Festuca rubra[b]	Red Fescue (Molate)	G	P	X		X	X		X	X
Hordeum brachyantherum ssp. californicum[b]	California Barley	G	P	X	X	X	X	X	X	X
Hordeum brachyantherum[b]	Meadow Barley	G	P	X	X	X	X	X	X	X
Koeleria macrantha[b]	June grass	G	P	X		X			X	
Leymus triticoides	Creeping Wildrye	G	P	X	X	X	X	X	X	X
Muhlenbergia rigens	Deer Grass	G	P	X	X			X		
Nassella pulchra[b]	Purple Needlegrass	G	P	X	X			X		
Phalaris californica[b]	Canarygrass	G	P	X	X			X		
Stipa lepida	Foothill Stipa	G	P	X	X	X		X	X	
Carex barbarae[a]	Basket Sedge	GL	P	X	X			X		
Carex praegracilis[a]	Clustered Field Sedge	GL	P	X	X			X		
Eleocharis spp.[a]	Spikerush	GL	P	X	X			X		
Juncus balticus[a]	Baltic Rush	GL	P	X	X	X		X		
Juncus patens	Blue green Rush	GL	P	X	X	X		X	X	

				1/		2/			3/	
Scientific Name	***Common Name***	***Tree Shrub Grass Forb***	***Ann/ Per***	**342**	**342**	**393**	**412**	**342**	**393**	**412**
Juncus phaeocephalus	Brown Headed Rush	GL	P	X	X	X		X	X	
Scirpus americanus	Three-Square Bullrush	GL	P	X	X	X		X		
Scirpus microcarpus	Small-fruited Bulrush	GL	P	X	X	X		X		
Artemisia californica	California Sagebrush	S	P	X						
Artemisia douglasiana	Mugwort	S	P	X	X	X	X	X	X	X
Atriplex lentiformis	Quail Bush	S	P	X	X			X		
Atriplex lentiformis ssp. Breweri	Brewers Salt brush	S	P	X	X			X		
Baccharis pilularis	Coyote Brush	S	P	X	X			X		
Baccharis viminea	Mule Fat	S	P	X	X			X		
Cephalanthus occidentalis	CA buttonwillow	S	P	X	X			X		
Cercis occidentalis	Western redbud	S	P	X	X			X		
Eriogonum arborescens	Santa Cruz Island Buckwheat	S	P	X	X			X		
Eriogonum fasciculatum	California Buckwheat	S	P	X	X			X		
Helianthemum scoparium	Rockrose	S	P	X	X			X		
Holodiscus discolor	Oceanspray	S	P	X	X			X		
Lonicera involucrata	Black Twinberry	S	P	X	X					
Malosma laurina	Sumac	S	P	X	X			X		
Polygonum paronchyi[a]	Beach Knotweed	S	P	X	X			X		

				1/		2/			3/	
Scientific Name	***Common Name***	***Tree Shrub Grass Forb***	***Ann/ Per***	**342**	**342**	**393**	**412**	**342**	**393**	**412**
Prunus ilicifolia	Hollyleaf Cherry	S	P	X	X			X		
Rhamnus california	Coffeeberry	S	P	X	X			X		
Ribes sanguineum var. glutinosum	Red-Flowering Currant	S	P	X	X			X		
Rosa californica	California Wildrose	S	P	X	X			X		
Rubus parviflorus	Thimbleberry	S	P	X	X			X		
Rubus ursinus	California Blackberry	S	P	X	X			X		
Salix scouleriana	Scouler Willow	S	P	X	X			X		
Salvia mellifera	Black Sage	S	P	X	X					
Sambucus mexicana	Blue Elderberry	S	P	X	X			X		
Vaccinium ovatum	California Huckleberry	S	P	X	X			X		
Acer macrophyllum	Big Leaf Maple	T	P	X	X			X		
Acer negundo	Box Elder	T	P	X	X			X		
Aesculus californica	California Buckeye	T	P	X	X			X		
Alnus rhombifolia[c]	White Alder	T	P	X	X			X		
Alnus rubra[c]	Red Alder	T	P	X	X			X		
Arbutus menziesii	Pacific Madrone	T	P	X	X			X		
Cornus californica	Creekside Dogwood	T	P	X	X			X		
Cornus stolonifera	Red Osier Dogwood	T	P	X	X			X		

				1/		2/			3/	
Scientific Name	***Common Name***	***Tree Shrub Grass Forb***	***Ann/ Per***	**342**	**342**	**393**	**412**	**342**	**393**	**412**
Heteromeles arbutifolia	Toyon	T	P	X	X			X		
Platanus racemosa[c]	Western Sycamore	T	P	X	X			X		
Populus fremontiic	Fremont Cottonwood	T	P	X	X			X		
Salix hindsiana	Sandbar Willow	T	P	X	X			X		
Salix hookeriana	Coastal Willow	T	P	X	X			X		
Salix laevigata	Red Willow	T	P	X	X			X		
Salix lasiandra	Yellow Willow	T	P	X	X			X		
Salix lasiolepis	Arroyo Willow	T	P	X	X			X		
Salix sitchensis	Coulter Willow	T	P	X	X			X		
Symphoricarpos albus	Snowberry	T	P	X	X					
Umbellularia californica	California Bay	T	P	X	X					
	Clements Lotus			X				X		

1. Natural Areas Definition: Areas where primary goal is restoration to native conditions and ecological functions.

2. Natural-Working Land Interface Definition: Area where primary purpose is to buffer natural areas from impact of working landscapes. Periodic management and/or disturbance may be required to sustain function (e.g., sediment removal, replanting, harvesting biomass and nutrients, mowing, etc.)

3. Farmscaping Definition: Working land area where the primary goal is crop production for harvest. Intensive management and regular disturbance occurs though some non-crop plants are established to protect crops (e.g. erosion-control, insect habitat, wind or dust control).

a/ Use local divisions
b/ Use local divisions or do not plant within 1 mile of a natural area
c/ Concern with introducing disease into plant community through contaminated nursery stock

EXHIBIT G:

Prohibited Plant Species List for the Santa Cruz Countywide Partners in Restoration Permit Coordination Program

Scientific Name	Common Name	Do not Plant in Project Area[1]	Eradicate in Project Area[2]
Acacia melonoxylon	Blackwood acacia	x	x
Acacia dealbata	Silver wattle	x	x
Ageratina adenophora	Mexican Eupatorium	羊	?
Ailanthus altissima	Tree-of-heaven	x	x
Ammophila arenaria	European Beachgrass	x	x
Arundo donax	Giant Reed	x	x
Bromus rigidus	Rip gut grass	羊	羊
Calystegia sepium	Hedge Bindweed	?	?
Carduus pycnocephalus	Italian Thistle	羊	羊
Carpobrotus edulis	Iceplant	x	x
Centaurea solstitialis	Yellow Star Thistle	x	x
Cirsium vulgare	Bull Thistle	羊	羊
Conium maculatum	Poison Hemlock	羊	x
Cortaderia jubata	Jubata Grass	羊	x
Cortaderia selloana	Pampas grass	羊	x
Cynodon dactylon	Bermuda grass	x	x羊
Cytisus scoparius	Scotch Broom	x	x羊
Cytisus striatus	Portuguese (Striatus) Broom	x	x羊
*C. franchetti, C. pannosa**, C. lacteal*	Cotoneaster	x	x
Dactylis glomerata	Orchardgrass	x	x
Delaireia odorata	Cape Ivy	羊	x
Ehrharta erecta, Ehrharta calycina	Veldt grass	x	x
Eucalyptus globulus	Eucalyptus	x	x
Erechtites glomerata	Australian fireweed	羊	羊
Erechtites mimima	Australian fireweed	羊	羊
Festuca arundinacea	tall fescue	x	x
Genista monspessulana	French broom	x	x
Hedera sp.	Algerian Ivy	?	?
Hedera helix	English Ivy	x	x
Holcus lanatus	velvet grass	x	x
Hordeum geniculatum	Mediterranean barley	羊	?
Hordeum leporinum	Famer's foxtail	羊	?

Leptospermum sp.	Australian tea tree	x	x
Scientific Name	**Common Name**	**Do not Plant in Project Area[1]**	**Eradicate in Project Area[2]**
Lolium multiflorum	Italian rye grass	?	x羊
Lolium perenne	perennial rye grass	x	?
Marrubium vulgare	horehound	x	x
Medicago hispida	bur clover	羊	羊
Melilotus albus	white sweet clover	羊	?
Myosatis latifolia	Forget-me-not	x	x羊
Oxalis pes-caprae	Bermuda buttercup	x	x羊
Pennisetum clandestinum	kikuyu grass	x	x
Phalaris aquatica	Harding grass	x	x
Robinia psuedoacacia	Black Locust	x	x
Rubus procerus	Himalaya Berry	x	x
Senecio mikanoides	German ivy	x	x
Senecio vulgaris	common groudsel	羊	羊
Silybum marianum	milk thistle	羊	x羊
Sonchus oleraceus	common sow thistle	羊	羊
Spartium junceum	Spanish Broom	x	x羊
Tamarix ramosissima	salt cedar, tamarisk	x	x
Tradescantia sp.	Wandering Jew	x	x
Ulex europaea	Gorse	x	x羊
Vinca major	Periwinkle	x	x
Xanthium stumarium	cocklebur	羊	x

Key to Symbols:

(羊) indicates that species is not commonly planted
(x) indicates species is uncontrollable;
(x羊) indicates that species may be uncontrollable depending on patch size
(?) indicates more research is needed on the spreading of these species through landowner implementation and ability to control these species once established. As with all species in this table, the proliferation of these species will be minimized as part of the program
(**) indicates species is much worse than other species

Exhibit H: Required Mitigation Measures for CEQA Negative Declaration

NAME: Santa Cruz County Resource Conservation District (RCD) and the Natural Resources Conservation Service (NRCS)
APPLICATION: 03-0513
A.P.N: Countywide

NEGATIVE DECLARATION MITIGATIONS

I. In order to mitigate for potential incidental loss of special status species, to comply with the Federal and State endangered species acts and to minimize impacts on wildlife habitat, in addition to implementing the avoidance measures, best management practices, and minimization techniques given in the program description, the applicant shall:

A) Prior to exercise of this permit, submit documentation for review and approval by Environmental Planning staff that all required state and federal approvals have been obtained. Copies of the United States Fish and Wildlife Service (USFWS) Incidental Take Permit and Biological Opinion, National Marine Fisheries Service (NMFS) Section 7 consultation, California Department of Fish and Wildlife (CDFW) Stream Alteration Agreement and California Regional Water Quality Control Board (RWQCB) Water Quality Certification permit shall be submitted.

B) Plans for individual projects and practices shall incorporate all conditions and recommendations of the approvals mentioned above. All recommended methods to lessen "take" of protected plants, animals and habitats, including avoidance, shall be incorporated into the design of each practice or project completed under this permit.

C) For each specific project the area disturbed by the project activity shall be monitored for increase in non- native plant cover. Non- native, invasive plants that have colonized the area or expanded shall be removed using BMPs designed to prevent re-establishment, unless the site is adjacent to an established, existing infestation that cannot reasonably be prevented from spreading onto the site without constant removal efforts.

D) Revegetation shall be informed by the "List of Suggested Plant Species", Appendix B *(of CEQA Initial Study or Exhibits E & F of Master Permit*), unless certain native plants that do not appear on the list can be collected from the site, propagated from on site plants or plants very close to the site, or grown from seed collected from the site or plants very close to the site. Further, native plant materials that are grown at or delivered from a nursery shall be closely inspected for disease and pests prior to use.

E) Revegetation and non-native plant removal programs shall be monitored for three to five years and until success criteria are reached.

If information has been submitted by an NRCS consulting biologist or qualified individual that demonstrates that certain characteristics of the site and/or the revegetation plan indicate that the revegetation may be established more quickly than five years, and if success criteria are reached after only three years, then three years of periodic monitoring may be adequate.

Revegetation success is defined as the site being restored to at least the same condition as existed prior to the project. Measures of this success criterion may include: percent native plant cover, percent non native invasive cover, number of native and non native species present, plant health, and areal extent of shade provided to adjacent waters by overhanging vegetation.

II. To ensure that there is no detrimental impact from conservation practices on conveyance of floodwater and the pattern of flooding, prior to the placement of fill within the floodplain or floodway the applicant shall provide analysis from a Registered Civil Engineer or hydrologist for review and approval of Environmental Planning staff. The analysis shall show that the practice will not decrease storage of floodwaters, modify conveyance, increase base flood level, or otherwise create an adverse impact on the site, upstream or downstream.

Exhibit I

CEQA Initial Study and Negative Declaration

(on file at the Planning Department)

Required Findings for the Extension of the Master Permit for Environmental Enhancement Projects Program

Riparian Exception Findings:

1. That there are special circumstances or conditions affecting the property.

Planning staff shall review each year's Pre-Construction Notification (PCN) to ensure that for each proposed Master Permit authorized environmental enhancement project in a riparian corridor, one or more special circumstance or conditions affecting each subject property exists. The special circumstances requiring some Master Permit authorized projects/conservation practices to take place in riparian corridors are that riparian corridors are often where remedial or enhancement projects are needed. Many of the proposed remedial or enhancement projects must be undertaken within or near riparian corridors because this is where the problem to be remedied occurs (e.g., stream bank erosion problems, degraded fish and/or riparian habitat, etc.).

2. That the exception is necessary for the proper design and function of some permitted or existing activity on the property.

Planning staff shall review each year's PCN to ensure that, for each proposed Master Permit authorized environmental enhancement project in a riparian corridor, a riparian exception would be necessary for the proper design and function of some permitted or existing activity on the property. For such projects, a Riparian Exception would be necessary because any Master Permit authorized projects that would take place in a riparian corridor would be necessary for the proper functioning of existing natural processes on the site (e.g., by creating of a natural non-erosive condition where an erosive condition previously existed, by enhancing natural riparian habitat, etc.).

3. That the granting of the exception will not be detrimental to the public welfare or injurious to other property downstream or in the area in which the project is located.

As part of the PCN review process, Planning staff will ensure that any Master Permit authorized project be conditioned to ensure that no detrimental downstream conditions (e.g., increased flooding), or other potentially injurious conditions, would be created. Authorized projects would generally improve downstream conditions.

4. That the granting of the exception, in the coastal zone, will not reduce or adversely impact the riparian corridor, and there is no feasible less environmentally damaging alternative.

As part of the PCN review process, Planning staff will ensure that any Master Permit authorized projects that would take place in a riparian corridor would be conditioned so as to improve riparian conditions and would, therefore, generally be the least environmentally damaging alternative (especially compared to not doing the project at all). The least environmentally damaging alternative method for accomplishing the project's goals would also be required, as per the general condition #1 listed in Exhibit A of the Master Permit.

5. That the granting of the exception is in accordance with the purpose of County Code Chapter 16.30, and with the objectives of the General Plan and elements thereof, and the Local Coastal Program land use plan.

As part of the PCN review process, Planning staff will ensure that any Master Permit authorized projects that would take place in a riparian corridor would provide enhancement of natural resource values (e.g., erosion control, habitat improvement, etc.), and as such would be consistent with the Riparian Corridor and Wetland Protection Ordinance (Chapter. 16.30) and the riparian habitat protection provisions of the General Plan/LCP.

Coastal Development Permit Findings:

1. That the project is a use allowed in one of the basic zone districts, other than the Special Use (SU) district, listed in section 13.10.170(d) as consistent with the General Plan and Local Coastal Program LUP designation.

Environmental enhancement projects such as those eligible under the Master Permit program are allowed uses in all zone districts.

2. That the project does not conflict with any existing easement or development restrictions such as public access, utility, or open space easements.

The applicant (RCD) shall research each candidate site within the Coastal Zone for possible conflicts with existing easements and development restrictions. In addition, Coastal Commission staff, as part of the Pre-Construction Notification process, shall receive and review parcel maps and other information about property easements and other property restrictions for any property within the Coastal Zone for which a Master Permit authorized project is being proposed. If any such proposed projects would potentially be in conflict with said easements or restrictions, Coastal Commission and County staff would work with RCD to either eliminate such conflicts or remove that project from the proposed project list.

3. That the project is consistent with the design criteria and special use standards and conditions of this chapter pursuant to section 13.20.130 et seq.

Projects under the Master Permit program will be consistent with the provisions of Chapter 13.20 in that there are provisions contained in the Master Permit's General Conditions (Exhibit A, #3) to ensure that all projects that involve earthmoving and/or vegetation removal be made to look as natural as possible and aesthetically pleasing when visible in the public viewshed (by using curvilinear shapes, natural undulations matching the surrounding landform, avoiding hard/constructed structures, using endemic vegetation, etc.).

4. **That the project conforms with the public access, recreation, and visitor-serving policies, standards and maps of the General Plan and Local Coastal Program land use plan, specifically Chapter 2: figure 2.5 and Chapter 7, and, as to any development between and nearest public road and the sea or the shoreline of any body of water located within the coastal zone, such development is in conformity with the public access and public recreation policies of Chapter 3 of the Coastal Act commencing with section 30200.**

   The Master Permit conditions of approval will ensure that all eligible environmental enhancement projects are consistent with Chap. 2: Fig. 2.5 and Chap. 7 of the General Plan/LCP. Moreover, since Coastal Commission staff will be reviewing all plans for eligible projects within the Coastal Zone, it is assured that the public access and recreation provisions of the Coastal Act will be followed.

5. **That the proposed development is in conformity with the certified Local Coastal Program.**

   The Master Permit conditions of approval will ensure that all eligible environmental enhancement projects are consistent with the policies of the General Plan/LCP (i.e., to protect and enhance riparian and aquatic habitats, to protect visual resources, to protect public access, to enhance natural processes, etc).

Development Permit Findings:
(as required to be included with all Coastal Development Permit findings)

1. **That the proposed location of the project and the conditions under which it would be operated or maintained will not be detrimental to the health, safety, or welfare of persons residing or working in the neighborhood or the general public, and will not result in inefficient or wasteful use of energy, and will not be materially injurious to properties or improvements in the vicinity.**

   As part of the PCN review process, Planning staff will ensure that all projects eligible under the Master Permit program will be conditioned to ensure that hazardous conditions are not created and will, in fact, result in an improvement to the environment and public welfare. None of the eligible environmental enhancement projects will involve the use of energy except during their construction and occasional maintenance and, therefore, will not result in inefficient or wasteful use of energy.

2. **That the proposed location of the project and the conditions under which it would be operated or maintained will be consistent with all pertinent County ordinances and the purpose of the zone district in which the site is located.**

   The Master Permit conditions of approval will ensure that all eligible environmental enhancement projects comply with all pertinent County ordinances, including the following, as applicable:

   - Encroachment Permit Regulations – County Code Chapter 9.70
   - Zoning Ordinance – County Code Chapter 13.10

- Coastal Zone Regulations – County Code Chapter 13.20
- Grading Ordinance – County Code Chapter 16.20
- Erosion Control Ordinance – County Code Chapter 16.22
- Water Quality Control – County Code Chapter 16.24
- Riparian Corridor and Wetlands Protection Ordinance – County Code Chapter 16.30
- Sensitive Habitat Protection – County Code Chapter 16.32
- Significant Trees Protection Ordinance - County Code Chapter 16.34
- Native American Cultural Sites Ordinance – County Code Chapter 16.40
- Paleontological Resources Protection Ordinance – County Code Chapter 16.44
- Permit and Approval Procedures – County Code Chapter 18.10.

3. That the proposed use is consistent with all elements of the County General Plan and with any specific plan which has been adopted for the area.

The Master Permit conditions of approval will ensure that all eligible environmental enhancement projects are consistent with the policies of all General Plan/LCP elements (i.e., to protect and enhance riparian and aquatic habitats, to protect visual resources, to protect public access, to enhance natural processes, etc).

4. That the proposed use will not overload utilities and will not generate more than the acceptable level of traffic on the streets in the vicinity.

Projects eligible under the Master Permit will not involve connections to any utilities, nor will generate any additional traffic.

5. That the proposed project will complement and harmonize with the existing and proposed land uses in the vicinity and will be compatible with the physical design aspects, land use intensities, and dwelling unit densities of the neighborhood.

The Master Permit conditions of approval will ensure that all eligible environmental enhancement projects will be visually compatible with their surroundings. For instance, there are provisions contained in the Master Permit's General Conditions (Exhibit A, #3) to ensure that all projects that involve earthmoving and/or vegetation removal be made to look as natural as possible and aesthetically pleasing when visible in the public viewshed (by using curvilinear shapes, natural undulations matching the surrounding landform, avoiding hard/constructed structures, using endemic vegetation, etc.). No changes to land use intensities or dwelling unit intensities are proposed.

6. The proposed development project is consistent with the Design Standards and Guidelines (sections 13.11.070 through 13.11.076), and any other applicable requirements of this chapter.

The projects proposed to be carried out under the Master Permit are not subject to Chapter 13.11 but will, nonetheless, be visually compatible with their surroundings.

Significant Tree Removal Findings:

Per the Significant Trees Protection ordinance (County Code Sec. 16.34.060) one or more of the following findings would be made for any Master Permit authorized project within the Coastal Zone that would result in the removal of a "significant tree" (as defined in County Code Sec. 16.34.030). These findings would appear in the Pre-Construction Notification and would be reviewed by Coastal Commission staff in addition to County (i.e., Environmental Planning) staff.

1. **That the significant tree is dead or is likely to promote the spread of insects or disease.**

2. **That the removal is necessary to protect health, safety, and welfare.**

3. **That removal of a non-native tree is part of a plan approved by the county to restore native vegetation and landscaping to an area.**

4. **That removal will not involve a risk of adverse environmental impacts such as degrading scenic resources.**

5. **That removal is necessary for active or passive solar facilities, and that mitigation of visual impacts will be provided.**

6. **That removal is necessary in conjunction with another permit to allow the property owner an economic use of the property consistent with the land use designation of the Local Coastal Program land use plan.**

7. **That removal is part of a project involving selective harvesting for the purpose of enhancing the visual qualities of the landscape or for opening up the display of important views from public places.**

8. **That removal is necessary for new or existing agricultural purposes consistent with other County policies and that mitigation of visual impacts will be provided.**

CALIFORNIA ENVIRONMENTAL QUALITY ACT ADDENDUM TO AN ADOPTED MITIGATED NEGATIVE DECLARATION

The Santa Cruz County Planning Department has reviewed the changes to the project described below and has determined that none of the provisions of CEQA Guidelines section 15162(a) apply. Therefore, pursuant to CEQA Guidelines section 15164(a), an Addendum to the Negative Declaration is required.

Application number of the project for which a Mitigated Negative Declaration was adopted: **03-0513**
Application number of the proposed amendment to the approved project: **211073**
Assessor parcel number: **Countywide**
Project location: **Countywide**

Project Description: Application to extend the Master Permit for Environmental Enhancement Projects, # 03-0513, for a five-year period, with minor amendments to the practices covered by the permit and allow the Permit to be extended every five (5) years thereafter, at a Level 3 approval.

Person or Agency Proposing Project: Santa Cruz County Resource Conservation District

Staff Contact and Phone Number: Kelli Camera (831) 464-2950 ext. 15

The Environmental Coordinator has reviewed the proposed changes to the Master Permit for Environmental Enhancement Projects with regards to CEQA Guidelines Section 15162(a), and has found that:

1. No substantial changes are proposed in the project which will require major revisions of the previous negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
2. No substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous Negative Declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; and
3. No new information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous Negative Declaration was adopted, shows any of the following:

    a. The project will have one or more significant effects not discussed in the previous negative declaration;
    b. Significant effects previously examined will be substantially more severe than shown in the previous negative declaration;
    c. Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of

the project, but the project proponents decline to adopt the mitigation measure or alternative; or

d. Mitigation measures or alternatives which are considerably different from those analyzed in the previous negative declaration would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

Therefore, pursuant to CEQA Guidelines section 15164(d), the Environmental Coordinator for the County of Santa Cruz recommends that decision making body consider this addendum with the attached adopted negative declaration prior to making a decision on the project.

Staff Planner: _____ Date: July 6, 2021

COUNTY OF SANTA CRUZ

PLANNING DEPARTMENT

701 OCEAN STREET, 4TH FLOOR, SANTA CRUZ, CA 95060
(831) 454-2580 FAX: (831) 454-2131 TDD: (831) 454-2123
~~TOM BURNS, DIRECTOR~~

MASTER PERMIT
for
ENVIRONMENTAL ENHANCEMENT PROJECTS

I. Project Description:

This Master Permit for Environmental Enhancement Projects (Master Permit) implements the Santa Cruz Countywide Partners in Restoration Permit Coordination Program and is being issued to the Resource Conservation District of Santa Cruz County (RCD) for the implementation of small, environmentally beneficial projects, such as stream bank protection, gully stabilization, culvert repair/replacement, erosion control structures, exotic vegetation removal, and fish stream habitat improvement projects, primarily on private parcels ~~(mostly farm and ranch lands)~~ throughout the unincorporated area (except within the "original jurisdiction" of the California Coastal Commission – i.e., primarily areas below the mean high tide line). This Master Permit constitutes County approval for the conduct of 15 specific types of conservation practices. Eligible projects implementing these practices are subject to size constraints and other limiting criteria, and shall be carried out under the auspices and oversight of the RCD and the U.S. Department of Agriculture's Natural Resources Conservation Service (NRCS).

This Master Permit incorporates all of the separate County permits that would otherwise be needed for the conduct of these qualifying environmental enhancement projects, including Coastal Zone approvals, riparian corridor exceptions, grading permits, erosion control plans, encroachment permits for projects impacting County right-of-way, and/or sensitive habitat reviews, as applicable (however separate Building Permits would be required for bridges and retaining walls over 3-feet in height).

A more detailed project description for the Santa Cruz Countywide Partners in Restoration Permit Coordination Program authorized by this Master Permit is provided in the California Environmental Quality Act (CEQA) Initial Study for the program (see Exhibit I).

Work performed according to the provisions of this Master Permit, as described and conditioned herein, are deemed to be consistent with the County General Plan and Local Coastal Program (LCP), and the requirements of the following County regulations:

- Encroachment Permit Regulations – County Code Chapter 9.70
- Zoning Ordinance – County Code Chapter 13.10
- Coastal Zone Regulations – County Code Chapter 13.20

- Grading Ordinance – County Code Chapter 16.20
- Erosion Control Ordinance – County Code Chapter 16.22
- Water Quality Control – County Code Chapter 16.24
- Riparian Corridor and Wetlands Protection Ordinance – County Code Chapter 16.30
- Sensitive Habitat Protection – County Code Chapter 16.32
- Significant Trees Protection Ordinance - County Code Chapter 16.34
- Native American Cultural Sites Ordinance – County Code Chapter 16.40
- Paleontological Resources Protection Ordinance – County Code Chapter 16.44
- Permit and Approval Procedures – County Code Chapter 18.10

II. Authorized Project Types:

Work authorized by this Master Permit falls into one or more of the following 15 project categories (see Exhibit B for more detailed descriptions of each category), subject to the general criteria listed in Exhibit A, and to project type-specific criteria including maximum dimensions and volumes as listed in Exhibit B:

1. **Access Roads:** Improvements to existing access roads to reduce or eliminate erosion.
2. **Plantings:** Installation of vegetation for erosion control and to improve wildlife habitat and visual resources.
3. **Stream Habitat Improvement and Management:** Implementing fish habitat enhancements (including removing/modifying barriers to fish passage).
4. **Grade Stabilization Structures:** Installation of structures to reduce or eliminate erosion, such as head cutting in gullies.
5. **Grassed Waterways:** Establishing grassed drainage channels to ensure stable conveyance of runoff.
6. **Obstruction Removal:** Removal and disposal of unnatural structures from waterways such as abandoned cars and appliances (but not including large woody debris).
7. **Restoration and Management of Declining Habitats:** Restoring and conserving rare or declining native vegetation communities by removing exotic, invasive plants and restoring native vegetation in the project area, to manage non-native habitats that provide critical habitat for special-status species, such as the monarch butterfly, and managing fuel loads in sensitive habitats, allowing treatment and maintenance of invasive species and noxious weeds, and revegetation of a treated area.
8. **Sediment Basins:** Installation of sediment basins, with (or without) water control and associated outlets and energy dissipating structures, tohelp stabilize downstream channel flows.
9. **Streambank Protection:** Using vegetation or structures for stream bank erosion protection.

10. **Stream Channel Stabilization:** Stabilizing a stream channel with a suitable structure and removing large amounts of accumulated sediment (from non-fish bearing streams).
11. **Stream Crossing:** Installing bridges, etc. when a barrier to fish passage has been removed.
12. **Structure for Water Control:** Installing certain types of water flow control structures, to reduce or eliminate erosion or flooding, and which do not create a barrier to fish passage.
13. **Underground Outlets:** Installing an underground conduit to collect surface water and convey it to a suitable outlet, to prevent erosion and downstream sedimentation.
14. **Upland Wildlife Habitat Management:** Creating, restoring, and/or enhancing upland habitat for wildlife species through the installation of infrastructure or manipulation of vegetation to sustain optimal habitat conditions.
15. **Wetland Management:** Restoring and enhancing wetland conditions similar to those that existed prior to modification for farming, grazing, or other land use, including managing water regime to improve habitat for desired species or for pest control.

III. Required Criteria for Eligible Projects:

A. General Criteria: All qualifying environmental enhancement projects must comply with the general required conditions set forth in Exhibit A. These conditions include limitations on:

- Timing of construction (e.g., limits on work during the wet season);
- Site disturbance (e.g., earthmoving and vegetation removal);
- Construction equipment;
- Revegetation and removal of exotic plants;
- Erosion generating activities;
- Work in streams, floodplains, wetlands and permanently ponded areas;
- Use of herbicides;
- Impacts to Special Status species;
- Impacts to floodwater conveyance patterns.

B. Project Specific Criteria: Exhibit B provides a detailed description of each type of eligible project, as well as the size/volume limitations and specific design criteria and standards for each conservation practice.

IV. Procedures for Review and Approval of Projects:

A. RCD/NRCS Role: Each qualifying environmental enhancement project must be carried out under the auspices and oversight of the RCD and NRCS, following the NRCS Conservation Planning Process (as described in Exhibit D). The RCD and NRCS will cooperatively maintain oversight of all qualifying projects/activities, and will use a nine-step conservation planning process (see Table D-1 in Exhibit D) to customize a management plan tailored for the unique conditions of each participating property and its owner/manager. A conservation plan describing the selected management system is prepared with the landowner/manager. In addition, prior to the onset of activities that result in the disturbance of habitat of any species listed under the Federal and/or California Endangered Species Acts, all project workers including RCD and NRCS staff and cooperating property owners/managers shall be given information on the listed species in the project area, by the RCD/NRCS, including a brief overview of the species' natural history, the protection afforded the species by the Federal and/or California Endangered Species Acts, and the specific protective measures to be followed during implementation of the practices.

