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, PLANNING DIRECTOR

March 28,2005

Agenda Date: April **13,2005**

Planning Commission
County of Santa Cruz
701 Ocean Street
Santa Cruz, CA 95060

SUBJECT: Master Permit for Environmental Enhancement Projects

Commissioners:

Your Commission is being asked to consider approval of an innovative permit coordination program designed to encourage more Santa Cruz County landowners (mostly farmers, ranchers and other rural landowners) to undertake environmental enhancement projects on their land. This proposed Santa Cruz Countywide Permit Coordination Program would be implemented through County issuance of a "Master Permit" that would incorporate all relevant County approvals under a single blanket permit, including approvals for coastal permits, riparian exceptions, grading, erosion control, biotic approvals, encroachment permits, zoning and other approvals.

Background and Discussion:

On August 19, 2003, the Board of Supervisors directed the Planning Department to work with the USDA Natural Resources Conservation Service (NRCS) (formerly the "Soil Conservation Service") and the Santa Cruz County Resource Conservation District (RCD) on the development of the Santa Cruz Countywide Permit Coordination Program. Staff recommended that this program be implemented through a proposed "Master Permit for Environmental Enhancement Projects", which would combine all required County approvals for qualifying conservation practices under a single approval (refer to the Board letters on this matter contained in the agenda packet for your March 23, meeting). Since that time, County staff from the Planning Department, Public Works Department, and Environmental Health Services have met numerous times with representatives of the NRCS and RCD, and occasionally the Coastal Commission, to develop and refine the provisions of the proposed Master Permit for Environmental Enhancement Projects Program.

The proposed permit coordination program grew out of a realization on the part of the RCD that a growing 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. The NRCS and the RCD propose to assist agricultural and rural landowners within Santa Cruz County by providing permitting assistance to landowners wishing to restore and enhance the natural resource conditions of their properties, maintain economic viability, and help achieve important water quality and habitat conservation goals. The California Coastal Conservancy, the NRCS, and the Community Foundation of Santa Cruz are providing funding for the development of this program in Santa Cruz County.

Normally landowners wanting to undertake environmental enhancement projects such as correcting erosion problems, enhancing fish habitat, etc., 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 applicable permits required by the responsible state and federal agencies that are also participating in this program (e.g., State Dept. of Fish & Game, U.S. Fish & Wildlife Service, NOAA Fisheries, Army Corps of Engineers, Regional Water Quality Control Board and Coastal Commission). This permit coordination program would provide an incentive to such landowners by removing bureaucratic hurdles and providing for "one-stop shopping" by allowing the landowner to deal solely with the NRCS/RCD, thus putting the onus on the NRCS/RCD to ensure that all county, state and Federal requirements are being met. Without this program, it is unlikely that many landowners would be willing to endure the time and expense necessary to obtain all the needed permits, and for this reason few such environmental enhancement projects are currently being implemented in Santa Cruz County.

Similar permit coordination programs have been working very well in the other areas throughout the state, including the Elkhorn Slough and Salinas River watersheds in Monterey County, Morro Bay watershed in San Luis Obispo County, coastal Marin County, and the Navarro River watershed in Mendocino County. Moreover, new permit coordination programs are currently being developed in several additional areas as well, including Alameda County (countywide permit), Humboldt County (countywide permit), and the San Luis Rey River watershed in San Diego County. In Elkhorn Slough watershed alone, 47 erosion control projects completed under the program since 1998 have stopped an estimated 40,000 tons of sediment from entering the slough system.

Proaram Description:

The proposed Santa Cruz Countywide Permit Coordination Program would involve County issuance of a single Master Permit for Environmental Enhancement Projects to the NRCS and RCD. The permit would authorize the conduct of **15** specific qualifying types of conservation practices that farmers, ranchers and other landowners could implement on their property, under the auspices and oversight of the NRCS/RCD. The 15 eligible project-types, subject to size limiting and other criteria (given in Exhibits **A** and **B** of attached Master Permit), are as follows:

1. Access Roads: Improvements to existing access roads to reduce or eliminate erosion.
2. Critical Area Plantings: Installation of vegetation for erosion control.
3. Diversions: Construction of structures across slopes to capture and divert water to a safe, non-erosive location in order to reduce erosion on or adjacent to the slope.
4. Filter Strips: Installation of vegetated filter strips to trap sediment and other pollutants.
5. Fish Stream Improvement: Implementing fish habitat enhancements (including removing/modifying barriers to fish passage, installing bridges, etc.).
6. Grade Stabilization Structures: Installation of structures to reduce or eliminate erosion, such as head cutting in gullies.
7. Grassed Waterways: Establishing grassed drainage channels to ensure stable conveyance of runoff.
8. Obstruction Removal: Removal and disposal of unnatural structures from waterways such as abandoned cars and appliances (but not including large woody debris).
9. Pipelines: Installation of pipelines (from existing water supply sources) to shift livestock away from using streams, lakes and other sensitive habitats for water supply.
10. 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.
11. Sediment Basins: Installation of sediment basins, with (or without) water control and associated outlets and energy dissipating structures, to help stabilize downstream channel flows.
12. Streambank Protection: Using vegetation or structures for stream bank erosion protection.

13. Stream Channel Stabilization: Stabilizing a stream channel with a suitable structure and removing large amounts of accumulated sediment (from non-fish bearing streams).
14. 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.
15. Underground Outlets: Installing an underground conduit to collect surface water and convey it to a suitable outlet, so as to prevent erosion and downstream sedimentation.

Under the proposed program, participating regulatory agencies (including the County) enter into programmatic agreements with the NRCS and the RCD to approve the 15 standardized conservation practiceslproject-types intended to improve habitat and soil stability on farms, ranches, and other rural properties. The **15** eligible types of conservation practices are relatively small in size, must have demonstrated a net environmental benefit, and are usually performed for erosion control or restoration in and around waterways. Participating landowners must agree to follow NRCS designs and specifications for conservation work to ensure high quality projects and adequate follow up and monitoring.

Under the Master Permit program, by May 15th of each year the NRCS/RCD would circulate, to all participating agencies, a list of the projects they intend to undertake for that year in the form of a "Pre-Construction Notification". The County and other participating agencies would have an opportunity to review and make revisions to the proposed projects on the list. NRCS and the RCD would subsequently submit a "Mid-Construction Season Status Report" (by October 1st) and an end-of-the-year "Annual Report" (by January 31st) that would track the progress and document the results of each project undertaken. Through this reporting process, County staff will be able to keep track of any projects that fall out of compliance with the Master Permit's provisions, so that appropriate enforcement actions could be taken if necessary.

It is proposed that the Master Permit for Environmental Enhancement Projects remain in effect for three years and be reviewed by Planning Department staff at that time for possible renewal (at a Level 3 review) for an additional two years, and then be reviewed for renewal every five years thereafter (at a Level 6 review, at least for the first 5-year renewal interval).

Conclusion and Recommendation:

Pursuant to Board of Supervisors direction, County staff has met numerous times over the past year and a half with representatives of the NRCS/RCD and the Coastal Commission to hammer out the proposed provisions of the Santa

Cruz Countywide Permit Coordination Program. The NRCS/RCD have also worked out similar agreements with all applicable state and Federal resource agencies to ensure that their regulations will be observed. Staff considers the outcome of this extensive process, embodied in the proposed Master Permit for Environmental Enhancement Projects, to be a balanced approach that sufficiently meets or exceeds all County requirements, while removing some of the bureaucratic obstacles that currently are a disincentive to landowners who would otherwise want to implement these types of environmental enhancement projects on their land. If approved by your Commission, this program will result in more environmental enhancement projects being implemented throughout in the watersheds of Santa Cruz County, and thus will result in tangible benefits for the County's natural resources.

The Santa Cruz Countywide Permit Coordination Program has undergone environmental review pursuant to the California Environmental Quality Act (CEQA). A CEQA Initial Study has been prepared and a Mitigated Negative Declaration proposed (attached as Exhibit C). The review period for the Initial Study/Negative Declaration ended on December 31,2004.

It is, therefore, RECOMMENDED that your Commission:

1. Adopt the required findings for the approvals of Riparian Exceptions, Development Permits, Coastal Development Permits, and Significant Tree Removal Permits, attached as Exhibit A;

2. Approve the issuance of the proposed Master Permit for Environmental Enhancement Projects (Exhibit B) to the Santa Cruz County Resource Conservation District authorizing the conduct of the Santa Cruz County Permit Coordination Program;

3. Adopt the proposed CEQA Mitigated Negative Declaration for the Santa Cruz County Permit Coordination Program (Exhibit C).

Sincerely,

Frank Barron, AICP
Project Planner
Policy Analysis Section

Glenda Hill, AICP
Principal Planner
Policy Analysis Section

Exhibits:

A. Required Findings for Riparian Exceptions, Development Permits, Coastal Development Permits, and Significant Tree Removal Permits

B. Proposed Master Permit for Environmental Enhancement Projects to be issued to the Santa Cruz County Resource Conservation District

C. CEQA Initial Study and Mitigated Negative Declaration

D. Correspondence – Letters *of* Support from Monterey Bay National Marine Sanctuary, California Coastal Conservancy, Monterey County Planning and Building Inspection Department, and Arana Gulch Watershed Alliance.

cc: Karen Christensen, Santa Cruz County Resource Conservation District
820 Bay Ave., Ste. 128, Capitola, CA 95010

Nicole Martin, Sustainable Conservation
121 Second St., 6th Floor, San Francisco, **CA** 94105

Dan Carl, California Coastal Commission
725 Front St., Ste. 300, Santa Cruz, CA 95060

Rachel Fatoohi and John Swenson, Dept. of Public Works (e-mail transmittals)

John Ricker, Environmental Health Services (e-mail transmittal)

Exhibit A

Required Findings for the Master Permit for Environmental Enhancement Projects Program

Riparian Exception Findings:

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

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.

The Riparian Exception is 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.

Master Permit authorized projects would 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.

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 listed in Exhibit A, #1.

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.

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 (Chap. **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/NRCS) 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 NRCS/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 Criteria (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. 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.

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 Criteria (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 hardlconstructed 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.

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COUNTY OF SANTA CRUZ
Planning Department

MASTER PERMIT FOR ENVIRONMENTAL ENHANCEMENT PROJECTS

Applicant: Santa Cruz County Resource Conservation District (RCD)
Address: 820 Bay Ave., Ste. 128 Capitola, CA 95010

Application Number: 03-0513
Parcel Number(s): N/A (Countywide)

PROJECT DESCRIPTION

Master Permit for Environmental Enhancement Projects constitutes County approval for the conduct of 15-types of habitat and natural resource enhancement projects under the auspices of the Santa Cruz County RCD and the Natural Resource Conservation Service (NRCS). Master Permit incorporates Coastal Zone approvals, riparian corridor exceptions, grading permits, erosion control plans, and/or sensitive habitat reviews, as necessary (see attachment for more detailed description).

SUBJECT TO CONDITIONS OF APPROVAL IN PART V OF ATTACHMENT

Approval Date:
Exp. Date:
Denied by: _____

Effective Date:
Coastal Appeal Exp. Date:
Denial Date: _____

__ This project requires a coastal zone permit which is not appealable to the California Coastal Commission. It may be appealed to Me Planning Commission. The appeal must be filed within 14 calendar days of action by the decision body.

_X_ This project includes a blanket Coastal Zone Permit, the approval of which is appealable to the California Coastal Commission, (Grounds for appeal are listed in the County Code Section 13.20.110.) The appeal must be filed with the Coastal Commission within 10 business days of receipt by the Coastal Commission of notice of local action. Approval or denial of the Coastal Zone Permit is appealable. The appeal must be filed within 14 calendar days of action by the decision body.

This permit cannot be exercised until afler the **Coastal** Commission **appeal** period. That appeal period ends on the above indicated date. Permittee is to contact Coastal **staff** at the end of the above appeal period prior to commencing any work.

Building Permits must be obtained for any installation/construction of any proposed bridges or retaining wails over t[illegible]) eet in eigh Construction must be initiated prior to the expiration date in order to exercise th p [illegible] ERMIT I NO A BUILDING PERMIT.

By signing this permit below, the applicant agrees to accept the terms and conditions of this permit. This permit shall be null and void in the absence of the applicant's signature below.

_____ _____
Santa Cruz County RCD Board President Date

_____ _____
Staff Planner Date

Distribution: Applicant. File. Clerical. California Coastal Commission

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. Proiect Description:

This Master Permit for Environmental Enhancement Projects (Master Permit) implements the Santa Cruz Countywide Permit Coordination Program and is being issued to the Santa Cruz County Resource Conservation District (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 Santa Cruz County 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 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 Comdor 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. **Critical Area Plantings:** Installation of vegetation for erosion control.
3. **Diversions:** Construction of structures across slopes to capture and divert water to a safe, non-erosive location in order to reduce erosion on or adjacent to the slope.
4. **Filter Strips:** Installation of vegetated filter strips to trap sediment and other pollutants.
5. **Fish Stream Improvement:** Implementing fish habitat enhancements (including removing/modifying barriers to fish passage, installing bridges, etc.).
6. **Grade Stabilization Structures:** Installation of structures to reduce or eliminate erosion, such as head cutting in gullies.
7. **Grassed Waterways:** Establishing grassed drainage channels to ensure stable conveyance of runoff.
8. **Obstruction Removal:** Removal and disposal of unnatural structures from waterways such as abandoned cars and appliances (but not including large woody debris).
9. **Pipelines:** Installation of pipelines (from existing water supply sources) to shift livestock away from using streams, lakes and other sensitive habitats for water supply.
10. **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.
11. **Sediment Basins:** Installation of sediment basins, with (or without) water control and associated outlets and energy dissipating structures, to help stabilize downstream channel flows.

12. **Streambank Protection:** Using vegetation or structures for stream bank erosion protection.
13. **Stream Channel Stabilization:** Stabilizing a stream channel with a suitable structure and removing large amounts of accumulated sediment (from non-fish bearing streams).
14. **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.
15. **Underground Outlets:** Installing an underground conduit to collect surface water and convey it to a suitable outlet, so as to prevent erosion and downstream sedimentation.

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 NRCS and the Santa Cruz County RCD, following the NRCS Conservation Planning Process (as described in Exhibit D). The NRCS, which will maintain oversight of all qualifying projects/activities, 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 land owner/manager, and an Environmental Assessment Worksheet

(EAW) is completed as part of each conservation plan (see Exhibit D for further details). 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 NRCS and RCD staff and cooperating property owners/managers shall be given information on the listed species in the project area, by the NRCSRCD, 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 NRCS and RCD will administer the Santa Cruz Countywide 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 of 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 NRCS and RCD 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 NRCS and RCD 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 NRCSRCD if County staff determines there are projects that need to be reviewed in greater detail. The County will make every attempt to contact the NRCS and RCD, meet if needed, and resolve any outstanding issues **within** a fixed time frame (i.e., 21-days). County staff may conduct pre-construction site inspections during this period (or at other times), if necessary. The NRCSRCD shall then submit a Final PCN incorporating any project revisions required by the County or other agencies. 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 **NRCS** and RCD 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 Permit Coordination Program is designed to ensure that outside agency mandates are upheld and that permit conditions are feasible for the NRCS, RCD, 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 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 (CDFG)	Memorandum of Agreement in place with Region 3 of CDFG and a Template 1602 Streambed Alteration Agreement will be developed for the Santa Cruz permit coordination program
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 fi-om the Coastal Commission.

California Department of Fish and Game (CDFG) – MOA and Template 1603 Streambed Alteration Agreement

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 Game, 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 CDFG 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. For the Santa Cruz Countywide Permit Coordination Program, the Regional MOA will be augmented to include Santa Cruz County and a Template 1602 Streambed Alteration Agreement will be approved for the project. This Template will be used to expedite preparation and review of 1602 Agreements for each project carried out under the permit coordination program.

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 Permit Coordination Program, it is expected that 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 NRCS 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, NOAA Fisheries has indicated that they will likely be issuing a Biological Opinion through a formal Section 7 process with the NRCS 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 NRCS/RCD, 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 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-D** 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 NRCS/RCD, 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 Game [CDFG] 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 Comdor 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 NRCS/RCD to County: By May 15 of each year, the NRCSRCD shall circulate for review by the County and participating agencies, a Preliminary Pre-Construction Notification (PCN) describing all projects proposed for that year (consistent with Section IV[B] above and Exhibit C). **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. By October 1 **of** each year, the NRCS/RCD shall distribute for review a Mid-Construction Season **Status** Report and, by January 31 of each year, an end-of-the-season Annual Report (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 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 three (3) years after its initial effective date. This expiration date can be extended one time for a period not to exceed two (2) years, subject to a time extension at a Level 3 approval, provided the Permittee requests (by letter) said time extension within two (2) years and six (6) months of the initial permit effective date. The initial two (2) 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 two **(2)** 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. 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. CEOA 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 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 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 Permit Coordination Program, the NRCS/RCD shall provide a CEQA mitigation implementation status report as part of each year's Pre-Construction Notification andor 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 NRCS/RCD 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 Permit Coordination Program (i.e., Master Permit)

Exhibit B: Conservation Practices Eligible Under the Santa Cruz Countywide 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 Mandate and 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 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 be 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 be 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 June 15 and October 15. Exceptions and/or further restrictions to this general timeframe include: • Revegetation may continue between October 15 and November 15, (some earthmoving associated with preparation of the site for revegetation may occur within this time frame, but only as necessary for revegetation efforts). • Work in upland areas may begin on April **15.** • If working within 200 feet of established riparian vegetation (or other special status bird potential nesting habitats) and/or if constructing a sediment andor 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 CDFG 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 CDFG) verifies that birds have fledged or nest is abandoned. If any listed or sensitive bird species are identified, CDFG must be notified prior to ***further*** action. *Take* of active bird nests is prohibited. The ***NRCS*** **and**

	RCD may request exemptions to this requirement from **CDFG** on a project-by-projectbasis. • 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 July 1. • If potential habitat for the marbled murrelet occurs in the project area, work shall either begin after September 15 or the NRCSRCD 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 NRCSRCD 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 NRCSRCD 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 CDFG, USFWS, ACOE, NOAA Fisheries, and Santa Cruz County. Any proposed winter grading (i.e., for any grading between October 15 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 luring 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 s 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 mpacts.
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 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 15, 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). If riparian vegetation will be disturbed, it shall be replaced with similar andor 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'. 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 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' (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 NRCS and RCD 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,

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).

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

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, andor 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 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 CDFG 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

[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 CDFG 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

	backfill, or other appropriate temporary crossing structure shall be installed and utilized. When possible, NRCS/RCD 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 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 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 15 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 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 andor resource protective (see Exhibits E and F for the full list of approved 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. 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 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 NRCS/RCD 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. If ***Arundo donax*** (or similar exotics that reproduce from cuttings) is removed, cuttings shall be disposed of in a manner that will not allow re-establishment to occur and will not expose other areas to cuttings.
5. **Conditions lor Erosion Control**	Earthmoving activities shall be completed prior to October **15.** Work beyond October 15 (with the exception of revegetation until November 15) 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 **15,** 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 15 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 NRCS/RCD shall comply with the terms and conditions outlined in the Biological Opinion issued for the Program, and any subsequent conditions, issued by **NOAA** Fisheries for this project. 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 CDFG-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 CDFG 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.
3. **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 critical area 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 mosl 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 CDFG. 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 ipplied 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 moms. When herbicides are used near waterways an approved glyphosphats 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 iabitat, in addition to implementing the avoidance measures, best management practices, and minimization techniques given in the program description, the NRCS/RCD shall ensure that the following mitigations are implemented for all projects carried out under the Countywide Permit Coordination Program and iuthorized 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, California Department of Fish and Game (CDFG) Stream Alteration Agreement 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. .@) Revegetation 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 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.

	l.(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 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 iabitat and/or individuals of any listed/special status species, all project workers including NRCS/ RCD staff and growers/landowners and/or their employees/representatives shall be given information on the listed species in he 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 he 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 NRCS/RCD shall provide analysis from a Registered Civil Engineer or hydrologist for review and approval of Environmental Planning staff. The analysis shall show hat 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 **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 dong 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 andor 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 Permit Coordination Program (i.e., Master Permit), with Allowed Dimensions and Project-Specific Conditions

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

I. 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 or removal of culverts from non-fish bearing' streams associated with access road improvements. 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'	Length: Average: 1,000 linear feet of work spread out over 2 miles; Max: 2,000 linear feet of work spread out over 12 miles. Width: Average: 30'; Max: 30'. Area: Average: 0.8 acres; Max: 1.5 acres. Volume' : Average: 750 cu. yards; **Max:** 1,500 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. **Critical Area Planting (342)***	Planting of vegetation such as trees, shrubs, vines, grasses, or legumes (see Exhibits E, F and G for lists of preferred 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.
Dimension:	Length: Average: *500';* Max: 1 mile (e.g., riparian areas). Width: Average: *20';* Max: 20'. Area: Average: *0.25* acre; Max: *2.5* acres. Volume: Average: 200 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 NRCS/SCCRCD shall occur until the critical area planting is established to control erosion.
*3. **Diversion (362)****	Construction of a channel across a slope generally with a supporting ridge on the lower side to slow and redirect surface flow. This practice results in a reduction of sheet and rill erosion by reducing the length of slope. Sediment may also be reduced by the elimination of gullies, reducing the amount of sediment and related pollutants delivered to the surface waters. This practice may also be used to

	deliver water to a sediment basin or an open area where runoff can infiltrate the ground at a natural rate of flow. This practice does not result in a change in volume of flow, or flow reduction in surface waters. This practice does not involve the diversion of water from a waterway, nor in the redirection of flow to a new watershed, nor any other potential off-site impacts. This practice applies to sites where: 1) runoff damages cropland, pastureland, farmsteads, or conservation practices; 2) surface flow and shallow subsurface flow caused by seepage are damaging land; **3)** runoff is in excess and available for use on nearby sites; 4) a diversion is required as part of a pollution abatement system; or 5) a diversion is required to control erosion and runoff.
Dimensions	Length: Average: 1,000'; Max: 2,000' (assume 10' wide and 1' deep). Width: Average: 10'; Max: 10'. Area: Average: 0.2 acre; Max: 0.5 acre. Volume: Average: 400 cu. yards; Max: 800 cu. yards. Flow Rate: Max: 100 cfs.
Additional Practice-Specific Protection Measures	This practice does not result in a change in volume of flow, or flow reduction in surface waters. This practice does not involve the diversion of water from a waterway.
4. Filter Strip (393)	Installation of a strip or area of vegetation for trapping sediment, organic matter, and other pollutants from runoff and wastewater. The strip or area is situated between cropland, grazing land, or disturbed land (including forest land) and environmentally sensitive areas. Installation often requires soil manipulation to remove surface irregularities and prepare for planting. **When** the field borders are located such that runoff flows across them in sheet flow, coarser grained sediments are filtered and deposited. Pesticides and nutrients may be removed fi-om runoff through infiltration, absorption, adsorption, decomposition, and volatilization thereby protecting water quality downstream. However, they may not filter out some soluble or suspended fine-grained materials, especially during heavy rain events. Filter strips may also reduce erosion on the area on which they are constructed.

Dimensions	Length: Average: 500'; **Max:** 2,000'. Width: Average: ***20';*** Max: 20'. Area: Average: 0.25 acre; Max: 1 acre. Volume? Average: 200 cu. yards; Max: 800 cu. yards.
Additional Practice-Specific Protection Measures	No additional measures are identified.
5. Fish Stream Improvement (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 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 CDFG 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.
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 CDFG. No chemically-treated timbers shall be used for grade or channel stabilization structures, bulkheads or other instream structures. 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.
6. 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 CDFG 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 CDFG California Salmonid

	Stream Habitat Restoration Manual that could be utilized during implementation of the Grade Stabilization practice is Brush Mattressing (p. VII-79).
7. 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: 20'. Area: Average: 0.5 acre; Max: 1 acre. Volume': Average: 1,000 cu. yards; Max: 2,000 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[4].
8. Obstruction Removal (500)[5]	Removal and disposal of unwanted structures from waterways 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 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'	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.
9. Pipeline (516)*	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 maximum livestock pipeline diameter would be **3** inches. While most activities will occur during the summer months when most areas are *dry*, dewatering may be required for some projects involving installation of a pipeline. 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: 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. Maximum livestock pipeline diameter would be 3 inches. Width: Average 15'; Max: 20'. Area: Max: 4,000 **sq.** ft. through riparian areas/crossing streams[6] Volume[3]: Average: 15 cu. yards; Max: 50 cu. yards through riparian areas[7]. Pressure: Max: 300 psi.
Additional Practice-Specific Protection Measures	Pipeline shall be installed and maintained only when a streambed is dry or dewatered. Trenching associated with this practice must be a minimum of three feet deep. Trenching depth for installation of the Pipeline practice will be deep enough to ensure that scour does not eventually reach the surface of the pipeline. If an open-trench method is used to install the pipeline when working in a waterway, the Operator shall remove and stockpile separately the top six to twelve inches of soils and material. This stockpiled material will be replaced at the end of construction and the stream channel returned to pre-project grade. In the rare circumstance that trenches must be dewatered (i.e. because of unanticipated seepage into the trench), a pump will be used to dewater the trench and water will be pumped to a detention area outside of the channel. No trenching activities would occur during a storm event. Pipelines and related apparatus designed for other than livestock use are not covered under **this** program.
I0. 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 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.
Dimensions	Length: Average: 500'; Max: 1 mile. Area: Average: 0.25 acre; Max: 2.5-acres. Volume[3]: Average: 50 cu. yards; Max: 500 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 NRCS/RCD shall occur until the native plant community or wildlife habitat planting is established to control erosion.
11. 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: 0.5 acre. Volume[3]: Average: 400 cu. yards; **Max:** 2,000 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[8].
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 CDFG 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.
12. 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: ***5'.*** 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' (or 1,000 cu. yards in all Coastal Zone Scenic Areas). Average Rock: 100 cu. yards;

	Max Rock 300 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.
3. ***Stream Channel tabilization (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 steams. 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, primarily 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: 20'. Area: Average: 0.1 acre; **Max:** 1 acre. Volume[3]: Average: 200 cu. yards; Max: 1,500 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).
14. 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. 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: Max: 40 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 NRCS/SCCRCD 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.
!5. 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': Max. in Riparian Areas: 10 cu. yards". 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.

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 CDFG 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.
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 A. 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. Area of practice includes a 100' stream width with 50' on either side of stream (total length 200') and a 20' wide potential work area for equipment.
7. Volume of soil is based on a 2' wide trench over 200' buried to a depth of 3'
8. 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 IO-year storm event.
9. 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'.
10. 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.
11. 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. The Pipeline practice will only require signoff by the NRCS Area Engineer if the project involves a riparian crossing and road crossings in which the road serves multiple users (i.e., more than one parcel).

** 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.

EXHIBIT C:

Notification and Communication Procedures for the Countywide Permit Coordination Promam (i.e., Master Permit)

1. Preliminary Pre-Construction Notification: By May 15" of each year the USDA Natural Resources Conservation Service (NRCS) and the Santa Cruz County Resource Conservation District (RCD) will send a written Preliminary Pre-Construction Notification (PCN) to the County Planning Department (attn: Environmental Planning) listing all projects planned for the upcoming construction season. The Preliminary PCN will consist of site-specific information for each of the proposed projects for the upcoming construction season. **This** Preliminary PCN 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 Permit Coordination Program (i.e. Master Permit). At a minimum, the Preliminary PCN shall include the following information for each of that year's proposed projects:

   - 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).
   - Identification of those projects with in-stream work, and those potentially directly or indirectly impacting fish bearing streams[4].

[4] A "fish-hearing stream" is defmed **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 CDFG fisheries

- Estimated number of creek crossings and type(s) of vehicle(s) to be used.
- Presence of barriers to aquatic species migration.
- 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)
- 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 has been notified of any projects potentially impacting archeological resources (checkbox).
- 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).
- 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 and APNs (NRCS and RCD 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. NRCS and RCD shall inform participating landowners that: (1) landowners are responsible for providing the NRCS and RCD 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, NRCS and RCD 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 NRCS and RCD shall document recommendations on how the project should be modified, if necessary, to ensure consistency with any such restrictions and communicate this

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.

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

2. Review of Preliminary PCN and Issuance of Final PCN: After reviewing the Preliminary PCN, if County staff determines there are projects that require further review andor modification to meet the criteria established by the Master Permit, the County will contact the NRCS/RCD 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 NRCS/RCD to determine how these measures/revisions will be incorporated into the project. The County and NRCSRCD will attempt to achieve resolution of outstanding concerns within 21 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.

3. Mid-Construction Season Status Report: By October 1 of each year, the NRCSRCD shall submit to the County (i.e., Environmental Planning) and the participating agencies for review, a written Mid-Constmction 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 ofthe Master Permit.

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 15 must be pre-approved by the County (i.e., Environmental Planning).

5. Annual Reuort: By January **31** of each year, the NRCSRCD 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.

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 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 NRCS/RCD 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:

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

Monitoring Promam: 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 and California Regional Water Quality Control Board (RWQCB) Water Quality Certification permit shall be submitted as part of the first Pre-Construction Notification (PCN).

Mitigation Measure: LB. (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.

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

Monitoring Promam: 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: LD. (also appears in General Condition #9 in Exhibit A).

Monitoring Promam: The Annual Report shall document that revegetation has been limited to plantings from the lists of preferred 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 gown 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 gown 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 Promam: 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 an NRCS consulting biologist 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.

F. 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 NRCS/ RCD staff and growersflandowners 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 Promam: 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 NRCS/RCD 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 Mandate and Approach to Conservation

The Natural Resources Conservation Service (NRCS) provides 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 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 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 to protect and improve the natural resources on and adjacent to their property. With their technical experience and landowner relationships, the NRCS 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 SCCRCD. 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

The NRCS utilizes a rigorous planning process before offering recommendations to cooperators. As a federal agency, the NRCS must ensure project works are compliant with the National Environmental Policy Act (NEPA). **NRCS** is required to conduct an Environmental Evaluation for assistance it provides according to the NRCS-NEPA rules (7CFR 650), which became effective in 1979 and as updated by California Amendment CA4 in 2000. This rule prescribes the assessment procedures under which NRCS-assisted actions are to be implemented. The procedures are designed to ensure that environmental consequences are considered in decision-making, and to allow NRCS to assist individuals and non-federal public entities to take actions that protect, enhance, and restore environmental quality.

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 and a NEPA compliant Environmental Assessment Worksheet (EAW) is completed **as** part of each conservation plan.

The NRCS 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. NRCS Planning Process

	NRCS **PLANNING STEP**	**DOCUMENT USED**	**RESULTS**
Step 1	Consultation	**Field Notes**	Identify resource problems with the client (land operator) and other specialists.
2	**objectives**		objectives.
Step 3	**resources***	***Resource Problems or***	The checklist prompts the inventory team provide quantitative or qualitative data in several resource categories: **Soils,** Water, **Air,** Plants,

	NRCS PLANNING STEP	DOCUMENT USED	RESULTS
		Conditions.	Animals, and Human (social, economic, and cultural).
Step 4	**Analyze resource data**	***Quality Criteria***	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, Conservation Effects Worksheet***	Assist client in selecting a system of optimal conservation practices to maximize resource protection and enhancement. ***NRCS*** prepares conservation plan and specifications and project Environmental Assessment Worksheet.
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.

*Ad
state
PM1

During the NRCS interdisciplinary planning process, **an** Environmental Assessment Worksheet (EAW) is used to document potential impacts of the preferred alternative. This document is then placed in the project case file. The EAW documents 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). NRCS field office 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

The NRCS Cultural Resources Protection Policy

NRCS Policies ensure that the effects of conservation activities on historic properties are considered in the earliest planning stages and that cultural resource protection is accomplished as efficiently as possible. For all conservation projects covered by the proposed permit coordination program, the NRCS identifies and examines the potential impacts to cultural resources and ensures that no significant adverse effects will result.

All projects implemented under the Santa Cruz Countywide Permit Coordination Program would be subject to NRCS assessment to ensure potential impacts to cultural resources are minimized. The NRCS is currently revising their Programmatic Agreement (PA) with the State Historic Preservation Office and the Advisory Council on Historic Preservation. Although the PA is currently being revised, it is expected to be in place during the life of the proposed program. Essentially the PA states that the NRCS is responsible for cultural resources compliance in all actions where NRCS is considered the lead agency. The PA creates 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. The policy also dictates the NRCS process for dealing with the discovery of human remains and previously unknown cultural resources.

NRCS 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 projects covered under the permit coordination program, the NRCS serves as the lead agency to ensure protection of cultural resources in the project area. In these situations, the NRCS fulfills its National Historic Preservation Act, Section 106 requirements in accordance with the Programmatic Agreement (PA) in the following way:

- Step 1: NRCS determines if the proposed activity is considered an undertaking as defined in the PA.

- Step 2: If it is an undertaking, the NRCS conducts a cultural resources review to determine if known protected resources could be affected by the conservation practice.

- Step 3: NRCS conducts a site visit to the locations and completes a field inspection of the area to re-locate previously known cultural resources andor possibly located new cultural resources

- Step 4: NRCS consults with appropriate SHPO/THPO, tribes, and public groups to identify potential cultural resources and evaluates whether they would be adversely affected by the proposed project.

- Step 5: NRCS revises plans if necessary to avoid adverse impacts to cultural resources.

Cultural Resources Review under the Permit Coordination Program

Under the permit coordination program, NRCS field employees trained in cultural resources protection will determine whether or not there exists the likelihood for cultural resources to be present at the site and will plan projects to avoid potential impacts. Whenever cultural resources are suspected of being present at the site, the NRCS field personnel will contact the State NRCS Archaeologist to conduct a records search and possible field survey to determine the extent and significance of the cultural resources present at the project site and instruct planners on how to avoid them. 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 during Step 5 that impacts to cultural resources cannot be avoided, the project would not proceed under the permit coordination program.

Discovery of ***Cultural Resources or Human Remains***

The ***NRCS*** will protect cultural resources to the fullest extent possible. **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 ***NRCS*** will respond immediately. This will include requesting the landowner to halt actions in areas with potential to affect cultural resources and notify the ***NRCS'*** cultural resources coordinator immediately.

If human remains are uncovered, the ***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 Plant Species for the Santa Cruz Countywide 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	41
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 Plant Species for the Santa Cruz Countywide Permit Coordination Program

Approved *Native* Species

(Numbers in right columns refer to NRCS practice numbei

Scientific Name	*Common Name*	*Tree Shrub Grass Forb*	*Ann/ Per*	1/ 342	342	393	41	2/ 12	342	393	41	3/
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			
Eutherniaoccidentalis	Goldenrod	F	P	X	X	X			X	X		
Heliotropium curassivicum ar. 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	

Scientific Name	Common Name	Tree Shrub Grass Forb	An Per	1/ 342	342	2/ 393	412	342	3/ 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/r	342	342	X			X	
Festuca rubra[b]	Creeping Red Fescue	G	P	X	X			X		
Festuca rubra[b]	Red Fescue (Molate)	G		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	

Scientific Name	Common Name	Tree Shrub Grass Forb	Ann/ Per	1/ 342	342	2/ 393	412	342	3/ 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	Peerose	S	P	X	X			X		
Holodiscus discolor	Oceanspray	S	P	X	X			X		
Lonicera involucrata	black Twinberry	S	P	X	X					
Malosma laurina	Suma	S	P	X	X			X		
Polygonum paronchyl[a]	Beach Knotweed	S	P	X	X			X		

Scientific Name	Common Name	Tree Shrub Grass Forb	Ann/ Per	1/ 342	342	2/ 393	412	342	3/ 393	4
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		

Scientific Name	Common Name	Tree Shrub Grass Forb	Ann Per	1/ 342	1/ 342	2/ 393	2/ 412	3/ 342	3/ 393	3/ 412
Heteromeles arbutifolia	Toyon	T	P	X	X			X		
Platanus racemosa[c]	Western Sycamore	T	P	X	X			X		
Populus fremontiic	Fremont Cottenwood	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 andlor 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 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	–	?
Ailanthus altissima	Tree-of-heaven	x	x
Ammophila arenaria	European Beachgrass	x	x
Arundo donax	Giant Reed	x	x
Bromus rigidus	Rip gut grass	–	–
Calystegia sepium	Hedge Bindweed	?	?
Carduus pycnocephalus	Italian Thistle	–	–
Carpobrotus edulis	Iceplant	x	x
Centaurea solstitialis	Yellow Star Thistle	x	x
Cirsium vulgare	Bull Thistle	–	–
Conium maculatum	Poison Hemlock	–	x
Cortaderia jubata	Jubata Grass	–	x
Cortaderia selloana	Pampas grass	–	x
Cynodon dactylon	Bermuda grass	x	x–
Cytisus scoparius	Scotch Broom	x	x–
Cytisus striatus	Portuguese (Striatus) Broom	x	x–
*C. franchetti, C. pannosa**, C. lacteal*	Cotoneaster	x	x
Dactylis glomerata	Orchardgrass	x	x
Delaireia odorata	Cape Ivy	–	x
Ehrharta erecta, Ehrharta calycina	Veldt grass	x	x
Eucalyptus globulus	Eucalyptus	x	x
Erechtites glomerata	Australian fireweed	–	–
Erechtites mimima	Australian fireweed	–	–
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	–	?
Hordeum leporinum	Famer's foxtail	–	?
Leptospermum sp.	Australian tea tree	–	–

Scientific Name	Common Name	Do not Plant in Project Area[1]	Eradicate in Project Area[2]
Lolium multiflorum	Italian rye grass	?	x–
Lolium perenne	perennial rye grass	x	?
Marrubium vulgare	horehound	x	x
Medicago hispida	bur clover	–	–
Melilotus albus	white sweet clover	–	?
Myosatis latifolia	Forget-me-not	x	x–
Oxalis pes-caprae	Bermuda buttercup	x	x–
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	–	–
Silybum marianum	milk thistle	–	x–
Sonchus oleraceus	common sow thistle	–	–
Spartium junceum	Spanish Broom	x	x–
Tamarix ramosissima	salt cedar, tamarisk	x	x
Tradescantia sp.	Wandering Jew	x	x
Ulex europaea	Gorse	x	x–
Vinca major	Periwinkle	x	x
Xanthium stumarium	cocklebur	–	x

Key to Symbols:

(–) indicates that species is not commonly planted
(x) indicates species is uncontrollable;
(x–) 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 (CDFG) 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 "List of Preferred 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 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 nonnative 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)

EXHIBIT e

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, PLANNING DIRECTOR

NEGATIVE DECLARATION AND NOTICE OF DETERMINATION

Application Number: 03-0513 **County of Santa Cruz, for Resource Conservation District (RCD)**
Master Permit for various qualifying habitat and natural resource enhancement projects, to be undertaken by the Santa Cruz County Resource Conservation District (RCD) and the Natural Resource Conservation Service (NRCS). Master permit will cover the multiple individual projects that are anticipated over five years. The master permit will incorporate Coastal Zone permit, Riparian Exception, Grading Permit, Biotic Approval, Significant Tree Removal permit, Winter Grading Approval, and an encroachment permit for projects that include structures, such as drainage outlets, to be placed in the public right-of-way. The project location is Countywide (mostly along streams) in Santa Cruz, California.
APN: Countywide **Frank Barron, Staff Planner**
Zone District: Countywide

ACTION: Negative Declaration with Mitigations
REVIEW PERIOD ENDS: December 31,2004
This project will be considered at a public hearing by the Planning Commission. The time, date and location have not been set. When scheduling does occur, these items will be included in all public hearing notices for the project.

Findings:
This project, if conditioned to comply with required mitigation measures or conditions shown below, will not have significant effect on the environment. The expected environmental impacts of the project are documented in the Initial Study on this project attached to the original of this notice on file with the Planning Department, County of Santa Cruz, 701 Ocean Street, Santa Cruz, California.

Required Mitiaation Measures or Conditions: .
_____ None
__XX__ Are Attached

Review Period Ends December 31.2004

Date Approved By Environmental Coordinator March 4, 2005

KEN HART

Environmental Coordinator
(831) 454-3127

If this project is approved, complete and file this notice with the Clerk of the Board:

NOTICE OF DETERMINATION

The Final Approval of This Project was Granted by _____

on _____. No EIR was prepared under CEQA.

THE PROJECT WAS DETERMINED TO NOT HAVE SIGNIFICANT EFFECT ON THE ENVIRONMENT.

Date completed notice filed with Clerk of the Boa

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 (DFG) 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 on to the site without constant removal efforts.

D) Revegetation shall be limited to plantings from "List of Preferred Plant Species", Appendix B, 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 ~~(depending on the site)~~, ~~or~~ and until success criteria are reached. ~~subject to adaptive management techniques.~~ If information has been submitted by an NRCS consulting biologist 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.

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, PLANNING DIRECTOR

NOTICE OF ENVIRONMENTAL REVIEW PERIOD

SANTA CRUZ COUNTY

APPLICANT: **County of Santa Cruz. for Resource Conservation District (RCD)**

APPLICATION NO.: **03-0513**

APN: **Countywide**

The Environmental Coordinator has reviewed the Initial Study for your application and made the following preliminary determination:

XX Neaative Declaration
(Your project will not have a significant impact on the environment.)

XX Mitigations will be attached to the Negative Declaration.

_____ No mitigations will be attached.

_____ Environmental Impact Report
(Your project may have a significant effect on the environment. An EIR must be prepared to address the potential impacts.)

As part of the environmental review process required by the California Environmental Quality Act (CEQA), this is your opportunity to respond to the preliminary determination before it is finalized. Please contact Paia Levine, Environmental Coordinator at (831) 454-3178, if you wish to comment on the preliminary determination. Written comments will be received until 5:00 p.m. on the last day of the review period.

Review Period Ends: **December 31,2004**

Frank Barron
Staff Planner

Phone: 454-2530

Date: December 17,2004

COUNTY OF SANTA CRUZ

PLANNING DEPARTMENT

Date: November 1,2004
Revised: March 1, 2005
Staff Planner: Frank Barron

ENVIRONMENTAL REVIEW INITIAL STUDY

APPLICANT: Santa Cruz County Resource Conservation District and U.S.D.A. Natural Resources Conservation Service
820 Bay Ave, Suite 128 Capitola, CA 95010

APN: Various

SUPERVISORAL DISTRICT: All.

OWNER: Various
APPLICATION No: 03-0513
LOCATION: Multiple Project Locations, Santa Cruz County
EXISTING SITE CONDITIONS –Not Applicable for this Countywide project- see Environmental Setting for more information

Parcel Size: N/A
Existing Land Use: N/A
Vegetation: N/A
Slope: N//A
Nearby Watercourse: N/A
Distance To: N/A
Rock/Soil Type: N/A

ENVIRONMENTAL RESOURCES AND CONSTRAINTS - As a Countywide Project, work may occur in these areas.

Groundwater Supply: Possible
Water Supply Watershed: " "
Groundwater Recharge: " "
Timber or Mineral: " "
Agricultural Resource: " "
Biologically Sensitive Habitat: " "
Fire Hazard: " "
Floodplain: " "
Erosion: " "
Landslide: " "

Liquefaction: Possible
Fault Zone: " "
Scenic Comdor: " "
Historic: NA
Archaeology: Possible
Noise Constraint: " "
Electric Power Line:" "
Solar Access: " "
Solar Orientation: NA
Hazardous Materials: No

SERVICES- Not Applicable (countywide)
Fire Protection: N/A

Drainage District: N/A
School District: N/A
Project Access: N/A
Water Supply: N/A
Sewage Disposal: N/A

PLANNING POLICIES- Not Applicable (countywide)
Zone District: N/A
Special Designation: N/A
General Plan: N/A
Special Community: N/A
Coastal Zone: N/A
Within USL: N/A

PROJECT SUMMARY DESCRIPTION:

Summary Description of Project: Application for a Master Permit to be issued to the Santa Cruz County Resource Conservation District (RCD) for 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. The Master Permit would be issued by the County for a five-year period and may be renewed at the end of that period according to the conditions outlined in that approval. The Master Permit program requires a Riparian Exception, Coastal Permit, Grading Permit, Biotic Approval, Significant Tree Removal Permit, Winter Grading Approval, and an Encroachment Permit for projects that include structures, such as drainage outlets to be placed in County Right of Way.

DETAILED PROJECT DESCRIPTION:

The project involves approval of a Master Permit to be issued to the Santa Cruz County Resource Conservation District (RCD) to administer the Santa Cruz Countywide Permit Coordination Program, for small, environmentally beneficial projects on private lands in Santa Cruz County for a period of five years. The Master Permit identifies eligible project types, specifies criteria for design, lists information to be included in project plans, and establishes a set of conditions to be applied to each project. The Master Permit also prescribes the elements to be included in the project summaries provided by the RCD to the County (and other agencies) dunng the pre-notification process each construction season. Annual reports would be prepared by the RCD describing the projects completed over the previous year, identifying how compliance with Master Permit conditions of approval have been attained.

The Master Permit would authorize fifteen specific restoration and conservation practices, implemented in coordination with the U.S.D.A. Natural Resources Conservation Service (NRCS) and the Santa Cruz County RCD, under the terms and conditions developed in coordination with each of the regulatory agencies. For a list of the fifteen covered practices see Table 1 and for magnitude of the practices see Table 2. The projects authorized by the Master Permit will result in reduced erosion and improved wildlife habitat. The practices include improvements to access roads, critical area plantings, installation of swales and grassed waterways to slow runoff,

installation of filter strips, grade stabilization structures in gullies, fish habitat enhancements, removal and disposal of unwanted items from waterways such as abandoned cars and appliances, installation of sediment basins and associated outlets and energy dissipating structures, installation of pipelines to shift livestock to constructed water sources (existing sources) and away from streams, lakes and other sensitive habitats, and restoring and conserving rare or declining native vegetation communities by removing exotic, invasive plants and restoring native vegetation.

The restoration and conservation projects will be implemented by participants in the permit coordination program including ranchers, growers, land managers, and individual property owners (Cooperators) who work with the Santa Cruz County RCD and the NRCS. The NRCS and the Santa Cruz County RCD, project proponents, will assist Cooperators in project design and monitor implementation and maintenance of conservation practices to ensure performance with the conditions of the permit. The project proponents will submit pre-construction reports to the County regarding specific projects to be implemented and post-construction reports summarizing project construction. A Cooperator that works with the NRCS and Santa Cruz County RCD who signs a Cooperator Agreement in which they agree to follow the design and construction specifications provided in the "Project Plans and Specifications" developed in cooperation with the NRCS and RCD, will be allowed to implement the associated conservation practices without the need to seek individuals permits, provided the Cooperator follows the terms and conditions of the Master Permit and any other agreements from the permitting agencies. See also Section 2 for further description of the projects.

PROJECT SETTING AND BACKGROUND:

Surrounding lands are expected to be primarily agricultural, forest, or rural private properties within Santa Cruz County. Topography is variable, ranging from flat agricultural fields to steep slopes. Elevation ranges from 100 feet to about 3,000 feet. Vegetation community types within the project area includes grasslands, sandhills, redwood forests, riparian woodland, coastal scrub, closed cone coniferous forest, mixed evergreen forest, chaparral, foothill woodlands, oak savannah grasslands, and agricultural crops. Individual restoration and conservation projects may take place on access roads, on landings and ramp fills used for timber harvest activities. in stream channels, on stream banks, and in highly erodible upland locations.

I. INTRODUCTION, PURPOSE, AND NEED FOR THE PROPOSED PROJECT

The U.S.D.A. Natural Resources Conservation Service (NRCS) and the Santa Cruz County Resource Conservation District (SCCRCD) propose to assist private landowners, primarily in rural and agricultural areas within Santa Cruz County, by providing permitting assistance for projects that enhance the natural resource conditions of their properties, maintain economic viability, and help achieve important water quality and habitat conservation goals. The California Coastal Conservancy, the NRCS, and the Community Foundation of Santa Cruz have provided funding for the development of this program in Santa Cruz County.

The NRCS and Sustainable Conservation developed the Partners in Restoration (PIR) model in 1998 to alleviate permitting challenges associated with small, environmentally beneficial erosion control projects. The countywide permit coordination program for Santa Cruz will be based on the model developed in the Elkhom Slough watershed but tailored to the resource conditions present in Santa Cruz County watersheds.

Regulatory partners involved in the development and approval of this program include representatives from the following agencies:

- U.S. Fish and Wildlife Service (USFWS)
- National Marine Fisheries Service (NOAA Fisheries)
- U.S. Army Corps of Engineers (USACE)
- U.S. Environmental Protection Agency (USEPA)
- California Department of Fish and Game (CDFG)
- California Coastal Commission
- Regional Water Quality Control Board (RWQCB)
- County of Santa Cruz

Under the proposed program regulatory agencies enter into programmatic agreements with the NRCS and the SCCRCD to approve fifteen specific, standardized, conservation practices that will improve habitat and soil stability. The conservation practices are limited in size (see Table 2), have demonstrated a net environmental benefit, and are usually performed for erosion control or restoration in and around waterways. Landowners agree to follow NRCS designs and specifications for conservation work. Follow up and monitoring on each conservation project is done by the NRCS and the SCCRCD.

Watershed groups and individual landowners are eager to address the resource concerns in their watersheds and on their properties. The NRCS and SCCRCD work with landowners on an individual basis to encourage voluntary conservation and restoration efforts. However, the complex regulatory review processes often act as disincentives to voluntary efforts to reduce nonpoint source pollution and enhance habitat. Most landowners will continue existing land use practices if the time and cost of seeking governmental approvals for improvements exceed the perceived benefits of conservation activities.

The proposed Program would alleviate this disincentive and facilitate implementation of a larger number of high quality erosion control and habitat restoration projects on private lands in the project area. The program focuses on land management practices that are linked to degradation of aquatic habitats by providing a permitting mechanism for landowners to utilize The NRCS has the technical expertise and funding to carry out these practices and the federal mandate to protect natural resources by working with private landowners. By bringing these elements together under the proposed Program, it's expected that a greater number of voluntary conservation projects would be encouraged and carried out on private lands throughout the County.

II. ADDITIONAL PROJECT DESCRIPTION

A. Proiect Overview

In order to assist private landowners in Santa Cruz County with regulatory compliance, the SCCRCD and the NRCS seek to offer "one-stop permit shopping" to landowners in Santa Cruz County who agree to work under the guidance of the NRCS and SCCRCD. The Santa Cruz Countywide Partners in Restoration Program involves obtaining approval or agreements from all local, state, and federal agencies with jurisdiction over one or more of the 15 conservation practices included in the Program. By working with agencies that have permitting authority over the activities proposed for inclusion under the program, the 15 conservation practices described in Table 1 have been described and conditioned to incorporate agency recommendations. Following is a list of agencies participating in the permit coordination program and the type of permit or approval being issued

- Countv of Santa Cruz – Master Permit
- California Department of Fish and Game – Memorandum of Agreement and Individual 1602 Streambed Alteration Agreements (Permit)
- National Marine Fisheries Service (NOAA Fisheries)– Section 7 Consultation
- U.S. Fish and Wildlife Service Section 7 Consultation
- U.S. Army Corps of Engineers –Regional General Permit
- Regional Water Quality Control Board – 401 Water Quality Certification

The final agreements and permits issued for the program by the permitting agencies will include and establish specific conditions for the implementation of the conservation practices. These conditions may include temporal or seasonal constraints, limitations on the size or general location of the specified practices, and/or pre-construction notification for specific activities. These types of conditions will avoid or minimize the impact of the work on water quality and sensitive habitats and will ensure that the regulatory agencies' mandates are honored. The bulk of these measures have already been incorporated as part of the proposed project conditions. However, in issuing their final approvals for the program, the agencies may revise the final conditions slightly. The terms and conditions from regulatory agencies shall be included with NRCS Project Plans and Specifications for each technical assistance and cost share project implemented under this program. In addition, the resource agencies (namely CDFG, USFWS, County, and NOAA Fisheries) have reserved the right to propose additional conditions for individual projects on a site-specific basis if they feel these measures will afford a higher level of

protection to species or sensitive habitat. These additional conditions are expected to be minor adjustments to the individual projects in response to the site-specific conditions at a project site.

Under the Permit Coordination Program, when the NRCS and SCCRCD work with individual Cooperators, the project conditions and protection measures finalized in the permits and agreements issued by the agencies will be built into the individual projects. The Cooperator signs an agreement (a contract) that they will adhere to these conditions during implementation of their projects. The NRCS and SCCRCD provide the oversight and reporting to the permitting agencies to ensure that permit conditions are being adhered to. Projects that do not qualify for the permit coordination program (either because they use practices other than the fifteen listed practices or cannot meet the size limits or permit conditions) would use the traditional permit mechanisms.

B. Proiect Parameters

In order for an individual project to "fit" under the approvals issued for the proposed Program, the project must be consistent with the specific conservation and restoration activities described below and consistent with the permit conditions issued by the various permitting agencies. Actions that the NRCS and SCCRCD may promote on private lands in Santa Cruz County under the auspices of this project are limited to implementation and maintenance of fifteen conservation practices, which are listed below in Table 1. The following conservation practices were selected from the Natural Resource Conservation Service (NRCS) Field Office Technical Guide (FOTG), which contains over 200 standardized land improvement practices approved by the federal agency. Numbers in parentheses indicate the practice number as referenced in the NRCS FOTG. The practice standards and specifications have been further conditioned by the NRCS, SCCRCD, and participating regulatory agencies for use under the proposed Program and are described below

Table 1. Proposed **Cons rvation** Practices

1. Access Roads (Improvement) (560)	Improve an existing road used for moving livestock, produce, and equipment and 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 or removal of culverts from non-fish bearing' streams associated with access road improvements. **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

[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 CDFG **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.

	includes Waterbars (p. W-96).
2. Critical Area Planting (342)	Planting vegetation such as trees, shrubs, vines, grasses, or legumes, on highly erodible or critically eroding areas (does not include tree planting mainly for wood products). This practice is used to stabilize the soil, reduce damage from sediment and runoff to downstream areas, and improve wildlife habitat and visual resources. Plants may take up more of the nutrients in the soil, reducing the amount that can be washed into surface waters or leached into ground water. During grading, seedbed preparation, seeding, and mulching, quantities of sediment and associated chemicals may be washed into surface waters prior to plant establishment.
3. Diversion (362)	**A** channel constructed across the slope generally with a supporting ridge on the lower side to slow and redirect surface flow. This practice results in a reduction of sheet and rill erosion by reducing the length of slope. Sediment may also be reduced by the elimination of gullies, reducing the amount of sediment and related pollutants delivered to the surface waters. This practice may also be used to deliver water to a sediment basin or an open area where runoff can infiltrate the ground at a natural rate of flow. This practice does not result in a change in volume of flow, or flow reduction in surface waters. This practice does not involve the diversion of water from a waterway. This practice does not result in the redirection of flow to a new watershed. This practice applies to sites where: 1) runoff damages cropland, pastureland, farmsteads, or conservation practices; 2) surface flow and shallow subsurface flow caused by seepage are damaging land; **3)** runoff is in excess and available for use on nearby sites; 4) a diversion is reauired as part of a pollution abatement system: or 5) a diversion is required to control erosion and runoff.
4. Filter Strip (393)	A strip or area of vegetation for trapping sediment, oi_a matter, and other pollutants from runoff and wastewater. The strip or area is situated between cropland, grazing land, or disturbed land (including forest land) and environmentally sensitive areas. Installation often requires soil manipulation to remove surface irregularities and prepare for planting. When the field borders are located such that runoff flows across them in sheet flow, coarser grained sediments are filtered and deposited. Pesticides and nutrients may be removed from runoff through infiltration, absorption, adsorption, decomposition, and volatilization thereby protecting water quality downstream. However, they may not filter out some soluble or suspended fine-grained materials, especially during heavy rain events. Filter strips may also reduce erosion on the area on which they are constructed.
5. Fish Stream Improvement (395)	Improving 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 he 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, it may be implemented no more than two times annually under the program **only** if the following circumstance exists. In situations where water is actively or potentially deflecting water to a bank, threatening Mher 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 dnring 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 CDFG 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).
6. Grade Stabilization Structure (410)	**A** structure built into a gully to control the grade and prevent head cutting in natural or artificial channels. For the purposes of our 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 CDFG California Salmonid Stream Habitat Restoration Manual that could be utilized during implementation of the Grade Stabilization practice is Brush Mattressing **(p.** VII-79).

7. Grassed Waterway (412)	A natural or constructed channel that is shaped or graded to required dimensions and velocities, and established to suitable vegetation for the stable conveyance of runoff. 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.
8. Obstruction Removal (500)	Removal and disposal of unwanted structures from waterways 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 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.
9. Pipeline (516)	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 stream or water courses. The maximum livestock pipeline diameter would be 3 inches. While most activities will occur during the summer months when most areas are dry, dewatering may be required for some projects involving installation of a pipeline. 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.
10. 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. 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.
11. Sediment Basins (350) 'with or without water control (638)]	Basins constructed 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 matenals 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.
12. Stream bank Protection (580)	Using 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 fi-om 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, 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.
!3. Stream Channel Stabilization (584)	Stabilizing 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. This permit

	coordination 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 hank failure. This practice would not be used in fish bearing streams. This practice would not be used for routine maintenance involving dredging of a waterway. This practice would be used to remove sediment that has accumulated, primarily as a result of a catastrophic event such **as** a flood and it 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.
14. Structure for Water Control (587)	**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. 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).
15. Underground Outlets (620)	**A** conduit installed 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 the 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, sue, 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

Conservation practices may be applied within the working portion of farms or ranches or on natural areas of a property. Due to site constraints, some practices may require productive land to be retired to make space for the practice. Most conservation practices may be considered part of the farming or ranching operation even if the location can no longer be used for economic production. These practices are **an** integral part of production since they enhance resource conditions or filter and prevent loss of productive resources from adjacent crop or rangeland. To

achieve the desired environmental benefits, access to the conservation improvements shall be insured to allow for required ongoing maintenance.

The conservation projects are limited in size based on the following chart. The estimated dimensions are based on typical projects installed by the NRCS and SCCRCD in the region over the last several years. If any one parameter in the table below is exceeded, the project will not be covered under the Master Permit.