The RCD and NRCS will administer the Santa Cruz Countywide Partners in Restoration Permit Coordination Program using *Procedures for Complying with Multiple Permits: A Guide for Conservation Planners*, a manual that will be designed specifically for the program. This manual will be prepared once all the permits from participating Federal, state and local agencies (including the Master Permit) have been finalized. The manual will contain all of the final permit conditions (as described in this Master Permit and all of the final approvals issued by the other regulatory agencies) and will be used by the RCD and NRCS staff to develop and implement the projects to be carried out under the Permit Coordination Program. The guidebook will specify the process for ensuring individual projects qualify for the program; list conservation practice selection, design, and implementation criteria and conditions required by the agencies in their individual permits; provide information on endangered species habitat; and detail the monitoring and reporting requirements of the program.

B. Pre-Construction Review by County: As described more fully in Exhibit C, each spring the RCD and NRCS will submit to the County a list of projects for that year as part of a Preliminary Pre-Construction Notification (PCN). County staff will review the submitted information to verify that the projects qualify under the Master Permit program; and will notify the RCD/NRCS if County staff determines there are projects that need to be reviewed in greater detail. The County will make every attempt to contact the RCD and NRCS, meet if needed, and resolve any outstanding issues within a fixed time frame, which varies by tier. County staff may conduct pre-construction site inspections during this period (or at other times), if necessary. The RCD/NRCS shall then submit a Final PCN incorporating any project revisions required by the County or other agencies, if changes are requested.

If no changes are requested, the draft PCN becomes final. No additional County approval is needed for projects that qualify under the Master Permit program, other than building permits for certain structures (e.g., bridges and retaining walls over 3-feet in height).

C. Pre-Construction Review by Other Agencies: The RCD and NRCS have coordinated with applicable state and federal regulatory agencies that have jurisdiction over natural resources that may be impacted by the projects approved under the Master Permit program (hereafter, "participating agencies"). The Santa Cruz Countywide Partners in Restoration Permit Coordination Program is designed to ensure that outside agency mandates are upheld and that permit conditions are feasible for the RCD, NRCS, and landowners participating in the program. To ensure this is the case, and as described more fully in Exhibit C, the PCN will be submitted each year to the participating agencies. Project conditions to protect resources are built into the various permits and/or agreements that are issued by these agencies. The regulatory approval mechanisms required by each State and Federal agency are summarized in the table below:

Regulatory Approvals Required from Other Agencies as Part of the Santa Cruz Countywide Partners in Restoration Permit Coordination Program

Agency	Approval Mechanism
California Coastal Commission	Master Permit issued through the County includes provisions for work in that portion of the Coastal Zone located within the County's delegated coastal permit jurisdiction, in compliance with the California Coastal Act (i.e., a County Coastal Permit is incorporated into Master Permit). This Master Permit does not cover development within the Coastal Commission's retained coastal permit jurisdiction.
California Dept. of Fish and ~~Game~~ Wildlife(~~CDFG~~CDFW)	~~Memorandum of Agreement in place with Region 3 of CDFG~~CDFW ~~and a Template 1602 Streambed Alteration Agreement will be developed for the Santa Cruz permit coordination program~~Individual Streambed Alteration Agreement
U.S. Army Corps of Engineers	Regional General Permit, Section 404 and Section 10 of the Federal Clean Water Act
U.S. Fish and Wildlife Service	Federal Endangered Species Act Section 7 Consultation
NOAA Fisheries	Federal Endangered Species Act Section 7 Consultation
Regional Water Quality Control Board	Federal Clean Water Act Section 401 Certification

California Coastal Commission – *Coastal Development Permit (partially covered by the "Master Permit" issued by the County*

Under the California Coastal Act, coastal development permits are required for most types of development within the California coastal zone. The California Coastal Commission has certified the Santa Cruz County Local Coastal Program (LCP) and delegated most direct permit and enforcement authority within the County's coastal zone to the County (subject to Commission oversight, review, and in some cases, appeal of County coastal permit decisions). The Commission retains direct coastal permit jurisdiction over tidelands, submerged lands, and/or public trust lands (i.e., typically areas below the mean high tide line such as those along the immediate shoreline, tidal estuaries, lagoons, etc.). Thus, the Master Permit issued through the County can only allow for development consistent with it that is located within the County's coastal permit jurisdiction area. Any development located within the Coastal Commission's retained coastal permit (or "original") jurisdiction is not covered by the Master Permit and would require a coastal permit directly from the Coastal Commission.

California Department of Fish and Wildlife (CDFW) *– ~~MOA and Template 1603 Streambed Alteration Agreement~~Individual Lake and Streambed Alteration Agreements, as needed.*

Under Section 1600 of the California Fish and Game Code, anyone proposing to carry out an action in a river, creek or stream must notify the Department of Fish and Wildlife, which is then responsible for determining if there is a need for a Streambed Alteration Agreement. A Streambed Alteration Agreement is a contract between the applicant and the CDFW ~~-~~regarding what will and will not be done in the riparian zone and stream course. ~~The NRCS and the non-profit organization Sustainable Conservation have developed a Memorandum of Agreement (MOA) with Region 3 of CDFG. It is expected that a Regional MOA for the Santa Cruz Countywide Permit Coordination Program and a Template 1602 Streambed Alteration Agreement will be approved for the program. This Template will be used to expedite preparation and review of 1602 Agreements for each project carried out under the permit coordination program. If not approved, individual 1600 permits will be obtained.~~ Individual applications will be submitted for each applicable project.

U.S. Army Corps of Engineers (USACE)*-Regional General Permit (RGP)*

Under Section 404 of the Clean Water Act (CWA), a permit from the U.S. Army Corps of Engineers is required for discharge of dredged or fill material into all waters of the United States, including wetlands. Such activities include the modification of banks, filling of wetlands, and alteration of creeks or other waterways. Similar activities with the potential to impact navigable waters of the United State require a permit under Section 10 of the Clean Water Act. For the Santa Cruz Countywide Partners in Restoration Permit Coordination Program, the

USACE will issue a Regional General Permit (RGP) for the program. The RGP authorizes reoccurring activities that do not have more than minimal impacts either individually or cumulatively on the aquatic environment at the regional level (within a certain geographical area).

U.S. Fish and Wildlife Service (USFWS) *- Section 7 Consultation under the Federal Endangered Species Act (ESA)*

A biological consultation with the Fish and Wildlife Service is required when a project is proposed to be undertaken in an area where Federally-listed endangered species are known to occur. Federal agencies engage in a consultation process provided for in Section (7)(a)(2) of the Federal ESA, which requires a consultation for any action that is "authorized, funded, or carried out" by a Federal agency that may affect listed species. Under the proposed program, a Section 7 Consultation is conducted through USFWS with the USACE as the requesting (Federal) agency. The result of the consultation process is a biological opinion, which prescribes measures for protecting endangered species and sets a limit on incidental take of species during project construction.

National Oceanic and Atmospheric Administration (NOAA) Fisheries (formerly National Marine Fisheries Service – NMFS) *- Section 7 Consultation under the Federal ESA*

The need for a consultation with NOAA Fisheries is triggered by the potential for listed anadromous species (including Coho salmon and Steelhead trout in Santa Cruz County) to be present in the area where a project is proposed. For the proposed program, ACOE as the federal lead, will obtain a ~~NOAA Fisheries will be issuing a~~ Biological Opinion through a formal Section 7 process ~~with the USACE along~~ with the allowance for incidental take for listed salmonids in the project area.

Regional Water Quality Control Board (RWQCB) *- 401 Certification*

Under Section 401 of the Federal Clean Water Act, the Regional Water Quality Control Boards have the authority to issue, waive, or deny certification that a proposed activity is in conformance with state water-quality standards. (A Section 401 certification essentially is the issuance of National Pollutant Discharge Elimination System, or NPDES, permit for discharges to waterways that may occur during the construction phase of a project.) Alternatively, under the state Porter-Cologne Act, the Regional Water Quality Control Board has the authority to issue a water discharge requirement (WDR) specifying the concentration or load limits allowable for a particular activity. A need for a Section 401 certification or WDR is triggered by the potential for an activity to result in the release of waste material into a waterway. Thus, although the net result of the

practices permitted under the proposed project is the reduction of sediment and pesticide delivery to streams, the initial implementation of these practices may result in discharges of sediments to waterways. For example, grading activities, stream bank restoration, preparations for planting, and construction of sedimentation ponds and underground drainage facilities may result in a short-term increase in erosion potential. All permits issued by the USACE for a project require 401 Certification by the RWQCB.

D. Post-Construction Monitoring and Reporting: As described more fully in Exhibit C~~, Mid-Construction Season Status Reports and~~ end-of-season Annual Reports will be prepared and submitted for review to the County and participating agencies by the RCD/NRCS, describing the status of all environmental enhancement projects carried out under the Master Permit program until projects are installed and are functioning according to design standards and serving their intended purpose, and until all mitigation measure installment, monitoring obligations and success criteria, are met. This provides the agencies with the opportunity to review the status and progress of projects implemented under the Program and to determine whether further clarification and/or minor project modifications may be necessary to meet program objectives and/or meet the terms of the Master Permit.

~~The Mid-Construction Season Status Report, to be distributed by October 1st of each year, will indicate the mid-season status of each project undertaken that year.~~
The Annual Report ~~shall be based on the NRCS Status Review format and~~ will be distributed to the participating agencies (those listed in Section IV[C] above) by January 31st of each year. The Annual Report will list projects, and describe each project's purpose, area affected, natural biological enhancements, and amount of yardage, cut and slope of the work, etc. The Annual Report will assess the conservation practices in terms of their current condition, check the practices against the original plan, evaluate success criteria achievement, and provide recommendations for resolving any problems with the implementation of the practices and/or mitigation measures. The Annual Report will also list conservation benefits and any net gains in wetlands and riparian areas, describe actions taken to avoid adverse effects to listed endangered/threatened species and their habitats, and provide photo documentation of before and after site conditions. Consistent with the CEQA Mitigation Monitoring Plan in section VI below, the Annual Report shall also document progress made towards implementation of project mitigations and achievement of success criteria, including those listed in the CEQA Initial Study/Negative Declaration for the Santa Cruz Countywide Partners in Restoration Permit Coordination Program and, in situations where mitigation measures are not being sufficiently implemented, provide recommended remediation measures to meet individual project success criteria as well as strategies to improve their implementation in the future.

V. Conditions of Approval:

There are three levels of Conditions of Approval for this Master Permit and the projects it authorizes. The first level consists of conditions that apply to the Master Permit program as a whole (Conditions A-E below). The second level consists of general conditions to protect the environment that apply to each of the individual projects undertaken under the Master Permit, and appear in Exhibit A. The third level consists of project type-specific conditions to protect the environment, and appear under "Additional Practice-Specific Measures" for each project-type in Exhibit B. Failure to comply with the conditions of approval, including the terms of the mitigation monitoring program described in part C and section VI below, may result in permit revocation pursuant to Section 18.10.462 of the Santa Cruz County Code.

A. Outside Agency Approvals: Prior to exercise of this Master Permit, documentation shall be submitted by the RCD/NRCS, for review and approval by Environmental Planning staff, certifying that all required state and federal approvals have been obtained. Copies of any approval documents shall be provided to Environmental Planning staff (e.g., United States Fish and Wildlife Service [USFWS] Incidental Take Permit and Biological Opinion, National Marine Fisheries Service [NMFS] Section 7 consultation, California Department of Fish and Wildlife[CDFW] Stream Alteration Agreement, California Regional Water Quality Control Board [RWQCB] Water Quality Certification permit, etc.).

B. Compliance with County Regulations: All projects undertaken pursuant to the Master Permit must meet criteria set forth in County ordinances, including the following County Code Chapters, and must conform to the requirements of the requisite findings contained therein, as applicable:

- 9.70 – Encroachment Permit Regulations
- 12.10 – Building Regulations
- 13.10 – Zoning Ordinance
- 13.20 – Coastal Zone Regulations
- 16.10 – Geologic Hazards Ordinance
- 16.20 – Grading Regulations
- 16.22 – Erosion Control Ordinance
- 16.24 – Water Quality Control Ordinance
- 16.30 – Riparian Corridor and Wetlands Protection Ordinance
- 16.32 – Sensitive Habitat Protection Ordinance
- 16.34 – Significant Trees Protection Ordinance
- 16.40 – Native American Cultural Sites Ordinance
- 16.44 – Paleontological Resource Protection Ordinance
- 18.10 – Permit and Approval Procedures

Where other design criteria conflict with County ordinances the criteria given in the County ordinances shall apply. In some cases supporting information from a geotechnical or other civil engineer and special inspections may be required.

C. Reporting from RCD/NRCS to County: By May 15 of each year (or later upon written approval by all agencies with jurisdiction over that project), the RCD/NRCS shall circulate for review by the County and participating agencies, Preliminary Pre-Construction Notifications (PCNs) describing all projects proposed for that year (consistent with Section IV[B] above and Exhibit C). For Tier I and Tier II projects, PCN's may also be submitted ~~on~~ by March 15th. A Final PCN describing any project revisions based on review of the Preliminary PCN shall be subsequently submitted to the County and participating agencies for final review, if revisions were requested during the review period. ~~By October 1 of each year, the NRCS/RCD shall distribute for review a Mid-Construction Season Status Report and, B~~by January 31 of each year, the RCD/NRCS shall distribute an end-of-the-season Annual Report for the previous year's projects (consistent with Section IV[D] above and Exhibit C). The PCN and/or the Annual Report (as applicable per Exhibit C, #6) shall document progress made towards implementation of project mitigation measures and achievement of success criteria, as required by the CEQA Mitigated Negative Declaration for the Santa Cruz Countywide Partners in Restoration Permit Coordination Program (as described in VI below and in Exhibit C). The Preliminary PCN, Final PCN, ~~Mid-Construction Season Status Report~~, and end-of-season Annual Report shall be consistent with, and subject to the detailed parameters for same identified in Exhibit C.

D. Duration of Master Permit: The Master Permit shall expire five (5) years after its effective date. This expiration date can be extended every five (5) years thereafter, at a Level 3 approval, provided the Permittee requests (by letter) said time extension within four (4) years and six (6) months of the previous permit effective date.

All requests to extend the duration of the Master Permit an additional five (5) years shall include data sufficient to evaluate the effectiveness of Master Permit implementation, including an identification of potential modifications to improve Permit effectiveness and/or resource protection and enhancement. The five (5) year time extension may only be granted on the condition that the Santa Cruz Countywide Permit Coordination Program is operating under the terms of the Master Permit and there have been no significant violations or other problems that have not been adequately addressed. If there are such violations and/or unresolved problems, amendments to the Master Permit may be required before the five (5) year extension is granted.

Minor modifications to improve Permit effectiveness or procedural changes to the program may be made at the time of the five (5) year extension. Any amendments or revisions to the Master Permit that require additional Environmental Analysis under the

California Environmental Quality Act shall require a Level 6 approval before the five (5) year extension is granted.

All County actions on the Master Permit, including initial approval and subsequent amendments, shall be appealable to the California Coastal Commission.

~~The Master Permit shall expire five (5) years after its initial effective date. This expiration date can be extended one time for a period not to exceed an additional five (5) years, subject to a time extension at a Level 3 approval, provided the Permittee requests (by letter) said time extension within four (4) years and six (6) months of the initial permit effective date. The five (5) year time extension may only be granted on the condition that the Santa Cruz Countywide Permit Coordination Program is operating under the terms of the Master Permit and there have been no significant violations or other problems that have not been adequately addressed. If there are such violations and/or unresolved problems, amendments to the Master Permit may be required before the five (5) year extension is granted, and any such amendments shall require a Level 6 approval.~~

~~After the initial five (5) year term, the Master Permit may be amended to extend its duration an additional five (5) years, subject to a Level 6 approval. At that time the approving body shall determine the level of approval required for future five (5) year time extensions. All amendment requests to extend the duration of the Master Permit an additional five (5) years shall include data sufficient to evaluate the effectiveness of Master Permit implementation, including an identification of potential modifications to improve Permit effectiveness and/or resource protection and enhancement. All County actions on the Master Permit, including initial approval and subsequent amendments, shall be appealable to the California Coastal Commission.~~

E. Indemnification: As a condition of this Master Permit for Environmental Enhancement Projects ("Master Permit") the Resource Conservation District of Santa Cruz County ("Permittee") is required to defend, indemnify, and hold harmless the County of Santa Cruz ("COUNTY"), its officers, employees, and agents, from and against any claim (including attorneys' fees), against the COUNTY, it officers, employees, and agents to attack, set aside, void, or annul this Master Permit of the COUNTY or any subsequent amendment of this Master Permit which is requested by the Permittee.

1. COUNTY shall promptly notify the Permittee of any claim, action, or proceeding against which the COUNTY seeks to be defended, indemnified, or held harmless. COUNTY shall cooperate fully in such defense. If COUNTY fails to notify the Permittee within sixty (60) days of any such claim, action, or proceeding, or fails to cooperate fully in the defense thereof, the Permittee shall not thereafter be responsible to defend, indemnify, or hold harmless the COUNTY if such failure to notify or cooperate was significantly prejudicial to the Permittee.

2. Nothing contained herein shall prohibit the COUNTY from participating in the defense of any claim, action, or proceeding if both of the following occur:

   a. The COUNTY bears its own attorney's fees and costs; and
   b. The COUNTY defends the action in good faith.

3. The Permittee shall not be required to pay or perform any settlement unless such Permittee has approved the settlement. When representing the COUNTY, the Permittee shall not enter into any stipulation or settlement modifying or affecting the interpretation or validity of any of the terms or conditions of the development approval without the prior written consent of the COUNTY.

F. Individual Project Conditions: All projects undertaken pursuant to this Master Permit must conform to the general conditions listed in Exhibit A and the project specific conditions and specifications listed in Exhibit B (under the "Additional Practice-Specific Protection Measures" listed for each project/practice type).

VI. CEQA Mitigation Monitoring Plan:

As required by the California Environmental Quality Act (CEQA), a CEQA Initial Study has been prepared by the County for the Santa Cruz Countywide Partners in Restoration Permit Coordination Program. Pursuant to the Initial Study's finding that the program will not generate significant unavoidable environmental impacts if certain mitigations are implemented, a CEQA Mitigated Negative Declaration has been prepared (State Clearinghouse No. 2004112063). The mitigations listed in the Mitigated Negative Declaration (Exhibit H) have been incorporated into sections 9 and 10 of Exhibit A (General Required Conditions for All Projects Authorized Under the Countywide Partners in Restoration Permit Coordination Program).

As required by Section 21081.6 of the California Public Resources Code, the implementation of the mitigation measures will be monitored for compliance according to the mitigation monitoring program described below, and this program is adopted as a condition of approval (as part of Condition of Approval C above) for this project. To implement the mitigation monitoring program for the Santa Cruz Countywide Partners in Restoration Permit Coordination Program, the RCD/NRCS shall provide a CEQA

mitigation implementation status report as part of each year's Pre-Construction Notification and/or Annual Report (as detailed in Exhibit C, #6). The Annual Report shall list each of the mitigations specified in the Mitigated Negative Declaration and provide a description of each mitigation's implementation status, as well as a description of any additional actions that may be needed to ensure that each mitigation is fully carried out and all success criteria are met, with a strategy for ensuring that such actions are taken in the following year. In describing the implementation status of each mitigation measure, the RCD/NRCS shall provide specific data for each applicable project (e.g., percent of plants established, percent of non-native invasives, documentation of pre- and post-project conditions, dates that applicable RCE/hydrologist reports were submitted to and approved by County staff, etc.). The purpose of this monitoring is to ensure compliance with the environmental mitigations during implementation and operation of the Master Permit program.

VII. Documents Incorporated by Reference:

Exhibit A: General Required Conditions for All Projects Authorized Under the Santa Cruz Countywide Partners in Restoration Permit Coordination Program (i.e., Master Permit)

Exhibit B: Conservation Practices Eligible Under the Santa Cruz Countywide Partners in Restoration Permit Coordination Program (i.e., Master Permit), with Allowed Dimensions, and Project-Specific Conditions

Exhibit C: Notification and Communication Procedures for the County Master Permit Program

Exhibit D: The NRCS Approach to Conservation

Exhibit E: Approved Non-Invasive Introduced Plant Species for Revegetation Use

Exhibit F: Approved Native Plant Species for Revegetation Use

Exhibit G: Prohibited Plant Species List

Exhibit H: Required Mitigation Measures for CEQA Negative Declaration

Exhibit I CEQA Initial Study and Negative Declaration

~~Exhibit J. Detailed Summary of revisions to the 5-year Santa Cruz Countywide Partners in Restoration Permit Coordination Program~~

EXHIBIT A:

General Required Conditions for All Projects Authorized Under the Santa Cruz Countywide Partners in Restoration Permit Coordination Program (i.e., Master Permit)

1. Use of Least Environmentally Damaging Alternative	Where there are various possible points of access, approaches/designs, etc. use of the least environmentally damaging alternative shall be required (e.g., removing the least amount of vegetation possible, placing the least amount fill possible, etc.) unless there are extenuating circumstances as approved by the County. Whenever possible, conservation practices shall be located to fully avoid negative resource impacts, including impacts on potential habitats of sensitive species identified during site evaluations or discovered subsequently. In some cases, short-term disturbance to potential habitat may be necessary to prevent further degradation of the site and to improve habitat for the species of concern. In sensitive habitat areas (as defined pursuant to County Code Chapter 16.32), alternatives that minimize ground disturbance and/or vegetation removal shall be selected. In situations where ground disturbance and/or vegetation removal in such areas cannot be avoided, all conditions specified in the agreements/permits of the participating State and/or Federal resource agencies shall be followed to minimize negative impacts to State and/or federally listed animals and plants and their habitats during implementation of the conservation practices.
2. Temporal Limitations on Construction	The timing of project construction shall take into consideration wildlife usage in the project area. The construction season for activities carried out under the proposed Program shall be limited to between April 15 and October 15. Exceptions and/or further restrictions to this general timeframe include: • Revegetation may continue in upland habitats throughout the year. Revegetation may occur in riparian habitats between October ~~30~~ 15 and ~~November 30~~ April 15, (some earthmoving associated with preparation of the site for revegetation may occur within this time frame, but only as necessary for revegetation efforts), when rain conditions allow and if no known species occurrences are documented within the past two years or if protocol level surveys are conducted and no species are found. • Work in upland areas may begin on April 15. • For invasive species removal in upland ~~and riparian~~ habitat, work may continue throughout the year~~until December 31~~, if no known species occurrences are documented within the past two years or if protocol level surveys are conducted and no species are found. In riparian habitat, ~~-~~invasive species removal may occur between October 15 and May 30, when rain conditions allow and if no known species occurrences are documented within the past two years or if

protocol level surveys are conducted and no species are found. If historical information is not available for the site, protocol levels surveys will be conducted in the area to determine presence or absence of listed species prior to the onset of work. If listed species are present (or assumed present based on habitat), a Service-approved individual will be present during work activities. All work in riparian habitat, during the wet season, will be completed by non-mechanized hand tools. Herbicide application will be hand-painted and carefully applied during non-windy days with no rain forecasted within 3-5 days All soils will be stabilized before a predicted rain event.

- If working within 200 feet of established riparian vegetation (or other special status bird potential nesting habitats) and/or if constructing a sediment and/or water control basin, work may not begin until after August 1. If construction must occur during this period, a qualified individual approved by USFWS and/or CDFW shall conduct pre-construction surveys for bird nests or bird nesting activity in the project area. If any active nests or nesting behaviors are found (for species other than starlings and house sparrows), an exclusion zone of 75 feet shall be established to protect nesting birds (200 ft. for raptors) and maintained until the qualified individual (approved by USFWS and/or CDFW) verifies that birds have fledged or nest is abandoned. If any listed or sensitive bird species are identified, CDFW must be notified prior to further action. Take of active bird nests is prohibited. The RCD and NRCS may request exemptions to this requirement from CDFW on a project-by-project basis.
- If suitable habitat for the California red-legged frog, California tiger salamander or the Santa Cruz long-toed salamander occurs in the project area, construction activities shall begin after April 15.
- If potential habitat for the marbled murrelet occurs in the project area, work shall either begin after September 15 or the RCD/NRCS shall implement sound reduction measures to ensure that activities do not significantly raise noise levels above ambient levels.
- If potential habitat for the Mount Hermon June beetle is present in the project area, construction activities shall begin after August 15 (unless USFWS gives prior approval to the RCD/NRCS in response to their pre-construction notification to begin work earlier than August 15).
- If least Bell's vireos are discovered in Santa Cruz County during the life of the Program and are potentially present in the project area, construction activities shall begin after August 31 (Note: USFWS would notify RCD/NRCS if least Bell's vireo are discovered in Santa Cruz County during the life of the Program).

Work beyond the allowed construction season end date may be authorized following consultation with agencies with jurisdiction over the specific project ~~CDFG, USFWS, ACOE, NOAA Fisheries, and Santa Cruz County~~.

	Any proposed winter grading (i.e., for any grading between October 30 and April 15), associated with construction work that extended beyond October 15, shall be subject to approval by Environmental Planning staff. Additional erosion control measures, as described below under **Conditions for Erosion Control**, shall be implemented for work conducted during the winter period (generally defined as October 15 through April 15). These measures shall be complete and in place by October 15. Where habitat for other Federal and/or State listed species not addressed above is identified on and/or adjacent to the project work site, construction and activities that may disturb the breeding, feeding, mating and sheltering of these species shall be limited to the maximum extent feasible to avoid potential impacts.
3. Limitation on Earthmoving and Vegetation Removal (Site Disturbance)	In addition to the limitations on the amount of grading that can be performed, as specified for each applicable project-type in Exhibit B, the following conditions apply to projects involving earthmoving and site disturbance: Disturbance to existing grades and vegetation shall be limited to the actual site of the conservation project and necessary access routes. Consistent with General Plan/LCP Policy 5.10.3, vistas from public roads and vista points shall be protected by minimizing disruption of landforms and aesthetic character caused by grading operations and/or vegetation. In many cases, project activities will utilize existing staging areas. In areas where new staging areas must be created, the size of the staging area including new access roads shall be less than 0.25 acres. Provisions of the Santa Cruz County Grading Ordinance (Chapter 16.20) shall be followed. Finished grades shall not be steeper than 2:1 side slopes unless pre-construction condition is so steep that site conditions prohibit a 2:1 slope on the final grade. Placement of temporary access roads, staging areas, and other facilities shall avoid and limit disturbance to habitat as much as possible. Any proposed winter grading (i.e., for any grading between October 15 and April 15), associated with construction work that extended beyond October 30, shall be subject to approval by Environmental Planning staff. Even though some authorized practices have grading limits greater than 1,000 cubic yards, in no case shall grading amounts exceed 1,000 cubic yards in areas within the Coastal Zone designated as Scenic Areas (as indicated on the County GIS maps). Installed practices shall be made to look as natural as possible and aesthetically pleasing when visible in the public viewshed (by using curvilinear shapes, natural undulations matching the surrounding landform,

	avoiding hard/constructed structures, using endemic vegetation, etc.). Disturbance of native shrubs, woody perennials or tree removal on the streambank or stream channel shall be avoided or minimized to the fullest possible extent. If trees over 6" dbh (diameter at breast height) are to be removed, they shall be replaced at a 3:1 ratio and maintained and monitored until established (unless the species readily replaces itself, e.g., Alder, or unless the site is being restored to historical or other designated habitat.). If riparian vegetation will be disturbed, it shall be replaced with similar and/or native riparian species (see discussion below under *Revegetation and Removal of Exotic Species and Revegetation of the Project Area and Removal of Exotic Plants*) As much as possible, project activities shall avoid thinning out stands of riparian vegetation to minimize potential for increased cowbird predation and minimize loss of canopy cover. If vegetation removal is required in or around stands greater than 0.5 acres, riparian vegetation shall be cleared by hand, leaving as much as possible of the root wad and base of plants intact (unless the project involves removal of exotic invasives such as *Arundo donax* or similar exotics that reproduce from cuttings or resprout). During or following completion of construction, poles and branches shall be replanted on banks. Subsequent maintenance of bio-technical plantings associated with implementation of the conservation practices may include hand labor to control spread outward of intended location (willows spreading into stream channel or cropped areas) or to maintain desired size (mowing of grasses to promote growth, pruning of willows to encourage dense cover rather than open woodland for bank protection, etc.). If potential wetlands are identified in the project area, wetland delineations shall be performed during the site evaluation stage of planning to assist in avoiding impacts to wetlands. The methodology for conducting delineations under the proposed program has been developed in coordination with the U.S. Army Corps of Engineers. For potential wetlands in the Coastal Zone, the Coastal Commission's definition of a wetland shall be used to avoid potential impacts[1]. Implementation of practices shall minimize all potential contributions of sediment to waterways. To the greatest extent possible, excavated materials shall be re-integrated on site. In the rare situations where excavated material is not used in the implementation of the practice it shall be removed and placed at sites that are not within riparian areas, wetlands, and/or the Federally identified floodway and/or floodplain. Any fill placed within the one hundred year floodplain shall be placed in a manner necessary to ensure there will be no rise in the base flood elevation and no flood related off site

[1] The Coastal Commission considers a wetland to be any area that is wet enough long enough to support a preponderance of hydrophytic vegetation or to result in soil that is predominantly hydric. In other words, only one of the three primary indicators of wetlands need be demonstrated for an area to be identified as a wetland (California Code of Regulations, Section 13577).

	impacts. This "no rise" condition shall be verified by a registered civil engineer. Upon completion of grading, slope protection of all disturbed sites shall be provided prior to the end of the construction season through a combination of permanent vegetative treatment, mulching, geotextiles, and/or rock[2] (where the preference is for "soft" materials, such as vegetation, woody debris, etc., as opposed to "hard" materials, such as concrete, gabions, large rock, etc.).
4. Limitations on Construction Equipment	The RCD and NRCS shall ensure that the use and/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). All workers shall be informed of the importance of preventing spills and of the appropriate measures to take should a spill occur. The following precautionary measures shall be adhered to: • All excavation and grading activities shall be scheduled for, and will occur during, dry weather periods. • A contained area shall be designated for equipment storage, short-term maintenance, and refueling. It shall be located at least 100-feet from all water bodies. If site conditions (property size) make this 100-foot distance infeasible, these activities shall occur at the maximum distance possible from aquatic areas. • Vehicles shall be inspected for leaks and repaired immediately. • Leaks, drips and other spill shall be cleaned up immediately to avoid soil or groundwater contamination. • Major vehicle maintenance and washing shall be done in a manner that protects the environment (at a minimum on a paved surface where all wash water, drippings, runoff, etc. is collected and properly disposed, and preferably offsite). • All spent fluids (including motor oil, radiator coolant, and/or other fluids) and used vehicle batteries shall be collected, stored, and recycled as hazardous waste off site. • All construction debris and sediments (if sediments are not incorporated on site) shall be properly disposed. Plans shall indicate the approved disposal site. • Dry cleanup methods (i.e. absorbent materials, cat litter, and/or rags) shall be used whenever possible. If water is used, the minimal amount required to keep dust levels down is used. • Spilled dry materials shall be swept up immediately. • All questionable motor oil, coolant, transmission fluid, and hydraulic