Table 2. Maximum Design Parameters: Dimensions and Volume Associated with Implementation of the Conservation Practices

Conservation Practice		Length (FT)	Width (FT)	Area of the Practice (AC)	Volume of Soil Disturbed" (cubic yards)	Additional Limitations
*1. Access Roads (Improvement) (560)** (Includes repair or removal of culverts from non-fish bearing streams)	*Average: work performed over 2 miles*	1000	30	0.8	750	
	Maximum: work performed over 12 miles	2000				
2. Critical Area Planting (342)	*Average:*	*500*	20	*0.25*	200	N/A
	Maximum:	5280	20	2.5	1000	N/A
*3. Diversion (362)**	*Average:*	1,000	10	0.2	400	
	Maximum:	2,000	10	0.5	800	100 cfs
4. Filter Strip (393)	*Average:*	500	20	0.25	200	
	Maximum:	2,000	20	1.0	800	N/A
*5. Fish Stream Improvement (395)***	*Maximum:*	1 mile with multiple structures at multiple bank locations		N/A	N/A	
6. Grade Stabilization Structure (410) (In non-fish bearing streams, primarily for gully repair)*	*Average:*	3 to 4 structures per 500 feet of gully		0.5		
	Maximum:	10 structures per 1,000 feet of gully		1.5	Max: 30 cu. yds. per structure; 300 cu. yds. total	300 cfs in the pipe

Conservation Practice		Length FT)	Width FT)	Area of the Practice AC)	olume of Soil isturbed[1] ubic yards)	Additional Limitations
. Grassed Waterway 412)	*Average:*	000	0	15	)00	
	Maximum:	1000	0	.0	)00	150 cfs
. Obstruction Removal (500) [3]	*Maximum:*	50	5	).2	/A	N/A
*. Pipeline (516) **	*Average:*	50	5		5	
	Maximum: (riparian)	200	20	1000 sq. ft.	0 [5]	300 psi
	Maximum (upland):	10000				300 psi
10. Restoration and Management of Declining Habitats 643)	*Average:*	500		).25	0	
	Maximum:	5280		2.5	00	N/A
11. Sediment Basin 350/638) (with (638) or without water control)*	*Average:*	N/A	N/A	).10	00	*0.5* acre-feet (AC) impoundment 6 ft embankment measured from the lowest point in the basin to the spillway 2:1 maximum slope
	Maximum:	N/A	N/A	*0.5*	000	2 AF impoundment 6 ft – 10 ft embankment measured from the lowest point in the basin to the spillway[6] 2.1 maximum slope
12. Stream bank Protection (580)	*Average: (vegetation)*	200	20	0.1	500	
	Maximum: (vegetation)	2000	*50*	2.5	4000 [7]	2000 cfs instream
Rockplaced would be	*Average:*	200	4	0.1		Max. volume

Conservation Practice		Length (FT)	Width (FT)	Area **of** the Practice (AC)	Volume **of soil** Disturbed" (cubic yards)	Additional Limitations
used at the toe of the bank in conjunction with bioengineering techniaues. The ***volumes*** *provided for the rock dimensions*	*(rock)*\8					of rock 100 cubic yards
	Maximum: (rock)\8	*500*	*5*	0.1	*300*	Max. volume of rock 300 cubic yards
13. Stream Channel Stabilization (584)	***Average:***	200	20	0.1	200	
	Maximum:	2000	20	1.0	1500	400 cfs
14. Structure for Water Control (587)*		n/a	n/a	n/a	n/a	40 cfs
15. Underground Outlets (620)*	***Average:***	N/A				
	Maximum: *(within riparian area)*	*50*	20	1000 sq. ft.	10\9	60 cfs

the volume c soil excavate(nd used as fill c

removed from site, or soil imported as fill.

\2 Access road improvements typically involve multiple installations spread out over a long reach of road. Maximum dimensions refer to actual area of improvement.

\3 Actual objects rarely exceed 10 ft. x 15 ft. Access to object may involve disturbance of up to 50' in length. Difficult to estimate total number of separate objects to be removed from stream. Maximum disturbance per project limited to .2 acres

\4 Area of practice includes a 100' stream width with 50' on either side of stream (total length 200') and a 20' wide potential work area for equipment.

\5 Volume of soil is based on a 2' wide trench over 200' buried to a depth of 3'. Add footnote 6 back in

\6 Embankment heights exceeding 6 A will he accompanied by additional technical information that has been reviewed and approved by County Geologist and County Civil Engineer.

All engineered practices will be designed to meet the minimum of a 10-year storm event.

\7 For vegetation treatments, soil disturbance assumed on maximum of 700' of 2000' max reach. Average depth of soil grading (cut or fill) is 3'.

\8 Numbers provided 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.

\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'.

*Per the County of Santa Cruz Master Permit requirements, the NRCS Area Engineer will be responsible for reviewing and signing plans that include those practices designated in Table **2** above with an asterisk. .The Pipeline practice will only require signoff by the NRCS Area Engineer if the project involves a riparian crossing.

** 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 County 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 determine 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.

The estimated number of individual projects to be implemented under the Program is 5-10 annually over the five-year life of the proposed Program. This permit coordination program does not cover projects that involve installation of grade stabilization structures in fish bearing streams. The project does not cover construction of dams or water diversions (although temporary diversion of water around a work space, during construction, is covered under the program). Landowners working with the NRCS or SCCRCD on projects that are not covered under this program will continue to seek permits on a project-by-project basis.

C. The NRCS Conservation Planning Process

Under the proposed Program, the NRCS and SCCRCD will follow the NRCS' Conservation Planning Process described below for all projects carried out under the program. The NRCS will maintain oversight of all projects and serve as a technical resource to the SCCRCD. The Natural Resources Conservation Service provides 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 employees have technical expertise and field experience including resource planning, including soil science, agronomy, biology, agroecology, range conservation, engineering, water quality, cultural resources, and economics. Technical support 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.

In Santa Cruz County, the NRCS shares an office in Capitola with the SCCRCD. 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 utilizes a rigorous planning process before offering recommendations to cooperators. As a federal agency, the NRCS must ensure projects are compliant with the National Environmental Policy Act (NEPA). NRCS is required to conduct an Environmental Evaluation for assistance it provides according to the NRCS-NEPA rules (7CFR 650), as updated by California Amendment CA4 in 2000. The procedures are designed to ensure that environmental consequences are considered in decision-making 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 and a NEPA compliant Environmental Assessment Worksheet (EAW) is completed (Appendix **A).**

The NRCS planning steps and specific tasks associated with the proposed Permit Coordination Program are listed below in Table **3.** Not all of the planning documents are generated anew for each farm, 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 Cooperator and the NRCS and result in a specific land use plan including detailed recommendations and an engineered plan if necessary. During the NRCS interdisciplinary planning process, an Environmental Assessment Worksheet (EAW) is used to document potential impacts of the preferred alternative. This document is then placed in the project case file. The EAW documents short term, long term, and cumulative effects of the proposed actions as well as the on-site and off-site impacts.

Table 3. How the Permit Coordination Program Builds on the NRCS 9-Step Planning Process

NRCS PLANNING STEP (and key documents used)	ACTIVITIES
Step 1. Identify Problems and Opportunities ***(Field Notes)***	Identify resource problems with the client (land operator) and other specialists. (*Field Notes*)
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). Specific **Tasks:** 3.a. NRCS or SCCRCD conduct site assessment for special status species' habitat in the project area. NRCS/SCCRCD staff working on the permit coordination program will be trained and familiar **with the** preferred habitats of

NRCS PLANNING STEP ,and key documents used)	ACTIVITIES
	the species potentially present in the project area. 3.b. For certain species and habitat (as specified by CDFG, USFWS, and NOAA Fisheries and discussed in Section C Biological Resources) if potential For presence of certain species exists at the project site (as specified in the final approvals issued by these resource agencies), the NRCS and SCCRCD contact resource agencies for guidance on how to proceed.
Step 4. Analyze resource data *(Quality Criteria)*	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 "alternativesanalysis." Specific Tasks: 6.a.Conduct wetland assessment to determine if a potential wetland exists. If a potential wetland is present, conduct wetland delineations in the project area (per Corps' and Coastal Commission definition of wetlands). 6.b. During investigation ofpotential presence of cultural resources, check the County map of sensitive cultural resource areas to determine if project area lies in an area designated as a "culturally sensitive area" by the County.
Step 7. Client determines course of action ***(Conservation Plan and Project Specifications)***	Assist client in selecting a system of optimal conservation practices to maximize resource protection and enhancement. NRCS prepares conservation plan and specifications and project Environmental Assessment Worksheet. Once the appropriate practices have been identified in the conservation plan, the NRCS prepares the project design (and engineering if an engineered project) according to NRCS recommended design, standards, and specifications. Specific **Tasks:** **7.a.** Develop Conservation Plan with the Cooperator. 7.b. Develop project designs with appropriate conditions. 7.c. Engineering review and sign-off: -If project involves placement of fill in the FEMA identified flood hazard area (Zones A, V, or floodway), a registered civil engineer will include analysis as part of the project plan that verifies that there will be no rise in the base flood elevation and no flood related off-site impacts that will result from the project.

NRCS PLANNING STEP ,and key documents used)	ACTIVITIES
	-If the project fall into the category of project types that requires review and signature by the NRCS Area Engineer (per County of Santa Cruz Master Permit requirements and indicated with an asterisk in Table 2), the NRCS Area Engineer will review and sign plans. If the project requires review by an RCE (see footnote in Table 2 per County of Santa Cruz Master Permit requirements), an RCE will sign the designs and plans. 7.d. Send project descriptions ("unofficial" preconstruction notification) to the agencies. 7.e. Meet with CDFG, NOAA Fisheries, and County in the field for those sites they request to see. 7.f. NRCS and SCCRCD incorporate recommendations of the agencies (additional protection measures) into the project descriptions. 7.g. Send revised project descriptions ("official pre-construction notification") to the agencies 7.h. Deliver Project Plans and Specifications to the Cooperator[2] 7.i. Complete Cooperator Agreement
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. Specific Steps: 8.a. A qualified individual approved by USFWS and/or CDFG performs pre-construction surveys if required (breeding bird survey prior to construction if working prior to August 1, California red-legged frog, San Francisco garter snake, and Santa Cruz long-toed salamander if potential habitat for these species is present in the project area, other surveys as required, etc.). 8.b. NRCS and SCCRCD provide construction monitoring during critical project points to ensure practices are being installed as outlined in the Conservation Plan and project specifications. 8.c. An onsite biological monitor (a qualified individual approved by USFWS, CDFG, and/or NOAA Fisheries depending on the potential species present) may also be required during any activities with the potential to disturb species or habitat (see Section D Biological Resources for instances where this is required) 8.d. Send October 1 notification to the agencies indicating those projects where revegetation will not be complete until November 15.
Step 9. Evaluation of results	Evaluate effectiveness of plan and make adjustments as needed.

The "Project Plans and Specifications" refers to the complete set of information provided to the participating landowner and would include the following: the Conservation Plan (developed prior to the rest of the documents), a Design Report, Practice Construction specifications, Practice Requirements (site specific specifications), Maintenance Plan, Drawings and Construction Notes, and Project Conditions (from the agencies).

NRCS PLANNING STEP (and key documents used)	ACTIVITIES
of plan	Specific Tasks: 9.a. Once the project is installed, the NRCS and SCCRCD conduct post-construction inspections to verify that the project was installed as described in the Project Plans and Specifications and is functioning as planned. If the project involves revegetation, project is monitored until vegetation is established. 9.b. NRCS and SCCRCD send annual report to the agencies which will describe each project implemented during that year, including a description of the area affected, natural biological enhancements, any net gains in wetlands and riparian areas, any listed species encountered and actions taken to avoid adverse effects to listed species, and provide photo documentation of before and after site conditions.

***Additional** Documents **Cons** e d *7.5"* topographic maps, aerial photos, soil survey: LCC, prime soils, soils statewide importance, unique soils, HEL, hydric conditio&, 303(d) list, Cultural Resources, NWI, EPA: ozone at PM10, National Range and Pasture Handbook DFG Rarefind Database/CNDDB, **FEMA** maps, County Archaeological Survey, Sandhills Habitat Management Plan, Santa Cruz long-toed salamander range map

Protection of Cultural Resources Under the Permit Coordination Program

For all conservation projects covered by the proposed permit coordination program, the NRCS identifies and examines the potential impacts to cultural resources and ensures that no significant adverse effects will result.

All projects implemented under the Santa Cruz Countywide Permit Coordination Program would be subject to NRCS assessment to ensure potential impacts to cultural resources are minimized. The NRCS has a Programmatic Agreement (PA) with the State Historic Preservation Office and the Advisory Council on Historic Preservation. The PA creates 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. The policy also dictates the NRCS process for dealing with the discovery of human remains and previously unknown cultural resources. (The original PA is currently undergoing revision at SHPO. In the interim, until the new PA is finalized, all projects will be considered undertakings and will be reviewed by the NRCS State Archaeologist or a contractor who is a qualified archaeologist. They will perform steps 2 through 5 below in accordance with Section 106 of the NHPA and 36 CFR 800 to ensure protection of cultural resources under the Program until the revised PA is in place.)

NRCS 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.

The NRCS fulfills its National Historic Preservation Act, Section 106 requirements in accordance with the Programmatic Agreement (PA) in the following way:

- Step 1: NRCS determines if the proposed activity is considered an undertaking as defined in the **PA.**
- Step 2: If it is an undertaking, the NRCS conducts a cultural resources review to determine if known protected resources could be affected by the conservation practice. The NRCS will also check the Santa Cruz County map showing sensitive cultural resource areas. Whenever cultural resources are suspected of being present at the site, the NRCS field personnel will contact the State NRCS Archaeologist to conduct a records search and possible field survey to determine the extent and significance of the cultural resources present at the project site and instruct planners on bow to avoid **them.**
- Step **3:** NRCS conducts a site visit to the locations and completes a field inspection of the area to re-locate previously known cultural resources and/or possibly locate new cultural resources.
- Step 4: NRCS consults with appropriate SHPO/THPO, tribes, and public groups to identify potential cultural resources and evaluates whether they would be adversely affected by the proposed project.
- Step ***5:*** NRCS revises plans if necessary to avoid adverse impacts to cultural resources.

Under the permit coordination program, NRCS field employees trained in cultural resources protection will determine whether or not there exists the likelihood for cultural resources to be present at the site and will plan projects to avoid potential impacts.

Discovery of *Cultural Resources* ***or*** *Human Remains*

The NRCS will protect cultural resources to the fullest extent possible. 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

Temporal Limitations on Construction	The timing of project construction will take into consideration wildlife usage in the project area. The general construction season for activities ***carried*** out under the proposed Program would be June15 to October 15[3]. Revegetation may continue beyond October 15 to November 15. Exceptions and/or further restrictions to this general timeframe include: • Work in the upland areas may begin on April 15 • If working within 200 feet of established riparian vegetation (or other special status bird potential nesting habitats) or if constructing a sediment and/or water

[3] Earthmoving activities would **be complete prior to** October 15.

	occur during this period, a qualified individual approved by USFWS andor CDFG will 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 CDFG) verifies that birds have fledged or nest is abandoned. If any listed or sensitive bird species are identified, CDFG must be notified prior to further action. Take of active bird nests is prohibited. The NRCS and SCCRCD may request exemptions to this requirement from CDFG on a project-by-project basis. • If suitable habitat for the California red-legged frog occurs in the project area, construction activities will begin after July 1 • If potential habitat for the marbled murrelet occurs in the project area, work with either begin after September 15 or the NRCS/SCCRCD 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 will begin after August 15 (unless USFWS gives prior approval to the NRCS/SCCRCD 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 would begin after August 31 (Note: **USFWS** would notify NRCS/SCCRCD if least Bell's vireo are discovered in Santa Cruz County during the life of the Program) • Work beyond the proposed end date (past October 15 for earthmoving activities) may be authorized following consultation with DFG, USFWS, *Corps,* NOAA Fisheries, and Santa Cruz County. Specific conditions for "winter grading approval" associated with construction work that extends beyond Oct. 15 will be included in the Master Permit to be issued by the County. Additional erosion control measures, as described below under **Conditions for** Erosion Control, will be implemented for work conducted during the winter period (generally defined as October 15 through April 15 ~~May 15~~). These measures would be complete and in place by October 15.
imitation **on** Earthmoving ınd Vegetation Removal (Site Disturbance)	Disturbance to existing grades and vegetation will be limited to the actual site of the conservation project and necessary access routes. In many cases, project activities would utilize existing staging areas. In areas where a new staging area must be created, :he typical size of the staging area including access roads is expected to be less than).25 acres. Provisions of the Santa Cruz County Grading Ordinance (Chapter 16.20) shall be followed. Finished grades will 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 Fade. Placement of temporary access roads, staging areas, and other facilities shall avoid and limit disturbance to habitat **as** much as possible. Installed practices will be nade to look as natural as possible and aesthetically pleasing when visible in the public viewshed. Disturbance of native shrubs, woody perennials or tree removal on he 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 will be replaced at a 3:1 ratio and maintained and monitored until established (unless the species readily replaces itself, e.g. Alder). If riparian vegetation will be disturbed. it will be replaced with similar and/or native 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 will 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 will 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 will 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.). If potential wetlands are identified in the project area, wetland delineations will 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 will be used to avoid potential impacts[4]. Implementation of practices shall minimize all potential contributions of sediment to waterways short-term disturbance will result in insignificant amounts of fine sediment. To the greatest extent possible, excavated materials will be re-integrated on site. In the rare situations where excavated material is not used in the implementation of the practice it will be removed and placed at sites that are not within riparian areas, wetlands, or the Federally identified floodway or floodplain. Any fill placed within the one hundred year floodplain would be done in a manner to ensure there will be no rise in the base elevation and no flood related off site impacts. This will be verified by a registered civil engineer. Upon completion of grading, slope protection of all disturbed sites will be provided prior to the end of the construction season through a combination of permanent vegetative treatment, mulching, geotextiles, and/or rock'.
Limitations on Construction Equipment	The NRCS and SCCRCD shall ensure that the use or storage of petroleum-powered equipment shall be accomplished in a manner to prevent the potential release of petroleum materials into waters of the state (Fish and Game Code 5650). All workers shall be informed of the importance of preventing spills and of the appropriate measures to take should a spill occur.

The 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(CCR) Section 135770

[5] A list of preferred species for revegetation is included as Appendix B.

The following precautionary measures will be adhered to:

- NRCS schedules excavation and grading activities for dry weather periods.
- **A** contained area is designated for equipment storage, short-term maintenance, and refueling. It is located 100 feet from water bodies. If site conditions (property size) make this 100-foot distance infeasible, these activities will occur at the maximum distance possible from aquatic areas.
- Vehicles are inspected for leaks and repaired immediately.
- Leaks, drips and other spill are cleaned up immediately to avoid soil or groundwater contamination.
- Major vehicle maintenance and washing will be done in a manner that protects the environment.
- All spent fluids including motor oil, radiator coolant, or other fluids and used vehicle batteries are collected, stored, and recycled **as** hazardous waste off site.
- All construction debris and sediments (if sediments are not incorporated on site) are taken to appropriate landfills. Plans shall indicate the approved disposal site.
- Dry cleanup methods (i.e. absorbent materials, cat litter, and/or rags) are used whenever possible. If water is used, the minimal amount required to keep dust levels down is used.
- Spilled *dry* materials are swept up immediately.
- All questionable motor oil coolant, transmission fluid, and hydraulic fluid hoses, fitting, and seals on Construction equipment will be replaced. All mechanical equipment will be inspected on a daily basis to ensure there are no motor oil, transmission fluid, hydraulic fluid, or coolant leaks. All leaks will 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 will not dump any trash or construction debris into the wetted channel.
- During the project activities, all trash and food that may attract potential predators of salmonids (e.g. raccoons, piscivors, etc.) will be properly contained, removed from the work site, and disposed of daily.
- When working in fish-bearing streams, oil absorbent and spill containment materials will be located on site when mechanical equipment is in operation. **If** a spill occurs, (1) no additional work will occur in-channel until mechanical equipment has been inspected and the leak has been prepared, (2) the spill has been contained, and (3) the CDFG 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, if it is necessary to repeatedly cross a 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 with be installed and utilized. When possible, NRCS/SCCRCD 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 after this option has been determined infeasible will the use of tracked vehicles be considered. 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 will be replaced to a similar density with native species. No staging will occur in wetlands. If it is not feasible to completely avoid movement of construction vehicles through wetlands, whenever possible rubber tired vehicles will be used or a mat will be laid down prior to moving across these areas.
Revegetation of he Project Area and Removal of Exotic Plants	The project area vegetation shall be restored to pre-construction condition or better and maintained until this goal has 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 15 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, or hydroseeding with non-invasive, grass species prior to tbe close of the construction season (See Appendix B for full list of preferred species for revegetation). If native vegetation is disturbed during project implementation, the 'native plant community will be restored to preconstruction condition or better. Native plants characteristic of the local habitat type shall be the preferred alternative for revegetation (see Appendix B for the full list of approved native plant 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 (Appendix B) as susceptible to genetic swamping. If the native local ecotype is not commercially available and that species is identified as susceptible to genetic swamping, another native species may be used in its place. Revegetation of a native community may not occur if there is a concern that nursery stock will introduce diseases into a susceptible community and if the community itself can regenerate (i.e. Alders). In this case, an annual grass species may be used for one-year erosion control (see Appendix B for full list of approved 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 NRCS and SCCRCD until vegetation is established and the project is functioning as intended. Revegetation success will be documented in the annual report provided to the regulatory 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 will be removed by hand. To the extent possible, revegetation should be implemented at the same time removal of exotic vegetation occurs. If Arundo donax (or similar exotics that reproduce from cuttings) is removed, cuttings will be disposed of in a manner that will not allow re-establishment to occur and will not expose other areas to cuttings.
Conditions for Erosion Control	Eartbmoving activities will be completed prior to October 15. **Work** beyond October 15 (with the exception of revegetation until November 15) shall be specifically authorized in advance by the agencies. Specific conditions for "winter grading approval" associated with construction work that extended beyond Oct. 15 will be included in the Master Permit to be issued by the County. All inactive areas (defmed **as** a five-day period) shall have all necessary soil stabilization practices in place two days after identification of inactivity 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. Erosion control measures are incorporated into the engineering design developed for each project. 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 will 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. Streambank, ground and/or soil (except for soil in agricultural fields) exposed as a result of construction, soil above toe-rock shall be revegetated by live planting, seed casting, or hydroseeding prior to November 15 of the project year. All debris, sediment, rubbish, vegetation 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.
Limitations on Work in Streams **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 the stream diversion systems shall remain in place and functional throughout the construction period. If the coffer dams 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 will 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 NRCS/SCCRCD will comply with the terms and conditions outlined in the Biological Opinion issued for the Program, and any subsequent conditions, issued by NOAA Fisheries for this project.

	No creosote treated timbers shall be used for instream structures. No gabions or concrete will be used in fish bearing streams, In non-fish-bearing streams they may be used above the high water **mark** only. Ifused, 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 DFG-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 DFG requests during their annual pre-construction review of projects that other measures be implemented. All debris, sediment, rubbish, vegetation, or other material removed from the channel banks, channel bottom, 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 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.
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 critical area plantings. Soil amendments will 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 will 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 CDFG. 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.

In addition to the General Measures described above, the following additional protection measures will be implemented when each of the following conservation practices are implemented as part of a project under the permit coordination program.

Table 5. Environmental Protection Measures and Conditions for Specific Conservation Practices

Access Road Improvement)	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.
Critical Area Planting and Restoration and Management of Declining Habitats	When implementing or maintaining a critical area planting above the high water line, a filter fabric fence, fiber rolls and/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 or straw bales. Periodic review by NRCS/SCCRCD shall occur until the critical area planting is established to control erosion.
Diversion	This practice does not result in a change in volume of flow, or flow reduction in surface waters. This practice does not involve the diversion of water from a waterway.
Filter Strip	No additional measures are identified.
Grade Stabilization Structure	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 fisher). 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 CDFG California Salmonid Stream Habitat Restoration Manual that could be utilized during implementation of the Grade Stabilization practice is Brush Mattressing (p. VII-79).
Grassed Waterway	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]
Fish Stream Improvement	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 CDFG.

[6] A list of preferred species for revegetation is included as Appendix B.

	No chemically-treated timbers shall be used for grade or channel stabilization structures, bulkheads or other instream structures.
Obstruction Removal	Wherever possible, **hand** labor will be used, however, heavy equipment such as mechanical excavators may be employed in some projects, particularly where the project requires removal of larger items such as cars and appliances. 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 andor 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.
Pipeline	Pipeline shall be installed and maintained only when a streambed is dry or dewatered. Trenching associated with this practice must be a minimum of three feet deep. Trenching depth for installation of the Pipeline practice will be deep enough to ensure that scour does not eventually reach the surface of the pipeline. If an open-trench method **is** used to install the pipeline when working in a waterway, the Operator shall remove and stockpile separately the top six to twelve inches of soils and material. This stockpiled material will be replaced at the end of construction and the stream channel returned to pre-project grade. In the rare circumstance that trenches must be dewatered (i.e. because of unanticipated seepage into the trench), a pump will be used to dewater the trench and water will be pumped to a detention area outside of the channel. No trenching activities would occur during a storm event.
Sediment Basin with or without water control	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 CDFG 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 under *General Project Conditions, **Temporal Limitations on Construction***. If the project may create standing water for greater than one week, the Mosquito and Vector Control program will be contacted. 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.
streambank Protection	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.
Stream Channel Stabilization	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).
Structure **for** Water Control	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 NRCS/SCCRCD 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 may create standing water for greater than one week, the Mosquito and Vector Control program will be contacted.
Underground Outlet	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.

In addition to the measures described above, species-specific protection measures have also been developed in coordination with USFWS, CDFG, and NOAA Fisheries. These measures are discussed in Section D Biological Resources. Although the NRCS and SCCRCD have worked with the agencies to develop these conditions over the last year, the final permits/approvals have not yet been issued by the permitting agencies. It is possible that in some cases the final conditions may vary slightly from the conditions described in this document.

E. Procedures for Complying with Permits

NRCS and SCCRCD training in the Capitola office shall clearly stipulate the special conditions issued in the final agency approvals for the proposed Program. All NRCS and SCCRCD staff that will be working on the permit coordination program (including NRCS staff from the Salinas Area Office) will participate in the training. The NRCS and SCCRCD will administer the program using a manual that will be developed once all of the permits and approvals have been issued to be entitled ***Procedures for Complying with Multiple Permits: A Guide for Conservation Planners,*** a manual that will be designed specifically for the permit coordination program. The guidebook will create a process for ensuring individual projects qualify for the program; lists conservation practice selection, design, and implementation criteria and conditions required by the agencies in their individual permits; provides information on endangered species habitat; and details the monitoring and reporting requirements of the program.

F. Individual Project Notification to Regulatory Agencies

Annually, the RCD/NRCS shall provide regulators, including but not limited to the U.S. Fish & Wildlife Service, NOAA Fisheries, U.S. Army *Corps* of Engineers, Regional Water Quality Control Board, California Department of Fish & Game, and Santa Cruz County, with pre-construction written notification of the proposed projects to be performed. Notification shall consist of the following information:

- Project identification and location.
- Nature of work and description of project need.
- Approved practices to be installed.
- Location of work to be performed.
- When native vegetation will be removed and revegetation will occur, a visual assessment of dominant native shrubs and trees, approximate species diversity, and approximate coverage.
- Environmental setting – surrounding habitat, adjacent land use.
- Potential presence of listed species (indication that CNDDB **map** has been consulted for species-checkbox)
- Estimated number of creek crossings and type of vehicle.
- Presence of barriers to aquatic species migration.
- Any wetland disturbance.
- Indication that County cultural resources map has been consulted to determine if the project is located in an area designated as "sensitive" according to the County map (checkbox)
- 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).

Upon receipt of the annual notification, regulators will review the *summary* information provided for each proposed project. They may request a meeting or site visit(s) to review the projects to provide additional recommendations based on site-specific conditions. Typically these additional recommendations are a result of site-specific conditions that require the resource agencies to propose conditions that will afford a higher level of protection for sensitive species or habitat. The NRCS and SCCRCD will work with agencies to ensure these measures are feasible and will build these additional conditions into the project descriptions. The NRCS/SCCRCD will then redistribute the final summary project descriptions to the agencies (with any additional conditions that have been incorporated into the projects). The NRCS and SCCRCD will also provide the agencies with a mid-construction season (October 1) report and **an** annual report that indicate the status of the projects implemented that year.

G. Cooperator Agreements

Individual property owners and managers participating in this program are referred to as Cooperators. Individual Cooperator Agreements between RCDMRCS and the landowner and/or party legally responsible for carrying out the work and the contractors performing the work will be signed to ensure that projects are constructed in compliance with NRCS conservation planning requirements and regulatory safeguards established as part of this Program.

H. Compliance and Non-Comuliance

Prior to implementation of the practices, the NRCS or SCCRCD shall clearly notify the Cooperator of the permit terms and conditions through a signed Cooperator Agreement. If a Cooperator does not carry out work consistent with NRCS' design standards and specifications, including the previously agreed upon terms and conditions, NRCS or SCCRCD shall notify the Cooperator and work directly with them to resolve the problem. If the Cooperator still fails to conform to the standards set forth in this Program, the NRCS or SCCRCD 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'spermits and agreements.

I. Maintenance and Monitoring of Conservation Practices

Pre-ConstructionMeeting with Cooperator and Project Workers
Prior to the onset of activities that result in the disturbance of habitat or individuals of any listed species, all project workers including NRCS and SCCRCD staff and growers, 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 Endangered Species Act, conditions of any approvals granted by the resource agencies, and the specific protective measures to be followed during implementation of the practices. Videos, brochures, books, and briefings may be used in the educational program, provided qualified NRCS or SCCRCD staff is on hand to answer questions.

ConstructionMonitoring
Under the proposed Program, the NRCS and SCCRCD monitor construction activities with onsite compliance until implementation of the practices is complete to ensure compliance with the measures developed in coordination with the permitting agencies. The frequency of onsite monitoring by the NRCS and SCCRCD during construction will be determined by the complexity of the project and the sensitive resources present. Depending on the project type, there may be critical points in the construction activities where the NRCS and SCCRCD will need to be onsite to monitor implementation (for example, to ensure appropriate depths for trenching or compaction). In cases where suitable habitat for particular species (as identified by the resource agencies), a qualified individual approved by FWS, CDFG, and/or NOAA Fisheries (depending on the species potentially present) will be onsite to do biological monitoring to ensure specific avoidance and protection measures required by the agencies are adhered to during project implementation. The NRCS and SCCRCD will also conduct post-construction inspections to ensure the project has been installed as prescribed in the project plans and specifications.

Follow-up Monitoring and Reporting
Following the initial installation of a project, the NRCS and SCCRCD will continue to monitor the project, at least annually until it is functioning as planned. Status Reviews shall be conducted for all projects carried out under the permit coordination program until projects are installed and are functioning according to design standards and serving their intended purpose. If 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.

Status Reviews examine the practices in terms of their current condition, check the practices against the original plan and provide recommendations for resolving any problems with the implementation of the practices. Under the proposed program, NRCS and SCCRCD shall provide written notification of the status of all projects to permitting agencies in the form of an annual report. The annual report shall list participating land owners, describe each project purpose, area affected, natural biological enhancements, and grading volumes, cut and slope of the work. It shall list conservation benefits and any net gains in wetlands and riparian areas, describe actions taken to avoid adverse effects to listed species, and provide photo documentation of before and after site conditions. The report shall be based on NRCS Status reviews and will be distributed to the participating agencies on January 31 of each year.

ENVIRONMENTAL REVIEW CHECKLIST

A. Geology and Soils

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	NO Impact
GEOLOGY **AND** SOILS – Does the project have the potential to:				
1. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
a) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of			√	

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
a known fault? Refer to Division of Mines and Geology Special Publication 42.				
b) Strong seismic ground shaking?			√	
c) Seismic-related ground failure, including liquefaction?			√	
d) Landslides?			√	
2. Subject people or improvements to damage from soil instability as a result of on-or off-site landslide, lateral spreading to subsidence, liquifaction, or structural collapse?			√	
3. Develop land with a slope exceeding 30%			√	
4. Result in soil erosion or the substantial loss of topsoil?			√	
5. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to property?				√
6. Place sewage disposal systems in areas dependent upon soils incapable of adequately supporting the use of septic tanks, leach fields, or alternative waste water disposal systems?				√
7. Result in Coastal cliff erosion?				√

Discussion of Geology and Soils

I-3, and 5. The county is located in the vicinity of at least six major regional seismic fault systems, and is therefore situated in an area of high seismic risk. Faults in the county include the San Andreas, Zayante, Ben Lomond, San Gregorio, Butano, and the Monterey Bay Fault Zone. Each of these regional faults is considered active or potentially active (i.e., characterized by movement within the last 200 years), except the Ben Lomond Fault, for which insufficient data is available to determine its activity (Santa Cruz County RTC 2001). Many hillside areas of the

county are susceptible to landslides, particularly in areas with steeper slopes, such as *the* San Lorenzo Valley area, Summit, and canyons countywide. In addition, coastal bluffs have historically been subject to slope instability. Landslide deposits are common in large portions of the County (Brabb et al. 1989). Given this setting, ground shaking may occur anywhere in the project area.

All conservation practices included under the proposed Program include Standards and Specifications that guide the design of *these* practices. The risk of slope failure, liquifaction or structural failure is also addressed during the NRCS planning process. NRCS planners assess the soil type and condition (including soil erosion potential, soil slippage, landslides, subsidence, compaction, etc. by referencing landslide and geology maps) during the project planning to assess what the optimal solution will be for a particular site. NRCS engineers consider physical factors on site when selecting and designing structures. Typically the NRCS chooses not work in areas of known geologic instability. Given this process, potential risks associated with placement of structures in areas with the potential for strong seismic shaking, ground failure, or expansive soils are expected to be less than significant.

Finding: Less than significant.

4. .Installation of erosion control and streambank stabilization projects, installing sediment basins, stabilizing upland areas through road improvements and gully stabilization projects, and improving the stability of stream banks through bank stabilization and restoration projects would have the beneficial effects of reducing soil erosion and protecting against the loss of topsoil. Many of the projects to be implemented under the proposed program have the stated purpose of reducing or eliminating soil erosion and will have an indirect positive impact of slope stabilization, particularly if the project involves bank protection. The potential for temporary erosion impacts to occur during construction will be minimized by implementing the measures described in Table **4,** General Project Conditions and offset by the long-term beneficial effects of the practices once installed.

Finding: Less than Significant Impact.

6 and 7. No septic tanks or alternative wastewater disposal systems would be installed under the program. Projects implemented under the program would not result in cliff erosion.

Finding: No Impact

B. Hydrology and Water Quality

Watersheds in the Project Area: The proposed project area encompasses all waterways within Santa Cruz County. Major watersheds in Santa Cruz County include the San Lorenzo River, Scotts Creek , Soquel and Aptos creeks, Waddell, and the Corralitos and Salsipuedes subbasins of the Pajaro River. Smaller watersheds in the County include Arana Gulch, Rodeo Gulch, and *the* North Coast streams of San Vicente, Liddell, Laguna, Davenport Creek, Majors Creek, San Andreas, Swanton Bluffs, and Baldwin and Wilder creeks. Associated waterways and land uses within Santa Cruz County watersheds are described in detail in Appendix C.

Water Quality: Several of the waterways in Santa Cruz County are listed on the Clean Water Act Section 303(d) List of Impaired Water Bodies. While sedimentation/siltation is a significant problem for most of the listed waterways (discussed in detail in Appendix C), nutrients, pathogens, pesticides, and coliform bacteria are also pollutants of concern for these drainages. In August 2001, Santa Cruz County released the ***San Lorenzo River Watershed Management Plan Update, Evaluation of Urban Water Quality, Task 4 Report*** (Ricker et al. 2001). Urban runoff is a significant source of pollutants in the San Lorenzo River. According to the report, the most significant water quality impairment that results from urban runoff in the San Lorenzo River is the bacteria contamination that occurs during both dry weather and storm runoff conditions. The Lower San Lorenzo River is subject to elevated levels of fecal coliform and enterococcus bacteria, significantly in excess of body contact standards. Fecal coliform bacteria is an indicator for the presence of disease-carrying organisms. Common sources include livestock waste, failing septic tanks, and unidentified non-point sources (Ricker et al. 2001).

Excessive nutrients, such and phosphorus and nitrogen are also identified as sources of pollutants in some Santa Cruz waterways. Sources of excessive nutrients in Santa Cruz County include stormwater runoff, removal of riparian vegetation, and nonpoint source pollution. Excessive nutrient loading is deleterious to water quality because it supports the growth of algae and other aquatic plans, particularly in lakes, which deprive other aquatic life of oxygen.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	Nil Impact
HYDROLOGY AND WATER QUALITY -- Would the project:				
1. Place development within a 100-year flood hazard area?			√	
2. Place development within the floodway resulting in impedance or redirection of flood flows?			√	
3. Be inundated by a seiche or tsunami?				√
4. Deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit, or a significant contribution to an existing net deficit in available supply, or a significant lowering of the local groundwater table?				√
5. Degrade a public or private water supply? (Including the contribution of urban contaminants, nutrient				√

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	NO Impact
enrichments, or other agricultural chemicals or seawater intrusion).				
6. Degrade septic system functioning?				√
7. Alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or nver, in a manner which would result in substantial erosion or siltation on- or off-site?			√	
8. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?			√	
9. Contribute to flood levels or erosion in natural water courses by discharges of newly collected runoff?			√	
10) Otherwise substantially degrade water quality?				J

Discussion of Hydrology and Water Quality

Projects implemented under the proposed permit coordination program would result in beneficial impacts to water quality. Temporary increases in sedimentation and turbidity levels in the stream near the work area may occur as a result of construction activities. These temporary adverse effects during construction would be offset by the long-term beneficial effects associated with water quality improvements directly tied to the reduction of sediment entering stream habitats in the project area. These practices are predominantly installed on farms, ranches, and rural residential areas to prevent erosion and the release of sediment, in riparian areas and stream banks to reduce bank erosion, head cutting, scour and sedimentation, and in erosion gullies to reduce head cutting, reduce down cutting, and stabilize the channel. Though some of the practices alter existing waterways or drainage courses, the alteration uses natural materials wherever possible, reduces erosion and sedimentation and improves the natural functioning. The conservation projects are designed to minimize impacts during construction. Thus, any short-term contributions of sediments from construction are offset within the first year by the functioning of the conservation practice. Further, any practice occurring in a stream or near a stream bank will be governed by a Stream Alteration Agreement issued by the California Department of Fish and Game.

1-2. Any fill moved and/or placed within the one hundred year floodplain would be done 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 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 flood elevation and no off-site impact. This includes footings, supports, approaches, and other elements of bridges that are below the BFE, as well as materials placed to protect those elements, such as rip rap or concrete aprons.

Projects carried out under the proposed program would not expose people or structures to a significant risk of loss, injury or death. Practices that include impoundment of water will be limited in size (embankment height and volume) and designed to meet geotechnical and engineering standards and regulations.

Finding: Less than significant impact.

3, 4, 5, and 6. The proposed Program would not increase the **risk** of inundation by seiche, tsunami, or mudflow. The proposed Program would not result in the substantial depletion of groundwater in the project area. Temporary changes in the course and direction of surface water flow could result during construction activities (which in some cases may require dewatering of a workspace) and have a very localized, temporary impact on local groundwater table levels. Any temporary impacts due to flow diversions would be negligible. The Program would not degrade a public or private water supply or degrade septic system functioning.
Finding: No Impact.

7. In some cases, implementation of conservation practices may require the temporary diversion of a water course around a worksite in order to minimize potential effects to aquatic species and water quality. This change would be temporary and returned to pre-construction conditions upon completion of the construction activity. Some conservation practices such as Grassed Waterway, Diversion, and Access Road Improvement may result in a change in local drainage patterns on site. However, these practices are designed to improve drainage and reduce erosion in a project area and would result in beneficial impacts regarding sedimentation off-site.

The specific practices as described in the NRCS/SCCRCD documents will not increase runoff or contribute to flooding offsite. Drainage would never be diverted to a different watershed under the proposed Program.

Finding: Less than significant impact.

8-9. The proposed Program would not create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff in the project area. The purpose of many of the conservation activities covered under the proposed Program is to reduce and slow runoff from a property site, thereby reducing the amount of pesticides, nutrients, and sediment from entering creeks and streams. Practices such as Grassed Waterways, Diversion, Filter Strips, and Sediment Basins are specifically designed to minimize runoff (and associated sediment and pollutants) from

agricultural and rural areas before it enters waterways. Benefits associated with implementation of conservation activities are achieved by improving infiltration of runoff through the use of increased vegetative cover of bare soils (Critical Area Planting, Filter Strips, and Grassed Waterways) and slowing of runoff through the 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 (Access Road Improvement). All work in channels would involve the use of NRCS hydrological engineering procedures and manuals and designs for certain categories of projects will be signed by a Registered Civil Engineer (see Table 2 for list).

Water quality improvements are an expected benefit to result from the proposed Project. The potential for temporary impacts to water quality during construction will be offset by the protection measures given in Table 4, General Conditions for all Projects.

Finding: Less than significant impact.

10. The Project will be in compliance with water quality standards. Applicants will obtain and comply with conditions of a 401 Water Quality Certification from the Central Coast Regional Water Quality Control Board and therefore will not violate water quality standards or waste discharge requirements.

Finding: No impact.

C. Biological Resources

The topography and varied soil types characteristic of Santa Cruz County support diverse habitats that in turn support diverse assemblages of species, many of which are protected under the Federal and State Endangered Species Acts. Some of the principal plant communities present in the county and their occurrence in the county, as described by the California Native Plant Society, are summarized below (California Native Plant Society 2003).

Grassland
Much of the County's coastal prairie has been converted to agriculture and development. The remaining areas have been invaded by exotic weeds, such as annual fescues (*Vulpia bromoides*), bromes (esp. *Bromus diandrus*), velvet grass (*Holcus lanatus*), and thistles (esp. *Carduus pycnocephalus*). The remaining, intact areas of coastal prairie are recognized by the patchy presence of California oatgrass *(Danthonia californica and Nassella pulchra)* and/or wildflowers, such as native bulbs (*Brodiaea* and *Triteleia* species), lupines (*Lupinus nanus*), self-heal (*Prunellus vulgaris)*, and many others. The best areas to view coastal prairie are at UCSC's upper campus (Marshall Meadows), State Parks' Gray Whale Ranch, and just north of Año Nuevo along the coast south of Franklin Point.

Coastal ***Scrub***
Coastal scrub grows on marine bluffs and hills, consequently experiencing salt air, fog and strong winds. Plants are generally less than **six** feet tall and include buckwheat, sagebrush, yarrow, lupine, and coyote bush.

Coastal Strand
European beachgrass and iceplant introduced to stabilize sand dunes have changed the vegetation patterns of the local coastal dunes. In native dune stands, a low ground canopy is formed by perennial forbs, grasses, and low shrubs, including such plants as pink sand-verbena, saltgrass, native dunegrass, and coyote brush. Sand dunes remain at Wilder and Waddell beaches in the north county and Sunset Beach in the south.

Coastal Salt Marsh
Though much of the original salt marshes have been destroyed, several remain at creek mouths, especially along the north coast. Common plants include species of cordgrass, pickleweed, and saltgrass. Brackish marshes may also contain bullrushes and cattails.

Fresh Water Marsh
Seasonally or permanently flooded areas along streams, lakes, ponds, and springs provide habitat for the fresh water marsh species, which include bulrushes, sedges, cattails, and rushes. The mouths of some local creeks form marshes that are brackish at the lower end and fresh water at the upper.

Riparian Woodland
Along stream banks **a** constant water supply plus winter flooding create a habitat not found elsewhere in the county. The overstory is formed by deciduous trees such as big leaf maple, alder, cottonwood, and sycamore. Understory trees are willows and dogwoods, and herbaceous plants are lush.

***Redwood** Forest*
The redwood community is found in the Santa Cruz Mountains generally west of the crest favoring moist areas especially canyons, north slopes, and spots moistened by summer fogs. Because of the thick tree canopy and layer of acidic duff in the redwood forest, the diversity of plants is restricted. Associated plants include sword ferns, huckleberry, trillium, and redwood sorrel.

Sandhills
Near the towns of **Ben** Lomond and Bonny Doon, parts of an ancient sandy sea floor have been uplifted, eroded, and exposed creating a unique sandhill environment. The combination of deep, well-drained sandy soils and the relatively humid coastal climate results in unusual "biological islands," containing many disjunct coastal relicts and other rare and endemic species. Plants and animals of the sand hills have developed unique adaptations to these features. Many of the plants thrive on soil that is too poor in nutrients for commoner species. Most tend to be annual or to be summer-dormant, growing only in the cooler and moister seasons.

Many species of plants found in the sandhills occur nowhere else in the world, typically occur in distant locations, or occur along the immediate coast. The Sierra Nevada plants Ponderosa Pine and pussy paws (*Clyptridium umbellatum*) are found in the sandhills. Some unique species include silverleaf manzanita and the Ben Lomond Wallflower.

Closed Cone Coniferous Forest

Two types of the local closed cone coniferous forest include species that are extremely rare in native stands--Monterey pine and Santa Cruz cypress. The former grows on dry coastal terraces while the later is found on rocky ridges where the soils are granitic or sandstone derived. Knobcone pine also grows in rocky areas and is often found growing near Santa Cruz cypress, as well as sand hill locations.

Mixed Evergreen Forest
Another common community found in the Santa Cruz Mountains is the mixed evergreen forest frequently adjacent to redwood forest but occupying drier and more inland areas. Common trees include interior and coast live oak, tan *oak,* madrone, bay, and buckeye. Understory plants include ceonothus, coffee berry, hazel, ground rose, and poison *oak.*

Chaparral
Occupying the hottest and driest slopes of the Santa Cruz Mountains, chaparral plants form dense thickets and are adapted to little water and to wildfires. Leaves of chaparral plants are often small, thick, light green or greyish, and waxy and are retained year round. Manzanita, coyote brush, chamise, ceonothus, monkey flower, and sage are common chaparral plants. [Includes Northern Maritime Chaparral, Chamise Chaparral, Serpentine Chaparral, Buck Brush Chaparral, Blue Brush Chaparral, and Mesic North Slope Chaparral]

Foothill Woodlands
Foothill woodlands commonly form the transition between grasslands and mixed evergreen forests on the eastern side of the crest in the Santa Cruz Mountains.

Oak Savanna/Grassland
Oak savanna and grasslands occasionally form on tops of south facing ridges. Valley oak is the dominant tree with the grassy ground vegetation containing needlegrass, fescue, melic, wildrye, and bluegrass species.

Special Status Species
Tables ***6*** and 7 provide summaries of plant and animal species that are listed as Threatened or Endangered under the Federal or State Endangered Species Act, considered "Species of Concern" by either the U.S. Fish and Wildlife Service or the California Department of Fish and Game, or plants that are listed as rare, threatened, or endangered in California and elsewhere according to the California Native Plant Society that have the potential to occur in Santa Cruz county.

For the purposes of this document special status species are defined as follows:

- Species considered to meet CEQA Guidelines Section 15380 criteria as rare, threatened or endangered, including plants or animals that are listed or proposed listing as rare, threatened or endangered under the California Endangered Species Act (CESA) or Federal Endangered Species Act (FESA);

- Plants or animals that are Candidates for possible future listing as threatened or endangered under the Federal Endangered Species Act;

• Plants included on lists 1A, 1B, and 2 of the California Native Plant Society Inventory of Rare and Endangered Vascular Plants of California (CNPS 1994);

• Animals designated by the **CDFG** as "Species of Special Concern" or "Protected" or "Fully Protected" by state or federal government law (e.g., the Migratory Bird Species Act).

Table 6. Endangered and Threatened Plant and Animal Species with the Potential to Occur in the Project Area

Common Name *Scientific Name*	Status
PLANTS	
Ben Lomond Spineflower *Chorizanthe pungens nar hartwegiana*	Federally Endangered
Ben Lomond Wallflower (Santa Cruz Wallflower) *Erysimum tetetifolium*	Federally Endangered, State Endangered
Monterey spineflower *Chorizanthe p. pungens*	Federally Threatened, Critical Habitat designated in Santa Cruz County
Robust spineflower (Aptos spineflower) *Chorizanthe robusta var. robusta*	Federally Endangered, Critical Habitat designated in Santa Cruz County
Santa Cruz Cypress *Cupressus abramsiana*	Federally Endangered, State Endangered
Santa Cruz tarplant *Holocarpha macradenia*	Federally Threatened, State Endangered, Critical Habitat designated in Santa Cruz County
Scott's Valley Polygonum *Polygonum hickmanii*	Federally Endangered, Critical Habitat designated in Santa Cruz County
Scott's Valley Spineflower *Chorizanthe robusta var hartwegii*	Federally Endangered, Critical Habitat designated in Santa Cruz County
Tidestrom's lupine (Clover lupine) *Lupinus tidestromii*	Federally Endangered
White -Rayed Pentachaeta *Pentachaeta bellidiflora*	Federally Endangered, State Endangered
INSECTS	
Mount Hermon (=Barbate) June Beetle *Polyphylla barbata*	Federally Endangered
Ohlone Tiger Beetle *Cicindela ohlone*	Federally Endangered
Zayante band-winged grasshopper *Trimerotropis infantilis*	Federally Endangered, Critical Habitat Designated in Santa Cruz County
FISH	
Coho Salmon-Central California ESU ***Oncorhynchus kisutch***	Federally Threatened, State Endangered, Critical Habitat designated in Santa Cruz County *Federal listing includes Santa Cruz County's North Coast Streams and the San Lorenzo River. The State listing includes North Coast streams, San Lorenzo River, Soquel Creek, and Aptos Creek.*
Steelhead-Central California Coast ESU *Oncorhynchus mykiss irideus*	Federally Threatened *All Santa Cruz County watersheds except the Pajaro River Watershed*

Common Name ***Scientific Name***	**Status**
Steelhead-South/Central California Coast ESU *Oncorhynchus mykiss irideus*	Federally Endangered *Pajaro River watershed*
Tidewater Goby *Euclogobius newberryi*	Federally Endangered, State Species of Concern
AMPHIBIANS	
California Red-Legged Frog *Rana aurora draytonii*	Federally Threatened, State Species of Concern
California Tiger Salamander *Ambystoma californiense*	Federal (Proposed) Threatened, State Species of Concern
Santa Cruz Long-toed Salamander *Ambystoma macrodactylum croceum*	Federally Endangered, State Endangered (Fully Protected)
REPTILES	
San Francisco Garter Snake *Thamnophis sirtalis tetrataenia*	Federally Endangered, State Endangered (Fully Protected)
BIRDS	
American Peregrine Falcon *Falco peregrinus anatum*	Federal Delisted, State Endangered, Fully Protected. Protected under the Migratory Bird Treaty Act.
Bank Swallow *Riparia riparia (nesting)*	State Threatened
Least Bell's vireo *Vireo bellii pusillus*	Federally Endangered
Marbled Murrelet *Brachyramphus marmoratus (nesting)*	Federally Threatened, State Endangered, Critical Habitat designated in Santa Cruz County
Swainson's Hawk *Buteo swainsoni*	State Threatened
Willow flycatcher *Empidonax traillii*	State Endangered
Yellow billed cuckoo *Coccyzus americanus*	Federal Candidate for listing, State Endangered

Table 7. Species of Concern and CNPS 1B Plants with the Potential to Occur in the Project Area

Common Name ***Scientific Name***	**Status**
PLANTS	
Ben Lomond Buckwheat (Zayante buckwheat) *Erigonum nudum var decurrens*	CNPS (1B)
Blasdale's Bent Grass *Agrostic blasdalei*	Federal Species of Concern, CNPS (1B)
Boony Doon Manzanita (Silver leaved manzanita) *Arctostaphylos silvicola*	Federal Species of Concern, CNPS (1B)
Bristly Sedge *Carex comosa*	CNPS (2)
Coast wallflower *Erysimum ammophilum*	Federal Species of Concern, CNPS (1B)
Congdon's tarplant *Hemizonia parryi congdonii*	Federal Species of Concern, CNPS (1B)

Common Name *Scientific Name*	Status
Deceiving sedge *Carex saliniformis*	CNPS (1B)
Dudley's Lousewort *Pedicularis dudleyi*	Federal Species of Concern, State rare, CNPS (1B)
Hooker's manzanita *Arctostaphylos h. hookeri*	CNPS (1B)
Kellogg's horkelia *Horkelia cuneata sericea*	Federal Species of Concern, CNPS
Maple-leaved checkerbloom *Sidalcea malachroides*	CNPS (1B)
~~Ponderosa Pine, Monterey Pine~~ *Pinus radiata*	Federal Species of Concern, CNPS (1B)
Pajaro manzanita ***Arctostaphylos pajaroensis***	Federal Species of Concern, CNPS (1B)
San Francisco Campion ***Silene verecunda ssp verecunda***	Federal Species of Concern, **CNPS** (1B)
Santa Cruz clover *Trifolium buckwestiorum*	PS (1B)
Santa Cruz Manzanita *rctostaphylos andersonii*	Federal Species of Concern, CNPS (1B)
Santa CNZ Microseris *Stebbinsoseris decipiens*	ederal Species of Concern, CNPS (1B)
Santa CNZ Mountains Beardtongue ***Penstemon rattanii var kleei***	CNPS (1B)
Schreiber's Manzanita ***Arctostaphylos glutinosa***	Federal Species of Concern, CNPS (1B)
Swamp Harebell ***Campanula californica***	Federal Species of Concern, CNPS (1B)
INSECTS	
Monarch Butterfly *Danaus plexippus*	State rare
AMPHIBIANS	
Foothill yellow-legged frog ***Rana boylii***	ederal Species of Concern, State **Species** of Concern
REPTILES	
Black legless lizard *Anniella pulchra nigra*	State Species of Concern
Southwester Pond Turtle *Clemmys marmorata*	Federal Species of Concern, State **Species** of Concern
American Bittern *Botaurus lentiginosus*	Federal Species of Concern
American White Pelican *Pelecanus erythrohynchos*	State Species of Special Concern
Burrowing Owl *Athene cunicularia hypugaea*	State Species of Special Concern
Storm-Perre1(Ashy and Black) ***Oceanodroma (sp. melania and homochroa)***	State Species of Special Concern

Common Name *Scientific Name*	Status
Common Loon *Gavia immer*	State Species of Special Concern
Cooper's Hawk *Accipiter cooperii (nesting)*	State Species of Special Concern
Double-crested Cormorant *Phalacrocorax auritus*	State Species of Special Concern
Elegant Tern *Sterna elegans*	State Species of Special Concern
Ferruginous Hawk *Buteo regalis*	State Species of Special Concern
Golden Eagle *Aquila chrysaetos*	Federally protected under the Bald Eagle Protection Act of 1962, State Species of Special Concern
Merlin *Falco columbarius*	State Species of Special Concern
Pairie Falcon	
Saltmarsh common yellowthroat *Geothlypis trichas sinuosa*	Federal Species of Concern, State Species of Special Concern
Sharp-shinned Hawk *Accipiter striatus*	State Species of Special Concern
Tricolored Blackbird *gelaius tricolor*	State Species of Special Concern
White-faced Ibis *Plegadis chihi*	State Species of Special Concern
Yellow Warbler ***Dendroica petechia***	**State** Species of Special Concern
MAMMALS	
Townsend's **western** big-eared bat *Corynorhinus **townsendii townsendii***	State Species of Concern
San Francisco dusky footed woodrat *Neotoma fuscipes*	State Species of Special Concern

Sources: Information in this table was taken from the California Natural Diversity Database run for Santa Cruz County 2002, CDFG 1990, the Santa Cruz County General Plan and Local Coastal Plan 1994, and "Annual Bird Records in Santa Cruz County, California", Prepared by David Suddjian, March 30, 2003, "California's Wildlife", edited by Zeiner, D.C. et al 1988-1990, and the California Native Plant Society Inventory of Rare and Endangered Plants online database: http://www.northcoast.com/~cnps/cgi-bin/cnps/sensinv.cgi. CNPS = California Native Plant Society (1B list = Plants rare, threatened, or endangered in California and elsewhere, 1A= Plants presumed extinct in California, 2= Plants rare, threatened, or endangered in California, but more common elsewhere) and personal communications with CDFG and USFWS.

The intent of the permit coordination program and the associated conservation practices is to reduce erosion and sedimentation and thereby improve water quality, the health of the natural resources and agricultural productivity. However, any activity that involves work in an area with sensitive resources, no matter what the intent, has the potential to negatively affect those resources. The protection measures described in the Project Description will be used to avoid or minimize the potential impacts of the conservation practices on the natural and cultural resources, plants, animals and sensitive habitat in the project area when designing and

implementing projects under the permit coordination program. In addition to these measures, the NRCS and Santa Cruz County RCD have been working with CDFG, USFWS, NOAA Fisheries, and the County of Santa Cruz to finalize additional measures developed to ensure protection of specific species.

On a long-term basis, all practices provide for improved surface water quality and decreased sedimentation in water bodies that benefit fish, amphibians, and reptiles. Practices that enhance riparian and bank vegetation, including the critical area planting, filter strips, and stream bank protection may also provide shelter from predators and breeding, foraging and basking sites for some special status species known to occur in the County's watersheds. Control of erosion and pesticide runoff from farm fields will improve the quantity and quality of freshwater input into the creeks, streams, and ponds. The net conservation benefits which may result from implementation and maintenance of the conservation practices for species include: reducing fragmentation and increasing connectivity of habitats, maintaining or increasing species populations, removing invasive exotics and restoring native plant populations, and buffering sensitive areas from runoff.

Possible negative impacts in the short-term stem from soil excavation or grading, preparation of the ground for seeding and mulching, grade and stream stabilization, channel excavation, construction of earthen embankments, placement of fill, burial, vegetation removal, invasion by non-native plant material, and trampling or crushing of vegetation from equipment and foot traffic. The potential for adverse impacts is expected to be offset by the long-term benefits expected to result from the proposed projects.

In certain cases, individual protected plants and animals may be "taken"[7]. In every case where take is a possibility, the resource agency with jurisdiction has been consulted and will issue an approval. In their consultations, resource agencies recognize that the potential for incidental take of certain threatened and endangered species during implementation of some projects will be balanced by the habitat and resource gains that will result from the proposed practices. In every case all conditions and recommendations associated with the B.O. and consultation will be implemented as part of the project. The measures described below in the individual checklist responses have been developed to minimize the potential for incidental take to occur.

The NRCS/SCCRCD, USFWS, NOAA Fisheries, CDFG, and the County of Santa Cruz have identified special status species potentially affected by the proposed project activities that would require additional species-specific measures (in addition to the ***General Project Conditions)*** to minimize potential impacts during construction. These species are listed below:

Insects

[7] Under the Federal Endangered Species **Act,** "take" is defined **as** to **harass,** harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in **any such** conduct. "Incidental Take" is defined **as** take that is incidental to, and not the purpose of the carrying out of an otherwise lawful activity. Take of State listed **Fully** Protected species is not authorized under this Program.

- Mount Hermon June Beetle *(Polyphylla barbata)*
- Ohlone Tiger Beetle (*Cicindela ohlone*)
- Zayante band-winged grasshopper *(Trimerotropis infantilis)*

Fish

- Tidewater Goby *(Eucylogobius newberyii)*
- Central California Coast (CCC) ESU Coho Salmon *(Oncorhynchuskisutch*)
- Central California Coast ESU Steelhead *(Oncorhynchusmykiss irideus*)

Amphibians

- California Red-legged Frog *(Rana aurora draytonii)*
- California tiger salamander *(Ambystoma californiense)*
- Santa Cruz Long-toed Salamander *(Ambystoma macrodactylum croceum)*
- Foothill Yellow legged frog **(***Rana boylii)*

Reptiles

- San Francisco **Garter** Snake *(Thamnophissirtalis tetrataenia*)
- Western Pond Turtle *(Clemmys marmorata)*

- Least Bell's Vireo *(Vireo bellii pusillus*)
- Marbled Murrelet (*Brachyramphus marmoratus (nesting),,*
- Burrowing Owl *(Athene cunicularia hypugaea)*

plants

- Ben Lomond Spineflower *(Chorizanthepungens* **var** *hartwegiana)*
- Ben Lomond Wallflower (Santa Cruz Wallflower) *Erysimum tetetifolium*
- Monterey Spineflower *(Chorizanthe Pungens var. Pungens)*
- Robust Spineflower *(Chorizanthe robusta var. robusta)*
- Santa Cruz Cypress *Cupressus abramsiana*
- Santa CNZ tarplant *Holocarpha macradenia*
- Scott's Valley Polygonum *Polygonum hickmanii*

- Scott's Valley Spineflower **(Ben** Lomond Spineflower) *(Chorizanthe robusta var hartwegii)*
- Tidestrom's lupine (Clover lupine) *Lupinus tidestromii*
- White -Rayed Pentachaeta *Pentachaeta bellidiflora*
- San Francisco Popcorn Flower, *Plagiobothrys diffuses*
- All CNPS 1B Plant listed species in Table 7

Measures Developed in Coordination with **USFWS,** CDFG, and **N O M** Fisheries

These resource agencies will formalize these conditions in their standard permits or agreements issued for the Program. **As** stated in the Project Description, the final approvals for the proposed Program have not yet been issued by the agencies. Therefore the measures as descnbed in the following section may be revised in the final agreements and permits issued*. The protection measures may also be slightly modified by regulatory agencies on a site-by-site basis to provide for greater resource protection and application of adaptive management. In no case will revisions result in lesser protection.