[2] A list of ~~preferred~~ suggested species for revegetation is included in Exhibits E and F

	fluid hoses, fittings, and/or seals on construction equipment shall be replaced. All mechanical equipment shall be inspected on a daily basis to ensure there are no motor oil, transmission fluid, hydraulic fluid, and/or coolant leaks. All leaks shall be repaired in the equipment staging area or other suitable location (away from watercourses) prior to resumption of construction activity. • Hydraulic fluids in mechanical equipment working within the active stream channel shall not contain organophosphate esters. • During construction the operator shall not dump any trash and/or construction debris into the wetted channel; all trash and/or construction debris shall be collected and properly disposed. • During the project activities, all trash and food that may attract potential predators of salmonids (e.g. raccoons, piscivors, etc.) shall be properly contained, removed from the work site, and disposed of daily. • When working in and/or near fish-bearing streams[3], or their tributaries, oil absorbent and spill containment materials shall be located on site when mechanical equipment is in operation. If a spill occurs, (1) no additional work shall occur in-channel until mechanical equipment has been inspected and the leak has been prepared, (2) the spill has been contained, and (3) the CDFW and NOAA Fisheries are contacted to evaluate the impacts of the spill. Heavy equipment shall not be used in flowing or standing water, except to cross a stream or pond to access the work site. In fish-bearing streams or their tributaries, if it is necessary to repeatedly cross the stream (i.e. more than once prior to and once following completion of construction activities) with heavy equipment to access a work site, a temporary culvert crossing with clean gravel backfill, or other appropriate temporary crossing structure shall be installed and utilized. When possible, RCD/NRCS shall use existing ingress or egress points and/or perform work from the top of the creek banks. Use of heavy equipment shall be avoided in a channel bottom with rocky or cobbled substrate. If access to the work site requires heavy equipment to travel on a rocky or cobbled substrate, a rubber tire loader/backhoe is the preferred vehicle. Only if this option has been determined infeasible shall the use of tracked vehicles be allowed. The amount of time this equipment is stationed, working, or traveling within the creek bed shall be minimized. When heavy equipment is used, woody debris and vegetation shall be replaced to a similar density with native species. No staging shall occur in or

[3] A "fish-bearing stream" is defined as a stream located within the range of the listed species (Central California Coast (CCC) Evolutionarily Significant Unit (ESU) Coho, the CCC steelhead, and South Central Coast ESU Steelhead) and/or designated critical habitat for these salmonids. The County of Santa Cruz and CDFW fisheries experts prepared a GIS-based summary of the existing information on salmonid distribution in Santa Cruz County streams "Steelhead and Coho Salmon Distribution", County of Santa Cruz, May, 2004. The NRCS and RCD will utilize this map during the initial project assessment to determine if the project is taking place in a fish-bearing stream.

	directly adjacent to wetlands. If it is not feasible to completely avoid movement of construction vehicles through wetlands, whenever possible rubber tired vehicles shall be used or a protective mat shall be laid down prior to moving across these areas.
5. Revegetation of the Project Area and Removal of Exotic Plants	The project area vegetation shall be restored to pre-construction condition or better (including as directed by project specific success criteria), and shall be maintained until this goal and/or project specific success criteria have been met and plants have become established. Any stream bank area left barren of vegetation as a result of the implementation or maintenance of the practices shall be restored by seeding, replanting, or other agreed upon means with native trees, shrubs, and/or grasses prior to November 30 of the project year. Soil exposed as a result of construction, soil above rock riprap, and interstitial spaces between rocks shall be revegetated by live planting, seed casting, mulching or hydroseeding with non-invasive grass species prior to the close of the construction season (See Exhibits E and F for full list of ~~preferred~~ suggested species for revegetation). If native vegetation is disturbed during project implementation, the native plant community shall be restored to pre-construction condition or better. Native plants characteristic of the local habitat type shall be the preferred alternative for revegetation, however non-invasive non-native species may be used if determined, during project planning, to be more feasible and/or resource protective (see Exhibits E and F for the full list of ~~approved~~ suggested native and non-native plant species and Exhibit G for prohibited species). If the native local ecotype is not commercially available, plants of the same species but different ecotype may be used, unless that species is identified in Exhibit F as being susceptible to genetic, pathogen or insect contamination. If the native local ecotype is not commercially available and/or that species is identified as susceptible to genetic, pathogen or insect contamination, another native species may be used in its place. Allowing the site to naturally revegetat~~ione~~ is also allowed under the program. However, soil erosion must be managed, and the site must be actively revegetated after a reasonable time frame specific in the PCN, if the success criteria is not met thru natural recruitment. Revegetation of a native community may not occur if there is a concern that nursery stock will introduce diseases into a susceptible community and/or if the community itself can regenerate (e.g. Alders). In this case, an annual grass species may be used for one-year erosion control (see Exhibits E and F for full list of ~~approved~~ suggested species for use in revegetation efforts). Inspections for the purpose of assessing the survival and growth of revegetated areas and the presence of exposed soil shall be conducted by the RCD/NRCS until vegetation is established and the project is functioning as intended, and success criteria have been met. Revegetation success shall be

	documented in the Annual Report provided to the County and participating agencies each year. If ~~the status reviews reveal that~~ the vegetative plantings are not becoming well established, an adaptive management plan that provides erosion control and habitat value at least equivalent to that which existed on the site prior to the project, and which considers cost and feasibility, shall be implemented. The spread or introduction of invasive plant species shall be avoided to the maximum extent possible by avoiding areas with established native vegetation during project activities wherever possible, restoring disturbed areas of native communities with native species where appropriate (as described above), and post-project monitoring and control of invasive species being treated as part of the project. Removal of invasive exotic species shall be strongly recommended. Mechanical removal (hand tools, weed whacking, hand pulling, brush raking) of exotics shall be done in preparation for establishment of plantings. To the greatest extent possible, vegetation shall be removed by hand. To the extent possible, revegetation should be implemented at the same time removal of exotic vegetation occurs. All plant material will be disposed of in a manner that will not allow re-establishment to occur.
6. Conditions for Erosion Control	Earthmoving activities shall be completed prior to October 30. Work beyond October 30 ~~(with the exception of revegetation until November 30)~~ shall be specifically authorized in advance by the participating agencies, as per General Condition #2 above. Any proposed winter grading (i.e., for any grading between October 15 and April 15), associated with construction work that extended beyond October 30, shall be subject to approval by Environmental Planning staff. All inactive areas (defined as a five-day period) shall have all necessary soil stabilization practices in place two days after identification of inactivity and/or before a rain event, whichever comes first. All erosion control shall meet specifications in County of Santa Cruz Erosion Control Ordinance Chapter 16.22. Erosion control and sediment detention devices shall be incorporated into the project design and implemented at the time of construction**.** These devices shall be in place prior to October 15 and the onset of rains for the purposes of minimizing fine sediment and sediment/water slurry input to flowing water, and of detaining water to retain sediment on-site. These devices shall be placed at all locations where the likelihood of sediment input exists. Sediment collected in these devices shall be disposed of away from the collection site and outside riparian areas and flood hazard areas. Streambanks, ground and/or soil (except for soil in agricultural fields) exposed as a result of construction, and soil above toe-rock shall be revegetated by live planting, seed casting, or hydroseeding prior to November 30 of the project year.

	All debris, sediment, rubbish, vegetation and/or other material removed from waterway shall be removed to a location where they shall not re-enter the waters of the state including wetlands.
7. Limitations on Work in Streams, Wetlands, Floodplains, and Permanently Ponded Areas	If it is necessary to conduct work in or near a live stream, the workspace shall be isolated from flowing water to prevent sedimentation and turbidity. In those specific cases where it is deemed necessary to work in a flowing stream/creek, all the flowing water shall be temporarily diverted around the work site to maintain downstream flows during construction. Any temporary dam or other artificial obstruction constructed shall only be built from materials such as sandbags or clean gravel which will cause little or no siltation. Coffer dams and any stream diversion systems shall remain in place and functional throughout the construction period. If the coffer dams and/or stream diversion fail, they shall be repaired immediately. When construction is completed, the flow diversion structure shall be removed as soon as possible in a manner that shall allow flow to resume with the least disturbance to the substrate. If dewatering in a fish-bearing stream is proposed as part of a project implemented under the permit coordination program, the RCD/NRCS shall comply with the terms and conditions outlined for this project in the Biological Opinion(s) ~~issued for the Program~~, and any subsequent conditions~~, issued by NOAA Fisheries .for this project~~. Given the potential adverse effects of dewatering on salmonid populations, in some instances and with NOAA approval, large wood will be installed within the active stream channel without dewatering. An approved biologist will be on-site during all activities to monitor for directly mortalities and/or adverse impacts to water quality. No creosote treated timbers shall be used for instream structures. No gabions or concrete shall be used in fish-~~-~~bearing streams. In non-fish-bearing streams they may be used above the ~~high waterhigh-water~~ mark only. If used, all concrete shall be allowed to cure for a minimum of 30 days before being exposed to stream water or water that may enter the stream, or all concrete shall be coated with a CDFW-approved concrete sealant. If sealant is used, water shall be excluded from the site until the sealant is dry. The implementation and maintenance of projects shall not result in sediment delivery to a clean bottom of stream channel. A “clean” bottom is characterized by natural stream substrate (cobbles, gravel and small stones or similar to background conditions). If the substrate of a seasonal pond, creek, stream or water body is altered during work activities and the alteration is not the goal of the practice being implemented (i.e. channel stabilization), it shall be returned to approximate pre-construction conditions after the work is completed, unless NOAA

	Fisheries or CDFW requests during their annual pre-construction review of projects that other measures be implemented. All debris, sediment, rubbish, vegetation, and/or other material removed from the channel banks, channel bottom, and/or sediment basins shall be removed to a location where they shall not re-enter the waters of the state. All petroleum products, chemicals, silt, fine soils, and/or any substance or material deleterious to fish, plant, or bird life shall not be allowed to pass into, or be placed where it can pass into the waters of the State. Wetlands shall only be disturbed when part of a project that will enhance the value of the wetland. No project shall divert water flow from one watershed into another. Any fill moved and/or placed within the one hundred year floodplain (i.e., FEMA Zone A) shall be accomplished in a manner to ensure that the flood capacity of the stream is not altered (i.e. downstream properties would not be threatened by a higher likelihood of flooding). No fill shall be placed in the flood hazard area (i.e., FEMA Zones A or V or Floodway) unless it is accompanied by an analysis (by a Registered Civil Engineer) showing that there shall be no rise in the base flood elevation and no off-site impact. Such fill includes footings, supports, approaches, and other elements of bridges that are below the base flood elevation (BFE), as well as materials placed to protect those elements, such as rip-rap or concrete aprons. Projects carried out under the Master Permit program shall not expose people or structures to a significant risk of loss, injury or death. Practices that include impoundment of water shall be limited in size (embankment height and volume) and designed to meet geo-technical and engineering standards and regulations.
8. Limitations on use of Herbicides	Except as noted below, no pesticides or soil amendments shall be used in the streambed or bank to hasten or improve the growth of plantings. Soil amendments shall only be used when the establishment of new plants is prohibited by poor soil conditions that cannot support new plantings. In most circumstances, organic amendments shall be used to ensure successful establishment of restoration vegetation associated with the practices. In situations where organic amendments will not guarantee adequate establishment of restoration vegetation, application rates for non-organic soil amendments shall be based on soil nutrient testing and shall utilize slow release or split applications to minimize leaching or runoff into water bodies. Use of soil amendments within 10 ft of a waterbody must be authorized in advance by CDFW. Where it is necessary to use herbicides to control established stands of

	exotics or to control the invasion of exotics into restoration plantings, the herbicides must be applied according to registered label conditions. Herbicides must be applied directly to plants and may not be spread upon any water or where they can leach into waterways in subsequent rains. Herbicides may be applied to control established stands of non-native species including *vinca*, ivy, and brooms. When herbicides are used near waterways an approved glyphosphate-based herbicide that is safe to use in or near aquatic habitats would be utilized.
9. Special Status Species Protection (CEQA Mitigation I)	In order to mitigate for potential incidental loss of special status species, to comply with the Federal and State endangered species acts and the California Environmental Quality Act (CEQA) and to minimize impacts on wildlife habitat, in addition to implementing the avoidance measures, best management practices, and minimization techniques given in the program description, the RCD/NRCS shall ensure that the following mitigations are implemented for all projects carried out under the Countywide Partners in Restoration Permit Coordination Program and authorized under the Master Permit: I.(A) Prior to exercise of this Master Permit, documentation shall be submitted for review and approval by Environmental Planning staff certifying that all required state and federal approvals have been obtained. Copies of the United States Fish and Wildlife Service (USFWS) ~~Incidental Take Permit and~~ Biological Opinion, National Marine Fisheries Service (NMFS) Section 7 ~~consultation~~RC Biological Opinion, ~~California Department of Fish and Game (CDFG) Stream Alteration Agreement~~ Army Corps of Engineers Regional General Permit, and California Regional Water Quality Control Board (RWQCB) Water Quality Certification permit shall be submitted. I.(B) Plans for individual projects and practices shall incorporate all conditions and recommendations of the approvals mentioned in I.(A) above. All recommended methods to lessen "take" of protected plants, animals and habitats, including avoidance, shall be incorporated into the design of each practice or project completed under this permit. I.(C) Each specific project area disturbed by a project activity shall be monitored for increase in non-native plant cover. Non-native, invasive plants that have colonized the area or expanded shall be removed using BMPs designed to prevent re-establishment, unless the site is adjacent to an established, existing infestation that cannot reasonably be prevented from spreading on to the site without constant removal efforts. I.(D) ~~–~~Exhibits E and F will be used as reference for developing the ~~R~~revegetation plan. ~~shall be limited to plantings from the lists of~~

	~~preferred plant species given in Exhibits E and F, unless certain native plants that do not appear on these lists can be~~ Preference will be given to salvage, plants ~~collected from the site,~~ propagated from on- site plants or plants very close to the site, or grown from seed collected from the site or plants very close to the site. Further, native plant materials that are grown at or delivered from a nursery shall be closely inspected for disease and pests prior to use. Natural recruitment is also ~~preferred~~allowed, in conjunction with erosion control and ensuring the site is properly revegetated. I.(E) Revegetation and non-native plant removal programs shall be monitored for three to five years and until success criteria are reached. If information has been submitted by a qualified individual that demonstrates that certain characteristics of the site and/or the revegetation plan indicate that the revegetation may be established more quickly than five years, and if success criteria are reached after only three years, then three years of periodic monitoring may be adequate. Revegetation success is defined as the site being restored to at least the same condition as existed prior to the project, or being restored to a better condition if identified success criteria for a particular project require as much. Measures of this success criterion may include: percent native plant cover, percent non native invasive cover, number of native and non native species present, plant health, and areal extent of shade provided to adjacent waters by overhanging vegetation. In addition, prior to the onset of activities that could result in the disturbance of habitat and/or individuals of any listed/special status species, all project workers including RCD/NRCS staff and growers/landowners and/or their employees/representatives shall be given information on the listed species in the project area, a brief overview of the species' natural history, the protection afforded the species by the Federal and California Endangered Species Acts, and the specific protective measures to be followed during implementation of the practices.
10. Floodwater Conveyance Patterns (CEQA Mitigation II)	To ensure that there is no detrimental impact from conservation practices/projects on conveyance of floodwater and the pattern of flooding, prior to the placement of fill within the floodplain or floodway the RCD/NRCS shall provide analysis from a Registered Civil Engineer or hydrologist for review and approval of Environmental Planning staff. The analysis shall show that the practice/project will not decrease storage of floodwaters, modify conveyance, increase base flood level, and/or otherwise create an adverse impact on the site, upstream or downstream.
11. West Nile	To minimize the spread of West Nile Virus, consultation with the County

Virus Vector Control	Mosquito Abatement and Vector Control District is required for any water control structure that will potentially hold water longer than 5-days.
12. Height Limits for Structures in Front Yard Setback Areas	Pursuant to County Code Chapter 13.10, no structure (e.g., retaining walls, bridge railings, fences, etc.) within a front yard setback area (which generally along the side of the parcel facing a street or road) may exceed 36" in height, unless in the case of bridges, a higher railing is required by the County Fire Marshall. Exceptions to the height limit for front yard fences in agricultural zones are provided for County Code subsection 13.10.525(c)3.
13. Building Permit Needed for All Bridges	A County building permit is needed for the installation/construction of any new bridge, however bridges installed/constructed under the Master Permit program are exempt from further environmental review and/or the need to obtain a Riparian Exception (both of which would normally be required for a new bridge), because the Master Permit has already undergone environmental (CEQA) review and the Master Permit includes a blanket Riparian Exception.
14. Coastal Commission Jurisdiction (i.e. State Tidelands) Restrictions	This Master Permit does not apply to projects conducted within Coastal Commission retained coastal permitting jurisdiction (e.g., all State tidelands, including any lands lying below the mean high tide line, submerged lands, filled areas that previously were below the mean high tide line, coastal lagoons/estuaries, public trust lands, etc.). Any qualifying environmental enhancement projects in these areas, while encouraged, shall require separate Coastal Commission approval.

EXHIBIT B:

Conservation Practices Eligible Under the Santa Cruz Countywide Partners in Restoration Permit Coordination Program (i.e., Master Permit), with Allowed Dimensions and Project-Specific Conditions, and Summary of Tier System

(NOTE: Numbers in parentheses indicate the practice number as referenced in the *NRCS Field Office Technical Guide*)

Projects proposed through this Certification may on a ~~case by case~~case-by-case basis exceed the dimensions shown in this table upon written approval by all agencies with jurisdiction over that project.

1. Access Roads (Improvement) (560)* *(NOTE: Access road improvements typically involve multiple installations spread out over a long reach of road.)*	Improvement of an existing road ~~used for moving livestock, produce, and/or equipment~~ to provide access for ~~proper,~~ property management while controlling runoff to prevent erosion and maintain or improve water quality. An example of this practice might include re-grading, outsloping, or the addition of a rolling dip to a road so that water is less erosive as it travels across the road. This practice may also be used for repair, removal, or addition of culverts ~~from non-fish bearing[1] streams associated with access road improvements~~. Ditch relief culverts that discharge onto slopes over 30% require additional measures. This practice is used only on existing roads. Some examples of practices from the California Department of Fish and Game, California Salmonid Stream Habitat Restoration Manual that could be utilized during implementation of the Access Road (Improvement) practice includes Waterbars (p. VII-96).
Dimensions[2]	Length: Average: 1,000 linear feet of work spread out over 2 miles; Max: 10,000 linear feet of work spread out over 12 miles. Width: Average: 30'; Max: 30'. Area: Average: 0.8 acres; Max: 4.5 acres. Volume[3]: Average: 750 cu. yards; Max: 7,500 cu. yards (or 1,000 cu. yards in Coastal Zone Scenic Areas).
Additional Practice-Specific Protection Measures	Road improvements in Santa Cruz County are modeled on the "Handbook for Forest and Ranch Roads: A Guide for planning, designing, constructing, reconstructing,

	maintaining and closing wildland roads," by William Weaver and Danny Hagens. This manual contains descriptions of sound methods and designs to improve and maintain rural roads. Proper road planning, construction and maintenance of roads can correct problems associated with poor road placement and design that cause excess runoff, and erosion leading to many kinds of problems including polluted water supplies, increased flooding, landslides, destruction of fish habitat, and loss of vegetation and soil. Improvements to existing access roads under this practice shall not be carried out for the purpose of accommodating future development.
2. Planting (342, 612, 422, 391)	Planting of vegetation such as trees, shrubs, vines, grasses, or legumes (see Exhibits E, F and G for lists of ~~preferred~~ suggested and prohibited species for revegetation), on highly erodible or critically eroding areas (does not include tree planting mainly for wood products). This practice is used to stabilize the soil, reduce damage from sediment and runoff to downstream areas, and improve wildlife habitat and visual resources. Plants may take up more of the nutrients in the soil, reducing the amount that can be washed into surface waters or leached into ground water. During grading, seedbed preparation, seeding, and mulching, quantities of sediment and associated chemicals may be washed into surface waters prior to plant establishment.
Dimensions	Area: Average: 1 acre; Max: 5 acres. Volume[3]: Average: 700 cu. yards; Max: 1,000 cu. yards.
Additional Practice-Specific Protection Measures	When implementing or maintaining a critical area planting above the "ordinary high water mark"[4], a filter fabric fence, fiber rolls and/or rice or straw bales shall be utilized, if needed, to keep sediment from flowing into the adjacent water body. When vegetation is sufficiently mature to provide erosion control, it may be appropriate to remove the fence, fiber rolls and/or rice/straw bales. Periodic review by RCD/NRCS shall occur until the critical area planting is established to control erosion.
3. Stream Habitat Improvement and	Improvement of a stream channel to create new fish habitat or to enhance an existing habitat. The practice is

Management(395)	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. This practice may also be used for removal or modification of fish barriers such as flashboard dams ~~or logjams~~. The modification of flashboard dams may involve cutting a notch in the dam to allow for fish passage. Complete removal of flashboard dams would also be covered under the program. This practice may be used for the removal or modification of logjams that present a complete barrier to all life stages of anadromous fish passage. If the logjam does not act as a complete barrier, logjam removal may be implemented no more than two times annually under the program, but only if the following circumstance exists: In situations where water is actively or potentially deflecting water to a bank, threatening further erosion, bank failure, destruction of conservation practices installed to stabilize the bank, or threatening damage to life and housing, the logjam may be modified to minimize this threat. This practice may be used to remove culverts that pose barriers to fish passage. ~~and replacement of an existing culvert with a crossing that improves fish passage~~. This practice may also be used to remove hardened crossings that pose barriers to salmonid passage such as culverts and simple fords that do not have complicated associated resource issues~~, and replace them with bridges, bottomless arch culverts, or embedded culverts that do allow for fish passage.~~. While most activities will occur during the summer months when most areas are dry, dewatering may be required for some projects involving the fish stream improvement practices. Dewatering a portion of a stream

	during construction would involve isolating the work area using temporary structures such as cofferdams and the pumping of water around the worksite in order to maintain flows downstream. The Fish Stream Improvement practice will be designed and implemented in accordance with the California Department of Fish and Game's *California Salmonid Stream Habitat and Restoration Manual* or in coordination with NOAA Fisheries and CDFW Some examples of the practices that could be utilized during implementation of the Fish Stream Improvement practice include Digger Logs (p. VII-26 of the manual), Spider Logs (p. VII-27), and Log, Root Wad, and Boulder Combinations (p. VII-28).
Dimensions	Maximum Length: 1 mile with multiple structures at multiple bank locations. Maximum dimensions for a logjam to be modified: 30 ft by 50 ft (across channel). Maximum dimensions for a flashboard dam to be modified or removed: ~~20~~ 30 ft by 60 ft (across channel) Maximum dimensions for hardened crossing (fords) be removed: 20 ft by 100 ft (across channel) Maximum and total area to be dewatered will not exceed 1,0~~3~~00 ft over the one mile maximum.
Additional Practice-Specific Protection Measures	The Fish Stream Improvement conservation practice will be designed and implemented in accordance with the California Department of Fish and Game's *California Salmonid Stream Habitat Restoration Manual* or in coordination with NOAA Fisheries and CDFW. No chemically-treated timbers shall be used for grade or channel stabilization structures, bulkheads or other instream structures.
~~11~~4. Stream Crossing (578)**	To provide access on a site where a in-stream barrier has been removed. If a culvert or ford has been removed, a

	bridge or other suitable crossing that is protective of water quality may be installed.
Dimensions	Maximum bridge size to be installed: Max.100 ft (across stream) with 20 ft wide deck (20 ft is what the County of Santa Cruz prefers for emergency vehicles but it's more likely that most bridges installed under the permit coordination program would not exceed 16 ft in width) *Maximum and total area to be dewatered will not exceed ~~300~~ 1,000 ft over the one mile maximum.
Additional Practice-Specific Protection Measures	Crossings will be consistent with California Department of Fish and Game's *"Culvert Criteria for Fish Passage"* (May 2002) and National Marine Fisheries Service Southwest Region's *"Guidelines for Salmonid Passage as Stream Crossings"* (September, 2001). If dewatering in a fish-bearing stream is proposed as part of a project implemented under the permit coordination program, the RCD/NRCS will comply with the terms and conditions outlined in the Biological Opinion, and any subsequent conditions, issued by NOAA Fisheries for this project.
4. Grade Stabilization Structure (410) -(In non-fish bearing streams, primarily for gully repair)*	Installation of a structure built into a gully to control the grade and prevent head cutting in natural or artificial channels. For the purposes of the Master Permit program, this practice will not be installed in fish bearing streams and would primarily be used for gully repair. This practice refers to rock, timber, or vegetative structures, such as a brush mattress, placed to slow water velocities above and below the structure, resulting in reduced erosion. This practice also involves earthmoving to reshape the area impacted by the gully. This will decrease the yield of sediment and sediment-attached substances and improve downstream water quality. An example of a practice from the CDFW California Salmonid Stream Habitat Restoration Manual that could be utilized during implementation of the Grade Stabilization practice is Brush Mattressing (p. VII-79).
Dimensions	Length: Average: 3 to 4 structures per 500' of gully, Max: 10 structures per 1,000' of gully. Area: Average: 0.5 acres; Max: 1.5 acres Volume[3]: Max: 30 cu. yards per structure; 300 cu. yards

	total. Flow Rate: Max: 300 cfs in the pipe.
Additional Practice-Specific Protection Measures	This practice will not be used in fish-bearing streams and will primarily be used for the repair of gullies. Construction and maintenance of any practice that results in a change in volume of flow in streams that support a fishery are not covered under this program. Construction and maintenance of Grade Stabilization Structures in streams or creeks that support a fishery are not covered under this program. Projects seeking to implement conservation practices in those circumstances must seek individual permits from appropriate public agencies. Grouted rock may be used for implementation of the Grade Stabilization practice at the head of gullies. Use of grouted rock will be minimized. Grouted rock would not be used on the bed or bank of a waterway. An example of a typical design from the CDFW California Salmonid Stream Habitat Restoration Manual that could be utilized during implementation of the Grade Stabilization practice is Brush Mattressing (p. VII-79).
5. Grassed Waterway (412)	Establishment of a natural or constructed channel that is shaped or graded to required dimensions and expected velocities, and establishment of 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 waters. 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 reduce the erosive force of 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.
Dimensions	Length: Average: 1,000’; Max: 2,000’. Width: Average: 20’; Max: 40’. Area: Average: 0.5 acre; Max: 2 acre.

	Volume[3]: Average: 1,000 cu. yards; Max: 4,500 cu. yards (except in Coastal Zone Scenic Areas where the maximum grading allowed is 1,000 cu. yards). Flow Rate: Max: 150 cfs.
Additional Practice-Specific Protection Measures	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.
6. Obstruction Removal (500)[5]	Removal and disposal of unwanted structures from waterways and/or other sensitive habitats, including cars, large appliances, and garbage (items that are anthropogenic and not natural to the system). Large objects such as cars and appliances would be removed unless their removal would result in a (net) detrimental effect. For example, cars will not be removed if the action would result in disturbance to an area beyond the maximum size identified for this practice or if the removal shall cause erosion in quantities deleterious to fish or other aquatic organisms. ~~For example, cars will not be removed if the action would result in disturbance to a significant area (beyond the scope of this program), which could result if it was discovered that multiple cars were stacked behind one another under a stream bank.~~ Structures would be removed when the stream channel is dry or during the lowest flows to minimize impacts. While most activities will occur during the summer months when most areas are dry, dewatering may be required for some projects involving removal of large objects such as cars and appliances. Dewatering a portion of a stream during construction would involve isolating the work area using temporary structures such as cofferdams and the pumping of water around the worksite in order to maintain flows downstream.
Dimensions[5]	Length: Max: 50'. Area: Average: 10' x 15'; Max: 0.2 acre.
Additional Practice-Specific Protection Measures	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. Large objects removed from the area will be lifted out of the area, ensuring the obstruction is kept upright during removal and will not be pulled, dragged, or pushed to minimize potential impacts to the aquatic and terrestrial habitats. If the obstruction is easily accessible and/or an access road is adjacent to the work site, equipment such as a boom would be used to lift the obstruction out of the area. Additional limitations on use of construction equipment are described in the General Project Conditions under Limitations on Construction Equipment.
7. Restoration and Management of Declining Habitats (643)	Restoring and conserving rare or declining native vegetated communities and associated wildlife species. This practice is used to restore land or aquatic habitats degraded by human activity; provide habitat for rare and declining wildlife species by restoring and conserving native plant communities; increase native plant community diversity; management of unique or declining native habitats (see Exhibits E, F and G for lists of ~~preferred~~ suggested and prohibited species for revegetation). This practice may be used to remove invasive plant species in sensitive resource areas ~~in order~~ to improve the quality of the adjacent aquatic habitat or to manage non-native habitats that provide critical habitat for special status species, such as the monarch butterfly. This practice may also be used to manage fuel loads in sensitive habitats and allows treatment and maintenance of invasive species and noxious weeds, as well as revegetation of a treated area.
Dimensions	Length: Average: 500'; Max: 1 mile. Area: Average: 1 acre; Max: 5 acres. Volume[3]: Average: 50 cu. yards; Max: 1,000 cu. yards.
Additional Practice-Specific Protection Measures	When restoring or maintaining a rare or declining native plant community or wildlife habitat adjacent to and above the "ordinary high water mark"[4] of a water body, a filter fabric fence, fiber rolls and/or rice/straw bales shall be utilized, if needed, to keep sediment from flowing into the adjacent water body. When vegetation is sufficiently mature to provide erosion control, it may be appropriate to remove the fence, fiber rolls and/or rice or straw bales.