Unless more specific measures are identified for individual species (see below), the following measures will apply to all projects that could impact species listed above:

1. NRCSISCCRCD staff working on the permit coordination program will be trained and familiar with the preferred habitats of the species described in this section.

2. NRCSISCCRCD staff will identify and evaluate characteristic habitat conditions in proposed work areas during the NRCS pre-project design planning, site assessment stage (Step 3, Table **3** ***How*** *the Permit Coordination Program Builds on the NRCS 9-Step Planning Process).*

3. The NRCS/SCCRCD shall submit names and credentials of individuals under consideration for species-specific monitoring, surveys and transport of named species to the USFWS (and/or CDFG where state listed species might be present) at least **15** days prior to the onset of activities that they are being authorized to conduct. The qualified individual will demonstrate experience in handling sensitive species and be familiar with the species' habitat requirements. USFWS will attempt to respond within **72** hours as to whether or not those individuals whose names and credentials have been submitted for review are approved to proceed with species-specific surveys or transport of named species.

4. No practices shall be implemented or maintained in ponded areas without discussion with USFWS to determine if additional conditions or procedures are needed *(species of concern include California red legged frog, San Francisco Garter Snake, and Santa Cruz long-toed salamander).* Permanent ponded areas are understood to be areas where there is standing water most of the year.

[8] Potential revisions to Sandhills species protection measures in particular (including ***Ohlone tiger beetle, Zayante band-winged grasshopper, and Mount Hermon June beetle).*** **are** currently under consideration by FWS, NRCS and SCCRCD and could become more restrictive in the final Biological Opinion issued by FWS.

5. Project activities will avoid impacts to vemal pool habitat. NRCS/SCCRCD staff will conduct reconnaissance-level surveys of project sites to determine if vemal pool habitat is present. If suitable habitat exists, a qualified individual approved by USFWS will conduct a pre-activity survey to verify if vernal pool habitat is present in the project area. If vernal pool habitat is found in the work area, the project will not be included in the Santa Cruz Countywide Permit Coordination Program.

Specific actions to avoid or minimize adverse effects to the ***California red-legged frog***

1. During the project site assessment, NRCS and SCCRCD will assess if potential habitat for the California red-legged frog occurs in the project area.

2. If suitable habitat is present, construction activities will begin after July 1 to avoid impacts to breeding adults or egg masses.

3. A qualified individual approved by USFWS and CDFG will conduct a pre-construction survey no more than 48 hours before the start of construction activities. The approved individual will look for the species, evaluate the likelihood of usage, and determine if additional biological monitoring is needed during construction.

4. If California red-legged frogs are observed during pre-construction activities, USFWS and CDFG (staff person assigned to the project) will be contacted before work activities begin for technical assistance, determination of additional measures if possible, or locations for suitable release sites up-or down- stream of the project site. USFWS will attempt to respond within 72 hours.

5. For projects occurring within the following types of potential habitat, the corresponding additional protection measures will be implemented.

A. For projects occurring in and around streams, the following measures will be implemented:
   1. Whenever possible, work will be conducted when streams are dry.
   2. All construction within the river channel will occur during daylight hours.
   3. Projects will be designed to minimize disturbance of vegetation near and on permanent and seasonal pools of streams, marshes, ponds, and shorelines with extensive emergent vegetation or weedy vegetation.
   4. All activities occurring in the riverbed or creekbed will occur before October 15.

B. For projects occurring in potential breeding area (ponded water), the following measures will be implemented
   1. Whenever possible, the NRCS/SCCRCD will avoid working in ponds.

2. If not possible to avoid working in ponds, work will be performed when the area is dry.
3. Projects will be designed to minimize disturbance of vegetation near and on permanent and seasonal pools of streams, marshes, ponds, and shorelines with extensive emergent vegetation or weedy vegetation,
4. If not possible to conduct work when dry, the NRCS/SCCRCD will contact FWS and CDFG (staff person assigned to the project) for guidance on how to proceed.

C. For projects occurring within 35 feet of a pond, the following measures will be implemented:

1. Projects will be designed to minimize disturbance of vegetation near and on permanent and seasonal pools of streams, marshes, ponds, and shorelines with extensive emergent vegetation or weedy vegetation.

For work conducted in any of the areas described under 5.A, 5.B, or 5.C above, the following protection measures would be implemented.

6. If biological monitoring during construction is needed, a qualified individual approved by USFWS and CDFG will have the authority to halt work activities that that may affect adults, tadpoles, or egg masses until they can be moved out of harms way.

7. Translocation of frogs and tadpoles to the closest suitable habitat will be performed only by individuals approved in advance by USFWS and CDFG (staff person assigned to the project). In the rare case that egg masses are found after July 1, NRCS\SCCRCD will make every attempt to wait until the egg masses hatch to transport them.

8. Additional guidelines for surveys and handling of the California red-legged frog and the California Tiger Salamander described below under *"Additional guidelines for surveys and handling of the California red-legged frog and the California Tiger Salamander"* will be adhered to.

*Specific actions to avoid or minimize adverse effects to the **California tiger salamander***

1. If the project area is located within 5 miles of either of the two known locations of the California tiger salamander in Santa Cruz County (Ellicott Reserve and the Buena Vista Pond in Watsonville), the following protection measures will be implemented.

2. During the project site assessment, NRCS and SCCRCD will assess if potential habitat for the California tiger salamander occurs in the project area. If any individual salamander(s) are found at the site, the salamander(s) will be translocated to the closest suitable habitat less than 24 hours prior to initiation of construction

3. Translocation of salamanders to the closest suitable habitat will be performed only by individuals approved in advance by USFWS and CDFG. While in captivity, individuals of this species will be kept in a cool, moist, aerated environment, such **as** a bucket containing a damp sponge. Containers used for holding or transporting this species will not contain standing water.

4. Projects will be designed to minimize disturbance of vegetation near and on permanent and seasonal pools of streams, marshes and ponds, and shorelines with extensive emergent vegetation and/or weedy vegetation. Vernal pools will be avoided during project implementation.

5. If potential habitat is present, a biological monitor will be present during all ground disturbance activities and shall have the authority to halt work activities that may affect the animal. If a salamander is found, an individual approved by USFWS and CDFG will then move the salamander out of harms way.

6. Additional guidelines for surveys and handling of the California red-legged frog and the California Tiger Salamander described below under *"Additional guidelines for surveys and handling of the California red-legged frog and the California Tiger Salamander"* will be adhered to.

Additional guidelines for surveys and handling of the California red-legged ***frog*** *and the California Tiger Salamander*

- California red-legged frog and California tiger salamander adults and sub-adults will be relocated by qualified individuals approved by USFWS and CDFG from areas where construction or restoration activities (including exotic species removal) may cause death or harm to those species.
- NRCS/SCRCD staff conducting reconnaissance-level surveys must be trained by Service-approved biologists prior to conducting field surveys. At least 15 days prior to any training, surveys, or monitonng activities, NRCS will submit for review and approval by USFWS, the credentials of NRCS/SCCRCD staff and NRCS biologists who will conduct training, reconnaissance-level surveys, pre-activity surveys, monitoring activities, and who will be handling the California red-legged frogs and California tiger salamanders.
- If NRCS/SCCRCD staff determines during reconnaissance-level surveys that suitable habitat for the California red-legged frog exists in the project area, a qualified individual approved by USFWS and CDFG will conduct pre-construction surveys of the project site no sooner than 48 hours prior to the beginning of construction activities. Surveys for California red-legged frogs will consist of searches during daylight hours for egg masses, tadpoles, or adults, and searches during nighttime hours for adults and sub-adults.
- The qualified individuals approved by USFWS and CDFG will move California red-legged frogs and California tiger salamanders to a nearby safe location (i.e. up- or down-stream of the project location and in an area that will not be affected by project activities and following contact with USFWS and CDFG (staff person assigned to the project) to discuss appropriate release sites as described above for

the red-legged frog) if they are found in a construction or restoration activity area and cannot be avoided.

- Nets or bare hands may be used to capture California red-legged frogs and California tiger salamanders. Authorized individuals will not use soaps, oils, creams, lotions, repellants, or solvents of any sort on their hands before and during periods when they are capturing and translocating these species.
- The authorized individual will limit the duration of handling and captivity of the California red-legged frogs and California tiger salamanders. While in captivity, individuals of these species will be kept in a cool, moist, aerated environment, such as a bucket containing a damp sponge. Containers used for holding or transporting this species will not contain standing water.
- To avoid transferring disease or pathogens between aquatic habitats during the course of surveys or handling of California red-legged frogs and California tiger salamanders, USFWS/CDFG-approved individual will follow the Declining Amphibian Population Task Force's Code of Practice.
- All diversion or dewatering activities, including restoration of flows after construction, will be monitored by a qualified individual approved by USFWS and CDFG to translocate California red-legged frog and California tiger salamander adults, tadpoles, or egg masses imperiled by the action. The USFWS/CDFG-authorized individual will assist project personnel in selecting the point(s) at which diversion and dewatering would least disrupt stream flow, and the USFWS/CDFG-approved individual will be onsite when stream flows are restored to monitor the area for stranded California red-legged frogs and California tiger salamanders. If listed species or suitable habitat is present in areas where exotic species are to be removed, the qualified individual approved by USFWS and CDFG will define where trails, staging areas, and other general sites of disturbance may occur.

*Specific actions to avoid **or** minimize adverse effects to the **least Bell's vireo***

The USFWS will inform the NRCS and SCCRCD if the least Bell's vireo are discovered in Santa Cruz County during the life of the program. If least Bell's vireos are discovered in Santa Cruz County during the life of the program, the following measures will be implemented.

- During the project site assessment, NRCS/SCCRCD will assess if potential least Bell's vireo habitat occurs in the project area.

- No construction activities will take place in potential breeding habitat during breeding season (March 1 through August 31).

- If reported sighting of least Bell's vireo is within a 10-mile radius of the project area, the NRCS/SCCRCD will (informally) consult with USFWS to determine if additional protection measures are required.

*Specific actions to avoid or minimize adverse effects to the **marbled murrelet***

1. During the project site assessment, NRCS and SCCRCD will assess if potential marbled murrelet habitat occurs in the project area.

2. If habitat is present in the project area, NRCS/SCCRCD shall either 1) perform work after September 15 or 2) implement sound reduction measures to ensure that activities do not significantly raise noise levels above ambient levels. These measures can include, but are not limited to, laying a bed of sand before unloading gravel or rock from a truck and/or disabling "back-up beepers" on equipment.

3. To the greatest extent possible, project activities will avoid old-growth trees

Specific actions to avoid or minimize adverse effects to the Mount Hermon June beetle

1. During the project site assessment, NRCS and SCCRCD will assess if potential Mount Hermon June beetle habitat occurs in the project area (habitat assessment resources may include Sandhills Management Plan and CNDDB).

2. If potential habitat is present in the project area, the NRCS/SCCRCD will contact USFWS for prior approval to proceed.

3. If June beetles may be impacted, any disturbance that occurs will take place according to the conditions and recommendations of the USFWS B.O.

4. In addition to the ***"Limitations on Use of Herbicides"*** described under the ***"General Project Conditions",*** the following additional restrictions on herbicide use would be applied to projects occurring in areas where potential habitat for the Mount Hermon June beetle occur:

    a. When herbicides are used near waterways, an approved glyphosate-based herbicide that is safe to use in or near aquatic habitats would be utilized.
    b. Herbicides would be applied on calm (wind speed less than 5 miles per hour), dry days (no rain), and according to registered label conditions.
    c. All chemicals used in herbicide operations would be limited to that which is minimally necessary, and when not in use will be stored in an impermeable lining away from areas that support habitat for listed species.

5. No sod-forming grasses will be planted.

Specific actions to ***avoid or minimize adverse effects to the Ohlone tiger beetle***

1. During the initial project site assessment, the NRCS/SCCRCD will assess if potential habitat occurs in the project area and determine if the project area is in the vicinity of a known population of the Ohlone tiger beetle.

2. If the project area is in the vicinity of these known populations or potential abitat exists, the NRCS/SCCRCD will work with USFWS to survey and/or develop site-specific protection measures for the project. Any ground disturbance shall only occur in accordance with the conditions and recommendations of the USFWS B.O. Potential protection measures recommended could include the following:

- Soils disturbed and left unworked for an extended period of time (>24 hours) as a result of project-related activities will be left in their disturbed state for at least 72 hours to avoid injury to unearthed Ohlone tiger beetles and allow time for larvae and adult beetles to burrow back under the soil surface. Whenever possible, following this 72 hour period, workers **will** pack down soils by hand to minimize potential impacts to the beetles and larvae beneath the surface.
- No sod-forming grasses will be planted.

Specific actions to avoid or minimize adverse effects to the Sun Francisco garter snake

1. During the project site assessment, NRCS and SCCRCD will determine whether or not the project area lies within the known range of the species.

2. If the project area lies within the known range of the species, the NRCS/SCCRCD will conduct a habitat assessment to determine if potential habitat for the garter snake is present in the project area

3. If potential habitat does not occur, but the project area lies within that portion of the County designated as an area where the garter snake could potentially occur (i.e. potential for use as movement corridors), the following measures will be implemented:

A. Workers will be educated on how to identify the San Francisco garter snake.
B. Construction will cease and USFWS and CDFG (staff person assigned to the project) will be contacted if a San Francisco garter snake is observed on or near the project area to determine how to proceed. CDFG and FWS will attempt to respond within 72 hours.
C. NRCS/SCCRCD personnel and other construction personnel will not attempt to touch, capture or move any snake detected.

4. If potential habitat does occur, the following protection measures will be implemented for work conducted in each of the following habitat types:

A. If work is proposed in the immediate vicinity of ponds and marshes, the following measures will be implemented:

1. Whenever possible, the NRCS/SCCRCD will avoid working in ponds and marshes.
2. If it's not possible to avoid working in ponds and marshes, work will be conducted when the area is dry and according to Part B below.

3. If it's not possible to work when *dry, the* NRCS/SCCRCD will assume presence of the species and CDFG (staff person assigned to the project) and USFWS will be contacted for guidance on how to proceed.

B. If work is proposed within **35** feet of a pond or stream or in a stream, the following measures will be implemented:

1. A qualified individual approved by USFWS and CDFG will conduct a pre-construction inspection no more than 48 hours before the start of construction activities. The surveyor will look for the species, evaluate the likelihood of usage (look for small animal burrows), and determine if additional biological monitoring is needed to ensure no individuals are harmed.
2. If burrows are present, either clear pathway for heavy equipment by hand excavating burrows or avoid use of heavy equipment in these areas.
3. Vegetation will be removed by hand.
4. Native vegetation will not be reduced by more than 50%.

C. If work is proposed in grasslands located more than **35** feet from ponds, marshes or streams, the following measures will be implemented:

1. A qualified individual approved by USFWS and CDFG will conduct a pre-construction inspection no more than 48 hours before the start of construction activities. The surveyor will look for the species, evaluate the likelihood of usage (look for small animal burrows), and determine if additional biological monitoring is needed to ensure no individuals are harmed.
2. If burrows are present, either clear pathway for heavy equipment by hand excavating burrows or avoid use of heavy equipment in these areas.

If the project site has characteristics of preferred habitat for the garter snake, as described under 4.A., 4.B, or 4.C, the following measures will be implemented:

5. The project area, including access roads and construction staging areas, will be limited to the minimum area necessary, as described above under ***"General Actions to Avoid Adverse Effects to Listed and Proposed Species".*** Project related activities will be restricted to these established roads or staging areas.

6. Excavated materials will not be stockpiled in areas with habitat characteristic of the garter snake.

7. **A** qualified individual approved by USFWS and CDFG with the authority to halt work activities that may affect the snake will be present during all earthmoving activities, movement of equipment larger than a pickup truck onto or off of undisturbed areas within the project area (walking in front of the equipment to watch for snakes), and during vegetation clearing. That individual will check inside of equipment, pipes, etc. prior to construction activities to check if any snakes are inside the equipment. Construction will

cease and USFWS and CDFG (staff person assigned to the project) will be contacted if a gartersnake is observed on or near the project area. Neither the NRCS/SCCRCD personnel nor other construction personnel will attempt to touch, capture, or move any salamander detected. NRCS/SCCRCD will consult with USFWS and CDFG to determine how to proceed. CDFG and USFWS will attempt to respond within 72 hours

8. Prior to construction or clearance of parking or laydown areas, a qualified individual approved by USFWS and CDFG will inspect the area for rodent burrows.

9. If mats are required to be placed in the laydown area, in case of wet or unstable ground, all rodent burrows that are encountered in this area will be hand excavated by a qualified individual approved by USFWS and CDFG to clear the area of burrows. When mats are removed, the individual will inspect under the mats for snakes.

6. Workers will be educated on how to identify the San Francisco garter snake.

7. Construction will cease and USFWS and CDFG (staff person assigned to the project) will be contacted if a San Francisco garter snake is observed on or near the project area. CDFG and USFWS will attempt to respond within 72 hours.

8. NRCSlSCCRCD personnel and other project workers will not attempt to touch, capture or move any snake detected.

9. Any dead or injured San Francisco garter snake will be turned over to USFWS, CDFG, or its agent.

*Specific actions to avoid or **minimize** adverse effects to **the Santa Cruz ions-toed salamander***

1. During the initial project site assessment, the NRCSlSCCRCD will determine if the project site is located within or adjacent to the area bounded by the known metapopulation complexes in Santa Cruz (roughly bounded on the north by Valencia Creek, by Corralitos Creek to the east, the Pajaro River to the south and the Pacific Ocean to the west) or within 0.5 miles of an unsurveyed pond, the NRCSlSCCRCD will conduct a habitat assessment to determine if potentia! habitat for the Santa Cruz long-toed salamander is present in the project area.

2. If potential habitat or potential movement corridors, as described below under A, B, C, and D do occur within this area, a qualified individual approved by USFWS and CDFG will conduct a pre-construction inspection no more than 48 hours before the start of construction activities. The surveyor will look for the species and evaluate the likelihood of usage (look for small animal burrows). If the species is observed on or near the project area, CDFG (staff person assigned to the project) and USFWS will be contacted immediately and prior to commencement activities to determine how to proceed. USFWS and CDFG will attempt to respond within 72 hours. The following additional protection measures will be implemented for work conducted in each of the habitat types described below:

A. If work will be taking place in the immediate vicinity of a potential breeding area (pond), the following measures will be implemented:

1. Whenever possible, the NRCS/SCCRCD will avoid working in ponds.
2. If it is not possible to avoid working in ponds, work will be performed when the pond is dry.
3. A biological monitor (a qualified individual approved by USFWS and CDFG) will be onsite during construction activities.
4. If it is not possible to work when the pond is *dry,* the NRCS/SCCRCD will assume the presence of the Santa Cruz long-toed salamander and contact CDFG (staff person assigned to the project) and USFWS for further guidance.

B. If work activities will occur within 35 feet of a pond, the following measures will be implemented:

1. A biological monitor will be onsite during construction activities.
2. If burrows are present, a qualified individual approved by the Service and CDFG will either clear a pathway for heavy equipment by excavating burrows or avoid the use of heavy equipment.
3. If burrows are present, avoid excavation and digging activities until the burrows can be hand excavated.
4. Vegetation will be removed by hand.
5. Native vegetation will not be reduced by more than 50%.

C. If work activities will occur in potential upland habitat, the following measures will be implemented:

1. A biological monitor will be onsite during construction activities.
2. If burrows are present, either clear a pathway for heavy equipment by excavating burrows or avoid the use of heavy equipment.
3. If burrows are present, avoid excavation and digging activities until the burrows can be hand excavated.
4. Projects will avoid removal of woody debris in upland areas (this is used for cover by the salamanders).
5. Vegetation will be removed by hand.
6. Native vegetation will not be reduced by more than 50%.

D. f work activities will occur in an area where it is determined that either no habitat is present or the area could potentially be used by the salamanders as *dry* movement corridors (this would be determined by CDFG on a site-specific basis). the following measures will be implemented:

1. Work will be performed when the area is dry.
2. If it's not possible to work when dry, the NRCS/SCCRCD will conduct a visual inspection for salamanders.
3. Vegetation will be removed by hand.

4. If burrows are present, avoid excavation and digging activities until the burrows can be hand excavated.

For work conducted in any of the areas described under 2.A, 2.B., 2.C, or 2.D above, the following protection measures would be implemented.

4. The biological monitor shall have the authority to halt work activities that may affect the salamander.

5. The project area, including access roads and construction staging areas, will be limited to the minimum area necessary. Project related activities will be restricted to these established roads or staging areas.

6. Workers will be educated on how to identify the Santa Cruz long-toed salamander and the proper protocol to follow if a salamander is encountered during project activities.

7. Construction will cease and USFWS and CDFG (staff person assigned to the project) will be contacted if a Santa Cruz long-toed salamander is observed on or near the project area. Neither the NRCS/SCCRCD personnel nor other construction personnel will attempt to touch, capture, or move any salamander detected. NRCS/SCCRCD will consult with USFWS and CDFG to determine how to proceed. CDFG and USFWS will attempt to respond within 72 hours.

Specific actions to avoid or minimize adverse effects to the tide water goby

1. No projects that would change or disturb the hydrology of the water body will be implemented in or around the lagoons of Baldwin, Wilder, Moore's and Scott's creeks, or the Pajaro River.

2. NRCS will design projects to minimize disturbance along lagoon edges.

2. Silt detention measures will be used during the implementation of the practices along banks and shores of the Baldwin, Wilder, Moore, Scott's, and Pajaro River lagoons or the Pajaro River within the range of the tidewater goby. (Note: In the find Biological Opinion issued for this program, USFWS may identify additional lagoons where tidewater gobies could potentially occur and for which these protection measures would be implemented).

Specific actions to avoid or minimize adverse effects to the Zayante band-winged grasshopper

1. During the project assessment, NRCS and SCCRCD will assess if potential Zayante band-winged grasshopper habitat occurs in the project area.

2. If potential habitat is present in the project area, qualified individual approved by USFWS will be on site to relocate juvenile and adult grasshoppers and move them out of harm's way if found during ground disturbance activities.

3. The NRCS and SCCRCD will determine if lupines (Lotus sp. other than listed Tidestrom's lupine) or telegraph weed are present in the project area. If possible, project activities would avoid impacts to grasshoppers feeding on these plants by establishing a 10-foot buffer around the plants.

4. Stockpiling of vegetation would only occur in areas of the project area where no habitat is present for the Zayante band-winged grasshopper. A qualified individual approved by USFWS will inspect the area prior to replacing the stockpiled material and move any grasshoppers found out of harm's way.

5. In addition to the ***"Limitations on Use of Herbicides"*** described under the ***"General Project Conditions",*** the following additional restrictions on herbicide use would be applied to projects occurring in areas where potential habitat for the Zayante band-winged grasshopper occurs:

A. When herbicides are used near waterways, an approved glyphosate-based herbicide that is safe to use in or near aquatic habitats would be utilized
B. Herbicides would be applied on calm (wind speed less than 5 miles per hour), dry days (no rain), and according to registered label conditions.
C. All chemicals used in herbicide operations would be limited to that which is minimally necessary, and when not in use will be stored in an impermeable lining away from areas that support habitat for listed species.

Specific actions to avoid or minimize adverse effects to the ***San Francisco Dusky Footed Woodrat***

1. Look for (dusky footed woodrat) nests in the project area

2. If potential nests are found in the project area, project activities will attempt to avoid disturbing nests or opening up that area to light which might result in increased susceptibility to predators.

3. If nests cannot be avoided, NRCS/SCCRCD will contact CDFG (staff person assigned to the project) to develop appropriate site-specific protection measures.

Specific actions to avoid or minimize adverse effects to the ***Western Pond Turtle***

1. If work is proposed in ponds (that are not *dry),* NRCS/SCCRCD will contact CDFG (staff person assigned to the project) on how to proceed.

2. If working in upland areas, a qualified individual approved by CDFG shall survey for burrows used by turtles. If burrows found, work activities would avoid burrows.

3. If project activities cannot avoid the burrows, burrows will be hand excavated by a qualified individual approved by CDFG to determine if turtles are present.

Specific actions to avoid or minimize adverse effects to the Foothill Yellow legged frog

1. If the project area located on either Soquel or Aptos Creek, determine if appropriate habitat is present in the project area.

2. If potential habitat is present, the NRCS and SCCRCD will either assume presence or conduct surveys to determine the presence or absence of the foothill yellow legged frog (night surveys, walking up and down the stream, turning over rocks, etc.)

3. If presence is assumed, avoid work in the stream and remove vegetation by hand within 25 ft of the stream

4. If in-stream work is proposed in either of these two streams, CDFG will be notified (in the pre-construction notification) for guidance on potential site-specific protection measures.

Specific actions to avoid or minimize adverse effects to the Burrowing Owls

1. Determine if potential habitat is present in the project area (dry open rolling hills, grasslands, deserts and open bare ground with gullies and arroyos)

2. If potential habitat is present, a qualified individual approved by CDFG will walk the project area and look for burrows characteristic of the owl ***(6*** inches or greater in size) and indicators of the owl (excrement (white splash) or feathers adjacent to burrow)

3. If burrowing owls or burrows with the indicators described above are seen in the project area, the NRCS/SCCRCD will contact CDFG (staff person assigned to the project) for guidance on potential additional site-specific protection measures (this could be noted in the pre-construction notification chart).

Svecific actions to avoid or minimize adverse effects to Coho and Steelhead

1. For work proposed in a fish-bearing stream', a qualified individual approved by NOAA Fisheries will act as a biological monitor during construction. The biological monitor will monitor construction activities and instream habitat and performance of sediment control devices. The biological monitor shall have the authority to halt work activity and recommend measures for avoiding adverse effects. Work activity shall not recommence until the situation is resolved to the satisfaction of the biological monitor.

2. **If** a streamflow diversion in a fish-bearing stream is necessary, the biological monitor will monitor placement and removal of the streamflow diversion structures. If necessary a pump will be used to dewater the work space and will be screened according to NOAA Fisheries' "Juvenile Fish Screening Criteria for Pump Intakes".

3. If the biological monitor determines Coho or steelhead must be removed from a workspace, or if **an** unanticipated event occurs that could impact individuals of either of these species, he/she will notify a NOAA Fisheries approved fisheries biologist qualified to capture and transport salmonids.

4. The NOAA Fisheries approved fisheries biologist will capture steelhead and Coho stranded in residual wetted areas as a result of **the** streamflow diversion and/or workspace dewatering and relocate them to a suitable location immediately upstream or downstream of the project area. The biologist shall note the number of steelhead observed, the number relocated, and the date and time of the collection and relocation. One or more **of** the following NOAA Fisheries approved collection methods shall be used by a qualified fisheries biologist: electrofishing, seine netting, or other collection method approved by NOAA Fisheries.

Specific actions to avoid or minimize adverse effects to Ben Lomond spineflower, Ben Lomond wallflower, Monterey spineflower. Robust spineflower, Santa Cruz Cypress, Santa Cruz tarplant, Scott's Valley polygonum, Scott's Valley spineflower, Tidestrom's lupine, San Francisco Popcorn Flower and White-Raved Pentachaeta

1. During the project assessment, the NRCS and SCCRCD will assess if suitable habitat is present within the project area for the above mentioned species.

2. If suitable habitat exists or a listed species is found within the project **area,** a qualified individual approved by USFWS will evaluate characteristic habitat conditions for the listed species during steps **3** through 6 of the NRCS pre-project design.

3. When listed plant species are found in a project area, a buffer zone of 20 feet will be established around the plants to avoid impacts to the plants. Removal of invasive, non-native plants by hand (i.e. using hand tools, hand pulling, etc.) within this buffer may occur and is recommended to protect listed plants.

[9] **A** "fish-bearing stream" is defined as a stream located within the range of the listed species and/or designated critical habitat (for coho and steelhead). Project areas located above a known permanent barrier to salmonid migration would not be afforded the additional measures outlined below.

4. If listed plant species cannot be avoided and buffer maintained, CDFG will be notified and options to offset potential effects will **be** proposed as part of the project.

6. When possible, no pesticides or fertilizers shall be used in the buffer zone to hasten or improve the growth of plantings associated with the practices.

7. Grading of adjacent portions of the project site shall not alter surface and subsurface hydrologic processes to the detriment of the species.