	Periodic review by RCD/NRCS shall occur until the native plant community or wildlife habitat planting is established to control erosion.
8. Sediment Basins (350) [with or without water control (638)]	Construction of basin(s) to collect and store debris or sediment. Sediment basins will trap sediment, sediment associated materials, and other debris and prevent undesirable deposition on bottomlands and in waterways and streams. Basins are generally located at the base of agricultural lands adjacent to natural drainage or riparian areas. Sediment basins shall not be constructed in a stream channel or other permanent water bodies. This practice may also involve designing the sediment basin to control water volumes leaving a site and releasing the water at a natural flow rate. If water control were recommended ~~by the NRCS~~, an earth embankment or a combination ridge and channel design constructed across the slope and minor watercourses would be implemented to form a sediment trap and water detention basin. The practice does not treat the source of sediment but provides a barrier to reduce degradation of surface water downstream. Due to the detention of runoff in the basin, there is an increased opportunity for soluble materials to be leached toward the ground water. Basins may also increase groundwater recharge. The design of spillways and outlet works will include water control structures to prevent scouring at discharge point into natural drainage.
Dimensions	Area: Average: 0.1 acre; Max: 1 acre. Volume[3]: Average: 400 cu. yards; Max: 4,000 cu. yards (compacted embankment); in Coastal Zone Scenic Areas no more than 1,000 cu. yards total grading volume. Impoundment Volume: Average: 0.5 acre-foot; Max: 2 acre-feet. Impoundment Structure: Average: 6 ft embankment measured from the lowest point in the basin to the spillway at a 2:1 maximum slope; Max: 6 ft – 10 ft embankment measured from the lowest point in the basin to the spillway at a 2:1 maximum slope[6].
Additional Practice-Specific Protection Measures	Where water and sediment control basins create marshy conditions and attract nesting birds and other wildlife, maintenance may occur only after August 1st. If

	construction must occur during this period, a qualified individual approved by USFWS and/or CDFW will conduct pre-construction surveys for bird nests or bird nesting activity in the project area. Bird nesting sites shall be avoided as described above in Exhibit A (#2) General Project Conditions, Temporal Limitations on Construction. If the project has the potential to create standing water for longer than five (5) consecutive days, the County Mosquito Abatement and Vector Control District shall be consulted. Sediment basins shall not be constructed in a stream channel or other permanent water bodies. The work may involve grading along one shore of the stream to remove gullies or eroded banks prior to building a streamside basin. Where construction of a sediment basin includes a pipe or structure that empties into a stream (underground outlet), an energy dissipater shall be installed to reduce bank scour.
9. Streambank Protection (580)	Use of vegetation or structures to stabilize and protect banks of streams, lakes, or estuaries against scour and erosion. "Bioengineered" solutions using vegetation and soft materials (as opposed to concrete and rip rap, for example) are the preferred options where conditions are favorable for their use. The banks of streams and water bodies are protected by vegetation to reduce sediment loads causing downstream damage and pollution and to improve the stream for fish and wildlife habitat as well as protect adjacent land from erosion damage. Examples of this practice may include willow sprigging, brush mattressing, and live vegetative crib walls. This practice can be applied to natural or excavated channels where the stream banks are susceptible to erosion from the action of water or debris or to damage from livestock or vehicular traffic. The streambed grade must be controlled before most permanent types of bank protection can be considered feasible. Some examples of practices from the California Department of Fish and Game's *California Salmonid Stream Habitat Restoration Manual* that could be utilized during implementation of the Streambank Protection practice include Log Cribbing (p. VII-68), Live Vegetative Crib Wall (p. VII-69), Logbank Armor (p. VII-

	70), Riprap (p. VII-65), Native Material Revetment (p. VII-75), Willow Sprigging (p. VII-77), Brush Mattressing (p. VII-77), and Trenching (p. VII-80). While most activities will occur during the summer months when most areas are dry, dewatering may be required for some projects involving implementation of streambank protection measures. Dewatering a portion of a stream during construction would involve isolating the work area using temporary structures such as cofferdams and the pumping of water around the worksite in order to maintain flows downstream.
Dimensions	Length: Vegetation Average: 200'; Vegetation Max: 2,000'. Rock Max: 200' contiguous rock protection and 500' of non-contiguous protection over 2,000' of bank. Width: Vegetation Average: 20'; Vegetation Max: 50'. Rock Average: 4'; Rock Max: 15'. Area: Average Vegetation: 0.1; Max Vegetation: 2.5 acre. Rock Protection Max: 0.1 acre Volume[3]: Average Vegetation: 500 cu. yards; Max Vegetation: 4,000 cu. Yards[7] (or 1,000 cu. yards in all Coastal Zone Scenic Areas). Average Rock: 100 cu. yards; Max Rock[8]: 800 cu. yards. Flow Rate: Vegetation Max: 2,000 cfs instream.
Additional Practice-Specific Protection Measures	No fill will be placed in the flood hazard area unless it is accompanied by an analysis (by a civil engineer) showing that there will be no rise in the base elevation and no off-site impact.
10. Stream Channel Stabilization (584)	Stabilization of the channel of a stream with suitable structures. "Bioengineered" solutions using vegetation and soft materials (as opposed to concrete and rip rap, for example) are the preferred options where conditions are favorable for their use. This practice applies to stream channels undergoing damaging aggradation or degradation that cannot be reasonably controlled with upstream practices (establishment of vegetative protection, installation of bank protection, or by the installation of upstream water control measures). The design and installation of grade stabilization structures produce a stable streambed favorable to wildlife and riparian growth. The Master Permit program does not cover projects that

	involve installation of grade stabilization structures in fish bearing streams. In non-fish bearing streams, this practice may be utilized to remove accumulated sand or sediment that have caused the channel to become plugged due to a large storm event or bank failure. This practice would not be used in fish-bearing streams or for routine maintenance involving dredging of a waterway. This practice would be used to remove sediment that has accumulated behind a dam or as a result of a catastrophic event such as a flood, and would only be used once at a given location under this program. While most activities will occur during the summer months when most areas are dry, dewatering may be required for some projects involving installation of the stream channel stabilization practices. Dewatering a portion of a stream during construction would involve isolating the work area using temporary structures such as cofferdams and the pumping of water around the worksite in order to maintain flows downstream.
Dimensions	Length: Average: 200'; Max: 2,000'. Width: Average: 20'; Max: 100'. Area: Average: 0.1 acre; Max: 4.5 acre. Volume[3]: Average: 200 cu. yards; Max: 7,500 cu. yards (1,000 cu. yards in Coastal Zone Scenic Areas). Flow Rate: Max: 400 cfs.
Additional Practice-Specific Protection Measures	Sediment removal will not occur in fish-bearing streams. Sediment removal from non-fish bearing stream channels ~~or ponds~~ may occur if it will improve biological functioning of the stream and restore channel capacity. Sediment removal would occur as a one-time event and not a repeated maintenance practice. Sediment removal may not occur in a flowing stream or standing water. Sediment will not be stored in wetlands or waterways (including floodplains and floodways).
12. Structure for Water Control (587)*	Installation of a structure in an irrigation, drainage, or other water management system, including streams and gullies, that conveys water, controls the direction or rate of flow, or maintains a desired water surface elevation, such

	as culverts, pipe drops or chutes within gullies, debris screens, etc. Structures for water control includes treatment systems, such as bioreactors, that improve on-site and/or downstream water quality. Structure for water control is used to replace or retrofit existing culverts that are either not functioning properly or are a barrier to fish passage. The placement of new culverts, when environmentally beneficial, is also covered. By controlling the velocity of water running through an area, this practice reduces erosion and prevents down cutting of stream channels. Culverts will be consistent with California Department of Fish and Game's "Culvert Criteria for Fish Passage" (April 2003) and National Marine Fisheries Service Southwest Region's "Guidelines for Salmonid Passage as Stream Crossings" (September, 2001).
Dimensions	Flow Rate: 80 cfs
Additional Practice-Specific Protection Measures	Crossings will be consistent with California Department of Fish and Game's *"Culvert Criteria for Fish Passage"* (May 2002) and National Marine Fisheries Service Southwest Region's *"Guidelines for Salmonid Passage as Stream Crossings"* (September, 2001). If dewatering in a fish-bearing stream is proposed as part of a project implemented under the permit coordination program, the RCD/NRCS will comply with the terms and conditions outlined in the Biological Opinion, and any subsequent conditions, issued by NOAA Fisheries for this project. If the project has the potential to create standing water for longer than five (5) consecutive days, the County Mosquito Abatement and Vector Control District shall be consulted.
13. Underground Outlets (620)*	Installation of a conduit beneath the surface of the ground to collect surface water and convey it to a suitable outlet. This practice is typically, although not always, associated with a sediment basin (with or without water control). Excess surface water generated by farmland on steep terrain can be collected and conveyed to a sediment basin by installing pipe safely buried underground. Location, size, and number of inlets are determined to collect excess runoff and prevent erosive surface flow. This runoff is then discharged at sediment basin where high velocity

	runoff is calmed and suspended sediment is trapped prior to releasing water into natural drainage channel. The basin is designed to release water at a natural rate of flow.
Dimensions	Length: Max. in Riparian Areas: 50'. Width: Max. in Riparian Areas: 20'. Area: Max. in Riparian Areas:1,000 sq. ft. Volume[3]: Max. in Riparian Areas: 10 cu. yards[9]. Flow Rate: Max. in Riparian Areas: 60 cfs.
Additional Practice-Specific Protection Measures	If a pipe or structure that empties into a stream (underground outlet), a properly sized energy dissipater shall be installed to reduce bank scour and bank erosion.
14. Upland Wildlife Habitat Management (645, 382, 614, 516)	This practice will be utilized to create, restore, and/or enhance upland habitat for wildlife species. This practice may be used to install shelter, cover, and food, establish vegetation for shelter, food, and enable movement, and for manipulating vegetation to sustain optimal habitat conditions. This practice may include the creation of infrastructure to accomplish the intended purpose of the practice, including a livestock pipeline, fence, and watering facility. Use of a pipeline for conveying water from an existing source of supply to points of its use for livestock; to shift livestock to constructed waters sources and away from streams and lakes. This practice is designed to reduce bank erosion, sediment yield, and manure entering watercourses. Occasionally, a pipeline may cross streams or water courses. The Watering Facility practice is limited to the device that actually holds the water. It is not the well, spring, or other source of undeveloped water. The construction a fence across a riparian corridor or in a sensitive habitat may be utilized to improve grazing and land use management to achieve restoration goals
Dimensions	Length: Average: 50'; Max: 200' through riparian areas (includes 50' on each bank and across a stream or gully),

	and up to 10,000' through the upland areas. Width: Average 15'; Max: 20'. Area: Max: 4,000 sq. ft. through riparian areas/crossing streams Volume[3]: Average: 15 cu. yards; Max: 50 cu. yards through riparian areas[4]. Pressure: Max: 300 psi (Highest capacity for a pipeline would not exceed 300 pounds per square inch). The maximum livestock pipeline diameter would be 3 inches.
15. Wetland Management* (657, 659, 356, 587, 644)	To restore and enhance wetlands conditions similar to those that existed prior to modification for farming, grazing, or other land use. This practice includes minor reshaping to restore topographic relief of the site, hydrological enhancement (increasing season of inundation or saturation), and vegetative enhancement to remove any undesired species that did not originally exist on the site or to plant native species. To actively manage the water regime to improve habitat for desired species or to be able to manage for pest control (i.e. mosquitoes), dike and Structure for Water Control may be used. Once constructed, the maintenance of the practice(s) is allowable, including management of water levels and a wide range of vegetation management activities to maintain or improve the vegetative composition on a site.
Dimensions	Area: 5 acres max (waters of the state); 18 acres max. Volume[3]: 1,000 cyd. (scenic coastal areas); 7500 cyd max.
Additional Practice-Specific Protection Measures	Activities will seek to emulate the functions of undisturbed conditions and will not result in significant loss of vegetation or disturbance which would negatively impact species' habitat, cover, food, etc.

1. A "fish-bearing stream" is defined as a stream located within the range of the listed species (Central California Coast (CCC) Evolutionarily Significant Unit (ESU) Coho, the CCC steelhead, and South Central Coast ESU Steelhead) and/or designated critical habitat for these salmonids.

[4] A "fish-bearing stream" is defined as a stream located within the range of the listed species

The County of Santa Cruz and ~~CDFG~~CDFW fisheries experts prepared a GIS-based summary of the existing information on salmonid distribution in Santa Cruz County streams "Steelhead and Coho Salmon Distribution", County of Santa Cruz, May, 2004. The RCD and NRCS will utilize this map, and any subsequent updates to it, during the initial project assessment to determine if the project is taking place in a fish-bearing stream.

2. Dimensions refer to actual area of improvement.
3. Volume of soil disturbed, based on practice installation and representing the volume of soil excavated and used as fill or removed from site, or soil imported as fill.
4. The "ordinary high water mark" on non-tidal rivers is defined by the line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank; shelving; changes in the character of soil; destruction of terrestrial vegetation; the presence of litter and debris; or other appropriate means that consider the characteristics of the surrounding areas. Some indicators of the ordinary high water mark include water staining, shelving, and evidence of debris, among other potential indicators.
5. Actual objects rarely exceed 10 ft. x 15 ft. Access to an object may involve disturbance of up to 50' in length. It is difficult to estimate the total number of separate objects to be removed from a stream. Maximum disturbance per project is limited to .2 acres.
6. Embankment heights exceeding 6 ft will be accompanied by additional technical information that has been reviewed and approved by County Geologist and County Civil Engineer. At a minimum, all engineered practices shall be designed/sized to accommodate a 10-year storm event.
7. For vegetation treatments, soil disturbance is assumed to be a maximum of 700' of 2,000' maximum reach. The average depth of soil grading (cut or fill) is 3'.
8. Numbers provided for rock armoring refer to actual areas and volume of rock placed only. Total soil disturbance limits are same as for vegetative treatments since remainder of work area will be vegetated. Rock placed would be used at the toe of the bank in conjunction with bioengineering techniques. RSP for bank protection is limited to approximately 300 cyd. Up to 800 cyd of rock is allowable if the majority of rock will be used for fish-friendly practices, such as rock vanes, j-hooks, root wad anchoring, etc.
9. Area of practice within riparian area includes a 50' length and a 20' wide work area for equipment. Volume of soil is based on a 2' wide trench over 50' with pipe buried to an average depth of 2'.

~~* The NRCS Area Engineer will be responsible for reviewing and signing plans that include those practices designated in the table above with an asterisk.~~ At a minimum, all engineered practices shall be designed/sized to accommodate a 10-year storm event.

~~~~ Where this practice involves replacement of a fish passage barrier with a bridge, bridge plans will be designed by a civil engineer and soil information will be supplied to the County by a civil engineer or geotechnical engineer.

Also, per the County of Santa Cruz requirements, a registered civil engineer (RCE) would be responsible for signing designs for projects where the following conditions exist:

- When grading exceeds 2000 cubic yards or the County geologist/engineer determines that the project warrants further investigation;
- When the embankment heights for a sediment basin exceeds six feet; or
- If project involves placement of fill in the FEMA identified flood hazard area (Zones A, V, or floodway), including footings, supports, approaches, erosion protection and other elements of bridges.

Lastly, if a ditch relief culvert outlets to a slope greater than 30%, a letter will be provided with the PCN documenting the stability of the slope.

Summary of Activities for Each Tier.

COMPLEXITY OF PROJECT AND REGULATORY REQUIREMENTS
LOWEST➔➔➔➔➔➔➔➔➔➔➔➔➔➔➔➔➔➔➔➔➔➔➔➔➔➔➔➔HIGHEST

	TIER I	TIER II	TIER III
Summary	Projects in upland areas only. •No work in stream channels or riparian habitat. •No projects where special status species or their habitat occurs.	Projects in streams or riparian areas; work may require temporary water diversion and dewatering. •No projects where threatened or endangered species or their habitat occurs. •No streambank rock riprap protection of any kind.	Projects in streams or riparian areas; work may require temporary water diversion and dewatering. Projects where threatened or endangered species or their habitat occurs, including in jurisdictional wetlands. • For projects involving streambank rock riprap protection or removal of in-stream barriers, early coordination with agencies will occur.
Timing	•Projects that occur in upland areas may occur year-round. •The Permittee shall consider wildlife usage in the project area. •Tier I projects, such as invasive species removal, can occur throughout the year, if there is no documented occurrence of special status species within the past two years or if protocol level surveys are conducted and no species are found. •Bare soil and areas where invasive plant species are removed must be stabilized before a Predicted Rain Event. ~~Project construction will~~	•Portions of the project that occur below top of creek banks or in riparian areas shall be stabilized for the winter prior to October 15 of each year, either by completing construction of those portions of the project (including installation of permanent erosion control measures) or by implementing winterization stabilization measures capable of effectively stabilizing the area and preventing erosion under winter rain and flow conditions generated by the 10-year 24-hour storm event. •No construction activities (other than manual, on foot, revegetation/erosion control actions) shall be conducted below top of creek banks or in other waters of the State during the winter period (October 15 – May 30), unless	All restrictions for TIER II apply, AND: Where special status species could be impacted by construction activities, work seasons will be further restricted by agency ~~staff, including~~permits.: •If special status species are present (based on protocol-level surveys), or assumed present based on habitat, invasive species removal may occur after early consultation with USFWS and CDFW has occurred. ~~If suitable habitat for the California red-legged frog, California tiger salamander or the Santa Cruz long-toed salamander occurs in the project area, construction activities shall begin after April 15.~~

	TIER I	TIER II	TIER III
	~~avoid the primary rainy season and consider wildlife usage in the project area. The general construction season will be April 15 to October 31. All earthmoving activities will be completed by October 31, with the exception of revegetation activities, which may occur until November 30.~~ ~~Additional tier one projects, such as invasive species removal, are authorized to proceed through December 31st, if there is no documented occurrence of the species within the past two years or if protocol level surveys are conducted and no species are found.~~	prior written approval has been obtained from Central Coast Water Board staff. ~~Project construction will entirely avoid the rainy season and consider wildlife usage in the project area. The general construction season will be June 15 to October 31. All earthmoving activities will be completed by October 31, with the exception of revegetation, which may continue until November 30.~~ Work outside this period may be authorized by agency staff on a site-specific basis. • Bare soil and areas where invasive plant species are removed must be stabilized before a Predicted Rain Event. •The Permittee shall consider wildlife usage in the project area. •Manual revegetation (revegetation that does not require the use of heavy equipment in the waterbody) may occur when rain conditions allow per the winter period text above. •Work shall be timed to avoid disturbing breeding birds in native habitat. Projects that could affect breeding birds shall not begin until August 1 or until a qualified individual determines that a) the birds have fledged and are no longer reliant on the nest or parental care for survival, or b) the nest is abandoned. ~~Work will be timed to avoid disturbing breeding birds in~~	~~If potential habitat for the marbled murrelet occurs in the project area, work shall either begin after September 15.~~ ~~If potential habitat for the Mount Hermon June beetle is present in the project area, construction activities shall begin after August 15.~~ ~~If least Bell's vireos are discovered in Santa Cruz County during the life of the Program and are potentially present in the project area, construction activities shall begin after August 31.~~ •Bare soil and areas where invasive plant species are removed must be stabilized before a Predicted Rain Event. ~~If listed species are present (based on protocol level surveys), or assumed present based on habitat, invasive species removal may continue until December 31st. Early consultation with FWS and DFG is required~~

	TIER I	TIER II	TIER III
		~~native habitat. Projects that could affect breeding birds will not begin until August 1 or until a qualified individual determines that a) the birds have fledged and are no longer reliant on the nest or parental care for survival, or b) the nest is abandoned.~~	
Notification	•Notifications shall include information specified in the PCN template •Tier I PCNs shall be submitted to regulatory agencies with regulatory authority over project activities no more frequently than two times per year (by March 15th and May 15th). •Projects may begin 10 working days after PCNs have been submitted to the regulatory agencies, unless the RCDSCC is contacted by the agencies. ~~RCDSCC will provide electronic Pre-Construction Notifications (PCN) for each project to regulatory agencies with jurisdiction over project activities no more frequently than 2 times per year; March 15th and May 15th.~~ ~~Notification will include the following information: project location; the TIER the project falls under and why; project description and purpose/need (including environmental benefits expected); environmental setting (surrounding habitat, adjacent land uses);~~	•Tier II PCNs shall be submitted to regulatory agencies with regulatory authority over project activities no more frequently than two times per year (by March 15th and May 15th). •Projects may not begin until 30 days after submittal of the PCN or until May 31st, whichever is later, unless the Permittee is contacted by the regulatory agencies. If contacted, the Permittee shall not begin work until after the PCN is re-submitted incorporating agency recommendations into the project description and until May 31. •The PCN shall flag (mark for attention) projects that exceed the dimensions identified in the Conservation Practices table. •For Tier II projects that exceed the dimensions identified in the Conservation Practices table, the Permittee shall submit the PCNs by February 21st to allow time for additional review. ~~All requirements for TIER I apply, AND:~~ ~~RCDSCC/NRCS will provide~~	• Notifications shall include information specified in the PCN template. Tier III PCNs shall be submitted one time per year by May 15th, unless a late submittal is approved by all agencies with regulatory authority over project activities. •Projects may begin 30 days after the PCNs have been submitted and no sooner than May 31, unless the Permittee is contacted by the regulatory agencies. •If the regulatory agencies require modifications, the Permittee shall prepare and circulate a Final PCN for final project approval. •Work may begin 10 working days after the Final PCN is sent and no sooner than May 31. •The PCN shall flag (mark for attention) projects that exceed the dimensions identified in the Conservation Practices table ~~(Attachment XX).~~above. •For Tier III projects that

	TIER I	TIER II	TIER III
	~~approved practices to be installed; project dimensions (length, width, volume of soil disturbance); and summary of any survey results.~~ ~~Projects may begin 10 working days after electronic notifications have been emailed, unless the RCDSCC is contacted by the agencies.~~	~~an electronic DRAFT Pre-Construction Notification (PCN) to regulatory agencies with jurisdiction over project activities no more frequently than 2 times per year; March 15th and May 15th. These agencies will provide comments or recommended revisions within 21 working days of receipt of a PCN. RCDSCC/NRCS will incorporate agency recommendations into the project description and may begin work without circulating a Final PCN. If discussions concerning recommended agency modifications are necessary, RCDSCC/NRCS will prepare and circulate a Final PCN for final project approval; work may begin 10 working days after the Final PCN is sent.~~ ~~Notifications will include a description of proposed water diversion or silt control, if working in a perennial stream and if flows will be isolated from the workspace.~~	exceed the dimensions identified in the Conservation Practices table ~~(Attachment XX),~~above, the Permittee shall submit the PCNs by March 15th to allow time for additional review. ~~All requirements for TIER II apply, AND:~~ ~~All DRAFT PCN's will be submitted one time per year on May 15th. The agencies will provide comments or recommended revisions within 30 working days of receipt of a PCN.~~ ~~Notifications will include information on special status species/habitat present in relation to the work area, potential impacts to special status species/habitat, and all applicable environmental protection and mitigation measures.~~

Description of Conservation Practices and Tier System

CONSERVATION PRACTICE (FOTG PRACTICE CODE)	TIER	PURPOSE AND COMMON USES
Access Road Improvement (560)	I, III, ~~IV~~	Road projects for which grading exceeds 100 cyd in upland habitat would fit in tier I; projects with T&E species, or their habitat would fit in tier III. ~~Projects which can discharge into stream reaches listed in the 2010 NMFS Recovery Plan as supporting coho salmon or having high intrinsic potential (IP > 0.70) for coho salmon would fit into tier IV.~~
Planting (342, 612, 422, 391)	I, II or III	Projects for which grading exceeds 100 cyd in upland habitat would fit in tier I; planting projects within a riparian corridor would fit in tier II; projects with T&E species, or near or in their habitat would fit in tier III.
Stream Habitat Improvement and Management (395)	II, ~~-~~III, ~~or IV~~	Projects within a riparian corridor would fit into tier II; projects with T&E species, or their habitat would fit into tier III. ~~Projects in stream reaches listed in the 2010 NMFS Recovery Plan as supporting coho salmon or having high intrinsic potential (IP > 0.70) for coho salmon would fit into tier IV~~.
Stream Crossing (578)	II, III	Activities without listed species would fit into tier II; projects with T&E species, or their habitat would fit into tier III.
Grade Stabilization Structure (410)	I or III	~~–~~Projects for which grading exceeds 100 cyd in upland habitat would fit in tier I; projects with T&E species, or their habitat would fit in tier III.
Grassed Waterway (412)	I or III	Projects for which grading exceeds 100 cyd in upland habitat would fit in tier I; projects with T&E species, or their habitat would fit in tier III.
Obstruction Removal (500)	II ,III~~, or IV~~	Projects within a riparian corridor would fit into tier II; projects with T&E species, or their habitat would fit into tier III. ~~Projects in stream reaches listed in the 2010 NMFS Recovery Plan as supporting coho salmon or having high intrinsic potential (IP > 0.70) for coho salmon would fit into tier IV.~~
Restoration and Management of Declining Habitats (643)	I, II or III	Projects for which grading exceeds 100 cyd in upland habitat would fit in tier I; projects within a riparian corridor would fit in tier II; ~~-~~projects with T&E species, or their habitat would fit in tier III.
Sediment Basin (350) [with or without Water Control (638)]	I or III	Projects for which grading exceeds 100 cyd in upland habitat would fit in tier I; projects with T&E species, or their habitat would fit in tier III.
Streambank Protection (580)	II ,III ~~, or IV~~	Streambank restoration activities, without listed species, would fit into tier II; projects with T&E species, or their habitat would fit into tier III. ~~Projects in stream reaches listed in the 2010 NMFS Recovery Plan as supporting coho salmon or having high intrinsic potential (IP > 0.70) for coho salmon would fit into tier IV.~~
Stream Channel Stabilization (584) ~~(In non-fish bearing streams only)~~	II, III~~, or IV~~	Stream channel activities, without listed species, would fit into tier II; projects with T&E species, or their habitat would fit into tier III. ~~Projects in stream reaches listed in the 2010 NMFS Recovery Plan as supporting coho salmon or having high intrinsic potential (IP > 0.70) for coho salmon would fit into tier IV.~~
Structure for Water Control (587)	I, II, III~~, or IV~~	Projects for which grading exceeds 100 cyd in upland habitat would fit in tier I; projects within a riparian corridor would fit in tier II. ~~Projects which can discharge into stream reaches listed in the 2010 NMFS Recovery Plan as supporting coho salmon or having high intrinsic potential (IP > 0.70) for coho salmon would fit into tier IV.~~
Underground Outlet (620)	I, II or III	Projects for which grading exceeds 100 cyd in upland habitat would fit in tier I; projects within a riparian corridor would fit in tier II; projects with T&E species, or their habitat would fit in tier III.
Upland Wildlife Habitat Management (645, 382, 614, 516)	I or III	Projects for which grading exceeds 100 cyd in upland habitat would fit in tier I; projects with T&E species, or their habitat would fit in tier III.

CONSERVATION PRACTICE (FOTG PRACTICE CODE)	TIER	PURPOSE AND COMMON USES
Wetland Management (657, 659, 356, 644)	II or III	Projects within a wetland, without T&E species or their habitat would fit in tier II; projects with T&E species, or habitat would fit in tier III.

EXHIBIT C:

Notification and Communication Procedures for the Countywide Partners in Restoration Permit Coordination Program (i.e., Master Permit)

Preliminary Pre-Construction Notification:

Tier I. The RCD will provide an electronic Pre-Construction Notifications (PCN) for each project to County Planning Department (attn: Environmental Planning) no more frequently than 2 times per year; March 15th and May 15th. Tier 1 notifications will include the following information:

- Project identification and location, including location map.
- Nature of work and description of project need.
- Approved practices to be installed.
- Environmental setting – surrounding habitat, adjacent land use.
- Photos of the project area and immediate surroundings annotated to describe the project area and any applicable site features.
- The volume of any proposed grading, including the offsite location to which the fill will be exported (if location is not a municipal landfill), and a valid grading permit (and, if in the coastal zone, a coastal permit) authorizing placement of the fill at the receiving site in such cases. Where grading exceeds 2,000 cubic yards, or as otherwise requested by the Planning Director, certification that plans have been designed and signed by a Registered Civil Engineer (RCE) practicing in accordance with the standards of the State of California (to be indicated by marking a checkbox on the PCN form).
- The compaction requirements and finished maximum cut and fill slopes, as applicable.
- 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.
- Information and justification about the plant species to be used for revegetation (checkboxes).
- Potential presence of listed species (i.e., indication that CNDDB map has been consulted for species) (checkbox).
- Indication that County archeological and paleontological resources maps have been consulted to determine if the project is located in an area where such resources may be impacted (checkbox); with certification that the NRCS Cultural Resources Coordinator or the USACE Regulatory Project Manager has been notified of any projects potentially impacting archeological resources (checkbox).
- If any projects will take place within Coastal Zone, certification that the PCN has been circulated to the California Coastal Commission, Central Coast District office (checkbox).
- For projects within the Coastal Zone, certification that the plans for such projects have been circulated to the California Coastal Commission, Central Coast District office (checkbox). All such plans should include:

- Location map.
- Site plan and cross-section/elevation views (if applicable);
- Plans/maps showing property lines, as providing by the County of Santa Cruz GIS website and APNs (RCD and NRCS will provide agencies with a key linking up the APNs for project locations and the landowner names);
- Indication of any easements or other restrictions applicable to the project area. RCD and NRCS shall inform participating landowners that: (1) landowners are responsible for providing the RCD and NRCS with accurate information about any easements and/or other restrictions affecting that portion of their property where the project would occur; (2) if landowners indicate that there are no such easements and/or restrictions when in fact this is inaccurate, or if they fail to identify all such easements and/or restrictions, and if project implementation leads to a conflict with the terms and conditions of any such easement(s) and/or restriction(s), then the involved landowner(s) shall be held responsible for rectifying the problems created by the project consistent with the terms and conditions of such easements and/or restrictions. When any easements and/or restrictions are identified, RCD and NRCS shall review such easements and/or restrictions (including coordinating with any third-party easement/restriction holders if there are any) to ensure that the project is consistent with them. The RCD and NRCS shall document recommendations on how the project should be modified, if necessary, to ensure consistency with any such restrictions and communicate this information to the landowner. If the landowner moves forward with project implementation and fails to incorporate such recommendations resulting in a conflict with any existing easements/restrictions, the landowner shall be held responsible for rectifying the problems consistent with the terms and conditions of such easements and/or restrictions. As described in the Project Description, and in the Cooperator Agreement itself, if a landowner (or Cooperator) does not carry out work consistent with project design standards and specifications, the RCD and NRCS shall notify the landowner and work directly with them to resolve the problem. If the landowner still fails to conform to the standards set forth in this Program, the NRCS or RCD shall notify the Cooperator that their activities are inconsistent with the standards and specifications contained in the Project Plans and Specifications and that the Cooperator's actions are no longer covered by the Program's permits and agreements. This easement/restriction language shall be included in the Cooperator Agreement signed by the participating landowners.

- For projects in Coastal Zone, a map showing trees that will be disturbed or removed, with description of how findings in County Code Chapter 16.34 (Significant Trees Protection) will be met for any proposed removal of a "significant tree" as defined in County Code Section 16.34.030.
- Indication if any part of the project area is within 40-feet of a County right-of-way.

- For any project that potentially could impact County rights-of-way and for which DPW Encroachment Permits would normally be needed, certification that plans for such projects have been circulated to the County Department of Public Works (DPW) (checkbox).
- Certification that site is not on list of hazardous materials sites cited in the CEQA Initial Study (checkbox).
- Proposed strategies for implementation of CEQA mitigations and other requirements, as specified in the Initial Study and Mitigated Negative Declaration for the Countywide Permit Coordination Program.
- Description of the criteria that will be used to measure success for each project, and the time frame to be used to monitor the identified success criteria. If identified success criteria are to be monitored for less than five years initially, then information and a rationale supporting such a decreased monitoring time-frame shall be provided.
- Indication that landowner access consent has been obtained for the project site and any properties that must be crossed to implement the project (checkbox).
- For all other project types requiring RCE review/approval, as indicated in Exhibit B (i.e., for practices designated with ~~one or~~ two asterisks in Exhibit B, or as indicated in the endnotes of Exhibit B), certification that an RCE has reviewed, analyzed, and/or designed the project (checkbox).
- Applicable information regarding CEQA mitigation monitoring, as described in #6 below.

Tier II. The RCD will provide an electronic Preliminary PCN for each project to County Planning Department (attn: Environmental Planning) no more frequently than 2 times per year; March 15th and May 15th. Notifications will include all Tier I information, as well as the following:

- Identification of those projects with in-stream work, and those potentially directly or indirectly impacting fish bearing streams[5].
- Estimated number of creek crossings and type(s) of vehicle(s) to be used.
- A description of proposed water diversion or silt control, if working in a perennial stream and if flows will be isolated from the workspace.
- Presence of barriers to aquatic species migration.
- Indication that County FEMA map has been consulted to determine if the project is located in a FEMA identified flood hazard area (Zones A, V, or floodway) (checkbox).
- For all projects with the potential to impact a floodway or floodplain, the written analysis of a Registered Civil Engineer (RCE), or licensed hydrologist, indicating that the project will not decrease floodwater storage, modify floodwater

[5] A "fish-bearing stream" is defined as a stream located within the range of the listed species (Central California Coast (CCC) Evolutionarily Significant Unit (ESU) Coho, the CCC steelhead, and South Central Coast ESU Steelhead) and/or designated critical habitat for these salmonids. The County of Santa Cruz and CDFW fisheries experts prepared a GIS-based summary of the existing information on salmonid distribution in Santa Cruz County streams "Steelhead and Coho Salmon Distribution", County of Santa Cruz, May, 2004. The NRCS and RCD will utilize this map, and any subsequent updates to it, during the initial project assessment to determine if the project is taking place in a fish-bearing stream.

conveyance, increase base flood elevation, or otherwise create an adverse impact either on the site, or upstream or downstream of the site.

Tier III ~~and IV~~. By May 15th of each year, the RCD will send an electronic Preliminary PCN to the County Planning Department (attn: Environmental Planning) for each project planned for the upcoming construction season. Notifications will include all Tier II information, as well as the following:

- Description of any proposed wetland disturbance, including description of how project/practice will increase functional capacity of said wetland, and a description of the wetland delineation methodology (checkbox).
- Information on special status species/habitat present in relation to the work area, potential impacts to special status species/habitat, and all applicable environmental protection and mitigation measures.
- ~~Results of the snorkel survey (Tier IV only).~~

All PCNs will include a cover sheet signed by the NRCS and the RCD certifying that each proposed project meets the criteria to qualify under the Santa Cruz Countywide Partners in Restoration Permit Coordination Program (i.e. Master Permit).

Review of Preliminary PCN and Issuance of Final PCN:

1. For Tier I, projects may begin 10 working days after electronic notifications have been emailed, unless the RCD is contacted by the County Planning Department.

2. For Tier II projects, County Planning Department staff will provide comments or recommended revisions within ~~21~~ 30 working days of receipt of a PCN. RCD/NRCS will incorporate agency recommendations into the project description and may begin work without circulating a Final PCN. If discussions concerning recommended modifications are necessary, RCD/NRCS will prepare and circulate a Final PCN for final project approval; work may begin 10 working days after the Final PCN is sent.

3. After reviewing the Preliminary PCN, if County staff determines there are projects that require further review and/or modification to meet the criteria established by the Master Permit, the County will contact the RCD/NRCS to discuss those specific projects and resolve the outstanding issues. During these discussions, if the County determines that additional protection measures or other project revisions are required, they will work with the RCD/NRCS to determine how these measures/revisions will be incorporated into the project. The County and RCD/NRCS will attempt to achieve resolution of outstanding concerns within ~~21~~ 30 days of the receipt of the Preliminary PCN. Following discussions with the County and other participating agencies, the RCD/NRCS will send a revised PCN (Final PCN) to the County and other participating agencies, incorporating any revisions necessary to meet the criteria established by the Master Permit that resulted from the County and participating agencies' review of the Preliminary PCN. If no comments are made on a DRAFT PCN, that PCN becomes final and is not resent to County staff.

~~4. Mid-Construction Season Status Report: By October 1 of each year, the NRCS/RCD shall submit to the County (i.e., Environmental Planning) and the participating agencies for review, a written Mid-Construction Season Status Report that describes the mid-season status of each of the projects implemented that year. This report shall identify any changes necessary to achieve identified project success criteria, and the mechanisms for their implementation, as necessary. The County and/or the participating agencies may require additional and/or different changes as necessary to ensure that the projects continue to meet the criteria of the Master Permit.~~

~~5.~~4. Winter Grading Approvals: Every attempt shall be made to finish all grading and to install erosion control measures prior to the October 15 cutoff date. Any additional grading work beyond October 30 must be pre-approved by the County (i.e., Environmental Planning).

~~6.~~5. Annual Report: By January 31 of each year, the RCD/NRCS shall submit a status report for review to the County (i.e., Environmental Planning) and participating agencies in the form an end-of-the-season Annual Report documenting all projects~~. The Annual Report format shall be based on the NRCS Status Review format~~. The Annual Report shall list currently active projects, and describe each project's purpose, area affected, environmental enhancements accomplished, amounts/volumes of yardage and cut/fill, finish slopes, etc. It shall also list conservation benefits and any net gains in wetlands and riparian areas, describe actions taken to avoid adverse effects to and enhance habitat of listed species, and provide photo documentation of before and after site conditions.

~~7.~~6. Mitigation Monitoring Program: Consistent with the CEQA Mitigation Monitoring Plan included as Section VII of the Master Permit, the PCN and/or the Annual Report (as indicated below) shall include documentation of progress made towards implementation each of the Master Permit program mitigations as specified in the CEQA Initial Study and Mitigated Negative Declaration for the Master Permit/Countywide Partners in Restoration Permit Coordination Program, including listing any additional actions that may be needed to fully implement the CEQA mitigations and meet success criteria, with proposed strategies for ensuring that such actions are taken in the upcoming or following year. For all situations where mitigation measures are not being sufficiently implemented and/or success criteria are not being timely met, the Annual Report shall provide recommended remediation measures (and an implementation schedule for them) designed to meet mitigation targets and/or individual project success criteria. The County and/or the participating agencies may require additional and/or different changes as necessary to ensure that the projects continue to meet the criteria of the Master Permit.

In describing the implementation status of each mitigation measure and related aspects of the project (such as the project specific criteria), the RCD/NRCS shall provide specific data for each applicable project (e.g., percent of plants established, percent of non-native invasives, documentation of pre- and post-project conditions, dates that applicable RCE/hydrologist reports were submitted to and approved by County staff, etc.), as specified below:

A. Mitigation Measure: I.A (also appears in General Condition #9 in Exhibit A).

Monitoring Program: Prior to exercise of the Master Permit, documentation shall be submitted for review and approval by Environmental Planning staff certifying that all required state and federal approvals have been obtained. Copies of the United States Fish and Wildlife Service (USFWS) ~~Incidental Take Permit and~~ Biological Opinion, ~~National Marine Fisheries Service (NMFS) Section 7 consultation~~, ~~California Department of Fish and Game (CDFG) Stream Alteration Agreement~~Army Corps of Engineers Regional General Permit, and California Regional Water Quality Control Board (RWQCB) Water Quality Certification permit shall be submitted as part of the first Pre-Construction Notification (PCN).

B. Mitigation Measure: I.B. (also appears in General Condition #9 in Exhibit A).

Monitoring Program: Plans for individual projects and practices shall incorporate all conditions and recommendations of the approvals mentioned in Mitigation Measure I.A. above. All recommended methods to lessen "take" of protected plants, animals and habitats, including avoidance, shall be incorporated into the design of each practice or project completed under this permit. For each project with the potential to impact a state or Federally-listed species, the PCN and the Annual Report shall indicate what measures are being taken to avoid take of such species.

C. Mitigation Measure: I.C. (also appears in General Condition #9 in Exhibit A).

Monitoring Program: Each specific project area disturbed by a project activity shall be monitored for increase in non-native plant cover, and the results of this monitoring shall be reported in each year's Annual Report. The Annual Report shall also document efforts to remove non-native, invasive plants that have colonized the area or expanded, including use of BMPs designed to prevent re-establishment, or shall document that the site is adjacent to an established, existing infestation that cannot reasonably be prevented from spreading on to the site without constant removal efforts.

D. Mitigation Measure: I.D. (also appears in General Condition #9 in Exhibit A).

Monitoring Program: The Annual Report shall document that revegetation ~~has been limited to plantings from~~ efforts have referenced the lists of ~~preferred~~ suggested plant species given in Exhibits E and F, or that certain native plants that do not appear on these lists have been collected from the site, propagated from on- site plants or plants very close to the site, or grown from seed collected from the site or plants very close to the site. The Annual Report shall also document that any native plant materials that were grown at or delivered from a nursery were thoroughly inspected for disease and pests prior to use.

E. Mitigation Measure: I.E. (also appears in General Condition #9 in Exhibit A).

Monitoring Program: The Annual Report shall document that revegetation and non-native plant removal programs are monitored for three to five years and until success criteria are reached. The Annual Report shall also document any information submitted by a qualified individual that demonstrates that certain characteristics of the site and/or the revegetation plan indicate that the revegetation may be established more quickly than five years, and if success criteria are reached after only three years, that three years of periodic monitoring is adequate. Revegetation success shall be defined as the site being restored to at least the same condition as existed prior to the project. Measures of this success criterion may include: percent native plant cover, percent non-native invasive cover, number of native and non native species present, plant health, and areal extent of shade provided to adjacent waters by overhanging vegetation.

a. Mitigation Measure: I (also appears at end of General Condition #9 in Exhibit A).

Monitoring Program: The PCN and Annual Report shall document that, prior to the onset of activities that result in the disturbance of habitat or individuals of any listed/special status species, all project workers including RCD/NRCS staff and growers/landowners and/or their employees/representatives will be have been given information on the listed species in the project area, a brief overview of the species' natural history, the protection afforded the species by the Federal and California Endangered Species Acts, and the specific protective measures to be followed during implementation of the practices.

G. Mitigation Measure: II (also appears in General Condition #10 in Exhibit A).

Monitoring Program: To ensure that there is no detrimental impact from conservation practices/projects on conveyance of floodwater and the pattern of flooding, prior to the placement of fill within the floodplain or floodway the RCD/NRCS shall provide analysis from a Registered Civil Engineer or hydrologist for review and approval of Environmental Planning staff (as part of the PCN). The analysis shall show that the practice/project will not decrease storage of floodwaters, modify conveyance, increase base flood level, or otherwise create an adverse impact on the site, upstream or downstream. The Annual Report shall also include documentation that this report was submitted to the County as part of the PCN.

EXHIBIT D: The NRCS Approach to Conservation

The Resource Conservation District of Santa Cruz County (RCD) is proposing to lead this Program with Natural Resource Conservation Service (NRCS) as a technical partner. The NRCS will assist Program participants by providing technical assistance and administers Farm Bill cost sharing programs to cooperators (private landowners working in partnership with the NRCS). NRCS assists landowners in developing a conservation plan for their property. 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 Resource Conservation Districts and other agencies, organizations and individuals to set conservation priority goals, work with people on the land, and provide technical assistance.

NRCS and RCD staff~~employees~~ have technical expertise and field experience to help land users address their natural resource concerns and maintain and improve their economic viability. Employees bring a variety of scientific and technical skills to support resource planning, including soil science, agronomy, biology, agroecology, range conservation, engineering, water quality, cultural resources, and economics. The technical support provided by the NRCS and RCD 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 streambank 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. Farmers and ranchers are stewards of much of the nation's privately owned land. They work voluntarily with the NRCS and RCD to protect and improve the natural resources on and adjacent to their property. With their technical experience and landowner relationships, the NRCS and RCD are~~is~~ in a unique position to provide dependable technical advice to landowners to ensure the conservation of natural resources for current and future generations.

In Santa Cruz County, the NRCS operates out of a Program Delivery Point Office in Capitola shared with the RCD. NRCS resources are also available through the Salinas Service Center and Salinas Area Office located in Monterey County. The agency is available to provide resource information and technology including:

1. Soil resource data for the County through the Soil Survey;
2. Conservation systems to sustain and improve soil and water quality by addressing erosion control, pesticide and nutrient management, irrigation water management, wetlands conservation and restoration, wildlife habitat improvement, flood control, and streambank stabilization;
3. A watershed approach to conservation that utilizes ecological principles and resource science to evaluate and manage the aggregate effects of many individual land uses;

4. A plant material program that introduces new ways to use native and introduced plants to protect and restore water quality and wetlands, and reduce soil erosion; and
5. Techniques for assessing and predicting erosion, agricultural nonpoint-source water pollution, and the effects of agricultural practices and management decisions on farm and ranch economics.
6. Individual experts: soil scientist, Central Coast agronomist, water quality specialist, civil engineer, range specialist, and a roads engineer, as well as additional geologists, biologists and engineers out of the State NRCS Office.

The NRCS Conservation Planning Process

Under the proposed program, the NRCS' Proven Conservation Planning Process will be followed as described below for all projects carried out under the program. For all Farm-bill funded projects, the NRCS will ensure project works are compliant with the National Environmental Policy Act (NEPA) and will 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 2010. This rule prescribes the assessment procedures under which NRCS-assisted actions are to be implemented. For all non-NRCS funded projects, as the federal lead, USACE will ensure compliance with NEPA. Agency procedures are designed to ensure that environmental consequences are considered in decision-making, and to allow RCD/NRCS to assist individuals and non-federal public entities to take actions that protect, enhance, and restore environmental quality.

The NRCS nine-step conservation planning process is used 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 with the customer.

The planning steps and the associated planning documents are listed below in Table D-1. Not all of the planning documents are generated anew for each property, but are based on templates that exist for each major land use or cropping system in California. Modifications to the templates and the resulting conservation plan are based on the assessment of site-specific conditions. Alternatives are evaluated by the client and the NRCS and result in a specific land use plan including detailed recommendations and an engineered plan if necessary.

Table D-1. Conservation Planning Process

	NRCS PLANNING STEP	**DOCUMENT USED**	**RESULTS**
Step 1	**Consultation**	***~~Tech Notes~~***	Identify resource problems with the client (land operator) and other specialists.