8. No sod-forming or non-native invasive plants will be planted.

9. The introduction or spread of invasive non-native plants will be discouraged and removal strongly recommended.

Specific actions to avoid ***or*** *minimize adverse effects* ***to CNPS 1B Listed Plant Species Listed in Table 7***

The NRCS and SCCRCD will utilize the California Natural Diversity Database to determine if there is the potential for CNPS 1B plants to occur in the project area. If there is the potential for their occurrence, the NRCS/RCD will look for these species in the project area properly timed floristic survey will occur. Project activities shall avoid individual CNPS list 1B plants if possible and shall provide a buffer zone of 20 feet around the plants to avoid impacts to the plants, whenever possible. Removal of invasive, non-native plants by hand (i.e. using hand tools, hand pulling, etc.) within this buffer may occur and is recommended to protect listed plants. If listed plant species cannot be avoided and buffer maintained, CDFG will be notified and options to offset potential effects will be proposed as part of the project.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
BIOLOGICAL RESOURCES -- Would the project:				
1. Have an adverse effect on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?		√		
2. Have an adverse effect on a sensitive biotic community (riparian comdor),		√		

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	NO Impact
wetland, native grassland, special forests, intertidal zone, etc.)?				
3. Interfere with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?		√		
4. Produce night time lighting that will illuminate animal habitats?				√
5. Make a significant contribution to the reduction of the number of species or animals?		√		
6. Conflict with any local policies or ordinances protecting biological resources, (such as the Significant Tree Protection Ordinance, Sensitive Habitat Ordinance, provisions of the Design Review ordinance protecting trees with trunk sizes of ***6*** inch diameters or greater)?		√		
7. Conflict with the provisions of an adopted Habitat Conservation Plan, Biotic Conservation Easement, or other approved local, regional, or state habitat conservation plan?				√

1. NOAA Fisheries and USFWS, trustee agencies for federal and state candidate, sensitive, and special status species, will issue Incidental Take statements as part of Biological Opinions issued for the Program, which will include Reasonable and Prudent Measures to minimize this potential for incidental take to occur. The NRCS and SCCRCD would be required to consult with USFWS and NOAA Fisheries if there was the potential for the incidental take limits issued as part of the Biological Opinions for any of the species to be reached under the Program. USFWS and NOAA Fishenes must ensure that the proposed Program activities would not result in jeopardy to any of these species. No take of Fully Protected species (listed under the California Endangered Species Act) would occur under this Program (i.e. Santa Cruz long-toed salamander and San Francisco garter snake). In order to mitigate impacts to sensitive animal species to a less than significant level, the NRCS and SCCRCD shall follow the conditions of the 1602 Streambed Alteration Agreement that will be issued by CDFG for each project and the Biological Opinions issued by

USFWS and NOAA Fisheries for the Program. The terms and conditions of these approvals will be adhered to for all projects implemented under the proposed Program.

2. Restoration of riparian habitats is central to the purpose of the project. The conservation practices will improve both the quantity and quality of riparian habitat. Practices that enhance the riparian and vegetation include: critical area planting, fish stream improvement, stream bank protection and stream channel stabilization. These practices improve the quality of riparian areas by stabilizing eroding soils in riparian areas, reducing cattle reliance on stream as a primary water source (pipeline practice), and managing sources of erosion that can accumulate in riparian areas. To control potential negative impacts associated with construction of the projects, mitigation measures have been built in by incorporating the protective measures and limits described in Table 4, **General Conditions for** all **Projects,** ***Limitations on Earthmoving and Vegetation Removal (Site Disturbance), Revegetation of the Project Area and Removal of Exotic Plants.***

One of the long-term positive environmental goals of the program includes the improvement of wetland functioning in the watersheds. The conservation practices will be used to restore natural functioning, stabilize erodible soils to prevent soil accumulation in wetlands, collect sediments before they enter waterways and wetlands, and provide watering areas for livestock away from sensitive habitats. The NRCS conservation planning process uses the California Environmental Assessment Worksheet to determine effects on wetlands (see Appendix A). Only projects that result in a net environmental benefit **are** included in this program. Short term impacts to wetlands may take the form of soil excavation or grading, preparation of the ground for seeding and mulching, grade and stream stabilization, channel excavation, construction of earthen embankments, placement of fill, burial, vegetation removal, and trampling or crushing of vegetation from equipment and foot traffic. There will be no net loss of wetlands under this Program. In those instances where wetlands may be temporarily encroached upon, protection measures appropriate to the type of wetland would be implemented. Types of protection measures could include laying down mats, avoiding vegetation and replanting where impacted, staging to avoid and minimize impacts to certain areas of the wetland, or collecting topsoil layers of the wetland area and restoring it once work is completed.

Projects may occur within native grassland, coastal scrub, *oak* woodland or other native plant communities. If native vegetation is disturbed during project implementation, the native plant community will be restored to preconstruction condition or better. Native plants characteristic of the local habitat type shall be the preferred alternative for revegetation (see Appendix B for the full list of approved native plant 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 (Appendix B) as susceptible to genetic swamping. If the native local ecotype is not commercially available and that species is identified as susceptible to genetic swamping, another native species may be used in its place. Revegetation of a native community may not occur if there is a concern that nursery stock will introduce diseases into a susceptible community and if the community itself can regenerate (i.e. Alders). In this case, an annual grass species may be used for one-year erosion control (see Appendix B for full list of approved species for use in revegetation efforts).

Finding: Less than Significant Impacts with Mitigation Incorporated

3. This project seeks to improve habitat for migrating fish, specifically Coho salmon and steelhead trout. This project is being reviewed by NOAA Fisheries through a Section **7** Consultation with the NRCS as the lead federal agency. By reducing the contribution of sediments to the waterways and increasing riparian habitat, the project is likely to have an overall net benefit to the species. Measures to reduce and minimize potential impacts will be incorporated into the project design using guidance from NOAA Fisheries biological staff (see above *Specific actions to avoid or minimize adverse effectsto* ***Coho and Steelhead*)**. In order to mitigate potential impacts to Coho, steelhead, and their habitat, the terms and conditions of the Biological Opinion issued by NOAA Fisheries for the Program shall be adhered to for all projects implemented under the proposed Program. Habitat restoration activities undertaken as part of the Program could also function to improve wildlife comdors by enhancing habitat features such as riparian vegetation.

Finding: Less than Significant Impacts with Mitigation Incorporated

4. All construction activities associated with the permit coordination program would occur during daylight hours. No impacts are expected.

Finding: No Impacts

5. The number of individuals of special status species could be reduced by incidental take, however such take will only occur when authorized by the USFWS and CDFG and when mitigated. Limits on take established by the resource agencies will not be exceeded, and the overall impact is therefore less than significant. Although some projects could result in the loss of individuals of a CNPS 1B listed plant species, such losses are expected to be minimal because of surveys and avoidance and because of the degraded nature of most of the project sites. The overall benefits of the environmentally beneficial projects undertaken as part of the proposed program will offset these potential impacts by improving resource conditions, overall, at multiple locations throughout Santa Cruz County and in some cases restoring native habitats by removing exotic invasive plant species where native species may be able to then recolonizing an area (through implementation of the *Restoration and Management of Declining Habitats* practice included under the proposed Program).

Finding: Less than Significant Impacts with Mitigation Incorporated

6. The project will include a condition in the Master Permit that requires all projects to be consistent with County ordinances and provisions. Potential conflicts are expected to be absent or less than significant. Section L, Land Use contains a more detailed discussion of the intersection of the proposed project activities with local policies and ordinances.

Finding: Less than Significant Impact

7. There are no Habitat Conservation Plans in the project area. The proposed Program would not conflict with provisions of any of these types of plans.

Finding: No Impacts

D. Energy and Natural Resources

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	NO Impact
Energy and Natural Resources – Does the project have the potential to:				
1. Affect or be affected by land designated as Timber Resources by the General Plan?				√
2. Affect or be affected by lands currently utilized for agriculture, or designated in the General Plan for agricultural use?				√
3. Encourage activities which result in the use of large mounts of fuel, water, or energy, or use of these in a wasteful manner?				√
4. Have a substantial effect on the potential use, extraction, or depletion of a natural resource (i.e., minerals or energy resources)?				√

1-4. Only beneficial impacts to the resources on rural properties (potentially on land designated as Timber Resources by the General Plan) and working, agricultural properties would result from projects undertaken as part of the Program (primarily erosion control benefits associated with these working landscapes). The proposed Program will not result in the conversion of farmland to non-agricultural uses. On-farm, conservation projects implemented under the proposed program, will take place on working agricultural landscapes and in many cases would increase the productivity of agricultural lands by preventing soil loss. The proposed project would not conflict with existing zoning for agricultural use, or result in conversion of Farmland to non-agricultural use.

This is a voluntary program for landowners, including agricultural growers, in Santa Cruz County wishing to protect t he resources on their properties by installing one or more of the conservation practices described in this program. One of the goals of this program is to support the economic viability of agricultural production in Santa Cruz County by assisting landowners wishing to implement erosion control projects that prevent soil loss from agricultural lands.

Size limitations have been placed on the practices (and the amount of grading involved for each practice) included under this Program as described in Table 2. Any potential impacts to mineral

resources from soil and rock movement associated with the practices covered under the Program are expected to be minor and result in less than significant impact.

Finding: No Impact.

E. Visual Resources and Aesthetics

The majority of projects occurring under the permit coordination program will take place on private, primarily rural and agricultural lands.

There are no officially designated state scenic highways in Santa Cruz County, although portions of routes 9, 17, 152, and 236 and Highway 1 within Santa Cruz County are currently eligible for this designation (California Department of Transportation 2003).

The County of Santa Cruz General Plan identifies the following State Highways as scenic roads:

- Route 1 from San Mateo County to Monterey County;
- Route 9 from Route 1 to Santa Clara County;
- Route 17 from Route 1 to Santa Clara County,
- Route 35 from Route 17 to San Mateo County;
- Route 129 from Route 1 to San Benito County;
- Route 152 from Route 1 to Santa Clara County; and
- Route 236 from Route 9 in Boulder Creek to Route 9 at Waterman Gap.

The County General Plan also designates portions of the following roadways as scenic county roads: Amesti Road, Beach Road, Bonita Drive and San Andreas Road, Bonny Doon Road, Browns Valley Road, Buena Vista Drive, Casserly Road, Corralitos Road, Empire Grade, East Cliff Drive, Eureka Canyon Road, Graham Hill Road, Hazel Dell Road, Highland Way, Ice Cream Grade, Martin Road, Mt. Hermon Road, Mt. Madonna Road, Pine Flat Road, San Dollar Drive, Summit Road, Sunset Beach and Shell Road, and Swanton Road (County of Santa Cruz 1994).

VISUAL RESOURCES AND AESTHETICS – Does the project have the potential to:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
1. Have an adverse effect on a scenic resource, including visual obstruction of that resource?			√	
2. Substantially damage scenic resources within a designated scenic corridor or public viewshed area including, but not limited to, trees, rock outcroppings, and historic buildings?			√	

VISUAL RESOURCES AND AESTHETICS – Does the project have the potential to:	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporation**	**Less Than Significant Impact**	**No Impact**
3. Degrade the existing visual character or quality of the site and its surroundings including substantial change in topography or ground surface relief features, and/or development on a ridgeline?			√	
4. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?				√
5. Destroy, cover, or modify any unique geologic or physical feature?				√

Discussion of Visual Resources and Aesthetics

1-4. Projects implemented under the proposed permit coordination program may result in temporary adverse effects to the visual setting of a project area during construction due to the presence of construction equipment and disturbed soils and vegetation. Because these projects will occur primanly on private agricultural and rural properties in Santa Cruz County, it is anticipated that only a small number of people would be affected by these temporary impacts to the visual character of a site or any views of scenic vistas in the project area. There is the potential that construction may be visible from the State Highways and roads designated by the County as scenic routes. However, because these adverse effects will be temporary and localized to a relatively small area on private lands, visual impacts will be less than significant.

The long-term effects to scenic vistas and the visual character of the project area would be beneficial. Installed practices will be made to look as natural as possible and aesthetically pleasing, particularly when visible in the public viewshed. In situations where rock is used to stabilize the toe of a bank, the soil above the rock and the interstitial spaces between rocks shall be revegetated by live planting, seed casting, or hydroseeding **(as** discussed under the ***General Condztionsfor all Projects).*** Individual projects would improve an area's aesthetics by enhancing and restoring vegetation along riparian corridors, reducing the presence of eroding and failing streambanks, and improving the aesthetic characteristics of streams. The long-term, net effect to the visual character of these project sites is expected to be beneficial.

Finding: Less than significant impact.

4 and 5. The proposed project would not create a new source of glare. Construction activities would take place during daylight hours. No unique physical features will be covered.

Finding: No impact.

F. Cultural Resources

The Ohlone Indians

Until approximately 1850, the Ohlone Indians occupied areas along the central California Coast from the San Francisco peninsula and eastern shores of San Francisco Bay, beyond the Santa Cruz Mountains and Monterey to Point Sur. Their population numbered at least 600 in several villages in and around Santa Cruz. During the 18th and 19th centuries, European expansion proved translatable into the decline of the Ohlone population in the Santa Cruz area. Numerous sites of Native American dwelling and activity have been identified in the County, dating as far back at 8000 B.C. Sensitive archaeological resource areas occur along streams, dunes and ridges in several locations throughout the County. Sensitive paleontological resource areas are identified along coastal bluff areas in the western portion of the county. Areas of low archaeological sensitivity are generally located in upland areas of the county, away from fresh water, while high and moderate sensitivity areas are located in the more level areas near fresh water (Santa Cruz County RTC 2001).

18^{th} and 19^{th} Century Historic Background

The principal agricultural and commercial centers developed from what began as the Santa Cruz Mission and Branciforte Villa communities. Following construction of the Santa Cruz Mission in 1791 on what is now the Mission Hill area, the Spanish government established a secular community to provide military presence in the area and constructed the Villa de Branciforte on a bluff east of Branciforte Creek. From these centers grew the expansion of industry, residential areas, and commercial businesses during the later part of the 19th century. The lumber, dairy, and ranching industries flourished also flourished during this time of growth. Many locations along the coast were transformed to seaside resorts and development began to focus on the tourist industry (Santa Cruz County RTC 2001).

Archaeologically ***Sensitive Areas***

The Santa Cruz County Planning Department has compiled information on archaeologically sensitive areas as determined by inventory of known archaeological sites within the County (County of Santa Cruz 1994). The Planning Department has converted this information into a digital database and created a GIS based planning tool, available online through their website (http://gis.co.santa-cruz.ca.us/). Protection of these sensitive resources is an important component of the NRCS planning process as described in the Project Description. Provisions for protection of cultural resources in Santa Cruz County are built into the proposed permit coordination program.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	NO Impact
CULTURAL RESOURCES -- Would the project:				

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	NO Impact
1. Cause an adverse change in the significance of a historical resource as defined in '15064.5?				√
2. Cause an adverse change in the significance of an archaeological resource pursuant to '15064.5?			√	
3. Disturb any human remains, including those interred outside of formal cemeteries?			√	
4. Directly or indirectly destroy a unique paleontological resource or site?			√	

1. The definition of "historical resource" includes archaeological resources listed in or formally determined eligible for listing in the California Register and, by reference, the National Register of Historic Places, California Historical Landmarks, Points of Historical Interest, and local registers (Sections 5020.1(j) and 5024.1 of the Public Resources Code). Appendix D provides a list of Historic Places in Santa Cruz County according to the National Register of Historic Places. Conservation activities included as part of the proposed Program would not affect the historic places listed in Appendix D.
As described above under the Project Description, the NRCS' proven conservation planning process incorporates measures for protection of historic resources in the project area.

Finding: No Impact

2-4. As discussed in the project description, for all conservation projects covered by the proposed permit coordination program, the NRCS identifies and examines the potential impacts to cultural resources and ensures that no significant adverse effects will result. The NRCS undertakes a cultural resources review by qualified staff to determine if known protected resources could be affected by the conservation practice. If the NRCS determines that known cultural resources could be affected by the conservation practice (or if the County's archaeological resources map indicates the project area is located in an archaeologically sensitive area) the NRCS conducts a site survey and develops plans to avoid adverse impacts to cultural resources. Because of the assurances for the protection of cultural resources that the NRCS planning process provides, potential impacts are expected to be less than significant.

Finding: Less than significant **impacts.**

G. Hazards and Hazardous Materials

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	NO Impact
HAZARDS AND HAZARDOUS MATERIALS – Does the project have the potential to:				
1. Create a significant hazard to the public or the environment through the routine transport, storage, use, or disposal of hazardous materials, not including gasoline or other motor fuels?			√	
2. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				√
3. Create a safety hazard for people residing or working in the project area as a result of dangers from aircraft using a public or private airport located within two miles of the project site?				√
4. Expose people to electro-magnetic fields associated with electrical transmission lines?				√
5. Create a potential fire hazard?				√
6. Release bioengineered organisms or chemicals into the air outside of project buildings?				√

Discussion of Hazards and Hazardous Materials

1. Potential impacts associated with hazards and hazardous materials would be less than significant. Removal of abandoned vehicles and appliances has the potential to leak during removal. As described in the project description, protection measures have been built into the program to minimize potential effects associated with accidental spills and leaks. During implementation of the Obstruction Removal practice, large objects removed from the area (i.e. car frames or appliances pulled out of waterways) 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. The use of herbicides and pesticides will also be limited as described in Table 4. General Conditions for all Projects. If used, herbicides would be applied according to registered label conditions and if used near waterways only an approved glyphosphate-based herbicide that is safe to use near aquatic habitats would be utilized. Through implementation of these measures included as General Project Conditions for all projects implemented under the permit coordination program, potential impacts related to hazards and hazardous materials are expected to be less than significant.

Finding: **Less** than significant impact

2-6. The project does not include any individual projects that are on properties listed as hazmat sites, where people will be subject to airport hazards, long term electromagnetic fields, and no project will include release of bioengineered organisms.

Finding: **No** Impact.

H. Transportation and **Traffic**

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	NO Impact
TRANSPORTATION/TRAFFIC -- Would the project:				
1. Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?				√
2. Cause an increase in parking demand which cannot be accommodated by existing parking facilities?				
3. Increase hazards to motorists, bicyclists, or pedestrians?				√
4. Exceed, either individually (the project alone) or cumulatively (the project combined with other development), a level of service standard established by the county congestion management agency for designated roads or highways?				√

Discussion **of** Transportation and Traffic

1-4. The proposed Program will not create new traffic. The project could result in beneficial impacts to circulation through road and drainage improvements. These projects may reduce hazards associated with failing roads that could, if left in their current state (gullies, ditches, etc.), impede safe travel and slow access of emergency vehicles. The proposed permit coordination program will not impact parking or conflict with any adopted policies.

Finding: No impacts

I. Noise

Motor vehicle traffic, aircraft, and railroad operations dominate the noise environment of Santa Cruz County. Ambient noise levels in Santa **Cruz** County vary widely depending upon proximity to these noise sources, such as major roads, airports, and rail lines.

Sensitive Receptors

It's anticipated that the majority of sensitive receptors in areas where projects will be implemented under the proposed project will be primarily rural landowners and growers, agricultural workers, and construction workers in the immediate vicinity of the individual construction sites.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	NO Impact
NOISE --Would the project have the potential to:				
1. Generate a permanent increase in ambient noise levels in the project vicinity above levels existing without the project?				√
2. Expose people to noise levels in excess of standards established in the General Plan, or applicable standards of other agencies?				√
3. Generate a temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?			√	

Discussion **of** Noise

1-2. No permanent increases in noise will occur.

Finding: No impact.

3. Temporary increases in ambient noise during construction activities would result from the use of heavy equipment such **as** excavators, backhoes, and back-up beepers. The use of heavy equipment may also result in ground borne vibrations and noise. However, these increases in noise would be temporary, isolated, and would only affect a small number of people in the vicinity of the construction site. Impacts are therefore expected to be less than significant.

Finding: Less than significant impacts

J. Air Quality

1. Impacts ***Assessment***

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	NO Impact
AIR QUALITY: Does the project have the potential to (Where available, the significant criteria established by the MBUAPCD may be relied upon to make the following determinations):				
1. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?			√	
2. Conflict with or obstruct implementation of the applicable air quality plan?				√
3. Expose sensitive receptors to substantial pollutant concentrations?			√	
4. Create objectionable odors affecting a substantial number of people?				√

Discussion of Air Quality

1 and **3.** Potential impacts to air quality are expected to be less than significant. Short term, temporary adverse effects to air quality would result from emissions from construction vehicles and dust created during construction activities associated with individual projects.

The Monterey Bay Unified Air Pollution Control District (MBUAPCD) has established recommended thresholds of significance to be used to evaluate air quality impacts for construction and operation. The recommended threshold of significance for construction is PM_{10} emissions of 82 pounds per day or greater. For direct and indirect operational impacts, the following thresholds are recommended:

Volatile Organic Compounds (VOC):	137 pounds/day (direct + indirect)
Nitrogen Oxides (NO_x):	137 pounds/day (direct + indirect)
Carbon Monoxide (CO):	550 pounds/day (direct)
Particulate Matter of < 10 μm (PM_{10}):	82 pounds/day (on-site)
Sulfur Oxides (SO_x):	150 pounds/day (direct)

Based on the guidelines for calculating construction impacts provided by the MBUAPCD in their 2000 CEQA Air Quality Guidelines, the minor construction activities associated with the small projects implemented under the permit coordination program are very unlikely to result in emission levels that exceed to the thresholds descnbed above'' (MBUAPCD 2002). Overall impacts *to* air quality are therefore expected to be less than significant.

Finding: Less than significant impacts.

2 and 4. The project would not conflict with or obstruct implementation of the MBUAPCD Air Quality Plan. Projects implemented under the Program would not result in objectionable odors that would affect a substantial number of people. Construction activities would be localized in a relatively small project area for each individual project.

Finding: **No** impact.

K. Public Services and Utilities

	Potentially Significant Impact	**Less Than Significant with Mitigation Incorporation**	**Less Than Significant Impact**	**No Impact**
PUBLIC SERVICES AND UTILITIES—Does the project have the potential to:				
1. Result in the need for new or physically altered governmental				

[10] Construction sites for projects implemented under the proposed program would be relatively small in *size*. Some projects may require use of larger equipment such **as** a backhoe. **As** an example: daily No, emissions from a 1995 Model Year Back Hoe, powered by a 150 HP diesel engine, and operated **4** hours a day would be approximately 11.1 lbs/day (MBUAPCD 2002). Daily VOC emissions would be **1.32** lbs/day, CO emissions would be 4.62 lbs/day, and PM_{10} would be 0.96 lbs/day. It can be assumed that even with a couple of back hoes, and any **other** vehicles brought to a relatively small construction site, would not result in emissions that exceed the MBUAPCD thresholds provided above.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	NO Impact
facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
a. Fire protection?				√
b. Police protection?				√
c. Schools?				√
d. Parks or other recreational facilities?				√
e. Other public facilities; including the maintenance of roads?				√
2. Result in the need for construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				√
3. Result in the need for construction of new water or Wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				√
4. Cause a violation of wastewater treatment standards of the Regional Water Quality Control Board?				√
5. Create a situation in which water supplies are inadequate to serve the project or provide fire protection?				√
6. Result in inadequate access for fire protection?				√
7. Make a significant contribution to a cumulative reduction of landfill capacity or ability to properly dispose of refuse?				√
8. Result in a breach of federal, state, and local statutes and regulations				√

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	NO Impact

related to solid waste management?

Discussion of Public Services

The projects implemented under the permit coordination program would not result in the creation of wastewater and therefore would not impact wastewater treatment facilities. The proposed program would not require creation of new water supplies, new storm water drainage facilities, or the expansion of such facilities.

The proposed project will result in negligible impacts to landfills in the project area in that small amounts of construction debris and sediments from individual projects which cannot be incorporated into the project and used onsite would be taken to municipal landfills for disposal, or to other sites for which grading permits have been issued. The amount of fill or debris generated by projects will be small so that potential impacts to landfill capacity are expected to be negligible. In some cases, projects may involve removal of large items such as abandoned cars and appliances. Such items would be disposed of in compliance with all applicable laws related to solid waste disposal. Existing landfills would have sufficient capacity to accept waste generated by projects implemented under the proposed program. The Program would not require additional public services, nor require new public facilities. No impacts are expected.

Finding: No impact

L. Land Use, Population and Housing

Santa Cruz County General Plan/Local Coastal Program
The 1994 General Plan/Local Coastal Program (GP/LCP) was adopted by the County on May 24, 1994, and certified by the California Coastal Commission in 1994. The GP/LCP incorporates the County's Growth Management System that includes natural and agricultural resource protection policies, policies to address urban sprawl and policies to maintain the character of the rural portion of the County. To accomplish these goals, the GP/LCP requires that all development activities be regulated through the implementation of specific County ordinances. County ordinances that may be applicable to projects contemplated under this program include the following:

*Santa Cruz County Code Chapter 16.10 (Geologic Hazards and **FEMA** Flood Hazard Regulations)*
The purpose of this chapter is to implement the policies of the National Flood Insurance Program of the Federal Insurance Administration, the State of California Alquist-Priolo Earthquake Fault Zoning Act, the Santa Cruz County General Plan, and the Land Use Plan of the Local Coastal Program and to minimize injury, loss of life, and damage to public and private property caused by the natural physical hazards of earthquakes, floods, landslides, and coastal processes.

Santa Cruz County Code Chapter 16.20 (Grading Regulations)
The purpose of this chapter is to safeguard health, safety, and the public welfare; to minimize erosion and the extent of grading; to protect fish and wildlife; to protect the watersheds; to insure the natural appearance of grading projects; and to otherwise protect the natural environment of Santa Cruz County.

Santa Cruz County Code Chapter 16.22 (Erosion Control)
The purpose of this chapter is to eliminate and prevent conditions of accelerated erosion that have led to, or could lead to, degradation of water quality, loss of fish habitat, damage to property, loss of topsoil and vegetation cover, disruption of water supply, and increased danger from flooding, and to implement Local Coastal Program land use policies.

Santa Cruz County Code Chapter 16.30 (Riparian Corridor and Wetlands Protection)
The purpose of this chapter is to eliminate or minimize any development activities in the riparian corridor in order to preserve, protect, and restore riparian corridors for: protection of wildlife habitat; protection of water quality; protection of aquatic habitat; protection of open space, cultural, historical, archeological and paleontological, and aesthetic values; transportation and storage of floodwaters; prevention of erosion; and to implement the policies of the General Plan and the Local Coastal Land Use Plan.

Santa Cruz County Code Chapter 16.32 (Sensitive Habitat Protection)
The purposes of this chapter are to minimize the disturbance of biotic communities, which are rare or especially valuable because of their special nature or role in an ecosystem, and which could be easily disturbed or degraded by human activity; to protect and preserve these biotic resources for their genetic, scientific, and educational values; and to implement policies of the General Plan and the Local Coastal Program Land Use Plan.

Santa Cruz County Code Chapter 16.34 (Significant Trees Protection)
The purposes of this chapter are to protect and preserve the trees and forest communities located within the County's Coastal Zone as valuable resources. Removal of significant trees could reduce scenic beauty and attractiveness of the area to its residents and visitors. The preservation of significant trees and forest communities on private and public property is necessary to protect and enhance the County's natural beauty, property values and tourist industry. According to Chapter **16.34, "significant tree"** shall include any tree, sprout clump, or group of trees, as follows:

(a) Within the Urban Services Line or Rural Services Line, any tree which is equal to or greater than 20 inches d.b.h. (approximately **5** feet in circumference); any sprout clump of five or more stems each of which is greater than 12 inches d.b.h. (approximately 3 feet in circumference); or any group consisting of five of more trees on one parcel, each of which is greater than 12 inches d.b.h. (approximately **3** feet in circumference).

(b) Outside the Urban Services Line or Rural Services line, where visible from a scenic road, any beach, or within a designated scenic resource area, any tree which is equal to or greater than 40 inches d.b.h. (approximately 10 feet in

circumference); any sprout clump of five or more stems, each of which is greater than 20 inches d.b.h. (approximately 5 feet in circumference); or, any group consisting of ten or more trees on one parcel, each greater than 20 inches d.b.h. (approximately 5 feet in circumference).

(c) Any tree located in a sensitive habitat as defined in Chapter 16.32. Also see Section 16.34.090(c), exemption of projects with other permits.

According to Chapter 16.34, one or more of the following findings must be made in order to allow for removal of a "significant tree":

(a) That the significant tree is dead or is likely to promote the spread of insects or disease.
(b) That removal is necessary to protect health, safety, and welfare.
(c) 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.
(d) That removal will not involve a risk of adverse environmental impacts such as degrading scenic resources.
(e) That removal is necessary for operation of active or passive solar facilities, and that mitigation of visual impacts will be provided.
(f) 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.
(g) 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.
(h) That removal is necessary for new or existing agricultural purposes consistent with other county policies and that mitigation of visual impacts will be provided. Also see Section 16.34.090(d), exemption of tree crops. (Ord. 3341, 11/23/82; 3443, 8/23/83)

*Santa Cruz County Code Chapter **16.42** (Historic Preservation)*
The purpose of this ordinance is to designate, preserve, protect, enhance, and perpetuate those designated historic structures, districts and sites which contribute to the cultural benefit of Santa Cruz County, and to provide for this, and future generations, examples of the physical surroundings of past generations; to foster civic awareness and pride in the rich diversity of the County's heritage; to enhance property values and the stability of the neighborhoods and areas in the County; and to encourage preservation and maintenance of the cultural and historical heritage of the County for purposes of education and the fostering of the knowledge of the past.

Santa Cruz County Code Chapter 16.50 (Agricultural Land Preservation and Protection)
The purposes of this chapter are to designate, preserve and protect the commercial agricultural lands in the County for exclusive agricultural use; protect noncommercial agricultural land; to support and encourage continued agricultural operations in the county; to maintain in exclusive agricultural use commercial agricultural land which is located within utility assessment districts, while recognizing that equitable compensation may be due because of the assessment district-caused encumbrances; and to forewarn prospective purchasers and residents of property adjacent

to agricultural operations of the necessary sounds, odors, dust and hazardous chemicals that accompany agricultural operations. It is an additional purpose of this chapter to ensure the maximum protection of commercially viable agricultural land by weighting decisions, in cases where there is not clear evidence of the unsuitability of the agricultural land, in favor of the preservation of the land for agricultural use.