Step 2	**Determine objectives**	***~~Tech Notes~~***	Identify, agree on, and document the client's objectives.
Step 3	**Inventory the resources***	***Checklist of Resource***	The checklist prompts the inventory team to provide quantitative or qualitative data in several

	NRCS PLANNING STEP	DOCUMENT USED	RESULTS
		Problems or Conditions.	resource categories: Soils, Water, Air, Plants, Animals, and Human (social, economic, and cultural).
Step 4	**Analyze resource data**	***Quality Criteria***	For each of the resource problems or concerns identified, consult quality criteria to determine if resource is significantly impaired.
Step 5	**Formulate alternative solutions**	***Site Specific Practices Effect Worksheet***	All significantly impaired resources are itemized in a matrix. A brainstorm of practices which could be used to treat each impaired resource concerns are evaluated for anticipated negative or positive effects in the matrix using a three-point scale.
Step 6	**Evaluate alternative solutions**	***Resource Management System (RMS) Guidesheet***.	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."
Step 7	**Client determines course of action**	***Conservation Plan***	Assist cooperator -in selecting a system of optimal conservation practices to maximize resource protection and enhancement. Prepare a conservation plan and specifications.
Step 8	**Client implements plan**	***Standards, Specifications, Practice Requirement Worksheet***	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**	~~***Tech Notes and Status Reviews***~~	Evaluate effectiveness of plan and make adjustments as needed.

***Additional Documents Consulted:** 7.5" topographic maps, aerial photos, soil survey: LCC, prime soils, soils of statewide importance, unique soils, HEL, hydric conditions, 303(d) list, Cultural Resources, NWI, EPA: ozone and PM10, National Range and Pasture Handbook, ~~CDFG~~ Rarefind Database

During the interdisciplinary planning process, all potential impacts of the preferred alternative are documented. This document is then placed in the project case file. The document identifies all short term, long term, and cumulative effects of the proposed actions as well as the on-site and off-site impacts.

If significant adverse environmental impacts are expected to result from a project, the land user is encouraged to consider alternative actions, or may be directed to prepare a project specific Environmental Impact Statement (EIS). RCD/NRCS staff discourages

projects that require an EIS. Typically, for small conservation projects, the assessment indicates that there are no significant adverse impacts or that long-term beneficial impacts outweigh short-term adverse impacts, and the conservation planner is directed to proceed with the plan of work.

Protection of Cultural Resources

Cultural Resources Review

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. For all conservation projects covered by the proposed permit coordination program, the potential impacts to cultural resources will be identified and examined and no significant adverse effects will result.

All projects implemented under the Program will be subject to an NHPA assessment to ensure potential impacts to cultural resources are minimized. NRCS (Farm Bill funded projects) and USACE (non Farm Bill funded projects) will follow procedures which comply with the conditions outlined in agreements with the California State Historic Preservation Office (SHPO). The agreements create a process for assessing potential impacts, reviewing local, State and national records and literature, and consulting with tribal authorities, historical societies and other interested parties. If the proposed site for a project lies within designated, culturally sensitive areas, a site inspection for cultural resources is conducted. If it is determined that impacts to cultural resources cannot be avoided, the project would not proceed under the permit coordination program.

Both agencies policy of protection is based on special measures that go into effect when a conservation activity qualifies as an "undertaking." An undertaking is any project, activity or program under the direct or indirect jurisdiction of a Federal Agency that can result in changes or use of historic properties. An undertaking may be determined to have no effect, no adverse effect, or an adverse effect on historic resources. This recognizes that practices that involve excavation and earthmoving (such as critical area planting and sediment basin) have a higher chance of impacting resources than practices affecting areas where tillage and cultivation have already been performed. If the project involves no ground disturbance or will not exceed the depth, extent, or kind of previous cultivation, the project will not qualify as an undertaking.

The NRCS California state office has a Cultural Resources Coordinator who provides resources and guidance to the District Conservationists and field staff. The Cultural Resources Coordinator provides training and informational materials to field personnel and other interested parties for the consideration of cultural resources; provides policy and procedural guidance for considering and managing cultural resources and historic properties; provides oversight and quality control for cultural resources program;

conducts cultural resources investigations and evaluations; and develops treatment plans for mitigation.

For all Farm Bill funded projects covered under the permit coordination program, the NRCS serves as the lead agency to ensure protection of cultural resources in the project area. For all non-Farm Bill funded projects covered under the permit coordination program, the USACE serves as the lead agency to ensure protection of cultural resources in the project areas.

Discovery of Cultural Resources or Human Remains

If, during the course of installing a conservation practice, the risk of affecting cultural resources increases (e.g., if an unanticipated resource is discovered, if an unevaluated resource will be affected, or if it is determined that cultural properties will be affected in a previously unanticipated manner), the RCD/NRCS will respond immediately. This will include requesting the landowner to halt actions in areas with potential to affect cultural resources and notify the appropriate individuals immediately.

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

EXHIBIT E:

~~Recommended~~ Suggested Plant Species for the Santa Cruz Countywide Partners in Restoration Permit Coordination Program

Approved Non-Invasive ***Non-Native*** Species

(Numbers in right columns refer to NRCS practice number)

				1/	2/			3/		
Scientific Name	***Common Name***	***Tree Shrub Grass Forb***	***Ann/ Per***	**342**	**342**	**393**	**412**	**342**	**393**	**412**
Atriplex semibaccata	Australian Saltbush	F	P	X	X			X		
Brassica rapa	Common Mustard	F	A/Bi	X	X			X		
Medicago sativa	Alfalfa	F	P		X			X		
Trifolium fragiferm	Strawberry Clover	F	P		X			X		
Vicia atropurpurea	Purple Vetch	F	A	X	X			X		
Vicia dasycarpa	Lana Woolypod Vetch	F	A	X	X	X	X	X	X	X
Agropyron intermedium	Intermediate Wheatgrass	G	P			X		X	X	
Avena sativa	Oats	G	A	X	X	X	X	X	X	X
Echinochloa crusgalli	Barnyard Grass	G	A					X	X	
Elytrigia intermedia	Luna Wheatgrass	G	P				X			X
Festuca ovina glauca	Sheep fescue	G	P			X			X	
Hordeum vulgare	Common Barley	G	A	X	X	X	X	X	X	X
Lippia	Matgrass	G	P	X	X	X	X	X	X	X
Lolium rigidum	Wimmera-62 ryegrass	G	A					X		
Poa annua	Annual Bluegrass	G	A		X[a]	X[a]	X[a]			
Secale cereale	Cereal Rye	G	A	X	X	X[b]		X	X	
Sorghum sudanese	Sudangrass	G	A			X		X		
Trifolium incarnatum	Crimson Clover	F	A	X	X					
	"Merced" Cereal Rye	G	A			X		X	X	
	Red Oats	G	A	X	X	X		X	X	
	Sterile Rye	G	A	X	X			X		
	Sterile Wheat	G	A	X	X	X		X	X	
Arbutus unedo	Strawberry Tree	S	P		X			X		
Callistemon citrinus	Lemon Bottlebrush	S	P		X			X		
Rosemarinus officinalis	Dwarf rosemary	S	P		X			X		

1. Natural Areas Definition: Areas where primary goal is restoration to native conditions and ecological functions.

2. Natural-Working Land Interface Definition: Area where primary purpose is to buffer natural areas from impact of working landscapes. Periodic management and/or disturbance may be required to sustain function (e.g., sediment removal, replanting, harvesting biomass and nutrients, mowing, etc.)

3. Farmscaping Definition: Working land area where the primary goal is crop production for harvest. Intensive management and regular disturbance occurs though some non-crop plants are established to protect crops (e.g. erosion-control, insect habitat, wind or dust control)

a/ Use in combination with secale cereale or hordeum vulgare

b/ Use in combination with other species

EXHIBIT F:

~~Recommended~~ Suggested Plant Species for the Santa Cruz Countywide Partners in Restoration Permit Coordination Program

Approved ***Native*** Species

(Numbers in right columns refer to NRCS practice number)

				1/	2/			3/		
Scientific Name	***Common Name***	***Tree Shrub Grass Forb***	***Ann/ Per***	342	342	393	412	342	393	412
Achillea millefoleum	Yarrow	F	P	X	X			X	X	
Anaphalis margaritacea	Pearly Everlasting	F	P	X	X			X		
Asclepias fascicularis	Milkweed	F	P	X	X			X		
Aster chilensis	Aster	F	P	X	X	–	–	X	–	–
Atriplex patula	Fat-Hen Saltbush	F	A	X	X			X		
Euthemia occidentalis	Goldenrod	F	P	X	X	X		X	X	
Heliotropium curassivicum var. oculatum	Heliotrope	F	P	X	X			X		
Potentilla gracilis	Slender Cinquefoil	F	P					X		
Stachys ajugoides or Stachys bullata	Hedgenettle	F	P	X	X			X		
Agrostis densiflora	Calfiornia Bentgrass	G	P	X			X			X
Agrostis exerata	Spike Bentgrass	G	P	X						X
Deschampsia caespitosa[b]	Tufted Hairgrass	G	P	X				X		
Deschampsia elongata[b]	Slender Hairgrass	G	P	X				X		
Deschampsia holciformis[b]	Pacific Hairgrass	G	P	X			X	X		X
Distichlis spicata	Seashore Saltgrass	G	P	X				X		
Elymus glaucus[b]	Blue Wildrye	G	P	X	X	X	X	X	X	X

				1/		2/			3/	
Scientific Name	***Common Name***	***Tree Shrub Grass Forb***	***Ann/ Per***	**342**	**342**	**393**	**412**	**342**	**393**	**412**
Elymus trachycaulus	Slender Wheatgrass	G	P	X	X	X	X	X		X
Festuca idahoensis[b]	Idaho Fescue	G	P	X	X	X		X	X	
Festuca occidentalis[b]	Western Red Fescue	G	P	X		X			X	
Festuca rubra[b]	Creeping Red Fescue	G	P	X	X			X		
Festuca rubra[b]	Red Fescue (Molate)	G	P	X		X	X		X	X
Hordeum brachyantherum ssp. californicum[b]	California Barley	G	P	X	X	X	X	X	X	X
Hordeum brachyantherum[b]	Meadow Barley	G	P	X	X	X	X	X	X	X
Koeleria macrantha[b]	June grass	G	P	X		X			X	
Leymus triticoides	Creeping Wildrye	G	P	X	X	X	X	X	X	X
Muhlenbergia rigens	Deer Grass	G	P	X	X			X		
Nassella pulchra[b]	Purple Needlegrass	G	P	X	X			X		
Phalaris californica[b]	Canarygrass	G	P	X	X			X		
Stipa lepida	Foothill Stipa	G	P	X	X	X		X	X	
Carex barbarae[a]	Basket Sedge	GL	P	X	X			X		
Carex praegracilis[a]	Clustered Field Sedge	GL	P	X	X			X		
Eleocharis spp.[a]	Spikerush	GL	P	X	X			X		
Juncus balticus[a]	Baltic Rush	GL	P	X	X	X		X		
Juncus patens	Blue green Rush	GL	P	X	X	X		X	X	

				1/		2/			3/	
Scientific Name	***Common Name***	***Tree Shrub Grass Forb***	***Ann/ Per***	**342**	**342**	**393**	**412**	**342**	**393**	**412**
Juncus phaeocephalus	Brown Headed Rush	GL	P	X	X	X		X	X	
Scirpus americanus	Three-Square Bullrush	GL	P	X	X	X		X		
Scirpus microcarpus	Small-fruited Bulrush	GL	P	X	X	X		X		
Artemisia californica	California Sagebrush	S	P	X						
Artemisia douglasiana	Mugwort	S	P	X	X	X	X	X	X	X
Atriplex lentiformis	Quail Bush	S	P	X	X			X		
Atriplex lentiformis ssp. Breweri	Brewers Salt brush	S	P	X	X			X		
Baccharis pilularis	Coyote Brush	S	P	X	X			X		
Baccharis viminea	Mule Fat	S	P	X	X			X		
Cephalanthus occidentalis	CA buttonwillow	S	P	X	X			X		
Cercis occidentalis	Western redbud	S	P	X	X			X		
Eriogonum arborescens	Santa Cruz Island Buckwheat	S	P	X	X			X		
Eriogonum fasciculatum	California Buckwheat	S	P	X	X			X		
Helianthemum scoparium	Rockrose	S	P	X	X			X		
Holodiscus discolor	Oceanspray	S	P	X	X			X		
Lonicera involucrata	Black Twinberry	S	P	X	X					
Malosma laurina	Sumac	S	P	X	X			X		
Polygonum paronchyi[a]	Beach Knotweed	S	P	X	X			X		

				1/		2/			3/	
Scientific Name	***Common Name***	***Tree Shrub Grass Forb***	***Ann/ Per***	**342**	**342**	**393**	**412**	**342**	**393**	**412**
Prunus ilicifolia	Hollyleaf Cherry	S	P	X	X			X		
Rhamnus california	Coffeeberry	S	P	X	X			X		
Ribes sanguineum var. glutinosum	Red-Flowering Currant	S	P	X	X			X		
Rosa californica	California Wildrose	S	P	X	X			X		
Rubus parviflorus	Thimbleberry	S	P	X	X			X		
Rubus ursinus	California Blackberry	S	P	X	X			X		
Salix scouleriana	Scouler Willow	S	P	X	X			X		
Salvia mellifera	Black Sage	S	P	X	X					
Sambucus mexicana	Blue Elderberry	S	P	X	X			X		
Vaccinium ovatum	California Huckleberry	S	P	X	X			X		
Acer macrophyllum	Big Leaf Maple	T	P	X	X			X		
Acer negundo	Box Elder	T	P	X	X			X		
Aesculus californica	California Buckeye	T	P	X	X			X		
Alnus rhombifolia[c]	White Alder	T	P	X	X			X		
Alnus rubra[c]	Red Alder	T	P	X	X			X		
Arbutus menziesii	Pacific Madrone	T	P	X	X			X		
Cornus californica	Creekside Dogwood	T	P	X	X			X		
Cornus stolonifera	Red Osier Dogwood	T	P	X	X			X		

				1/		2/			3/	
Scientific Name	***Common Name***	***Tree Shrub Grass Forb***	***Ann/ Per***	**342**	**342**	**393**	**412**	**342**	**393**	**412**
Heteromeles arbutifolia	Toyon	T	P	X	X			X		
Platanus racemosa[c]	Western Sycamore	T	P	X	X			X		
Populus fremontiic	Fremont Cottonwood	T	P	X	X			X		
Salix hindsiana	Sandbar Willow	T	P	X	X			X		
Salix hookeriana	Coastal Willow	T	P	X	X			X		
Salix laevigata	Red Willow	T	P	X	X			X		
Salix lasiandra	Yellow Willow	T	P	X	X			X		
Salix lasiolepis	Arroyo Willow	T	P	X	X			X		
Salix sitchensis	Coulter Willow	T	P	X	X			X		
Symphoricarpos albus	Snowberry	T	P	X	X					
Umbellularia californica	California Bay	T	P	X	X					
	Clements Lotus			X				X		

1. Natural Areas Definition: Areas where primary goal is restoration to native conditions and ecological functions.

2. Natural-Working Land Interface Definition: Area where primary purpose is to buffer natural areas from impact of working landscapes. Periodic management and/or disturbance may be required to sustain function (e.g., sediment removal, replanting, harvesting biomass and nutrients, mowing, etc.)

3. Farmscaping Definition: Working land area where the primary goal is crop production for harvest. Intensive management and regular disturbance occurs though some non-crop plants are established to protect crops (e.g. erosion-control, insect habitat, wind or dust control).

a/ Use local divisions
b/ Use local divisions or do not plant within 1 mile of a natural area
c/ Concern with introducing disease into plant community through contaminated nursery stock

EXHIBIT G:

Prohibited Plant Species List for the Santa Cruz Countywide Partners in Restoration Permit Coordination Program

Scientific Name	Common Name	Do not Plant in Project Area[1]	Eradicate in Project Area[2]
Acacia melonoxylon	Blackwood acacia	x	x
Acacia dealbata	Silver wattle	x	x
Ageratina adenophora	Mexican Eupatorium	羊	?
Ailanthus altissima	Tree-of-heaven	x	x
Ammophila arenaria	European Beachgrass	x	x
Arundo donax	Giant Reed	x	x
Bromus rigidus	Rip gut grass	羊	羊
Calystegia sepium	Hedge Bindweed	?	?
Carduus pycnocephalus	Italian Thistle	羊	羊
Carpobrotus edulis	Iceplant	x	x
Centaurea solstitialis	Yellow Star Thistle	x	x
Cirsium vulgare	Bull Thistle	羊	羊
Conium maculatum	Poison Hemlock	羊	x
Cortaderia jubata	Jubata Grass	羊	x
Cortaderia selloana	Pampas grass	羊	x
Cynodon dactylon	Bermuda grass	x	x羊
Cytisus scoparius	Scotch Broom	x	x羊
Cytisus striatus	Portuguese (Striatus) Broom	x	x羊
*C. franchetti, C. pannosa***, *C. lacteal*	Cotoneaster	x	x
Dactylis glomerata	Orchardgrass	x	x
Delaireia odorata	Cape Ivy	羊	x
Ehrharta erecta, Ehrharta calycina	Veldt grass	x	x
Eucalyptus globulus	Eucalyptus	x	x
Erechtites glomerata	Australian fireweed	羊	羊
Erechtites mimima	Australian fireweed	羊	羊
Festuca arundinacea	tall fescue	x	x
Genista monspessulana	French broom	x	x
Hedera sp.	Algerian Ivy	?	?
Hedera helix	English Ivy	x	x
Holcus lanatus	velvet grass	x	x
Hordeum geniculatum	Mediterranean barley	羊	?
Hordeum leporinum	Famer's foxtail	羊	?

Leptospermum sp.	Australian tea tree	x	x
Scientific Name	**Common Name**	**Do not Plant in Project Area[1]**	**Eradicate in Project Area[2]**
Lolium multiflorum	Italian rye grass	?	x羊
Lolium perenne	perennial rye grass	x	?
Marrubium vulgare	horehound	x	x
Medicago hispida	bur clover	羊	羊
Melilotus albus	white sweet clover	羊	?
Myosatis latifolia	Forget-me-not	x	x羊
Oxalis pes-caprae	Bermuda buttercup	x	x羊
Pennisetum clandestinum	kikuyu grass	x	x
Phalaris aquatica	Harding grass	x	x
Robinia psuedoacacia	Black Locust	x	x
Rubus procerus	Himalaya Berry	x	x
Senecio mikanoides	German ivy	x	x
Senecio vulgaris	common groudsel	羊	羊
Silybum marianum	milk thistle	羊	x羊
Sonchus oleraceus	common sow thistle	羊	羊
Spartium junceum	Spanish Broom	x	x羊
Tamarix ramosissima	salt cedar, tamarisk	x	x
Tradescantia sp.	Wandering Jew	x	x
Ulex europaea	Gorse	x	x羊
Vinca major	Periwinkle	x	x
Xanthium stumarium	cocklebur	羊	x

Key to Symbols:

(羊) indicates that species is not commonly planted
(x) indicates species is uncontrollable;
(x羊) indicates that species may be uncontrollable depending on patch size
(?) indicates more research is needed on the spreading of these species through landowner implementation and ability to control these species once established. As with all species in this table, the proliferation of these species will be minimized as part of the program
(**) indicates species is much worse than other species

Exhibit H: Required Mitigation Measures for CEQA Negative Declaration

NAME: Santa Cruz County Resource Conservation District (RCD) and the Natural Resources Conservation Service (NRCS)
APPLICATION: 03-0513
A.P.N: Countywide

NEGATIVE DECLARATION MITIGATIONS

I. In order to mitigate for potential incidental loss of special status species, to comply with the Federal and State endangered species acts and to minimize impacts on wildlife habitat, in addition to implementing the avoidance measures, best management practices, and minimization techniques given in the program description, the applicant shall:

A) Prior to exercise of this permit, submit documentation for review and approval by Environmental Planning staff that all required state and federal approvals have been obtained. Copies of the United States Fish and Wildlife Service (USFWS) Incidental Take Permit and Biological Opinion, National Marine Fisheries Service (NMFS) Section 7 consultation, California Department of Fish and Game (CDFW) Stream Alteration Agreement and California Regional Water Quality Control Board (RWQCB) Water Quality Certification permit shall be submitted.

B) Plans for individual projects and practices shall incorporate all conditions and recommendations of the approvals mentioned above. All recommended methods to lessen "take" of protected plants, animals and habitats, including avoidance, shall be incorporated into the design of each practice or project completed under this permit.

C) For each specific project the area disturbed by the project activity shall be monitored for increase in non- native plant cover. Non- native, invasive plants that have colonized the area or expanded shall be removed using BMPs designed to prevent re-establishment, unless the site is adjacent to an established, existing infestation that cannot reasonably be prevented from spreading onto the site without constant removal efforts.

D) Revegetation ~~shall be limited to plantings from~~shall be informed by the "List of ~~Preferred~~ Suggested Plant Species", Appendix B *(of CEQA Initial Study or Exhibits E & F of Master Permit*), unless certain native plants that do not appear on the list can be collected from the site, propagated from on site plants or plants very close to the site, or grown from seed collected from the site or plants very close to the site. Further, native plant materials that are grown at or delivered from a nursery shall be closely inspected for disease and pests prior to use.

E) Revegetation and non-native plant removal programs shall be monitored for three to five years and until success criteria are reached.

If information has been submitted by an NRCS consulting biologist or qualified individual that demonstrates that certain characteristics of the site and/or the revegetation plan indicate that the revegetation may be established more quickly than five years, and if success criteria are reached after only three years, then three years of periodic monitoring may be adequate.

Revegetation success is defined as the site being restored to at least the same condition as existed prior to the project. Measures of this success criterion may include: percent native plant cover, percent non native invasive cover, number of native and non native species present, plant health, and areal extent of shade provided to adjacent waters by overhanging vegetation.

II. To ensure that there is no detrimental impact from conservation practices on conveyance of floodwater and the pattern of flooding, prior to the placement of fill within the floodplain or floodway the applicant shall provide analysis from a Registered Civil Engineer or hydrologist for review and approval of Environmental Planning staff. The analysis shall show that the practice will not decrease storage of floodwaters, modify conveyance, increase base flood level, or otherwise create an adverse impact on the site, upstream or downstream.

Exhibit I

CEQA Initial Study and Negative Declaration

(on file at the Planning Department)

Santa Cruz Countywide Partners in Restoration Permit Coordination Program
10-Year Renewal

The following is a summary of changes proposed by the Santa Cruz County Resource Conservation District (RCD) and Natural Resources Conservation Service (NRCS) to the conservation practices included under the Santa Cruz Countywide Partners in Restoration Permit Coordination Program (Program). The program underwent a number of changes in 2009, after the 5-year review, and minimal modification is currently requested.

The RCD and NRCS will seek 10-year programmatic regulatory approvals for implementation of these practices under the renewed Permit Coordination Program. The RCD and NRCS propose the following changes based on our experience implementing the Program during the past 15 years and based on feedback from regulatory agency staff. We will use this document to obtain feedback from all agency staff regarding these proposed modifications to the practices to be included under the Program and identify major concerns with the coverage of these practices under the programmatic regulatory approvals. Discussions with agency staff regarding environmental protection measures that will accompany implementation of these practices will follow.

New Practices to be Included Under the Program

1. Groundwater Depletion (TBD)
    a. If NRCS adds resource depletion as a resource concern, NRCS and RCD would like to add groundwater recharge practice, recognizing aquifer overdraft as a high priority concern not currently addressed by the program. NRCS is currently developing an interim practice standard and specification for California, which we hope to incorporate into the renewed program.

Appendix A
Ten-Year Evaluation of the Santa Cruz Countywide Partners in Restoration Permit Coordination Program
(as requested by the County of Santa Cruz)
Updated 5/18/2021

Review of practice descriptions and dimensions

a. Restoration and Management of Rare and Declining Habitats (643)
At USFWS request, add language in support to monarch habitat in case federal listed occurs during permit life span.

Restoring and conserving rare or declining native vegetation communities by removing exotic, invasive plants and restoring native vegetation in the project area, to manage non-native habitats that provide critical habitat for special status species, such as the monarch butterfly, and managing fuel loads in sensitive habitats, allowing treatment and maintenance of invasive species and noxious weeds, and revegetation of a treated area.

b. Stream Habitat Improvement and Management (395)
Dam removal is a high priority for NMFS, CDFW and RCD to improve the extent of salmonid anadromy and increase wood and gravel transport. In partnership with the County, an extensive survey of all dams on Branciforte Creek was completed in 2014. With the goal to remove all remaining structures, we request to increase the width of in-stream dam removals from 20-ft to 30-ft, based on upcoming planned projects.

In addition, the NOAA Restoration Center Biological Opinion allows for dewatering of up to 1000 LF to install stream habitat improvement projects. This additional length will allow the implementation of larger projects (ie. more large wood to be installed over a longer stream reach) and allow larger projects to be installed at one time, rather than in phases (which has been completed in the past on Scotts Creek). Both will improve in-stream habitat for improved ecosystem function while reducing the negative impacts of multiple construction seasons.

c. Streambank Protection (580)
Based on discussions with NRCS that rock width is defined by measuring from the toe of slope to top of bank, 5-ft of rock would be 2.5 ft of actual rock on a 2:1 slope and less on a 3:1 or shallower slope. Request that this be increased to 15 ft. All rock would be planted. Geotextile fabric only used when alternatives are not feasible and upon approval. Rock rip rap use under the program would only be used for protection of critical infrastructure (with a restoration benefit) or as a component of restoration activities defined by NMFS Restoration Center BO. As the RWQCB has taken a position of preferring use of planted rock rip rap, rather than petroleum-based practices (ie. geogrids), the 5- ft of allowable rock under the program has limited the projects that can be implemented or required approval of an exception by each applicable agency.

d. Structure for Water Control (587)
In 2016, this practice was approved to be used for water treatment systems. Request to officially add it to the practice description.

Installation of a structure in an irrigation, drainage, or other water management system, including streams and gullies, that conveys water, controls the direction or rate of flow, or maintains a desired water surface elevation, such as culverts, pipe drops or chutes within gullies, debris screens, etc. Structures for water control includes treatment systems, such as bioreactors, that improve on-site and/or downstream water quality. Structure for water control is used to replace or retrofit existing culverts that are either not functioning properly or are a barrier to fish passage. The placement of new culverts, when environmentally beneficial, is also covered. By controlling the velocity of water running through an area, this practice reduces erosion and prevents down cutting of stream channels. Culverts will be consistent with California Department of Fish and Game's "Culvert Criteria for Fish Passage" (April 2003) and National Marine Fisheries Service Southwest Region's "Guidelines for Salmonid Passage as Stream Crossings" (September, 2001).

e. Wetland Management (657, 659, 356, 587, 644)
Added as a practice to the program in 2009, the allowable grading has been limiting for this practice. At the request of FWS to increase the size of amphibian recovery projects and based on conversations with NRCS, RWQCB and review of larger wetland restoration projects (outside of PIR), we request to increase the dimensions from 5 acres to 18 acres (5 acre limited in waters of the state) and from 1000 cyd to 7500 cyd (limited to 1,000 cyd in the scenic coastal area). 7500cyd is the maximum volume for other practices under the program. Over the two phases of the Bryant Habert project, a total of 7300 cyd over ~ 4 acres was graded, although the area benefitted by surrounding revegetation efforts was 18.5 acres. While 1000 cyd will remain the maximum grading within scenic areas of the coastal zone, the increase in size and volume will allow us to install larger wetland restoration and enhancement projects.

Review of reporting procedures

a. The mid-construction season notification was created at the request of NMFS and seemed appropriate to provide a progress report and to document any issues of non-compliance. However, over the last 15 years, we have never received a call from any agency staff to discuss why a project was dropped for the list (i.e comparing the pre-construction notification list with the mid-construction list). Note: No cooperators were dropped from the Program due to lack of compliance. Request omitting this requirement.

b. The annual report seemed to be an appropriate mechanism to summarize projects and document monitoring observations on an annual basis. However, a number of agency staff have admitted to never reviewing and given that it is time consuming for staff to develop, have suggested a simpler table format.

c. When the program was originally developed, the County of Santa Cruz requested that a number of practices be approved by the NRCS Area Engineer, rather than NRCS field engineers with signatory authority. Practices include:

i. Access Road Improvement
ii. Stream Crossing
iii. Grade Stabilization Structure
iv. Sediment Basin (with or without structure for water control)
v. Structure for Water Control
vi. Underground Outlets
vii. Wetland Management
viii. Upland Wildlife Habitat Management

Given the successful track record of the program, we would like to request that this additional layer of oversight/secondary review be omitted to streamline program processes.

Review of general conditions

a. Given experience in certain watersheds, request that language be added to allow sites to naturally revegetate, rather than active revegetation with nursery stock. Soil erosion will be managed, and the site must be actively revegetated after a reasonable time frame specified in the PCN, if the success criteria is not met thru natural recruitment.
b. Given the effects of dewatering on salmonid populations, NMFS has requested, in some instances, the installation of large wood within the active stream channel without dewatering. Request that language be changed to allow work in a flow stream/creek for stream projects conducted from the top of bank and with limited potential for adverse impacts to water quality.
c. Exhibit E and F were developed with the Elkhorn Slough Foundation as a guide to revegetation. Still a useful, but outdated, requested language be edited to refer to these exhibits as resources but not limit planting recommendations to them.

Review of the Tier Table

a. RWQCB has requested to omit Tier IV, focused solely on projects with the potential to impact coho. NMFS has concurred.
b. RWQCB has requested that invasive species removal and revegetation be allowed throughout the year, with adequate measures to ensure no adverse impacts to species or water quality. FWS and NMFS have concurred.

Thorough review of actions authorized in the previous consultation and their effectiveness

Please refer to Appendix B for a comprehensive summary of practices, benefits, and effectiveness over the past 10 years. A brief summary of practices implemented is provide below.

The primary practices utilized for the last 10 years of this program were Planting, Access Road Improvement, Restoration and Management of Declining Habitats, and Structure for Water Control. These practices were utilized on 12, 38, 20 and 29 sites respectively. Obstruction Removal, Wetland Management and Stream Habitat Improvement and Management were each used on 10 sites. Streambank Protection, Stream Channel Stabilization and Sediment basins were used on 9, 8 and 6 sites

respectively. Grade Stabilization Structure, Grassed Waterway and Underground Outlet were used once on each site and Stream Crossing and Upland Wildlife Habitat Management were not used at all over the 10-year period. A summary of all practices and the # of sites at which they were implemented is list below in Table 1.

Table 1. Number of practices implemented for the 10-year program. Note: Multiple practices were often implemented at a project site to achieve environmental benefit.

	Practice	# of sites practice implemented
1	Access Road Improvement (560)	12
2	Planting (342), (612) and (391)	38
3	Grade Stabilization Structure (410)	1
4	Grassed Waterway (412)	1
5	Obstruction Removal	10
6	Restoration and management of Declining Habitats (643)	20
7	Sediment Basins (350) [with or without water control (638)]	6
8	Streambank Protection (580)	9
9	Stream Channel Stabilization (584)	8
10	Structure for Water Control (587)	29
11	Wetland Management (657), (659), (356),(644)	10
12	Stream Habitat Improvement and Management[1]	10
13	Stream Crossing (578) [2]	0
14	Underground Outlets (620)	1
15	Upland Wildlife Habitat Management (645), (382), (614), (516)	0

Access Roads Improvements (in combination with Structure for Water Control) were installed in partnership with rural road associations with the assistance of funding provided under the RCD's Rural Roads Program. In addition, sediment basins captured agriculturally derived sediment and protected wildlife habitat. These projects resulted in more than 12,000 T/A/Yr of sediment from impacting water quality, predominantly in the San Lorenzo River, Pinto Lake, and Pajaro watersheds (Table 2).

Almost 10 miles of salmonid habitat was improved throughout Santa Cruz County utilizing the Fish Stream Habitat Improvement and Management and Streambank Protection practices.

More than 90 acres of habitat was restored with the Restoration and Management of Declining Habitats and Planting practices, focusing on Watsonville Slough, Soquel, Scotts and San Vicente Creek and tributaries to the San Lorenzo River, which provides habitat for the Steelhead, Coho, tidewater goby, and foothill yellow legged frog.

Changes to the Program Moving Forward

[1] Formerly Fish Stream Improvement (396)
[2] Formerly Fish Stream Improvement (396)

1. Renewed emphasis on fish passage removal projects and continued emphasis on projects that focus on increasing survival through channel complexity and watershed condition (emphasis on floodplain restoration, channel complexity, upslope sediment control in key watersheds etc.). Continued large wood projects through on-site harvesting to promote forest health, reduce cost and minimize impact.
    a. When NRCS adds resource depletion as a resource concern, NRCS and RCD would like to add groundwater recharge practice to the program, recognizing aquifer overdraft as a high priority concern not currently addressed by the program. NRCS is currently developing an interim practice standard and specification for California, but it is not ready for incorporation during the renewal.

Table 2. Summary of the environmental benefit for each predominant practice. Note: Many projects include multiple practices which add to the environmental impact.

Work Type	Acres Restored										T/A/Y Sediment Saved										Miles of Salmonid Habitat Improved										Recharge (ac-ft)									
	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Access Road Improvement																57																								
Access Road Improvement																			93																					
Access Road Improvement											116	116	116	116	116	116	116	116																					
Access Road Improvement											82	82	82	82	82	82	82	82	82	82																			
Access Road Improvement												14	14	14																									
Fish Stream Improvement									0.80																				1.30										
Grade Stabilization Structure										0.75										400																		
Obstruction Removal							0.02										90																					
Obstruction Removal								0.50																														
Obstruction Removal					0.12																																
Obstruction Removal					0.08																																
Obstruction Removal (Wetland Management)					0.50																																
Obstruction Removal/ Stream Channel Stabilization	0.03										126										1.00																
Restoration and Management of Declining Habitats							5.00	5.50	4.00																												
Restoration and Management of Declining Habitats							0.54		0.45																												
Restoration and Management of Declining Habitats						5.30																															
Restoration and Management of Declining Habitats						0.20																															
Restoration and Management of Declining Habitats										1.20																											
Restoration and Management of Declining Habitats									1.70																												
Restoration and Management of Declining Habitats									0.05																												
Restoration and Management of Declining Habitats										2.00																											
Sediment Basin											200	200	200	200	200	200	200	200	200																			
Sediment Basin											350	350	350	350	350	350	350	350	350	350																		
Sediment Basin				0.25										47																								
Sediment Basin with Water Control Structure																																20								
Sediment I Basin											200	200	200	200	200	200	200																					
Stream Channel Stabilization																			414																			
Stream Channel Stablization					0.10										580																							
Stream Channel Stablization					0.56						12	12	12	12	427																							
Stream Habitat Improvement and Management					0.95						200	200	200	200	200										0.24												
Stream Habitat Improvement and Management					0.34																				0.28												
Stream Habitat Improvement and Management			0.21																				1														
Stream Habitat Improvement and Management																							1														
Stream Habitat Improvement and Management												556										0.10															
Stream Habitat Improvement and Management	0.01																				1																
Stream Habitat Improvement and Management						0.95																				0.18											
Stream Habitat Improvement and Management																											0.30										
Stream Habitat Improvement and Management						0.53	###	0.25																					0.09									
Stream Habitat Improvement and Management																											3.00										
Streambank Proteection		0.02										70																										
Structure for Water Control																																					
Structure for Water Control										0.15										16																	
Structure for Water Control																															107	40	142	40	40	33	39	8		
Wetland Management						0.25																															
Wetland Management						0.20																															
Wetland Management								0.50																				0.20									
Wetland Management									0.95																												
Wetland Management								0.34																													
Wetland Management							0.40																														
Wetland Management					0.28																																
Wetland Management					0.25																																
Wetland Management				0.50								50	50																								

Appendix B. Effectiveness Evaluation for the last 10-years of the program.

Project	Year(s)	Practice	Environmental Benefits (Project Goals)	Effectiveness/Revegetation/Success Criteria	Methods to less "take" of protected, plants, animals and habitats, including avoidance[1]
AGC 1	2010	**Structure for Water Control** (587), N/A **Critical Area Planting** (342) 6,600 sq ft	GOAL: Improve water quality by reducing chronic erosion during larger flow events and preventing catastrophic failure from failing road culverts, reducing sediment loads to West Branch Arana Gulch BENEFIT: This project will improve water quality and spawning habitat for Steelhead within the Arana Gulch watershed.	***Effectiveness of Access Road and Structure for Water Control:*** To accomplish the goals, two (2) undersized, failing culverts were replaced with rock-lined open channels. The project successfully conveyed flows across the road, preventing on-going sediment deposition on the road. The boulder cascade installed to address severe undercutting of the road has successfully stabilizing the outfalls of the open channels. ***Effectiveness of Critical Area Planting:*** Container plants, including thimbleberry, snowberry, Western swordfern, California blackberry and willow, were planted and the site was seeded with a mix of California brome, blue wild rye and common barley with he goal of erosion control and a 70% success criteria. Blackberry and fern achieved the greatest survival at both crossings with willows establishing near 100% at crossing 3. The success criteria of >75% native plant covered was achieved for both sites in 2013 and monitoring was deemed complete.	Based on previous work in this area, no species were anticipated. However, a preconstruction survey was completed to determine presence of California red-legged frogs (CRLF) within the 2010 project area and no individuals were found during this survey or during construction activities.
LVC1	2010	**Grade Stabilization Structure** (410), 20' w. x 40' l, each (7 structures) [2] **Critical Area Planting** (342) 10,000 sq ft	GOAL: Stabilize a dynamic and steep gully through the installation of a combination of rock and biotechnical measures and reduce sediment deposition and flooding along Larkin Valley Road. BENEFIT: Reduce the quantity of sediment entering Larkin Valley Creek, which provides critical habitat for the Santa Cruz long-toed Salamander and California red-legged Frog.	***Effectiveness of Grade Stabilization Structure:*** The 7 rock structures are functioning well and beginning to stabilize the dynamic and steep gully. While some channelization continues between rock structures and flow was diverted around one rock structure, native recruitment has contributed to vegetative cover and the gully appears to be stabilized. In addition, there has been no further loss of mature oak trees. ***Effectiveness of Critical Area Planting:*** Annual barley, seeded on the haul road, staging area and gully, provided erosion control cover	Although the project was within the range of the Santa Cruz long-toed Salamander (SCLTS), their presence at the project site was determined unlikely based on personal communications with biological consultants, visual observations, and the degraded quality of the habitat. A qualified individual approved conducted a 48-hour preconstruction survey for CRLF. No CRLF were observed during the survey nor construction activities.

[1] Prior to the onset of activities that resulted in disturbance of the project area, all project workers were given information on the listed species in the project area including protection afforded by the Federal and California Endangered Species Acts and the specific protective measures to be followed during implementation of practices. All work was completed outside of the nesting bird season and outside of the rainy season to avoid to impacts to water quality, unless noted otherwise.

[2] 0.08 acre of permanent non-wetland waters of the US filled

				during the first winter season. Approximately 170 willow stakes were planted along the banks of the gully for erosion control and to enhance native habitat. There was poor survivorship attributed to dry conditions. However, coupled with native recruitment the 40% willow survivorship was deemed adequate to stabilizing the gully and in 2014 monitoring was deemed complete.	
LWS 1	2010	**Restoration and Management of Declining Habitats** (643), 1.2 acres	GOAL: Restore and enhance slough habitat within Watsonville Slough. BENEFIT: The project will increase both wetland and upland habitat values within the last mile of the slough ecosystem through the removal of invasive species and revegetation to increase native diversity.	***Effectiveness of Restoration and Management of Declining Habitats Practice:*** Through the hand removal of iceplant and herbicide treatment of perennial pepperweed, the restored wetland is thriving, and invasive species remain reduced by over 90%. Native vegetation, particularly bush lupine, gumplant, lizardtail, and creeping wild rye thrive at the site and an 80% success criteria of native cover has been achieved. Monitoring was deemed complete in 2013.	Species of concern included Monterey spineflower and coast wallflower. A floristic survey was completed and none of the aforementioned species were found.
MWS1	2010	**Structure for Water Control** (587), 15" w. x 90' l. **Critical Area Planting** (342) 7,500 sq ft **Restoration and Management of Declining Habitats** (643), 1.4 ac. **Sediment Basin** (350), 10,800 sq ft	GOAL: Enhance critical habitat for endemic amphibians, reptiles and birds and improve water quality from upstream agricultural production. BENEFIT: Converting upland habitat from a monoculture of hemlock to coastal scrub and oak woodland species and restoring the depth and open water of a breeding pond will assist in CA red-legged frog recovery.	***Effectiveness of Sediment Basin and Structure for Water Control Practices:*** Installed to capture agriculturally-derived sediment and protect downstream habitat for CRLF, the sediment basin stopped draining effectively in 2013 due to continual irrigation tailwater from a new crop type. A trash pump was used to drain the basin and allow for sediment removal. This method will be used in the future, if needed, to manage the basin. ***Effectiveness of Restoration and Management of Declining Habitat Practice:*** Upland habitat has been enhanced through poison hemlock removal, utilizing a 4-5 inch layer of chip mulch applied to the soil surface. New sprouts were hand pulled and the 90% reduction has been achieved. ***Effectiveness of Critical Area Planting:*** Exposed soils were seeded with common barley and straw mulched and provided erosion control during the winter season. A diverse mix of native plants were used to enhance upland and wetland habitat after poison hemlock removal. Mugwort, marsh goldenrod, blue wild rye, creeping wild rye,	A Service-approved individual conducted a 48-hour pre-construction survey for CRLF. No species were observed, but as CRLF are known to breed downstream, activities began after July 1 to avoid impacts. The approved individual was on-site for the removal of vegetation. No species were observed.

				spreading rush, coffeeberry, California blackberry, and blue elderberry are all doing exceptionally well and have exceed the success criteria of 70%. An 85% native cover has been achieved and monitoring was deemed complete in 2013.	
Paj10	2010-2012	**Critical Area Planting** (342)- 0.1 ac. (north bank) and 0.7 ac. (south bank). **Access Road Improvement** (560)- 20 ft. (north bank) and 25 ft. (south bank) **Streambank Protection** (580) – 140 ft. **Obstruction Removal** (500) - **Fish Passage Improvement**[3][4] (396) – 140 ft	GOAL: Open up ~ 1.3 mi. of potential spawning and rearing habitat for endangered South-Central California Coast (SCCC) steelhead through the removal and replacement of the failing undersized culvert with a bridge. BENEFIT: Improve access during winter flows for salmonids and improved habitat with a roughened channel, designed to accommodate fish passage through the steep stream reach while conveying peak flows and associated debris. The roughened channel design contains rock cascades, boulder weirs, resting pools, and large wood structures, which form a complex flow pattern with variations in depth and velocity to provide numerous paths for migrating fish. Rock slope protection and revegetation will protect steep banks from erosion, while providing habitat for species.	***Effectiveness of Fish Passage Improvement:*** The in-stream culvert was successfully removed and the bridge is functioning as intended. ***Effectiveness of Critical Area Planting:*** Native plants continue to thrive and provide erosion control, bank stability, and habitat enhancement. Plant survivorship at the project site was 72% with native recruitment of California blackberry, cow parsnip, and horsetail. Willow staking downstream of the bridge contributed to native cover. With the success criteria of 60% for revegetation achieved, the project was deemed complete in 2014.	A biotic assessment, completed 0.2 mi downstream and 0.24 mi upstream of the project, documented the potential for the CRLF to utilize Shingle Mill Gulch as a dispersal corridor, as well as the known presence of steelhead. In accordance with NMFS, salmonids were captured and relocated by a qualified individual. 8 Pacific Giant Salamander and 140 steelhead were relocated, with 1 YOY mortality. Effected by the 2009 storm event, 7 additional steelhead were relocated. In 2010 and 2011, all work was conducted outside of the stream. No CRLF were documented during pre-construction surveys nor during construction activities.

[3] With renewal of the program, the practice "Fish Passage Improvement" was modified to "Stream Habitat Improvement" and Stream Crossing. However, as the PCN for PAJ 10 was submitted in 2009, it refers to the original practice name.

[4] 0.07 acres of permanent non-wetland waters of the US filled

SoQ6	2010	**Restoration and Management of Declining Habitats** (643): 80' x 1,500'	GOAL: Remove cape ivy from the riparian corridor to improve bank stability, decrease erosion and sedimentation and native habitat. BENEFIT: Removal of ivy from riparian trees improves tree health and minimizes tree mortality, critical for healthy salmonid habitat.	***Effectiveness of Restoration and Management of Declining Habitats Practice:*** Restoration initially improved local riparian habitat with a 90% sustained reduction in cape ivy. However, other existing non-native species, particularly English ivy, vinca and arum lilies have moved into the treated area. After several years of volunteer maintenance and control efforts, cape ivy had not returned to the site and native plantings have survived well. Despite this success, the extent of other invasive species at the site and recolonization of disturbed areas by other existing invasive species make further eradication efforts unfeasible.	Pre-construction surveys were completed for the Foothill yellow-legged frog (FYLF) and CRLF in 2007, 2008, 2009 and 2010. Neither species were observed, and all work and materials were excluded from Soquel Creek to avoid impacts to Steelhead.
TGC1	2010	**Access Road Improvement** (560), 12' x 780' **Structure for Water Control** (587), N/A	GOAL: Improve water quality through improved road drainage BENEFIT: Reduced erosion into Trout Gulch Creek, enhancing salmonid habitat.	***Effectiveness of Access Road Improvement and Structure for Water Control:*** The system is operating as intended. Both the rolling dip, rock dissipater, and armoring of the inside ditch are functioning to reduce erosion from the road during storm events. Seeded with common barley immediately following construction and natural colonization by existing non-natives on the site, have restored the project area to better than pre-construction conditions. The project was deemed complete in 2013.	No special status species within the project area.
BeC1	2011	**Sediment Basin** (643), 0.41 acres **Structure for Water Control,** N/A	GOAL: Repair existing sediment basin to improve sediment retention and decrease transport to Bean Creek. BENEFIT: Improve in-stream habitat in Bean Creek for Steelhead.	***Effectiveness of Sediment Basin and Structure for Water Control Practice:*** The sediment basin is functioning to capture erosion from the vertical quarry face and the baffle system is increasing the retention of flows, allowing more suspended material to deposit. There is some continual rilling around the banks of the basin from gopher activity and the sandy nature of the soil, which is expected to continue. Seeded for erosion control, the site has been restored to better than pre-construction conditions and was deemed complete in 2014.	The special status species of concern on this property were Mount Hermon June Beetle, Ben Lomond Spineflower and Zayante band-winged Grasshopper. Ground disturbing activities occurred outside the flight season and a qualified biologist was on-site although no animals were encountered. Silver bush lupine and sessileflower false goldenaster, within 30 ft of the project area, were flagged to avoid impacts to host plants.

BGC1	2011	**Restoration and Management of Declining Habitats** (643): 4 acres	GOAL: Encourage Santa Cruz long-toed Salamanders from the Seascape and Valencia populations to interbreed through the enhancement of habitat. BENEFIT: Removal of non-native jubata grass from upland habitat will allow oak trees to repopulate, creating ideal habitat for the salamander.	***Effectiveness of Restoration and Management of Declining Habitats Practice:*** Herbicide treatment of the jubata grass was highly effective, with a 90% success criteria achieved and native plants observed to be growing beneath and over the dead material. As such, the project was deemed complete in 2014.	The project was located in critical habitat for the CRLF and SCLTS, although neither species is known to occur on-site. In close coordination with FWS and CDFW, all work was completed after July 1 and herbicide application was selected for jubata grass control to limit ground disturbing impacts. No animals were observed.
MWS2	2011	**Restoration and Management of Declining Habitats** (643): 1.7 acres	GOAL: Restore coastal prairie and associated marsh habitat between Hanson Slough and agricultural production. BENEFIT: Improve water quality and support CRLF breeding recovery and grassland dependent bird species populations with the Watsonville Slough system.	***Effectiveness of Restoration and Management of Declining Habitats Practice:*** Having just been directly retired from agricultural production, native plant cover increased from an average of 43% in 2013 to 46% in 2014 despite drought conditions. Ten species of native plants, including 8 which were seeded and 2 which were recruited from the seedbank, have exceed the 80% success criteria Mulching reduced poison hemlock by 90% and the project was deemed complete in 2014.	Familiar with the species and movements of CRLF on Watsonville Slough Farm, no surveys were conducted. No animals were observed.
MWS3	2011	**Wetland Management** (644), 0.95 acres	GOAL: Expand existing riparian and wetland habitat onto retired agricultural land through the re-creation of topography. BENEFIT: Enhance wetland and wet meadow habitat to support CRLF breeding and wetland dependent bird species populations within the Watsonville Slough system.	***Effectiveness of Wetland Management Practices:*** Retired agricultural land was regraded, creating elevational differences and supporting CRLF breeding in the 1st year. The thick layer of mulch limited regrowth of non-native species, particularly bristly ox tongue. Native plants exceeded the 80% success criteria by the second year and with 90% survival by year 3, the project was deemed complete in 2014.	The special status species of concern on this property was the CRLF. Exclusionary fencing was installed prior to project implementation to clearly delineate the construction area and a silt fence was installed at the south end of the project to minimize sediment impacts to existing wetland habitat. During fence installation, one California red-legged frog was observed adjacent to the project area. Relocation was unnecessary.

MWS4	2011	**Restoration and Management of Declining Habitats** (643): 131' x 151'	GOAL: Increase sunlight exposure in the immediate vicinity of Milsap Pond to increase water temperatures for endemic amphibians. BENEFIT: The removal of eucalyptus will increase sunlight exposure with the intent to create warmer conditions to facilitate metamorphosis of overwintering CRLF and SCLTS.	***Effectiveness of Restoration and Management of Declining Habitats Practice[5]:*** With eucalyptus trees removed, there is increased sunlight compared to pre-project conditions and aquatic sampling in 2014 found both CRLF and SCLT larvae. However, SCLTS larvae remain small likely due to continued cold water conditions (spring-fed) and low oxygen levels from accumulated vegetation in the pond bottom. Eucalyptus trees that were cut and treated with herbicide were effectively killed with only minimal regrowth of new saplings, which were re-treated. Native vegetation in the understory is thriving, particularly oak and coffeeberry, and the project was deemed successful in 2014.	This project involved working adjacent to known populations of the SCLTS and CRLF. As such, activities were conducted late in the season, when animals would not be migrating and in close coordination with FWS and CDFW.
MWS5	2011	**Restoration and Management of Declining Habitats** (643): 50' x 200' **Stream Channel Stabilization** (584), 25' x 15'	GOAL: Remove accumulate sediment and nuisance plant materials from the area immediately surrounding the Harkins Slough pumps. BENEFIT: Removal of the material will allow PV Water to put to beneficial use their full 2000 ac-ft water right diversion.	***Effectiveness of Restoration and Management of Declining Habitats and Stream Channel Stabilization Practices:*** Pennywort and other emergent vegetation remains in Harkins Slough but is not affecting normal function of the pumps at Harkin Slough. Pajaro Valley Management Agency is considering alternative locations for their intake system as high salt concentrations have limited use of their diversion. Monitoring for the project was completed in 2014.	CRLF were the species of concern for the project site. As such, a qualified individual was on-site during all activities and no animals were observed.
PaR1	2011	**Structure for Water Control** (587), N/A	GOAL: Restore the flow of stormwater into an existing agricultural basin to increase infiltration. BENEFIT: The management of storm water will reduce downstream flooding, decrease erosion and assist in addressing groundwater overdraft in the Pajaro Valley basin.	***Effectiveness of Structure for Water Control Practice:*** The structure for water control is safely and effectively direct stormwater flow through an existing agricultural basin and to the existing recharge basin, recharging more than 500 ac-ft of water into the Pajaro Valley Groundwater Basin. Monitoring for the project was completed in 2014.	There were no special status species in the project area.
RGC1	2011	**Stream Channel Stabilization[6]** (584), 32' x 79' **Critical Area Planting** (342), 50' x 160'	GOAL: Reduce chronic and episodic sediment from stream and road bank erosion. BENEFIT: Reduced erosion and	***Effectiveness of Stream Channel Stabilization Practice:*** Replacing a pair of failed culverts with a rock riprap armored ford, erosion has been significantly reduced and the downstream banks have been	Two special status species, Ben Lomond spineflower and Santa Cruz wallflower, are known to occur adjacent to the project site on Zayante sandhill habitat, but are not found within the project footprint. The

[6] 0.15 acres of permanent non-wetland waters of the US filled.

			downstream sedimentation will enhance spawning habitat for steelhead in Laguna Creek.	stabilized. ***Effectiveness of Critical Area Planting Practice:*** Reseeded with annual barley, all disturbed areas had adequate temporary erosion control. Chipped wood mulch reduced the re-colonization of non-natives and provided longer term erosion control with the exception of a few velvet grass plants and one jubata grass, which was removed. Of the 85 willow stakes planted along the margins of the riprap, the 60% success rate was achieved by 2013. In 2014, the willows were growing so densely along the banks that it was difficult to determine the number of individual trees present. It was clear, however, that the willows were established well enough to serve their ecological function as bank stabilization and long-term erosion control. Natural recruitment of native vegetation was strong throughout the project area and includes mugwort, California goldenrod, yerba santa, and several sedge species. As such, the project was deemed complete in 2014.	designs minimized impacts to riparian vegetation and protected sensitive wetlands and mature oak trees.
SLR1	2011	**Access Road Improvement**[7] (560), 16' x 100' **Obstruction Removal** (500), 39' x 10' **Critical Area Planting** (342), 0.7 acres	GOAL: Reduce chronic and episodic sediment from stream and road bank erosion. BENEFIT: Reduced erosion and downstream sedimentation will improve water quality and enhance spawning habitat for steelhead in the San Lorenzo River.	***Effectiveness of Access Road Improvement and Obstruction Removal Practices:*** The road structure (fill material prism) was stabilized and the stream's natural grade and alignment was restored through the replacement of a undersized, failing culvert. ***Effectiveness of Critical Area Planting Practice:*** Common barley with weed free straw mulch provided temporary erosion control over the staging and project area after construction. With the goal of erosion control, bank stability and habitat enhancement, 74% of the 88 container plants have survived, exceeding the 60% success criteria. Redwood, tan oak, and ferns grew quickly, while snowberry and big leaf maple were slower to establish. While the horsetails are surviving, they are not thriving due to drought stressed. Redwood sorrel, thimbleberry, hedge nettle, poison oak, and California blackberry have naturally colonized the site. As such, the project was deemed complete in 2014.	This project was determined to be in within the range of Marbled Murrelet. As such, earthmoving activities occurred after September 15. Further, the project was designed to minimize impacts to riparian vegetation and to protect mature redwood and maple trees.

[7] 0.01 acres of permanent non-wetland waters of the US filled.

SVC1	2011	**Stream Habitat Improvement and Management**[8] (395) – 25' x 475', each **Critical Area Planting** (342), 10' x 500'	GOAL: Increase cover, complexity and channel diversity through the installation of large wood along the main channel of San Vicente Creek. BENEFIT: The installation of large wood will result in additional pools and cover for steelhead and coho and activate adjacent floodplains during high flows.	***Effectiveness of Stream Habitat Improvement and Management Practice:*** The eight large wood structures are functioning to increase habitat complexity throughout the stream reach, creating scour pools and some have racked a significant amount of wood. Many are also increasing the accumulation of cobble and gravel and sprouted live shoots. NMFS monitoring of fish and macroinvertebrate populations in the project area report high populations of coho salmon where the structures were installed. Several CRLF have also been observed near the structures, especially those with abundant emergent vegetation. ***Effectiveness of Critical Area Planting Practice:*** Common barley and slash material provided temporary erosion control and cape ivy suppression for the staging and project area after construction. Access roads were also slashed and willows quickly re-sprouted. Approximately 50% of the 30 willow stakes and 12 alder stakes placed in both the access routes and amidst the structures to mitigate for the ten willows and 2 alders that were removed have survived. Success criteria for revegetation was a 50% increase in native vegetation over disturbed project areas and aside from the staging area, which receives continued disturbance as a parking area for neighbors, native cover has been achieved. As such, the project was deemed complete in 2014.	The project involved working in critical habitat for steelhead, coho, San Francisco dusky footed woodrat (SFDFW), and CRLF. NMFS staff removed salmonids from the project area, dewatering 218 ft of stream and relocating 299 steelhead. Exclusion fencing was placed along the staging area and access routes to ensure no species entered the work area. Two SFDFW were relocated during project activities. No other animals were encountered during construction activities.
BGC1	2012	**Restoration and Management of Declining Habitats** (643): 5 acres **Wetland Management**[9]**,** 20,000 sq ft **Structure for Water Control** (587), N/A	GOAL: Encourage Santa Cruz long-toed Salamanders from the Seascape and Valencia populations to interbreed through the enhancement of wetland and upland habitat. BENEFIT: Removal of non-native jubata grass from upland habitat will allow oak trees to repopulate, creating ideal habitat	***Effectiveness of Wetland Management and Structure for Water Control Practices:*** The wetland continues to hold water throughout the intended hydroperiod even during drought years. Unfortunately, continued sampling efforts have not identified SCLTS breeding since the initial identification of eggs in 2012/2013, which were trampled by trespassing pet owners. The barbed wire fence and establishing vegetation seems to be limited trespass by domestic animals (although the	The project was located in critical habitat for the CRLF and SCLTS, although neither species is known to occur on-site. All work was completed after July 1 and herbicide application was selected for jubata grass control to limit ground disturbing impacts. Seven SFDFW houses were identified within the wetland area. Live trapping included 28 12-inch Sherman live catch traps set around the entrances of each woodrat house located within the project area. The traps were baited

[8] 0.01 acres of temporary wetlands or other waters filled, 0.009 acres of permanent wetlands or other waters filled, and 0.02 acres of non-wetland waters of the US filled.
[9] 0.15 acres of permanent wetlands or other waters filled

			for the salamander and enhancement of 0.5 acres of wetland habitat will encourage amphibian breeding.	fence was stolen in 2016). CDFW, FWS, and RCD staff continue to monitor water levels and conduct aquatic sampling. ***Effectiveness of Restoration and Management of Declining Habitats Practice:*** Herbicide treatment of the jubata grass was highly effective, with 90% success criteria achieved, with native plants observed to be growing beneath and over the dead material. Successful establishment of native plants within the wetland area was slow due to high compaction. However, the 70% success criteria was achieved and the project was deemed complete in 2016.	with rolled oats and 2-4 cotton balls were placed inside. The traps were left open overnight and the following morning six traps had captured rats. All sticks and other materials associated with the house were set aside for use in the artificial house. Three additional houses encountered during construction were dismantled. No other species were encountered during construction activities.
MoC1	2012	**Wetland Management**[10], 100' x 225' **Structure for Water Control** (587): N/A **Critical Area Planting** (342)- 25' x 225'	GOAL: Increase the hydroperiod and geomorphic function of Molino Pond to provide suitable habitat for CRLF. BENEFIT: During adequate rainfall years, water will be diverted from Molino Creek will allow successful CRLF metamorphosis.	***Effectiveness of Wetland Management Practice:*** As a goal of this project was to ensure water retention at Molino Pond through the summer months, project success was based on the pond's ability to retain water until July/August of each year via surface runoff and auxiliary flows from the diversion structure. Despite continued drought years and the pond successfully holding water into October, there have been no confirmed CRLF observations. ***Effective of Structure for Water Control Practice:*** As it was critical to ensure adequate stream flow in Molino Creek for salmonids, the diversion structure was monitored monthly with three (3) data loggers placed at the site until it could be confirmed that the weir structure was installed at the correct height. In 2016, the RCD and engineer determined that the diversion structure was functioning as intended and the piezometers were removed from the site. ***Effective of Critical Area Planting Practice:*** The native seed mix , willow stakes and nature recruitment of lupine, coyote brush, CA blackberry and seaside golden yarrow (pond) and stinging nettle, CA blackberry, willow and dogwood (diversion) exceeded the 60% success criteria and the project was deemed complete in 2016	A qualified individual electro-fished the project reach to relocate all fish and amphibian species from the area. In all, 27 steelhead, 37 sculpins, and 15 newts were relocated from the exclusion area. With the exception of two young-of-the-year steelhead mortalities (7.4% of all captured steelhead), all fish and amphibians appeared in good condition upon release. A biological monitor was on-site during earth moving and vegetation clearing to monitor for RLF. species were encountered during construction activities.

[10] <0.01 acres of temporary wetlands or other waters filled and <0.2 acres of permanent acres of wetlands or other waters filled.

MWS7	2012	**Wetland Management**[11], 12,000 sq ft **Structure for Water Control** (587): N/A **Critical Area Planting** (342)- 15,000 sq ft	GOAL: Enhance breeding conditions for the SCLTS and California Tiger Salamander (CTS) through the enhancement of existing wetlands at the Ellicott Slough National Wildlife Refuge. BENEFIT: Increased hydroperiod will provide suitable breeding habitat for endemic amphibians within the Ellicott Slough-Buena Vista complex.	***Effectiveness of Wetland Management and Structure for Water Control Practices:*** Despite persistent drought conditions, the wetland habitat continues to provide an adequate hydroperiod, and SCLTS and CTS are utilizing the habitat for breeding and juvenile red-legged frogs have been observed. ***Effectiveness of Critical Area Planting Practice:*** Revegetation efforts have been tremendously successful and native cover is approximately 85% in upland areas and over 90% within the pond. Revegetation occurred with the goal of enhancing wetland habitat and the surrounding area to encourage amphibian breeding. The wetland has become well-established with juncus, common spikerush, eleocharis, deerweed, and California poppy. This site has become extremely prolific; it has been used as a local source of natives for other habitat enhancement projects in 2014 and 2015. Exceeding the 60% success criteria, the project was deemed complete in 2015.	Species of concern included SCLTS, CTS and SFDFW. Prior to construction activities, a total of 12 woodrat nests were flagged for avoidance or relocation. US Fish and Wildlife biologists dismantled then rebuilt the nests for relocation of the individuals. Three individual wood rats were encountered and relocated. An artificial refuge for salamanders was created outside of the project area using on-site wood, leaf litter, and water in preparation for the potential of unearthing a CTS or SCLTS individual. One CTS individual was unearthed during construction and was relocated to the refuge site. No other species were observed during construction activities.
SqC1	2012	**Obstruction Removal** (500), 25 ft. X 75 ft **Critical Area Planting** (342), 25 ft. X 75 ft	GOAL: Enhance habitat conditions along a reach of Soquel Creek by removing improperly sized rock riprap and replacing it with native riparian vegetation. BENEFIT: Removal of improperly sized rocks from riparian habitat and revegetation with native species will prevent sedimentation of Soquel Creek and enhance habitat for steelhead trout and coho salmon.	***Effectiveness of Obstruction Removal Practice:*** Rock riprap was successful removed from the streambank and replaced with native vegetation. ***Effectiveness of Critical Area Planting Practice:*** After removal of the riprap, the site was successfully planted with willow stakes, dogwood, blue wildrye and CA blackberry. Prolific in the watershed and providing some root stability, non-native species were only managed to allow establishment of container plants. Even with continued drought conditions, the 80% success criteria was nearly achieved and as the main objectives of this project had been accomplished; the project was deemed complete in 2015.	Species of concern included steelhead, coho, CRLF and FYLF. All work was completed by hand. Workers stayed out of the water and were careful to ensure that no sediment entered Soquel Creek. A survey for CRLF and FYLF was conducted prior to the onset of activities. No individuals were observed during project activities.
SVC1	2012	**Restoration and Management of Declining Habitats** (643): 100' x 100'	GOAL: Remove highly invasive ivy species from the riparian corridor to enhance habitat. BENFIT: Removal of cape ivy from the site allows native vegetation to return and promotes	***Effectiveness of Restoration and Management of Declining Habitats Practice:*** An isolated patch of cape ivy was hand pulled in a continued effort to increase tree recruitment in this high priority salmonid watershed. Cape ivy reduction achieved a 90% success criteria and native cover achieved the	The project involved working in critical habitat for steelhead, coho, and CRLF. A qualified individual was on-site during the invasive species removal to ensure responsible methods were followed to reduce potential to impact any listed species. The project itself was conducted during a

[11] 0.26 acres of permanent wetlands or other waters filled.

			tree sapling establishment, critical for salmonid recovery.	50% increase in native plant cover resulting from active revegetation and natural recruitment and the project was deemed complete in 2015.	time when spawning salmonids or redds were least likely to be present and CRLF were least likely to be migrating to or from water bodies. All cape ivy material removed was placed into dumpsters and hauled to a waste disposal site. A temporary bridge was used for stream crossing to reduce the footprint of the work crews in the creek bed. All trash found at the project site was removed and disposed of. No other animals were encountered during construction activities.
BaC1	2013	**Obstruction Removal** (500), 20' x 40' **Critical Area Planting** (342), 20' x 40' **Tree/Shrub Establishment** (612), 20' x 40'	GOAL: Prevent erosion to a fish bearing stream and restore the natural grade of the streambank. BENEFIT: Prevent sediment loading to the Soquel Creek Watershed and protect steelhead habitat and water quality.	***Effectiveness of Obstruction Removal Practice:*** Removing the terraced retaining wall, compacting the slope and planting the project area was successful. ***Effectiveness of Planting Practices:*** Due to the challenge of establishing vegetation under a mature redwood canopy, a 40% success rate was chosen. The erosion control blanket and accumulated duff are protecting the soil from erosion and an approximate 80% survival rate was achieved in 2014. The site was mowed in 2016 per instructions from the fire department. However, native vegetation has re-grown and the 40% success criteria was achieved. The project was deemed complete in 2017.	A pre-construction surveys and onsite biological monitoring was conducted for FYLF. A silt fence was installed to protect water quality during construction and protect known steelhead habitat. No species were observed before or during construction.
BGC1	2013	**Restoration and Management of Declining Habitats** (643): 5 acres	GOAL: Encourage Santa Cruz long-toed Salamanders from the Seascape and Valencia populations to interbreed through the enhancement of habitat. BENEFIT: Removal of non-native jubata grass from upland habitat will allow oak trees to repopulate, creating ideal habitat for the salamander.	***Effectiveness of Restoration and Management of Declining Habitats Practice:*** Initial herbicide treatment of the jubata grass was highly effective, with a 90% success criteria achieved and native plants observed to be growing beneath and over the dead material. However, without funds for re-treatment, the jubata grass population has increased. Further treatment was completed in 2018 and 2019.	The project was located in critical habitat for the CRLF and SCLTS, although neither species is known to occur on-site. All work was completed after July 1 and herbicide application was selected for jubata grass control to limit ground disturbing impacts. SFDFW nests were avoided. No animals were observed.

BrC1	2013	**Obstruction Removal** (500), 0.003 acres **Stream Habitat Improvement and Management**[12] (395), 20' x 40' **Streambank Protection** (580), 3' x 60' **Critical Area Planting** (342), 1,707 sq ft	GOAL: improve fish passage and stream function through the removal of an in-stream impediment. BENEFIT: Improved in-stream conditions by allowing sediment deposited behind the dam to move downstream, allowing buried substrates to return to the surface where they can be utilized by spawning salmonids. The project also opens up approximately three miles of previously inaccessible habitat upstream for spawning and rearing and increases cover and pool habitat for rearing salmonids.	***Effectiveness of Obstruction Removal, Streambank Protection and Stream Habitat Improvement and Management Practices:*** In May following removal, fry that were spawned just upstream of the removed barrier were observed. The stream channel has adjusted to match upstream and downstream conditions and large wood structure has maintained a small pool. ***Effectiveness of Critical Area Planting Practice:*** Revegetation of the project site was completed with the goal of habitat enhancement and erosion control. The 60% success criteria was exceeded, with container plants and the natural recruitment of poison oak, big leaf maple and miner's lettuce achieving a 85% native cover. The project was deemed complete in 2016.	A qualified individual electro-fished the project reach to relocate all fish from the area. In all, 114 steelhead and 36 Sacramento sucker were relocated from the exclusion area. With the exception of two young-of-the-year steelhead mortalities (3% of all captured steelhead), all fish appeared in good condition upon release. A biological monitor was on-site each morning to clear nets and confirm no amphibians were on site. No. species were encountered during construction activities.
FC1	2013	**Stream Habitat Improvement and Management**[13] (395), 25' x 52'	GOAL: Improve an existing fish ladder with the goal of bringing the ladder into compliance for adult and juvenile steelhead passage during most flow regimes BENEFIT: Reduced pool turbulence, sufficient flow over weir structures and reduced jump height will restore fish passage for all life stages.	***Effectiveness of Stream Habitat Improvement and Management Practice:*** The project successfully eliminated subsurface flow through the repouring of concrete between weir structures and stabilizing the weirs. No vegetation was disturbed during project activities and the project was deemed complete in 2016.	A qualified individual electro-fished the project reach to relocate all fish from the area. In all, 228 juvenile steelhead were relocated from the exclusion area. With the exception of four young-of-the-year steelhead mortalities, all fish appeared in good condition upon release. A survey for SFDFW was completed prior to project initiation. No nests were identified within the work area. No other species were encountered during construction activities.
MWS4	2013	**Restoration and Management of Declining Habitats** (643): 140' x 170'	GOAL: Increase sunlight exposure in the immediate vicinity of Milsap Pond to increase water temperatures for endemic amphibians. BENEFIT: The removal of eucalyptus will increase sunlight exposure with the intent to create warmer conditions to facilitate metamorphosis of overwintering	***Effectiveness of Restoration and Management of Declining Habitats Practice***[14]***:*** The goal of this project was to increase temperatures of an existing pond through clearing over invasive tree canopy cover. The site conditions were immediately improved upon clearing of the trees and a number of native species have begun to naturally recruit along the path where additional sunlight has fallen, particularly coffeeberry. Aquatic sampling in 2016 found	This project involved working adjacent to known populations of the SCLTS and CRLF. As such, activities were conducted late in the season, when animals would not be migrating and in close coordination with FWS and CDFW. No species were encountered during construction activities.

[12] <0.01 acres of temporary and permanent non-wetland waters of the US filled.

[13] <0.01 acres of temporary and permanent non-wetland waters of the US filled.

[14] Further eucalyptus was treated on the property in later years under code MWS11.

			CRLF and SCLTS.	SCLTS, but not CRLF. No trees have re-sprouted after herbicide treatment, and the project was deemed successful in 2016.	
MWS10	2013	**Wetland Management**[15], 110' x 60' **Water and Sediment Control Basin** (638), 70' x 140' **Critical area planting** (342), 12,000 sq ft **Restoration and Management of Declining Habitats** (643): 4.25 acres	GOAL: Improve wetland function through the extension of the hydroperiod, sediment management and habitat restoration. BENEFIT: Improves amphibian breeding and upland habitat.	***Effectiveness of Wetland Management Practice:*** Enhanced to support amphibian breeding, the wetland dried before June during drought conditions, and as a result successful breeding CRLF was not achieved. However, the wetland functioned during average and above-average rainfall years and when the wetland was full, the spillway and riser pipe functioned as intended. ***Effectiveness of Water and Sediment Control Basin Practice:*** The sediment basin is functioning to capture agricultural- derived sediment and trap it before it enters Hanson Slough. ***Effectiveness of Critical Area Planting Practice:*** All disturbed areas were seeded with common barley and mulched with weed free straw for erosion control. An 80% native cover was achieved in the first year. ***Effectiveness of Restoration and Management of Declining Habitats Practice:*** Mulched with wood chips to deter poison hemlock, an 80% reduction has been achieved. The area was planted to native tree, shrub and herbaceous rhizamatous species to restore upland and riparian habitat. The 80% success criteria has been exceeded and the project was deemed complete in 2016.	Per discussions with CDFW and USFWS, the Service approved individual was on-site for removal of vegetation, and prior to the onset of activities that resulted in the disturbance of CRLF habitat or individuals. No species were observed or relocated during project implementation.