1. Impacts Assessment

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
LAND USE AND PLANNING – Does the project have the potential to:				
1. Conflict with any policy of the County adopted for the purpose of avoiding or mitigating an environmental effect?				√
2. Conflict with any County Code regulation adopted for the purpose of avoiding or mitigating an environmental effect?				√
3. Physically divide an established community?				√
4. Have a potentially significant growth inducing effect, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				√
5. Displace substantial numbers of people, or amount of existing housing, necessitating the construction of replacement housing elsewhere?				√

Discussion *of* Population and Housing

3-5. The proposed permit coordination program would not directly or indirectly induce population growth, displace people or necessitate the construction of housing. The proposed project would not divide an established community. There are no habitat conservation plans or natural community conservation plans that the proposed project would conflict with. No impacts are expected.

Finding: **No** impact

Discussion **of** Land **Use**

1 and 2. The Master Permit issued for the project will place conditions on individual projects to ensure consistency with the following County policies, and there will be an overall condition that requires standards given in all applicable County ordinances to be met by any given project. The following approvals (and/or permits) are requested as part of the Master Permit to be issued for the Program.

*Santa Cruz **County** Code Chapter 16.32 (Sensitive Habitat Protection)*
The conservation activities proposed in this program are consistent with the overall goals of the Chapter. According to 16.32.100, exceptions to the approval provisions of this Chapter may be issued if "the exception is necessary for restoration of a sensitive habitat". The stated goals of the proposed Program are to encourage voluntary conservation and restoration activities on private lands. The Program furthers the goals of habitat restoration and protection and improvement to water quality. Although project activities may occur in areas defined as sensitive habitat in this Chapter, the ultimate goal of the Program activities would be to improve the conditions of that habitat and the species it supports. "Development/Development Activities" that may occur under the proposed Program (per the definition in Chapter 16.32) include a.) discharge of dredged materials; b). grading; and c) removal of vegetation. The disturbance of any rare, endangered, or locally unique plant or animal or its habitat will be minimized by employing the protection measures developed in coordination with the resource agencies (described in General Project Conditions and Section C. Biological Resources and finalized in the permits and approvals issued by these agencies). NRCS and SCCRCD have worked with the resource agencies to develop project conditions that minimize temporary impacts associated with installation of these practices in order to achieve the end-result of environmental improvements. **Only** those projects that result in a net environmental improvement are covered under the Program.

*Santa **Cruz** County Code Chapter 16.30 (Riparian Corridor and Wetlands Protection)*
Findings to approve a riparian exception for the Program can be made. Practices proposed as part of this Program are consistent with the goals of Chapter 16.30 including the preservation, protection, and restoration of riparian corridors for protection of wildlife habitat, water quality, and aquatic habitat. The purpose of the practices being installed under the proposed Program is to improve and/or protect resources on an individual property. In some cases, temporary disturbance of the riparian corridor may be necessary to achieve the desired environmental improvements. Activities proposed as part of the Program will not be detrimental to the public welfare or injurious to other property downstream or in the area in which the project is located. Projects undertaken as part of the Program will include measures to minimize any effects that do occur during the installation of these conservation activities (i.e. limitations on vegetation removal, revegetation, follow-up monitoring to ensure establishment of vegetation, etc.).

The NRCS conservation planning process uses the California Environmental Assessment Worksheet to determine effects on wetlands. (The NRCS planning documents are provided in Appendix **A** to this document.) Only projects that result in a net environmental benefit are included in this program. Short- term impacts to wetlands, such as soil excavation or grading, preparation of the ground for seeding and mulching, grade and stream stabilization, channel excavation, construction of earthen embankments, placement of fill, burial, vegetation removal,

and burial, trampling or crushing of vegetation from equipment and foot traffic, will be minimized during construction by incorporating protection measures described in the General Project Conditions and offset by the long-term improvements in water quality and wetland habitat values as a result of project installation. Proposed activities are consistent with Chapter 16.30.

*Santa Cruz County Code Chapter 16.20 (**Grading** Regulations)*
Grading may be necessary for installation of the conservation and restoration practices described under the proposed Program. The purposes of many of the conservation practices included under the proposed Program are consistent with the purpose of Chapter 16.20 to minimize erosion and protect fish and wildlife. The minimum amount of grading necessary to achieve the desired goals of erosion reduction and habitat restoration will be employed under the proposed Program. Grading volumes will be limited **to** the maximum volumes shown in Table 2 and erosion control measures will incorporated into each project to minimize potential effects during construction. Projects will be designed to meet the standards specified in the ordinance. Proposed activities are consistent with Chapter 16.20.

Santa Cruz County Code Chapter 16.34 (Significant Trees Protection)
An application for Significant Tree Removal permit is included in the Master Permit for the Program. Some projects may require removal of trees defined as "Significant Trees" according to Chapter 16.34 in order to implement conservation activities. For example, implementation of the "Restoration and Management of Declining Habitats" practice may include a project whose goal is to remove non-native trees such as eucalyptus trees and replant with native trees and vegetation. Per Section 16.34.060 of the County code, removal of trees designated as "significant trees" may be allowed if they are associated with a Conservation Plan to restore native vegetation in a project area (i.e. implementation of the "Restoration and Management of Declining Habitats" practice). Removal of trees may also be necessary in order to install other practices such as the Streambank Protection practice. As described in the General Conditions for all Projects, measures will be incorporated into the individual projects to offset the effects of removing these trees. Findings to comply with Chapter 16.34 will be indicated for removal of a significant native tree. If findings cannot be made, the tree will be avoided. As descnbed in the project description, if trees over 6" dbh are to be removed, they will be replaced at a 3:1 ratio and all project areas will be revegetated and restored to pre-project condition or better. Proposed activities are consistent with Chapter 16.34.

Santa Cruz County Code Chapter 16.10 (Geologic Hazards)
Structures such as grade stabilization structures, sediment basins, culverts, or bank stabilization structures may be installed as part of the projects proposed under the Program. (**See** *Discussion under Section* **A.** *Geology and Soils for discussion of how geologic hazards are considered during the NRCS planning process).* For some projects, fill may need to be placed in a waterway to stabilize the bank or improve fish passage or habitat. No fill will be placed in the floodway unless it is accompanied by an analysis (by a civil engineer) showing that there will be no rise in the base flood elevation and no negative off-site impact. Proposed activities would be consistent with Chapter 16.10.

Santa Cruz County Code Chapter 16.22 (Erosion Control)

According to Chapter 16.22.110 part e, "Resource Management" defined to include "erosion control or other resource management programs carried out under the auspices of a government agency which include appropriate erosion control measures" are exempt from the provisions of the Chapter (except Sections 16.22.040 General Provisions and 16.22.160 Variances-190 Appeals). The purpose of many of the practices included under the proposed Program is to address erosion problems on private properties in Santa Cruz County. The proposed Program includes activities that address existing and potential conditions of accelerated erosion including slowing and reducing runoff flow and stabilizing sources of sediment such as large gullies. For each project that is carried out under the proposed Program, necessary erosion control measures are built into the Conservation Plan developed for the Project. Design standards and seasonal time limits will be met by individual projects. Proposed activities are consistent with Chapter 16.22.

Santa Cruz County Code Chapter 16.42 (Historic Preservation)
As described in *Section F. Cultural Resources,* the proposed Program is not expected to adversely affect historic structures, properties, historic sites, or historic districts. Proposed activities are consistent with Chapter 16.42.

Santa Cruz County Code Chapter 16.50 (Agricultural Land Preservation and Protection)
As described in *Section D* the on-farm, conservation projects implemented under the proposed program, will take place on working agricultural landscapes and in many cases would increase the productivity of agricultural lands by preventing soil loss. The proposed project would not conflict with existing zoning for agricultural use, or result in conversion of farmland to non-agricultural use. This is a voluntary program for landowners, including agricultural growers, in Santa Cruz County wishing to protect the resources on their properties by installing one or more of the conservation practices described in this program. Proposed activities are consistent with Chapter 16.50.

Finding: Less than significant Impact

M. Non-Local Approvals

Does the project require approval of federal, state, or regional agencies?
Yes X No__ .

Which agencies?

Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.)
California Department of Fish and Game – Memorandum of Agreement and Individual 1602 Streambed Alteration Agreements (Permit)
National Marine Fisheries Service (NOAA Fisheries)– Section 7 Consultation
U.S. Fish and Wildlife Service –Section 7 Consultation
U.S. Army Corps of Engineers –Regional General Permit
Regional Water Quality Control Board – 401 Water Quality Certification
State Coastal Conservancy – Funding Approval

N. Cumulative Impacts

Cumulative effects are the total impacts of all individual actions that are reasonably expected to occur in the project area. The NRCS and SCCRCD estimate that approximately 5-10 conservation projects would be implemented under the proposed program each year over the five-year life of the program. The potential for temporary effects associated with construction activities will be offset by the long-term environmental net benefits that result from the proposed project activities.

Potential loss of riparian vegetation would be offset through revegetation of project sites following installation of conservation practices. For all projects implemented under the proposed program, the project area vegetation shall be restored to pre-construction condition or better. If riparian vegetation will be disturbed, it will be replaced with similar and/or native species. If native vegetation is disturbed during project implementation, the native plant community will be restored to preconstruction condition or better. Native plants characteristic of the local habitat type shall be the preferred alternative for revegetation (see Appendix B for the full list of approved native plant 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 (Appendix B) as susceptible to genetic swamping. If the native local ecotype is not commercially available and that species is identified as susceptible to genetic swamping, another native species may be used in its place. Revegetation of a native community may not occur if there is a concern that nursery stock will introduce diseases into a susceptible community and if the community itself can regenerate (i.e. Alders). In this case, an annual grass species may be used for one-year erosion control (see Appendix B for full list of approved 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 NRCS and SCCRCD until vegetation is established and the project is functioning as intended. Revegetation success will be documented in the annual report provided to the regulatory agencies each year. If 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.

There is the potential for incidental take **of** individuals of certain listed species, the benefits to water quality and habitat for these species are expected to outweigh these potential impacts associated with construction activities. NOAA Fisheries, USFWS, and CDFG will issue Incidental Take statements and other approvals which will include measures to minimize the potential for incidental take. No take of Fully Protected species (listed under the California Endangered Species Act) would occur. In order to mitigate cumulative losses of special status animals and plants, this environmental analysis relies upon the oversight of the resource agencies. The NRCS and SCCRCD shall follow the conditions of the permits issued by each agency for the Program. Any potential loss of individuals is expected to be minimal, would not result in jeopardy to any species, and the benefits of the environmentally beneficial projects undertaken as part of the proposed program will offset these potential impacts by improving resource conditions, overall, at multiple locations throughout Santa Cmz County

There will be no net loss of wetlands under this Program. In those instances where wetlands may be temporarily encroached upon, protection measures appropriate to the type of wetland would be implemented.

Temporary increases in erosion during construction activities will be minimized through implementation of erosion control measures and offset in the long-term by the reduction in the amount of sediment entering Santa Cruz County watersheds as a result of these projects being in place. For example, the cumulative effects of a sediment basin are demonstrated in the additional sediment trapped each year over the life of that basin, (and prevented from entering sensitive habitats and waterways).

O. Mandatory Findings of Significance

	YES	NO
MANDATORY FINDINGS OF SIGNIFICANCE --		
1. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		√

	YES	NO
2. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?		√
3. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?		√

The project is designed to reduce erosion and sedimentation and improve wildlife habitat quality in the County's watersheds, and as such would have a long-term beneficial, cumulative impact on water quality and the health of natural resources throughout the project area. The number of individuals of special status species could be reduced by incidental take, however such take will only occur when authorized by the USFWS and CDFG and when mitigated. Limits on take established by the resource agencies will not be exceeded, and the overall impact is therefore less than significant (See also Section C, Biological Resources).

ENVIRONMENTAL REVIEW ACTION

On the basis of this initial evaluation:

__ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

_X_ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because the mitigation measures described below have been added to the project. A MITIGATED NEGATIVE DECLARATION will be prepared.

__ I find the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

Paia Levine
Deputy Environmental Coordinator

3-1-05
Date

For: Ken Hart
Ken Hart, Environmental Coordinator

Attachments:
1. Comments received during public review period

LITERATURE CITED

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APPENDICES
(Available **for** review, on file at the Santa Cruz County Planning Department)

Appendix A. ***NRCS*** Planning Documents

Appendix B. List of Preferred Plant Species

Appendix C: Description of Watersheds in Santa Cruz County

Appendix D. National Register of Historic Places in Santa Cruz County

Appendix E. List of Plants Not to be Spread or Introduced as Part of the Program

Appendix F. Declining Amphibian Population Task Force Fieldwork Code of Practice

State of California – The Resources Agency
DEPARTMENT OF FISH AND CAME
http://www.dfg.ca.gov
POST OFFICE BOX 47
YOUNTVILLE, CALIFORNIA 94599
(707)944-5500

December 30, 2004

Ms. Paia Levine
Environmental Coordinator
County of Santa Cruz
Planning Department
701 Ocean Street, 4th Floor
Santa Cruz, CA 95060
Fax (831) 454-2580

Dear Ms. Levine:

Master Permit for Environmental Enhancement Projects
Santa Cruz County
Mitigated Negative Declaration
SCH 2004112063

Department of Fish and Game (DFG) personnel have reviewed the document for the subject project. Thank you for the opportunity to comment during the extended review period. Personnel at the organization known as Sustainable Conservation have been working with DFG staff for several years on similar projects on behalf of Resource Conservation Districts (RCD) in other counties throughout the Central Coast Region. Overall, DFG is supportive of this effort by the RCDs to provide a permit coordination process for private landowners to undertake erosion reduction and habitat enhancement efforts.

Please be advised this project may result in changes to fish and wildlife resources as described in the California Code of Regulations, Title 14, Section 753.5(d)(1)(A)-(G)1. Therefore, de minimis determination is not appropriate, and an environmental filing fee as required under Fish and Game Code Section 711.4(d) should be paid to the Santa Cruz County Clerk on or before filing of the Notice of Determination for this project. DFG recently sent a letter to all Planning Departments in the State further explaining this requirement.

For any activity that will divert or obstruct the natural flow, or change the bed, channel, or bank (which may include associated riparian resources) of a river or stream, or use

1 http://ccr.oal.ca.gov . Find California Code of Regulations, Title 14 Natural Resources, Division 1, Section 753

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Conserving California's Wildlife Since 1870

material from a streambed, DFG may require a Streambed Alteration Agreement (SAA), pursuant to Section 1600 et seq. of the Fish and Game Code, with the applicant. Most, although not all, projects that will occur under the proposed Master Permit will be subject to the SAA requirement. Issuance of SAAs is subject to CEQA. DFG, as a responsible agency under CEQA, must consider the CEQA document for the project. The CEQA document typically must identify the potential impacts to the stream or riparian resources and provide adequate avoidance, mitigation, monitoring and reporting commitments for completion of the agreement.

Please be advised that California Endangered Species Act (CESA) Permits must be obtained if projects have the potential to result in take of species of plants or animals listed under CESA, either during construction or over the life of the project. Issuance of a CESA Permit is subject to CEQA documentation. As designed, the Master Permit does not incorporate or address CESA permitting, so no take can occur in conjunction with these project activities.

The Master Permit approach seeks to enhance permitting efficiency by creating a single CEQA document that will cover a wide variety of future projects that fall within certain categories of activity. DFG will provide further oversight on resource protection through the SAA or CESA permit processes. DFG will coordinate with the County, RCD and other agencies on future projects to determine the specific level of significance and make any necessary recommendations for additional or subsequent environmental review. For some situations, DFG may advise the RCD that a proposed project is not covered in the current Negative Declaration and may require separate CEQA documentation. If an SAA and CESA incidental take permit are being considered for such a project, DFG will not be able to finalize the SAA or incidental take permit until CEQA has been properly complied with.

DFG agrees with the inclusion of the Amphibian Population Task Force's Code of Practice in your list of protection measures (Page 51) for the California red-legged frog and Santa Cruz long-toed salamander, but suggests that you include the document in an appendix. Also, the need to completely stop work in the event of an occurrence of a fully protected species, properly outlined as Item 7 on Page 57 for the Santa Cruz long-toed salamander, should be identically practiced in the case of the San Francisco garter snake (Item 7, Page 55).

If you have any questions regarding these comments, please contact Serge Glushkoff, Environmental Scientist, at (707) 944-5597, or by email at SGlushkoff@dfg.ca.gov; or Scott Wilson, Habitat Conservation Supervisor, at (707) 944-5584.

Sincerely,

Robert W. Floerke
Regional Manager
Central Coast Region

cc: State Clearinghouse

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California Native Plant Society

December 15, 2004

Paia Levine, Environmental Coordinator
Santa Cruz County Planning Department
701 Ocean St.
Santa Cruz, CA 95060

RE: Santa Cruz Countywide Partners in Restoration Permit Coordination Program Proposal

Dear Ms. Levine:

The Santa Cruz Chapter of the California Native Plant Society (CNPS) is very supportive of the goals and objectives of the master restoration permitting process proposal. We feel that it can play a significant role in helping Santa Cruz County residents restore and enhance the natural resources of their properties and the overall water-quality and habitat values of our county.

We are concerned with the somewhat vague and confusing language regarding revegetation and restoration of native plant species and communities on pages 27 and 65 of the proposal document. To ensure that plants of the same species are used in restoration work, we suggest changing the following wording found on page 65 from:

"If native vegetation is disturbed during project implementation, the native plant community will be restored to preconstruction condition or better. Native plant characteristics of the local habitat type shall be the preferred alternative for revegetation. If the native local ecotype is not commercially available, plants of the same species but different ecotype may be used, unless that species (Appendix B) is susceptible to genetic swamping. If the native local ecotype is not commercially available and that species is identified as susceptible to genetic swamping, another native species may be used in its place."

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To: (Suggested changes are underlined.)

"If native vegetation is disturbed during project implementation, the native plant community will be restored to preconsrruction condition or better. Native plant characteristics **of** the local habitat type shall be used. These plants may not be commercially available, so planning should be done in advance to make sure that plants that are not site specific or commercially available will be grown on a contract basis. This may involve contracting for one or two years in advance, or planting in succession for several years.

The services of a qualified restoration botanist may be needed on large-scale restoration projects."

We think that these changes in wording and practice will ensure that the native disturbed plant community will be restored to preconstruction condition or better.

Thanks you foryourwork.

Fred Mc Pherson

Fred Mc Pherson. President
Santa Cruz Chapter, California Native Plant Society
P. O. Box 544
Boulder Creek, CA 95006
(831) 338-2097

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Paia Levine

From: Grey Hayes [grey@elkhornslough.org]
Sent: Tuesday, December 14,20042:12 PM
To: Paia Levine
cc: Frank Barron; Kelli.Camara; Nicole Martin
Subject: comments on 03-0513

Hello Paia,

I wanted to comment on the ap# 03-0513 "Santa Cruz Countywide Partners in Restoration Permit Coordination Program" item that I understand is deadlined for comment for tomorrow. As you may know, I helped network members of the scientific community in commenting on the preliminary drafts of this document. As such, many of my concerns have already been addressed.

First, the statement on the "negative declaration migations", un-numbered second page, measure c), states that sites should be monitored 3-5 years or until success criteria are met. There are no guidelines stated for choosing 3, 4, or 5 years nor any guidelines on 'success criteria,' therefore, this migigation is meaningless until further clarified. Success criteria for true mitigation should entail identifying and collecting data on a suitable reference site that will not be disturbed and restoring the disturbed site to the conditions (structure, composition, cover) of the reference site. Success criteria for non-native plant removal also needs further clarification in consultation with scientists. There are no BMPs established for removal, so inclusion of this language is meaningless; suggestions for the most problematic species in Santa Cruz County could be established with sufficient scientific review.

In many places in the document, there is reference to 'non-native invasive species,' however, a list of these is not referenced. The scientific community routinely reviews the list published by the California Invasive Plant Council. The standard when establishing regulation against 'non-native invasive species' is to reference this organization's "Exotic Pest Plants of Greatest Ecological Concern in California," especially their "List A." Their list is widely accepted and available at: http://ucce.ucdavis.edu/freeform/ceppc/documents/l'est_Plant_List2325.pdf

In Appendix B, the species Achillea millefolium (which is spelled incorrectly in the text) (yarrow) propagation stock should contain the footnote b, (use local divisions or do not plant within 1 mile) as this species has many local ecotypical variants.

Also, in review of the document, I had previously submitted a list *of* genera of special concern due to their local conservation value that should not, in any case, be used in restoration Projects because of the chance of planning or implementation mistakes that could cause contamination of the local gene pools of senstive species. I do not currently see this list as Part of the plan. It would include, at the very least, Arctostaphylos, Ceanothus, Cupressus, and Pinus which have rare local species that would be threatened with hybridization if incorrect non-local or nursery grown stock were used in a restoration project. Without including such language, there may a significant threat to CEQA species.

Finally, the title page for Appendix B mistakenly identifies the organization with which I am affiliated. While I worked for a brief time at the Elkhorn Native Plant Nursery in the early

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1990's, during the course of advising NRCS on this plant list; I was associated with the Elkhorn Slough National Estuarine Research Reserve's Coastal Training Program. Please change the text to reflect my current status.

Thanks,

Grey Hayes

Dr. Grey Hayes
Coordinator
Coastal Training Program
Elkhorn Slough National Estuarine Research Reserve
1700 Elkhorn Road
Watsonville, CA 95076
831-728-2822 (v)
831-728-1056 (f)
grev@elkhornslouah.org
http://www.elkhornslough.org/CTP/index.htm

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Paia Levine

From: Dan Carl [dcarl@coastal.ca.gov]
Sent: Friday, December 03, 2004 5:09 PM
To: Paia Levine
CC: Frank Barron; Nicole Martin (E-mail)
Subject RCD-NRCS Master Permit Neg Dec

Hi Paia,
Thanks for forwarding the neg dec for the master permit program. It is very thorough. I have only a couple of things to note about it at this point:

* My copy didn't have the list of native plant species to be used, but I presume this is OK. On this note, the "critical area plantings" measure should specify that such plantings will be native (and from the list).
* On the pipeline measure, I think it would be wise to make it explicit that this does not allow some kind of new diversion of water, rather the "source of supply" identified (p9) is required to be an existing developed source of supply. Also, I understand this to be supply for livestock, but the measure indicates it is to "points of its use" and appears to indicate that livestock is one such (but not the only) use. It should be explicit that this is for livestock use only. We have talked about this before in the larger group.
* For the stream bank protection and stream channel stabilization measures, would recommend that this include an explicit preference for natural "soft" materials as opposed to "hard" structures (like concrete structures, rip-rap rocks, gabions, etc.) if feasible.
* It is my understanding that the "structure for water control" measure is only culverts (and not some other type of structure). Would recommend that this is made explicit.
* The success criteria against which any individual project is measured should be explicit. Would suggest that this not be left vague (in the "follow-up monitoring and reporting" part of this), but rather is required to be included in the up-front submittal. Also, it is unclear how long projects would be monitored post-installation. I suppose it could be made explicit in each case through the identified and submitted success criteria. In any case, please note that CCC has been generally requiring 10 years of monitoring in larger restoration projects (5 in smaller ones). It may be that 5-10 years is too long for these kind of projects, but we should all think about what is an appropriate time period. It may be that less regular monitoring (check-ups) could be made part of the longer term reporting process for the overall permit (and thus account for some of this). I will give this some more thought.
* Native Monterey pine is a CNPS lb species, but it is not listed in Table 7 (though it is discussed under closed cone forests). Please add it to the list.
* The project notification should include identification of property lines and the underlying property owner, and, if other properties are involved for site access (but are not necessarily the site of the primary work), consent of neighboring property owners for site access. All of this should be shown on site plan maps.
* The project notification should include a description of any legal instruments that affect the project area. In other words, if a project will take place on a property that is encumbered by a deed restriction, easement, or other type of property restriction, that legal instrument could affect what can happen and how, and we need to know this information in advance to know if the projects are appropriate in this regard. Would suggest this is added to the list.
* It is implied in the project notification list that there would be some amount of site plans and cross-sections describing any particular project, but this is not explicit. Would suggest that it be made clear that the notification submittal for each project will include clear site plans and cross sections with the various other listed features identified on them, including underlying property ownership and the location and effect of any legal restrictions, Would also like to be sure these include a

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resources in the long run. I would suggest that this be made an explicit requirement as opposed to an expected outcome. In other words, I would suggest that it be required that projects pursuant to this permit that take place within public viewsheds be required to be made to look as natural and aesthetically pleasing as possible (but using curvilinear shapes, natural undulations matching the surrounding landform, avoiding hard/constricted structures, using endemic veggies, etc.). This seems to be the intent, but I think that projects within this public viewshed subset of the County should be thinking about this in the design phase from the get go as a requirement (and not as an indirect effect of the project).

* Please add CCC to the project notification list (unless this is somehow made explicit in the permit itself (see also below)

• Finally, and this is more to Frank and Nicole, we really also need to see the mechanics of the permit conditions (including the process for extension, changing, expiration. enforcement, etc.) to understand how this is all going to work. If there is a draft of the permit conditions, please forward as soon as possible.

I have to run outta here...Hope that helps.

Have a good weekend...

Dan

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ATTACHMENT 1, 9 of 9
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APPENDIX A. NRCS PLANNING DOCUMENTS

CALIFORNIA
ENVIRONMENTAL ASSESSMENT WORKSHEET

Date_____

Client and/or Business Name:
Purpose and Need Statement (Client Objective):
Description of Proposed Project:
Treatment Unit: Farm #: Tract #: Field #:
Watershed:
Name of Person(s) Completing Worksheet:

- This worksheet is used to document the effects a proposed activity may have on natural, human, and cultural resources, in compliance with NEPA and *NRCS* NEPA Policy (General Manual 190, Section 410).
- Effects are documented in terms of: Short Term - those that occur during installation/construction; and Long Term - those that occur during and after the activity is finished. Onsite and offsite, positive and negative, and cumulative effects must be documented. If mitigation is proposed effects must be documented.

	Environmental Effects Element	Description of Effects
I.	SOIL:	
a.	Soil surface (e.g. disruptions, destruction of structure, displacements, compaction, deposition, removal of organic material, improvements)?	
b.	Soil fertility?	
c.	Unique geologic or natural physical features (e.g. covering, modification, partial destruction, protection, etc.)?	
d.	Wind or water erosion of soils, or soil erodibility, either on or off site?	
e.	Siltation, deposition or erosion which may impact or modify the channel of a river, stream, ocean shoreline, or other water?	
f.	Exposure of people or property to geologic hazards such as landslides, mudslides, subsidence or similar hazards?	
g.	Number of acres of prime &/or unique cropland?	
	Other?	
II.	WATER:	
a.	Stream channel dimension, pattern, and/or slope (including down stream impacts)?	
b.	Surface water infiltration rates, drainage patterns, velocities and/or volumes?	
c.	Quality or quantity of discharge into surface waters, including, but not limited to temperature, nutrients, bacteria, or turbidity?	
d.	Quantity of ground waters through either direct additions/withdrawals or interception of aquifers?	
e.	Ground water quality?	
f.	Amount of water available for public use?	
g.	Exposure of people or property to flooding?	
h.	Other?	

	Environmental Effects Element	Description of Effects
III.	AIR:	
a.	Air quality?	
c.	other?	
IV	PLANTS:	
a.	Diversity of species, or numbers of any plant species (upland, riparian, wetland, eto.)?	
b.	Numbers or health & vigor of any unique, species of concern, rare, threatened or endangered plants?	
c.	Normal recruitment of existing, native species?	
d.	Other?	
V.	ANIMALS:	
a.	Diversity of species, or numbers of any species of animals (birds, mammals, fish, invertebrates)?	
b.	Unique, species of concern, rare, threatened, or endangered animals (review T&E lists)?	
c.	Native animals (migration barriers, competition from non-natives, etc.)?	
d.	Existing fish & wildlife habitat or critical habitat (nesting, spawning, etc.)?	
e.	Human activity during sensitive life stages (nesting, spawning, etc)?	
f.	Other?	
VI I.	OTHER HUMAN CONSIDERATIONS:	
a.	Noise levels?	
b.	Present or planned land uses?	
c.	Aesthetic resource, scenic value, or natural area?	
d.	Recreational opportunities?	
e.	Public health and safety?	
f.	Public interest related to the site or watershed?	
g.	Economic impacts to the clients, landowners, or public?	
h	Client well being?	
i.	Environmentaljustice?	
j.	Other?	

SPECIAL ENVIRONMENTAL CONCERNS Check each category. If the effect is adverse or positive to *any* of the following, explain in the notes section or on an attachment. . Under **Present** indicate Yes or **No.** For Cultural Resources purposes, if the activity is an "Undertaking", separate primary documentation is required. For other Concerns supplemental documentation may be required.