SLR2	2013	**Access road improvement** (560), 12' x 1,300' **Structure for Water Control**[16] (587), 45' x 30'	GOAL: Improve salmonid habitat and water quality in the San Lorenzo River by reducing sediment input from road related erosion. BENEFIT: Increased hydroperiod for amphibian and other wildlife species, water quality improvement and restored riparian and upland habitat.	***Effectiveness of Access Road Improvement and Structure for Water Control Practices:*** Culverts were replaced with low tech water crossings to restore more natural drainages and given the remote location in the watershed. The improvements, including outsloping and earthen water bars, along the 1.5 miles of road have successfully slowed sediment drainage in the San Lorenzo River. All culverts are clear and functioning. Given the location, natural recruitment with ferns, sedges, juncus, grasses and redwood saplings, was relied on for revegetation and	This project was determined to be within the range of marbled murrelet, a special status species. As such, earth moving activities began after September 15 to avoid and/or minimize disturbance to the species. No species were encountered during construction activities.

[15] 0.061 acres of permanent wetlands or other waters filled and 0.06 acres of permanent non-wetland waters of the US filled.
[16] 0.04 permanent acres of non-wetland waters of the US filled.

				disturbed areas are covered with redwood duff. the project was deemed complete in 2016.	
SVC1	2013	**Restoration and Management of Declining Habitats** (643): 0.56 ACRES	GOAL: Remove highly invasive ivy species from the riparian corridor to enhance habitat. BENFIT: Removal of cape ivy from the site allows native vegetation to return and promotes tree sapling establishment, critical for salmonid recovery.	***Effectiveness of Restoration and Management of Declining Habitats Practice:*** This phase of cape ivy to remove 5 patches along 1400 LF has been successful and all areas have achieved 99+% control. No revegetation was conducted and native recruitment has successful established in areas where ivy was removed. Native cover, particularly stinging nettle, California blackberry and California coffeeberry has achieved 75%+. The site will continue to be annually monitored to ensure that no ivy becomes re-established, but the project was deemed complete in 2016.	The project involved working in critical habitat for steelhead, coho, and CRLF. A qualified individual was on-site during the invasive species removal to reduce potential to impact any listed species. The project itself was conducted when spawning salmonids or redds were least likely to be present and CRLF were least likely to be migrating to or from water bodies. A 60-foot buffer zone adjacent to standing or flowing water was established, aquatic-safe formulations of herbicides were used and were not applied within 24 hours of predicted rain events. The herbicide was applied by a licensed herbicide applicator and consistent with label instructions. Herbicide was applied between August 1 to October 31 to avoid potential impacts. No animals were encountered during construction activities.
GaS1	2014	**Wetland Management** (659)[17], 60 ft. x 200 ft. **Planting** (342), 20 ft. x 200 ft.	GOAL: Improve approximately ~3.7–acres of wetland by extending the hydroperiod to allow successful breeding, movement, nesting, and foraging for a wide variety of wildlife species and is crucial for recovery of the SCLTS. BENEFIT: A portion of a seasonal wetland, which did not hold water long enough in low to average rainfall years, was deepened to increase the hydroperiod to allow successful amphibian breeding.	***Effectiveness of Wetland Management Practice:*** By deepening a 12,000 square feet area within the existing 3.7-acre pond, the project area filled and maintained an adequate hydroperiod for SCLTS and CTS breeding when the entirety of the wetland did not fill. In 2017, Azolla dominated the water surface during the spring and may have contributed to low oxygen levels. Despite high rainfall, sampling efforts at many ponds did not yield amphibian larvae and the project was deemed successful and will continued to be monitored by FWS staff. ***Effectiveness of Planting Practice:*** Revegetation of the temporary access road through seeding of native grass mix has been extremely effective. The access road has been returned to pre-construction conditions. Within the wetland, *Eleochiaris* has become well established and is providing adequate medium for targeted amphibians.	Due to three previous drought years, neither the SCLTS nor CTS successfully bred in Ellicott Pond. As such, the potential for impacts to the species was determined to be negligible by CDFW and FWS staff. Agency-approved individuals were on-site during all ground disturbing activities to monitor for listed species. No species were encountered during construction activities.
GaS2	2014	**Wetland Management**[18] (659),	GOAL: The project will improve approximately ~0.4 –acres of	***Effectiveness of Wetland Management Practice:*** By excavating the existing wetland	Due to three previous drought years, neither the SCLTS nor CTS successfully bred in

[17] 0.1 acres of permanent wetlands or other waters filled.
[18] 0.19 acres of permanent wetlands or other waters filled.

		85 ft. x 85 ft. **Planting** (342), 95 ft. x 105 ft.	wetland by extending the hydroperiod to allow successful breeding, movement, nesting, and foraging for a wide variety of wildlife species and is crucial for salamander recovery. BENEFIT: A portion of a seasonal wetland, which did not hold water long enough in low to average rainfall years, was lined with sodium bentonite to increase the hydroperiod to allow successful amphibian breeding.	and lining it, the pond has successfully held water to support SCLTS and CTS breeding. In 2017, Buena Vista pond reached a depth of 13 feet. While it retained sufficient water, no larvae were detected, which was seen across all sampled ponds. Having met the intended hydroperiod, the project was deemed successful and will continued to be monitored by FWS staff. ***Effectiveness of Planting Practice:*** The required 60% success criteria was exceed with over 95% survival rate of wetland plants, including Scirpus, juncus, and Eleocharis.	Ellicott Pond. As such, the potential for impacts to the species was determined to be negligible by CDFW and FWS staff. Agency-approved individuals were on-site during all ground disturbing activities to monitor for listed species. No species were encountered during construction activities.
LoC1	2014	**Stream Channel Stabilization**[19] (584), 7.5' x 63' **Streambank Protection** (580), 48' x 74' **Critical Area Planting** (342), 6,838 sq ft	GOAL: To improve water quality in Bear Creek and the San Lorenzo River by reducing acute and chronic sediment inputs related to poor road drainage. BENEFIT: This project will improve water quality and improve salmonid habitat within the San Lorenzo River watershed.	***Effectiveness of Stream Channel Stabilization and Streambank Protection Practices :*** Removal and regrading within the area of a failing stream crossing has successfully conveyed flow from a tributary to Lompico Creek. ***Effectiveness Critical Area Planting Practices:*** Completed with the goal of erosion control and habitat enhancement, revegetation efforts achieved a 95% survival rate. The planted ferns and natural recruitment of California blackberry, grasses, ferns and horsetails exceeded the low criteria (30%) established based on previous challenges of establishing vegetation under a mature redwood canopy. The project was deemed complete in 2017.	Prior to construction, a qualified individual determined that the tributary channel to Lompico Creek did not have the habitat characteristics required to support fish. In addition, a qualified individual determined that the project area was not suitable habitat for sandhill species identified on the CNDDB search, and thus no protection measures were needed for the Zayante band-winged grasshopper and Mount Herman June Beetle.
MWS4	2014	**Restoration and Management of Declining Habitats** (643): 0.8 acres	GOAL: Increase sunlight exposure in the immediate vicinity of Milsap Pond to increase water temperatures for endemic amphibians. BENEFIT: The removal of eucalyptus will increase sunlight exposure with the intent to create warmer conditions to facilitate metamorphosis of overwintering CRLF and SCLTS.	***Effectiveness of Restoration and Management of Declining Habitats Practice:*** With the goal of increased water temperatures, site conditions were immediately improved upon clearing of the trees and a number of native species have begun to naturally recruit along the path where additional sunlight has fallen, particularly coffeeberry. Aquatic sampling in 2017 found SCLTS, but not CRLF. No trees have re-sprouted after herbicide treatment, and the project was deemed successful in 2017.	This project involved working adjacent to known populations of the SCLTS and CRLF. As such, activities were conducted late in the season, when animals would not be migrating and in close coordination with FWS and CDFW. No species were encountered during construction activities.

[19] <0.01 acres of temporary and permanent wetlands or other waters filled.

ScC1	2014	**Stream Habitat Improvement and management**[20] (395), 45' x 80' **Streambank Protection** (580), 13,487' (levees breaches), 44' x 936' (LWD) **Critical Area Planting** (342), 12' x 395'.	GOAL: Enhance instream and floodplain habitat and to restore natural hydro-geomorphic function. BENEFIT: Strategic levee breaching, placement of large wood (LWD) and confluence enhancement will improve spawning and rearing habitat for coho salmon, steelhead trout, and CRLF in Scotts Creek.	***Effectiveness of Stream Habitat Improvement and Streambank Protection Practices:*** Increased instream complexity and enhanced floodplain connectivity was observed with all five levee breaches providing floodplain connectivity, both alcove features providing high flow refugia during storm events, and all four large wood structures continue to create bathymetric variability (deepening pools and facilitating formation of sandbars), facilitating sediment sorting, and providing instream cover. ***Effectiveness Critical Area Planting Practices:*** Revegetation of the project area occurred with the primary goal of erosion control and floodplain restoration. Due to the challenge of establishing vegetation under a mature canopy in the riparian area, the success criteria for revegetation at this site is 30% plant survival. Vegetation has become successfully established on all disturbed areas due to active revegetation efforts or natural recruitment. Having achieved a 90% survival rate, the project was deemed complete in 2017.	In consultation with NMFS, CDFW and NOAA Southwest Fisheries Science Center, it was determined that large wood would be placed in the stream with a biologist on site, but without dewatering the reach, even with the presence of steelhead and coho. A site visit, by a qualified individual, confirmed that tidewater goby (TWG) would not be in the project area. A qualified individual was on-site daily to monitor for CRLF and SFDFW. No species were encountered
GaS3	2015	**Obstruction Removal** (500), 20 ft x 70 ft	GOAL: Improve wetland habitat for CRLF and SCLTS. BENEFIT: Encourage CRLF and SCLTS breeding and reduce bullfrog reproduction through the management of the hydroperiod and through the creation of vegetative diversity.	***Effectiveness of Obstruction Removal Practice:*** Approximately 1400 sq ft of plastic liner was successfully removed from a former agricultural pond. Having previously dried up prior to successful SCLTS and CTS larval development, the pond held water long enough to allow salamanders to successfully metamorphosis. Removal of accumulated pine needles improved the oxygen content and raised the pH. The project was deemed complete in 2018.	As the species of concern were CRLF, CTS, and SCLT, a qualified individual was on-site during all activities to stop work if the species was found. No species were encountered during project activities.
GVC1	2015	**Obstruction Removal** (500), 0.12 acres	GOAL: Improve wildlife habitat, reduce the risk of erosion if the items became dislodged and mobilized, and improve safety through the removal solid waste items from the stream channel and stream bank. BENEFIT: Removal of car bodies and appliance from the stream	***Effectiveness of Obstruction Removal Practice:*** With the car bodies and other material removed from Green Valley Creek, the site has been able to successful revegetate through natural recruitment and with willow staking. The success criteria of 50% native cover was achieved and the project was deemed complete in 2018.	No species were potentially present at the project site.

[20] 0.01 acres of temporary wetlands or other waters filled and 0.08 acres of permanent wetlands or other waters filled.

			channel will allow native vegetation to become established, increasing wildlife habitat.		
LVC3	2015	**Obstruction Removal** (500), 600 sq ft **Critical Area Planting** (342), 1,600 sq ft	GOAL: Improve wetland habitat for native amphibians, including SCLTS and CRLF, which are endemic to the Larkin Valley area. BENEFIT: Enhancing the riparian corridor will improve habitat for endemic amphibians that may use the area as a dispersal corridor.	***Effectiveness of Obstruction Removal Practice:*** One car, a small metal tank, a bed frame/springs and miscellaneous pieces of wood, chicken wire, concrete and plastic debris that were disposed of in a drainage channel prior to the current landowners purchasing the property were successfully removed and disposed of off-site. ***Effectiveness of the Critical Area Planting Practice:*** With the car body and other material removed, the site has successfully revegetated through natural recruitment and container plantings. Revegeted with the goal of erosion control, the 70% success rate was achieved, and the project was deemed complete in 2018.	Species of concern included CRLF, SCLTS and SFDFW. A qualified individual was on-site during all activities. No species were encountered during project activities.
MWS11	2015	**Wetland Management**[21], 0.11 acres **Structure for Water Control** (587), N/A **Critical Area Planting** (342A), 12,000 sq ft	GOAL: To enhance wetland habitat for amphibians . , including SCLTS and CRLF, which are endemic to the Larkin Valley area. BENEFIT: Provide additional breeding habitat given the cold temperatures and low oxygen content of the existing pond.	***Effectiveness of Wetland Management and Structure for Water Control Practice:*** While the outlet structure is functioning as intended and the vegetation has become well-established, the wetland has not maintained an adequate hydroperiod to support amphibian breeding. On-going monitoring data has shown that the pond needs supplemental water and additional lining to ensure a successful project. This additional work will be completed in 2020.	In preparation for project implementation, the area to be impacted by construction activities, was mowed beginning in spring of 2014 through the summer of 2015 to maintain low grass height to deter SCLTS juveniles outmigrating from the existing pond from burrowing within the project area. A qualified individual was on-site during all activities to stop work if the species was found. No species were encountered during project activities.
MWS12	2015	**Stream Channel Stabilization** (584), 21,000 sq ft **Critical Area Planting** (342A), 0.45 acres	GOAL: Restore channel capacity, reduce flooding of nearby cropland, and restore wetland function. BENEFIT: Restoration of wetland habitat will improve breeding habitat for the California Red-legged Frog, as well as other aquatic and wetland-associated species.	***Effectiveness of Stream Channel Stabilization Practice:*** The removal of 2,150 cyd of sediment from an 1,100 foot reach of Watsonville Slough restored channel capacity, reduced flooding of nearby cropland, and restored wetland habitat for aquatic and wetland-associated species. ***Effectiveness of Critical Area Planting Practice:*** 108 willow stakes were installed to replace willows removed during sediment removal activity. In addition, re-vegetation	A qualified individual was on-site during all activities. Nets were used to capture CRLF and authorized individuals did not use soaps, oils, creams, lotions, repellants, or solvents while capturing and translocating these species. CRLF were kept in a cool in a bucket containing a damp sponge and the species were relocated just upstream of the project site. The Declining Amphibian Population Task Force's Code of Practice were followed and all diversion or dewatering

[21] 0.05 acres of permanent wetlands or other waters filled.

				work was undertaken in two areas defined by the willow scrub enhancement area and the critical area planting area. All plantings exceeded the survival target of 50% and the seeding with natural recruitment has established a native cover of over 70-80%. The project was deemed complete in 2018.	activities, including restoration of flows after construction, were monitored by a qualified individual. Forty-six (46) CRLF species were relocated during project activities with one mortality.
QHB1	2015	**Structure for Water Control** (587), 92 ft x 23 ft (spillway), 37 ft x 8 ft (5 rolling dips/slope drains), and 26 ft x 12 ft (gully stabilization) **Stream Channel Stabilization**[22] (584), 166 ft x 16 ft (three headcut repairs), 80 ft x 20.5 ft avg (10 coir roll check dams), and 65 ft x 18 ft (5 rock check dams)	GOAL: Reduce sediment loading in the San Lorenzo River Watershed to improve habitat for salmonids. BENEFIT: Reduce sediment transport to Zayante Creek to protect spawning habitat for threatened salmonids.	**Effectiveness of Structure for Water Control and Stream Channel Stabilization Practices:** The 3 headcut repairs, 5 rock check dams, 10 coir log structures and 4 rolling dips and slope drains on the adjacent dirt access road, have successfully addressed erosional features created by current road conditions. Several of the instream structures required minor maintenance due to extreme high flows the first year, but are now functioning as intended. A 100% sterile wheat hybrid was seeded for temporary erosion control. Natural recruitment of preexisting species now provides adequate cover similar to preexisting conditions. The project was deemed complete in 2018.	A biological assessment was conducted prior to construction by a qualified individual. The survey concluded that potential habitat existed for Mount Hermon June Beetle (MHJB), Ben Lomond Spineflower, CRLF, Zayante Band-Winged Grasshopper and SFDFW. The qualified individual was on-site and a pre-construction survey was completed. No frogs or turtles were observed during the survey or project, although California newts were very abundant. All wetted portions of the stream (i.e. pools) were mapped and flagged to facilitate daily clearing which helped crews avoid impacts to California newts. Prior to work each day, surveys of all equipment, materials, and work areas were conducted. 12 California newts, as well as numerous arthropods, were relocated. Work was approved to begin after September 1 to minimize impacts to dispersing adult MHJB quality sandhills habitat. A pre-project survey was conducted and a total of 17 SFDFW nests were mapped and all except one were deemed active. No direct impacts occurred to the nests, but four woodrats were observed and construction was halted until the animals left the work area on their own.
RcC1	2015	**Wetland Restoration** (657), 0.125 ac **Critical Area Planting** (342), 0.11 ac	GOAL: The goal of the project is to improve wetland habitat through the removal of homogenous vegetative and revegetation will increase ecological diversity. BENEFIT: The wetland will encourage CRLF breeding and reduce bullfrog reproduction through the management of the	***Effectiveness of Wetlands Management Practice:*** Removal of the bur-reed and accumulated sediment was successful, but it was temporary and is once again prolific and limiting vegetative diversity. ***Effectiveness of Critical Area Planting Practice:*** There was a 100% success rate for the dogwood. However, increasing herbaceous diversity will not be possible given the tenacity of the existing bur-reed. Additional willow cuttings were planted higher on the banks and	A qualified individual was on-site during all activities. Twelve (12) CRLF were relocated during clearing of vegetation.

[22] 0.1 acres of permanent non-wetland waters of the US filled.

			hydroperiod and through the creation of vegetative diversity.	the project as deemed complete in 2018.	
ScC2	2015	**Stream Habitat Improvement and Management**[23] (395), 24 ft x 250 ft **Streambank and Shoreline Protection** (580), Floodplain Connections = 7,000 sq ft **Streambank and Shoreline Protection** (580), 41,200 sq ft **Critical Area Planting** (342), 15,000 sq ft	GOAL: Enhance instream and floodplain habitat and restore natural hydro-geomorphic function through strategic levee breaching, placement of large wood, and confluence enhancement. BENEFIT: Enhancing instream habitat will improve the streams habitat as a spawning and rearing ground for coho salmon, steelhead trout, and CRLF.	***Effectiveness of Stream Habitat Improvement and Streambank Protection Practices:*** Increased instream complexity and enhanced floodplain connectivity was observed with the nine in-stream wood complexes, by grading two backwater connections with two existing off-channel ponds and one backwater connection with an existing floodplain drain, and through reconfiguration of the confluence area of Archibald Creek to form a backwater connection with Scotts Creek. ***Effectiveness Critical Area Planting Practices:*** With the goal of erosion control and floodplain restoration, native species have exceeded the 30% success criteria with a 64% absolute cover. The dominant native species includes California blackberry, stinging nettle, hedge nettle, Douglas' nightshade, Elderberry, Juncus and wood fern. The project was deemed complete in 2018.	In consultation with NMFS, CDFW and NOAA Southwest Fisheries Science Center, it was determined that large wood would be placed in the stream with a biologist on site, but without dewatering the reach, even with the presence of steelhead and coho. A site visit, by a qualified individual, confirmed that tidewater goby (TWG) would not be in the project area. A qualified individual was on-site daily to monitor for CRLF. No species were encountered.
SqC2	2015	**Stream Habitat Improvement and Management**[24] (395), 1,276 ft. **Streambank Protection** (580), 45' x 1000' **Planting** (342), 2.6 acres	GOAL: Enhance instream, riparian and floodplain habitat and function along a 1,500 foot reach of the East Branch of Soquel Creek while ensuring current levels of flood protection for two adjacent homes and a bridge. BENEFIT: Enhancing instream habitat, restoring natural hydro-geomorphic function, and capturing fine sediment will improve the creek's capacity as a spawning and rearing ground for steelhead and FYLF.	***Effectiveness of Stream Habitat Improvement and Streambank Protection Practices:*** The removal of large rock riprap and backfill of remaining rock with ed with native alluvial material has successfully been revegetated with riparian species to increase food and cover. The bench, constructed at the toe of the existing landslide, has accumulated material and prevented sediment from entering the stream. One of the six large wood structures was moved downstream during a 2017/18 storm event and has been cabled in its new location. All of the wood structures and the five rock barbs have created increased sinuosity and scour. ***Effectiveness Critical Area Planting Practice:*** Completed with the goal of erosion control and improved shade and cover, the 40% success criteria was met. A 85% survival rate was achieved for the twenty 5-gallon	A qualified individual electro-fished the project reach to relocate all fish from the area. In all, 518 steelhead, 6 Pacific lamprey, 30 sculpins, 41 Sacramento suckers, and an unquantified number of three-spine sticklebacks were relocated from the exclusion area. Twelve FYLF were relocated during fish relocation activities. A qualified individual was on-site daily to monitor for FYLF.

[23] 0.132 acres of permanent non-wetlands waters of the US filled.
[24] 0.006 and 0.088 acres of temporary and permanent non-wetlands waters of the US filled, respectively.

				redwoods, six 5-gallon oak trees and 102 (live pole and treepot) alders were planted in addition to the relocation of seven 6-inch dbh redwoods and the removal of a 20-inch multi-trunk oak and an 8-inch alder. The project was deemed complete in 2018.	
AmC1	2016	**Access Road Improvement** (560), 90LF	GOAL: Address nutrient rich run-off in Pinto Lake Watershed by reducing transport of sediment and sediment-bound nutrients into Pinto Lake. BENEFIT: Reduced cyanobacteria and associated toxins will improve habitat for fish, birds, and wildlife in Pinto Lake.	***Effectiveness of Access Road Improvement Practice:*** Regrading of the existing road and installation of 5 rolling dips has successfully addressed soil erosion from the steep sections, directing flow to stable vegetated areas. The project was deemed complete in 2019.	A Service approved individual conducted a pre-construction survey for CRLF and Western pond turtles (WPT). None were observed during the survey, although a SFDFW nest was observed off the side of the road, and crews were advised to avoid any impacts to that area. No animals were encountered during construction activities.
CCC1	2016	**Sediment Basin** (350), 105' x 70' **Structure for Water Control**[25] (587), 18' x 6' (dissipater), 77' x 13' (swale) **Critical Area Planting** (342), 10,000 sq ft	GOAL: Addresses nutrient rich run-off in Pinto Lake Watershed by reducing transport of sediment and sediment-bound nutrients into Pinto Lake. BENEFIT: Reduction of sediment and resulting cyanobacteria and associated toxins will improve habitat for fish, birds, and wildlife in Pinto Lake and downstream in Monterey Bay.	***Effectiveness of Sediment Basin and Structure for Water Control Practices:*** Intended to capture agriculturally derived sediment, the basin is functioning to capture 0.15 ac-ft of sediment per year. ***Effectiveness of Critical Area Planting Practice:*** With the goal of erosion control, disturbed areas were successfully stabilized with a mix of common barley and red fescue, achieving the 80% success criteria. Human use of the eastern slope for frisbee golf has created a short social trail and a bare earth area around the frisbee basket. No erosion due to the trail was observed, but the areas will not support vegetation due to frequent use. In addition, an 80% success rate for thee 24 willow stakes were planted to mitigated for the 8 willow trees removed has been achieved and the project was deemed complete in 2019.	A Service approved individual conducted a pre-construction survey for CRLF and Western pond turtles (WPT). None were observed during the survey nor encountered during construction activities.
CoC2	2016	**Wetland Management**[26]**,** 15' x 900' **Underground Outlet** (620), 8' x 100' **Critical Area Planting** (342), 0.5 acres	GOALS: Increase wetland habitat and native plant diversity to support CRLF and other wildlife. BENEFITS: The project will collect additional surface water and provide a longer hydroperiod	***Effectiveness of Wetland Management and Underground Outlet Practices:*** The wetland continues to dry out earlier than anticipated. It is currently not holding water even during high rainfall events. Additional clay will be placed in the pond to help address leakage. ***Effectiveness of Critical Area Planting***	A Service approved individual conducted a pre-construction survey for CRLF. None were observed during the survey nor encountered during construction activities.

[25] 0.02 acres of permanent non-wetland waters of the US filled.

[26] 0.03 acres of permanent wetlands or other waters filled.

			to support amphibian and wildlife habitat.	***Practice:*** With the goals of erosion control and wetland enhancement, all disturbed areas have become well vegetated with grass cover established at 90%. The wetland area is flourishing with native plants with creeping wildrye, Santa Barbara sedge, juncus, California bee plant and spreading gooseberry.	
MWS 13	2016	**Grassed Waterway** (412), 15' x 600' **Sediment Basin** (350), 75' x 150' **Structure for Water Control** (587) 55' x 150' **Critical Area Planting** (342), 15,000 sq ft	GOALS: Improve water quality through the construction of a sediment basin and bioreactor that will treat concentrated run-off from up to 160 acres. BENEFITS: Improved water quality will benefit aquatic life in the Watsonville slough.	***Effectiveness of Grassed Waterway, Sediment Basin and Structure for Water Control Practices:*** The bioreactor and vegetated swale perform as designed and water quality monitoring demonstrates a 70-100% reduction in nitrate concentration. ***Effectiveness of Critical Area Planting Practice:*** Revegetation of disturbed areas occurred with the goal of erosion control, and the swale was vegetated to provide additional water quality treatment and to suppress weeds. The 80% success criteria has been achieved and the project was deemed complete in 2019.	To avoid impacts to CRLF, which are known to be in the sloughs, all construction activities began after April 15 and were completed before October 31. A service-approved individual conducted a pre-construction visual survey. No species were observed nor encountered during construction activities.
CoC3	2017	**Water and Sediment Control Basin** (638), 100' x 285' **Structure for Water Control**[27] (587), NA **Critical Area Planting** (342), 1.6 acres	GOALS: Improve water quality in the Corralitos Creek Watershed. BENEFITS: By reducing transport of sediment and sediment-bound nutrients, downstream water quality and habitat will be enhanced.	***Effectiveness of Water and Sediment Control Basin and Structure for Water Control Practices:*** The 0.6 acres sediment basin is successfully capturing flows, reducing downstream sedimentation and improving groundwater infiltration. Damaged in the 2017 storm event, the basin as repaired with an additional inlet to capture neighbors flow and seeded and mulched to stabilize the banks. ***Effectiveness of Critical Area Planting Practice:*** With a 25% success rate achieved for seeding and planted areas, the project continues to be monitored.	A Service approved individual conducted a pre-construction survey for CRLF. None were observed during the survey nor encountered during construction activities.
ScC3	2017	**Stream Habitat Improvement and Management**[28] (395), 32' x 500' **Streambank and Shoreline Protection** (580), Floodplain Connections = 1,700 sq ft **Streambank and**	GOAL: Enhance instream and floodplain habitat and restore natural hydro-geomorphic function through strategic levee breaching, placement of large wood, and confluence enhancement. BENEFIT: Enhancing instream habitat will improve the streams	***Effectiveness of Stream Habitat Improvement and Streambank Protection Practices:*** Increased instream complexity and enhanced floodplain connectivity has been achieved with the 11 in-stream wood complexes, enhancing 2 existing debris jams, and by grading two backwater connections with the adjacent floodplain. ***Effectiveness Critical Area Planting Practices:*** Revegetation activities targeted	In consultation with NMFS, CDFW and NOAA Southwest Fisheries Science Center, it was determined that large wood would be placed in the stream with a biologist on site, but without dewatering the reach, even with the presence of steelhead and coho. A site visit, by a qualified individual, confirmed that tidewater goby (TWG) would not be in the project area. A qualified individual was on-site daily to monitor for

[27] 0.002 acres of permanent non-wetland waters of the US filled.

[28] 0.005 acres of temporary and 0.33 acres of permanent non-wetlands waters of the US filled.

		Shoreline Protection (580), 23' x 865' **Critical Area Planting** (342), 9,200 sq ft	habitat as a spawning and rearing ground for coho salmon, steelhead trout, and CRLF.	areas where access was cleared prior to construction in the riparian area and unstable banks in the floodplain. Native species have achieved a 65% success criteria, and the project continues to be monitored.	CRLF. No species were encountered.
SVC3	2017	**Stream Habitat Improvement and Management**[29] (395), 40' x 250' **Streambank and Shoreline Protection** (580), Floodplain Connections = 200 sq ft **Critical Area Planting** (342), 9,200 sq ft	GOAL: Enhance instream and floodplain habitat and restore natural hydro-geomorphic function through strategic levee breaching, placement of large wood, and confluence enhancement. BENEFIT: Enhancing instream habitat will improve the streams habitat as a spawning and rearing ground for coho salmon, steelhead trout, and CRLF.	***Improvement and Streambank Protection Practices:*** Increased instream complexity and enhanced floodplain connectivity has been achieved through the placement of 38 redwood trees at 11 locations. Habitat surveys suggest an increase in habitat complexity and quality following implementation, with more deposition than scour near large wood sites. The lack of scour is consistent with expectations that the stream system is more resistant to change due to channel armoring with cobbles and boulders ***Effectiveness Critical Area Planting Practice:*** As anticipated, natural colonization of the project area is occurring and prefers this method of revegetation rather than the import of container plant materials. The 65 redwood tree seedlings planted in 2018 (to replace the 38 trees removed as part of the project) are doing well with 10 mortalities due to competition with other native species. The project continues to be monitored.	In consultation with NMFS, CDFW and NOAA Southwest Fisheries Science Center, it was determined that large wood would be placed in the stream with a biologist on site, but without dewatering the reach, even with the presence of steelhead and coho. A qualified individual was on-site daily to monitor for CRLF. No species were encountered.
BrC2	2018	**Streambank and Shoreline Protection**[30] (580), 0.02 acres **Tree and Shrub Establishment** (612), 0.02 acres **Critical Area Planting** (342), 0.02 acres	GOAL: Improve fish passage and stream habitat for salmonids on Branciforte Creek. BENEFIT: Removal of barriers will provide safer passage for fish and increase and improve spawning habitat.	***Effectiveness of Streambank Protection Practices:*** The placement of rock rip along a 40 LF stretch of Branciforte Creek has successfully stabilized the slope and protected housing infrastructure. ***Effectiveness of Planting Practices:*** With the goal of erosion control and habitat enhancement, the CA blackberry has achieved the 80% success rate. The willow stakes sustained a high mortality rate and 25 additional stakes were planted in 2019. The project continues to be monitored.	A silt fence was constructed during construction activities to trap any sediment and protect habitat for Steelhead. No work was completed in the stream. A Service approved individual conducted a pre-construction survey for CRLF, Pacific Giant Salamander and Black Salamander. None were observed during the survey nor encountered during construction activities.
FTC1	2018	**Stream Habitat Improvement and Management**[31] (395),	GOAL: Protect downstream steelhead habitat by preventing the delivery of sediment to	***Effectiveness of Stream Habitat Improvement and Streambank Protection Practices:*** Both culverts are functioning as	A qualified individual electro-fished the project reach to relocate all fish from the area. In all, 40 steelhead (29 YOY and 11

[29] 0.005 acres of temporary and 0.33 acres of permanent non-wetlands waters of the US filled.

[30] 0.0008 acres of temporary and 0.001 acres of non-wetland waters of the US filled.

[31] 0.001 acres of temporary and 0.05 acres of permanent non-wetlands waters of the US filled.

		7,187 sq ft **Access Road Improvement** (560), 12' x 136' **Critical Area Planting** (342), 2,114 sq ft	Branciforte Creek. BENEFIT: Reduced sediment to protect downstream critical habitat for steelhead.	intended and flow is at grade with no signs of erosion. ***Effectiveness Critical Area Planting Practice:*** With the goal of erosion control, the site has been stabilized and is functioning, as planned. Big leaf maple and Box elder trees have achieved 100% success in the first year. Other native potted plants have achieved a 39% success criteria. The site was monitored when some of the plants were dormant*, so a summer survey will be conducted in 2020 to determine if replanting is needed.	yearling or older) and 14 larval CA giant salamanders were captured relocated from the exclusion area. One YOY steelhead morality was noted, representing a 2.5% of the total number of steelhead relocated. No black salamanders were observed, and no animals were encountered during construction activities.
KC1	2018	**Access Road Improvement** (560), 22' x 1,410' **Tree and Shrub Establishment** (612), 240' x 140' **Critical Area Planting** (342), 2,114 sq ft	GOAL: Protect downstream steelhead habitat by preventing the delivery of sediment to the San Lorenzo River. BENEFIT: Reduced sediment inputs to Kings Creek to protect downstream critical habitat for steelhead.	***Effectiveness of Access Road Improvement Practice:*** ***Effectiveness Planting Practices:***	A survey for Marbled Murrelet (MAMU) was conducted by a qualified individual. MAMU have never been documented nesting, or present, in the project area. The survey concluded that the current site conditions were not conducive to MAMU.
ZaC1	2019	**Stream Habitat and Improvement** (395), 27' x 1585' **Tree/Shrub Establishment** (612), 48 sq ft	GOAL: Address sediment and limiting factors for salmonid species along one mile of Zayante Creek. BENEFIT: The creation of channel diversity, increasing sediment sorting, floodplain activation and the formation of deep pools will improve cover and high flow refugia for salmonids.	*This project was just implemented in 2019, so effectiveness will continue to be monitored.*	A qualified individual electro-fished the project reach to relocate all fish from the area. In all, 118 steelhead were relocated downstream of the project site. One mortality occurred. In addition, one (1) suckerfish was also relocated. No black or CA giant salamanders were observed, and no animals were encountered during construction activities.
ZaC2	2019	**Obstruction Removal** (500), 10' x 45' **Stream Channel Stabilization** (584), 39'x 87' **Tree/Shrub Establishment** (612), 0.3 acres **Critical Area Planting** (342), 0.3 acres	GOAL: Protect downstream steelhead habitat by preventing the delivery of sediment to Zayante Creek due to an in-stream basin embankment failure. BENEFIT: Reduced sediment to No Name Creek will protect downstream critical habitat for steelhead.	*This project was just implemented in 2019, so effectiveness will continue to be monitored.*	Species of concern included CRLF, SFDFW, MHJB, Zayante Band-winged grasshopper, Steelhead, and Santa Cruz wallflower. Prior to construction activities, a total of 13 woodrat nests were flagged for relocation. Traps were baited with rolled oats and 2-4 cotton balls were placed inside. The traps were left open overnight and the following morning two (2) traps had captured SFDFW. Any non-target species captured, such as deer mice, were immediately released.

					In consultation with CDFW, houses that could be avoided by construction activities despite buffer distance were intact. Three houses were dismantled and replaced with artificial shelters. No other species were encountered during construction activities.