Concerns	NRCS Policy Procedure	Present	Positive Adverse Effect
Threatened or Endangered ensure not	190 GM- 410.22 , California Endangered Species Handbook		
Natural Area (To recognize and consider impacts when planning and recommending actions adjacent to nearby Natural Areas)	190 GM 410.23		
Landscape Resource (To preserve and enhance scenic beauty or improve landscape)	190 GM 410.24		
Floodplain Management (To conserve, preserve and restore existing natural and beneficial values of floodplains)	190 GM 410.25		
Wetland (To protect, maintain and restore wetland functions and values)	190 GM 410.26, NFSA Manual		
Stream Channel Modification (To maintain and restore streams, wetlands and riparian vegetation as functioning parts of a viable ecosystem)	190 GM 410.27-28		
Riparian Area (To protect, maintain, and restore riparian areas)	190 GM 411		
Prime and Unique Farmland (To minimize unnecessary and irreversible conversion of farmland *to* non agricultural use)	310 GM 403		
Cultural Resources (To preserve and prevent the destruction or degradation of cultural resources, including historical archaeological sites and traditional cultural places)	420 GM 401		
Coastal Zone Management Area (To ensure conservation of coastal resources)	Federal Register 6/25/99, PL 92-583		
Wild and Scenic River (Consideration of impacts when actions affect areas adiacent to Wild and Scenic Rivers)	Federal Register 9/7/82, p. 39454		
Special Aquatic Site (To protect, restore and maintain special aquatic sites)	Federal Register 12/24/80 EPA 404(b)(1) 2303 & 230.10		
Essential Fish Habitat (To conserve and enhance fish habitat for salmon, shellfish, marine fish)	50 CFR 600.905-930 Federal Register 12/19/97		

OTHER CONSIDERATIONS

Documentation of the following questions can be completed hen.

a If wetland impacts are proposed, conduct a wetland determination and complete the NRCS minimal effects procedure per the Food Security Act Manual. Make certain that the client contacts the US Army Corps of Engineers to determine the need for a Permit under Section 404 of the Clean Water Act and Section 10 Rivers and Harbors Act and the Regional Water Quality Control Board for Section 401 Clean Water Act certification.

b. If a stream, take or other water body is involved the client should contact the California Department of Fish and Game for a Section 1600 Stream Alteration Agreement.

c. Document mitigation planned or required to avoid, minimize, or compensate For negative impacts:

d. Document communications mth USFWS, NMFS, Corps of Engineers, EPA, CDFG, RWQCB, NRCS Biologist, etc.

e. Discuss any Cumulative Effects (beneficial or adverse):

f. Alternatives to Proposed Action that were considered (include reasons why alternative was not selected):

1. No Action
2.
3.
4.

g. Remarks or Other Considerations:

RECOMMENDATION (check one)

☐ Based upon the conclusions below, I find that this action will not have significant adverse impacts on the quality of the human environment. No further environmental analysis is required. The assessment indicates work should proceed

☐ Further analysis is necessary, including the possible need to prepare an Environmental Impact Statement or a Finding Of No Significant Impact. The landowner will be informed not to proceed until further assessment is completed.

h. Conclusions, based upon the assessment (rationale for the findings above):

Signature (Planner)	Title	Date
Reviewed/Concurred By	Title (District Conservationist)	Date

CA-CPA-WORKSHEET
MAY 2000

US DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

CHECKLIST OF RESOURCE PROBLEMS OR CONDITIONS

Business Name: _____ Tract/Land Unit: _____

NRCS Client Land Use: _____ Management System Label: _____

ANSWER ALL ITEMS AND DESCRIBE EACH YES ANSWER

	YIN	DESCRIPTION OF CONDITION
A.1.- Soil Erosion		
a. Sheet and Rill Erosion - USLE or RUSLE		_____ Tons/Acre/Year
a. Sheet and Rill Erosion - Narrative Entry	_____	_____
b. Wind Erosion - WEQ or RWEQ		_____ Tons/Acre/Year
b. Wind Erosion - Narrative Entry	_____	_____
c Ephemeral Gully .Numeric (Tons/Year)		_____ Tons/Year
c. Ephemeral Gully .Numeric (Acres Affected)		_____ Acres
c. Ephemeral Gully- Narrative Entry	_____	_____
d Classic Gully- Numeric (Tons/Year)		_____ Tons/Year
d. Classic Gully. Numeric (Acres Affected)		_____ Acres
d Classic Gully - Narrative Entry	_____	_____
e Streambank Erosion - Numeric (Tons/Year)		_____ Tons/Year
e Streambank Erosion - Numeric (Acres Affected)		_____ Acres
e Streambank Erosion - Narrative Entry	_____	_____
f. Irrigation Induced Erosion - Numeric (Tons/Year)		_____ Tons/Year
f. Irrigation induced Erosion - Numeric (Acres Affected)		_____ Acres
f Irrigation Induced Erosion - Narrative Entry	_____	_____
g. Soil Mass Movement- Numeric (Tons/Year)		_____ Tons/Year
g. Soil Mass Movement .Numeric (Acres Affected)		_____ Acres
g. Soil Mass Movement- Narrative Entry	_____	_____
h. Roads, Const., Scoured - Numeric (Tons/Year)		_____ Tons/Year
h. Roads, Const., Scoured - Numeric (Acres Affected)		_____ Acres
h. Roadbanks, El. Al. Erosion - Narrative Entry	_____	_____
I. Other Soil Erosion - Numeric (Tons/Year)		_____ Tons/Year
I. Other Soil Erosion - Numeric (Acres Affected)		_____ Acres
i. Other Soil Erosion - Narrative Entry	_____	_____
A.2.- Soil Condition		
a. Tilth, Crusting, Infiltration, Organic	_____	_____
b. Soil Compaction	_____	_____
c Excess Chemicals in Soil (Salinity)	_____	_____
d. Excess Animal Wastes/Organics in Soil	_____	_____
e. Excess Fertilizer in Soil	_____	_____
f. Excess Pesticide(s) in Soil	_____	_____
g. Soil Condition-Other	_____	_____
A.3.- Soil Deposition		
a. Soil Deposition Causing Onsite Damage	_____	_____
b. Soil Deposition Causing Offsite Damage	_____	_____
c. Soil Deposition-Onsite Safety Hazard		_____
d. Soil Deposition-Offsite safely Hazard	_____	_____
e. Soil Deposition-Other	_____	_____

CHECKLIST OF RESOURCE PROBLEMS OR CONDITIONS

ANSWER ALL ITEMS AND DESCRIBE EACH YES ANSWER:

	YIN	DESCRIPTION OF CONDITION
B.1. - Water Quantity		
a. Seeps		
b. Runoff/Flooding		
c. Soil Saturation		
d. inadequate Outlet6		
e. Irrig. Water Mgmt. - Amount Water Applied		Acre inches/Acre/Year
e. Irrig. Water Mgmt. - System Efficiency		Percent
e. Irrigation Water Mgmt - Narrative		
f. Nonirrigated Water Mgmt		
9. Onsite Conveyance Capacity		Acre inches
a Onsite Convevance Capacity - Narrative		
h. Offsite Conveyance Capacity		Acre Inches
h. Offsite Conveyance Capacity- Narrative		
i. Streams/Lakes Conveyance Capacity		Acre inches
i Streams/Lakes Restricted Capacity-Narrative		
I. Water Quantity-Other		
B.2. - Water Quality - Groundwater - Contaminents		
a Pesticide's) in Ground Water		
b. Nitrate-N Leaving Bottom of Root Zone		Lbs/Acre/Year
b. Nitrate-N in Groundwater		Mg/Liter
b. Phosphate-P Leaving Bottom of Root Zone		Lbs/Acre/Year
b. Phosphate-P in Groundwater		Mg/Liter
b. Nutrients 8 Organics In Ground Watw		
c. San in Ground Water		
d. Heavy Metals in Ground Water		
e. Pathogens in Groundwater		
f. Groundwater Pollution Severity		Code (AD-862)
f. Groundwater contaminants - Other		
B.2. - Water Quality - Surface Water - Contaminants		
9. Pesticide(s) in Surface Water		
h. Animal Waste		Tons/Year
h. Nitrate-N Leaving Field		Lbs/Acre/Year
h. Nitrate-N In Surface Water		Mg/Liter
h. Total Kjeldahl N Leaving Field		Lbs/Acre/Year
h. Ammonium-N Leaving Field		Lbs/Acre/Year
h. Solution-P Leaving Field		Lbs/Acre/Year
h. Total Phosphorus Leaving Field		Lbs/Acre/Year
h. Total Phosphorus in Surface Water		Mg/Liter
h. Nutrients 8 Organics in Surface Water		
i. Transperency Secchi Disk Reading		Meters
i. Sediment Yield, Average Annual		Tons/Year
i. Sediment Yield, Storm Event		Tons
I. Storm Event Suspended Sediment Yield		Tons
I. Turbidity in ntu's		ntu
i. Suspended Sediment/Turbid Surface Water		

CHECKLIST OF RESOURCE PROBLEMS OR CONDITIONS

ANSWER ALL ITEMS AND DESCRIBE EACH YES ANSWER:

	Y/N	DESCRIPTION OF CONDITION
B.2. - Water Quality - Surface Water - Contaminants		
j. Dissolved Oxygen		Mg/Liter
j Low Dissolved Oxygen in Surface Water		
k Salt Delivered		Tons
k Salt in Surface Water		
l. Heavy Metals in Surface Water		
m. Surface Water Temperature		Degrees C
m. Surface Water Temperature		
n Fecal Coliform Leaving Field		No./100ml
n. Fecal Streptococcus Leaving Field		No./100,;
n. Pathogen(s) In Surface Water		
n. Surface Water Pollution Severity		Code (AD-862)
n. Surface Water Total Dissolved Solido		PPTHousand
n Surface Water pH		pH
n Surface Water contaminant(s) - Other		
B.2. - Water Quality - Aquatic Habitat Suitability		
o. Five-day Biochemical Oxygen Demand		Mg/Liter
o Stream Fish Population		No./Sq.Mi.
o Stream Benthic invertebrates		No./Sq.Mi.
o Lake/Reservoir Fish Population		Lbs/Acre
o Lake/Reservoir Algae		Mg./Liter
o. Lake/Reservoir Rooted Macrophytes		Lbs/Acre
o Aquatic Habitat Suitability		
B.2. - Watw Quality - Other		
p. Annual Nitrogen Applied		Lbs/Acre/Year
p. Annual Phosphorus Applied		Lbs/Acre/Year
p. Water Quality Concerns - Other		
C.1. Air Quality		
a. Airborne Sediment/Smoke - Onsite Safety		
b. Airborne Sediment/Smoke - Offsite Safety		
c. Airborne Sediment/Smoke - Onsite Property		
d. Airborne Sediment/Smoke - Offsite Property		
e. Airborne Sediment/Smoke - Onsite Health		
f. Airborne Sediment/Smoke - Offsite Health		
9. Airborne Sediment/Smoke - Conveyance		
h. Airborne Chemical Drift		
i. Airborne Odors		
j. Air Quality- other		
C.2. Air Condition		
a. Air Temperature		
b. Air Movement		
c. Humidity		
d. Air Condition - Other		

US DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

CHECKLIST OF RESOURCE PROBLEMS OR CONDITIONS

ANSWER ALL ITEMS AND DESCRIBE EACH YES ANSWER:

	Y/N	DESCRIPTION OF CONDITION
D.1. - Plants – Suitability		
a. Plants Not Well Adapted to Site		
b. Plants Unsuitable for Intended Use		
c. Plants Suitability – Other		
D.2. - Plants - Condition		
a. Range Condition Index		Index
a Range Trend Condition Index		Index
a. Plants Productivity		
b. Plants Health & Vigor		
b. Plant Damage from Wind Erosion		
c. Plank Condition - Other		
D.3. - Plants - Manage ent		
a Forest Cover Typo		Type Code
a. Potential Wood Production		CuFt/Acre/Year
a. Site Index		Site Index
a. Forest Stocking Level (Basal Area)		SqFt/Acre
a. Number of Trees per acre		Trees per Acre
a. Forage Production		Lbs/Acre/Year
a. Forage Production		AUM/Acre/Year
a Establishment, Growth and Harvest		
b. Nutrient Management		
c. Plant Pests		
d. Threatened/Endangered Plank		
d. Plant(s) Management - Other		
E.1. - Animals - Habitat		
a. Domestic Animal Food Requirements		
b. Domestic Animal Cover - Shelter		
c. Domestic Animal Water Requirements		
d. Domestic Animal - Other		
E.1. - Animals - Habitat		
a. Wildlife Food Requirements		
b. Wildlife Habitat Suitability		Index
b. Wildlife Habitat Acres		Acres
b. Wildlife Cover - Shelter		
c. Wildlife Water Requirements		
d. Threatened/Endangered Sped —		
d. Wildlife " Other		
d. Animal Habitat - Other		
E.2. - Animals - Management		
a. Animals Population-Resource Balance Mgmt		
b. Animal Health Management		
c. Animal Management - Other		

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CHECKLIST OF RESOURCE PROBLEMS OR CONDITIONS

ANSWER ALL ITEMS AND DESCRIBE EACH YES ANSWER: DESCRIPTION OF CONDITION

a. Conservation System Cost Effectiveness

b. Farm/Ranch Financial Condition .....

c. Markets for Farm/Ranch Products .....

d. Available Mgt, Land. Labor. Matls. Equip ...

e USDA Base *Acreage* .....

f. USDA Program Participation .....

9. Long-term Financial Sustainability .....

h. Economics Considerations-Other .....

F.2 - Human -- Social

8. Public Health & Safety .....

b. Private/Public Values

c. Client Characteristics .....

d. Risk Tolerance-Aversion .....

e. Tenure .....

f. Social Considerations-Other .....

F.3. - Human – Cultural

a. Absence/Presence *of* Cultural Resources ...

b. Significance of Cultural Resources .....

c. Neutral/Positive Impact Cult Resource(s) ..

d. Mitigation *at* Negative Cultural Impacts. .

e Cultural Considerations-Other .....

Other Concerns/Remarks:

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NRCS-CPA-5(
1-94

SITESPECIFIC PRACTICE EFFECTS

Natural Resource:

Land use:

FIELD OR CMU	3/ CONSERVATION PRACTICES	1/ / 2/					

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1/ Enter the broad resource considerations illustrated in the CPPE mal located in Section IV of the FOTG.
2/ Enter the resource problems that correspond tc the resource considerations.
3/ Enter conservation practices from the FOTG that contribute toward solving the identified probl ms
4/ Enter practice effects illustrated in the CPPE matrix or localized practice effects data sheets.

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NATURAL RESOURCES CONSERVATION SERVICE

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1-94

Natural Resource:

Land use:

Client:

Field/CTU:

OPTION NO.	3/	1/					
		2/					
		4/					

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1/ Enter the broad resource considerations illustrated in the CPPE matrix located in *section* V of the FOTG.

3/ Enter CMS options by listing combinations of practices based on the "Site Specific Practice Effects Worksheet"

4/ Enter the Effects of selected practices. Refer to CPPE matrix located in Section V FOTG (Includes N/A, F, O, + or -)

IATURAL RESOURCES CONSERVATION SERVICE 1-94		OPID:
CONSERVATION EFFECTS TREATMENT OPTIONS	Address:	Field or Tract No.:

Treatment Option No.	Description of Treatment Option (with treatment management system):

Actions - Proposed Management (Kinds, amounts, and timing):	Effects (Effects of conservation treatment):	Comparison of Effects of Benchmark and Treatment Option	
		Impacts	Decisionmaker Evaluation

Comments:

The use of brand names does not constitute an endorsement by the Natural Resources Conservation Service.

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Appendix B. List of Preferred Plant Species

The following recommended plant species list (both native and non invasive, introduced species) for the Santa Cruz County Partners in Restoration Program was developed for the Program by the **NRCS** with assistance from Dr. Grey Hayes of the Elkhorn Slough National Estuarine Research Reserve's Coastal Training Program.

Recommended Plant Species for the Santa Cruz Countywide Partners in Restoration Program

Approved ***Native*** Species

Scientific Name	*Common Name*	*Tree Shrub Grass Forb*	*Ann/ Per*	1/ 34	2/ 342	2/ 393	2/ 412	3/ 342	3/ 393	3/ 412
Achillea millefolium[b]	Yarrow	F	P	X	X i			X i	X i	
Anaphalis margaritacea	Pearly Everlasting	F	P	X	X			X		
Asclepias fascicularis	Milkweed	F	P	X	X i			X i		
Aster chilensis	Aster	F	P	X	X i			X i		
Atriplex patula	Fat-Hen Saltbush	F	A	X	X			X		
Euthemia occidentalis	Goldenrod	F	P	X	X	X		X	X i	
Heliotropium curassivicum var. oculatum	Heliotrope	F	P	X	X			X		
Potentilla gracilis	Slender Cinquefoil	F	P					X i		
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 i		
Elymus glaucus[b]	Blue Wildrye	G	P	X	X	X	X	X	X	X
Elymus trachycaulus	Slender Wheatgrass	G	P	X	X i	X i	X	X i		X
Festuca idahoensis[b]	Idaho Fescue	G	P	X	X	X		X	X	
Festuca occidentalis[b]	Western Red Fescue	G	P	X		X			i X	
Festuca rubra[b]	Creeping Red Fescue	G	P	X	X i			X		
Festuca rubra[b]	Red Fescue (Molate)	G	P	X		X	X		X	X

Approved ***Native*** Species

Scientific Name	*Common Name*	*Tree Shrub Grass Forb*	*Ann/ Per*	1/	2/			3/		
				342	342	393	412	342	393	412
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	
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		

Approved *Native* Species

Scientific Name	Common Name	Tree Shrub Grass Forb	Ann/ Per	1/ 342	2/ 342	2/ 393	2/ 412	3/ 342	3/ 393	3/ 412
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		
Heteromeles arbutifolia	Toyon	T	P	X	X			X		
Platanus racemosa[c]	Western Sycamore	T	P	X	X			X		
Populus fremontlic	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., sedicment removal. *replanting*, harve

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, wi

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

Approved ***Native*** Species

Scientific Name	*Common Name*	*Tree Shrub Grass Forb*	*Ann/ Per*	1/	2/			3/		
				342	342	393	412	342	393	412
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		
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		

Recommended Plant Species for the Santa Cruz Countywide Partners in Restoration Program

Approved Non-Invasive ***Introduced*** Species

				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

APPENDIX C: DESCRIPTION OF WATERSHEDS IN SANTA CRUZ COUNTY

Ano Nuevo Creek

The Ano Nuevo watershed is located in the northwestern portion of the County along the border of San Mateo County. The watershed covers an area of approximately 10 square miles. The headwaters of this watershed begin in Santa Cruz County but empty into the Bay along the San Mateo coastline. The portion of this watershed in Santa Cruz County includes the headwaters of Whitehouse Creek, Cascade Creek, Elliot Creek, Wilson Creek, Green Oaks Creek, Ano Nuevo Creek, Finney Creek, and Willows Gulch. Big Basin Redwood State Park is present in the eastern portion of the watershed. Other land uses in the watershed include residential and agricultural land uses.

Waddell Creek

The Waddell Creek watershed drains an area of approximately 27 square miles and is comprised by Las Chance Creek, the two major tributaries of Waddell Creek, East Waddell and West Waddell, and numerous unnamed tributaries. East Waddell Creek is fed by Blooms Creek, Sempervirens Creek, Maddocks Creek, Rogers Creek, Opal Creek, and Union Creek. West Waddell is fed by Henry Creek and Berry Creek. Big Basin State Park constitutes the majority of land cover in the watershed with small pockets of rural residential and agricultural use near the coast.

Swanton Bluffs

Swanton Bluffs is a small watershed adjacent to the Scotts Creek and Waddell Creek watersheds. The watershed is approximately five square miles, and is comprised of two unnamed streams. Land use is predominantly agriculture with small strips of parkland along the coast as well as some residential areas.

Scotts Creek

Scotts Creek encompasses a 39 square mile watershed in northern Santa Cruz County. Big Creek and Little Creek are the major tributaries to Scotts Creek. Smaller tributaries include Queseria Creek, Berry Creek, Boyer Creek, Dead Man's Gulch, Winter Creek Mill Creek, Archibald Creek, and numerous unnamed streams and creeks. Principal land uses in the watershed include agriculture and timber, industrial use (particularly in the vicinity of lands held by Lockheed-Martin), residential use, and recreation. The stream provides salmonid habitat for both spawning and rearing anadromous salmonids. Coho salmon spawn naturally in Scotts Creek, making it the only major stream south of San Francisco where this occurs. Serious aggradation has occurred in the lower reaches of Scotts Creek resulting in accelerated sedimentation that threatens to impair critical spawning habitat of the coho and steelhead. Invasive and exotic plant species such as French broom (Genista monspessulana), Cape ivy (Senecio mikanioides) and other nonnative invasive species are also a problem and are present throughout the riparian comdors of the watershed.

Davenport

Davenport watershed is located between Scotts Creek and San Vicente and drains an area of approximately 8 square miles, Molino Creek and several unnamed creeks comprise this

watershed. Major land uses in this area include agriculture and mountain residential commercial and residential uses in the town of Davenport.

San Vicente Creek

The San Vicente watershed drains an area of approximately 14 square miles and is comprised of San Vicente Creek fed by Mill Creek and several unnamed tributaries. Land use in the watershed is predominantly residential with 2 quarries located on Mill Creek and on one of the unnamed tributaries to San Vicente Creek. There is also a small pocket of agricultural land along the coast.

Liddell Creek

The Liddell Creek watershed drains and area of approximately 8 square miles and is comprised of Liddell Creek, West Liddell Creek, and Yellow Bank Creek. Land use in the watershed is predominantly agriculture (about 60%) with the remainder comprised of mountainous residential areas.

Laguna Creek

The Laguna Creek watershed drains an area of approximately 8 square miles and is comprised of Laguna Creek, Reggiardo Creek, and several unnamed streams. Approximately half of the land use in the watershed is agriculture with the remaining area comprised of residential and resource conservation uses.

Majors

Majors watershed is located between the Laguna and Baldwin Wilder watersheds. It drains an area of approximately 5 square miles and is comprised of Majors Creek and three unnamed tributaries. Land use is predominantly parkland with the remainder comprised by rural residential and a small area of agricultural production.

Baldwin Wilder

The Baldwin Wilder watershed is located just south of and adjacent to Majors watershed and the San Lorenzo River watershed. It drains an area of approximately 20 square miles and is comprised of Baldwin Creek, Lombardi Gulch, Sandy Flat Gulch, Old Dairy Gulch, Wilder Creek (Peasley Gulch, Adams Creek, and Cave Gulch), and Moore Creek. The majority of the watershed is comprised of Wilder Ranch State Park with some agriculture along the coast and a quarry along Old Dairy Gulch.

San Lorenzo River

The San Lorenzo River is a 138 square mile watershed located in northern Santa Cruz County. It is the largest watershed lying completely within Santa Cruz County. Originating in the Santa Cruz Mountains, the watershed consists of a 25-mile long main stem and 9 principal tributaries that include the following (with associated smaller waterways shown in parentheses: Branciforte (Glen Canyon Creek, Redwood Creek, Granite Creek, Crystal Creek, Tie Gulch, and Blackburn Gulch), Carbonera (Camp Evans Creek and several unnamed streams), Zayante (Lompico Creek, Mill Creek, and Mountain Charlie Gulch), Bean, Fall, Newell (Loch Lomond Reservoir), Bear (Hopkins Gulch, whalebone Gulch, Deer Creek, Connely Gulch, and Shear Creek), Boulder (Foreman Creek, Silver Creek, Pea Vine Creek, Bracken Brae Creek, Jamison Creek, and Hare Creek), and Kings Creeks (Logan's Creek). Smaller creeks and waterways include Powder Mill Creek, Eagle Creek, Gold Gulch, Shingle Mill Creek, Bull Creek, Bennett Creek (Fall Creek and

South Fall Creek), Mason Creek, Love Creek (Smith Creek and Fritch Creek), Hubbard Gulch, Alba Creek, Clear Creek, Malosky Creek, Spring Creek Gulch, Two Bar Creek, Spring Creek, and numerous unnamed streams and creeks. The watershed includes the cities and communities of Santa Cruz, Scotts Valley, Felton, Ben Lomond, and Boulder Creek. Much of the watershed is forested with the exception of these pockets of urban areas. The San Lorenzo River is listed on the 2002 Clean Water Act Section 303(d) List of Water Quality Limited Segments for sediment, pathogens, and nutrients. A sediment Total Maximum Daily Load (TMDL) for the San Lorenzo River (and associated tributaries Carbonera Creek, Lompico Creek, and Shingle Mill Creek) has been adopted by the Regional Board.

Arana Gulch-Rodeo

The Arana Gulch-Rodeo watershed drains a 3.5 square-mile area at the outer (eastern) edges of the City of Santa Cruz. Major waterways and water bodies in this watershed include Arana Gulch, Leona Creek, Schwann Lake, Rodeo Creek Gulch, and several unnamed waterways. Principal land uses in the watershed are urban, primarily residential, commercial, and light industrial, plus institutional areas such as schools, hospitals, and cemeteries. Habitat types present in the watershed include wetlands and freshwater marsh, streambank vegetation, mixed evergreen/mixed broadleaf forest, and a few patchy areas of chaparral habitat. High sediment loads threaten the quality of habitat for the steelhead and other aquatic species in Arana Gulch. Reducing the delivery of sand and sediments to *Arana* Gulch, its tributaries, and the Santa Cruz Small Craft Harbor and providing passage for migrating adult steelhead to the eastern and central branches of Arana Gulch are identified as principal goals for the Arana Gulch watershed.

Soquel Creek

Located between the cities of Santa Cruz and Watsonville, the Soquel Creek watershed drains an area of 42 square miles. Major tributaries include the West Branch (Bums, Laurel, Hester Creek, Amaya Creek, Fern Gulch, Ashbury Gulch, Hinkley Creek, and numerous unnamed waterways) and the Main Branch (fed by Moore's Gulch, Grover Gulch, Love Creek and Bate's Creek). Smaller tributaries include Noble Gulch, Porter Gulch, Tannery Gulch and Borregas Creek. Principal land use in the watershed includes urban development, rural residential development, agriculture, parks and recreation, and mining and timber harvesting. The unincorporated town of Soquel and the City of Capitola are both located in the lower reaches of the watershed. Sedimentation and impairment of important fish habitat have been identified as principal resource concerns in *this* watershed. Soquel Lagoon is listed on the Clean Water Act Section 303(d) List of Water Quality Limited Segments for nutrients, pathogens, and sedimentation/siltation.

Aptos Creek

The Aptos Creek watershed drains an area of approximately 25 square miles in southern Santa Cruz County. Aptos Creek and Valencia Creek are the principal tributaries in the watershed. Aptos Creek converges with Valencia Creek approximately 1 mile inland of the Bay. Bridge Creek and Mangels Gulch empty into the Aptos Creek portion of the watershed and Trout Gulch empties into Valencia Creek. Land use in *this* watershed is comprised of forested lands, state parks and some rural residential areas. More than half of the Aptos Creek portion of the watershed is forested, With the majority of the creek running through the southern portion of the Nisene Marks State Park. Land use in the Valencia Creek portion of the watershed is primarily rural residential and urban development. There are historical and modem day logging sites in

both sub-watersheds. The Aptos Creek watershed provides important habitat to who and steelhead. Excessive sedimentation, low stream flow resulting from overpumping of groundwater in the region, fish barriers, loss of channel complexity, and poor water quality in the coastal lagoon are some principal resource concerns associated with the Aptos Creek watershed.

Pajaro River

The Pajaro River Watershed drains an area of approximately 1,300 square miles of land in Central California in Santa Cruz, San Benito, Santa Clara, and Monterey Counties. Approximately fifteen percent, or 200 square miles, of the Pajaro River Basin lies within Santa Cruz County. The Pajaro River watershed is comprised of the Watsonville Slough System (fed by Gallighan Slough, Harkins Slough, and Struve Slough), Corralitos Creek (fed by Rider Creek, Eureka Gulch, Diablo Gulch, Redwood Creek, Browns Creek, and Ramsey Creek), and Salsipuedes Creek (fed by College Creek, Green Valley Creek, Hughes Creek, Pinto Lake, Casserly Creek, and Gaffey Creek). Predominant land use practices in the Lower Pajaro and its tributaries include imgated croplands, rangelands, timberlands, urbanization, and rural residential development. The Pajaro watershed is home to several special status species including *the* tidewater goby, steelhead trout, Santa *Cruz* long-toed salamander, and the California red-legged frog. The Pajaro River and several tributary streams are considered to be water quality impaired due to sedimentation.

Watsonville Sloughs. Watsonville Slough drains 14 square miles from the hills of southern Santa Cruz County into the Pajaro River and Monterey Bay. The Watsonville Slough *system* is comprised of six individual sloughs including Watsonville Slough, Harkins Slough, Gallighan Slough, Hanson Slough, the main branch of the Struve Slough, and the western branch of Struve Slough. The Sloughs represent significant water supply resources, part of which are being used to offset salt-contaminated coastal wells in the region. Nutrient loading, oftentimes exacerbated by the absence of marsh vegetation, coupled with poor water circulation has resulted in eutrophic conditions in many areas of the Sloughs. Watsonville Slough is listed on the 2002 Clean Water Act Section 303(d) List of Water Quality Limited Segments for pathogens, pesticides, and sedimentation/siltation (Swanson Hydrology and Geomorphology 2003).

San Andreas

The San Andreas watershed is bordered on the north and east by the Pajaro River watershed and to the west by the Aptos Creek watershed. San Andreas drains an area of approximately 15 square miles and is comprised of Bush Gulch and *two unnamed streams.* Land use is predominantly agriculture with some rural and urban residential areas.

APPENDIX D. NATIONAL REGISTER OF HISTORIC PLACES IN SANTA CRUZ COUNTY

Bank of Santa Cruz County (added 1982 - Building - #82002273) Also known as 1955; County Bank of Santa Cruz 1502 Pacific Ave., Santa Cruz
Bayview Hotel (added 1992 - Building - #92000259) Also known as Anchor House 8041 Soquel Dr., Aptos
Bocklus, Godfrey M., House (added 1989 - District - #89000937) Also known as Orr, Frank and Zoe Ann, House 322 E. Beach St., Watsonville
Branciforte Adobe (added 1979 -Building - #79000552) 1351 N. Branciforte Ave., Santa Cruz
Brown, Allan, Site (added 1981 - Site - #81000178) Also known as CA-SCR-20 Address Restricted, Santa Cruz
Carmelita Court (added 1986 - Building - #86000456) 315–321 Main St., Santa Cruz
Castro, Jose Joaquin, Adobe (added 1976 - Building - #76000531) NW of Watsonville at 184 Old Adobe Rd., Watsonville
Cope Row Houses (added 1982 -Building - #82002274) Also known as Abbott Row House 412–420 Lincoln St., Santa Cruz
Davenport Jail (added 1992 - Building - #92000422) 1 Center St., Davenport
Felton Covered Bridge ** (added 1973 - Structure - #73000451) Covered Bridge Rd., Felton
Felton Presbyterian Church (added 1978 - Building - #78000774) Also known as Faye G. Belardi Memorial Library 6299 Gushee St., Felton
Garfield Park Branch Library (added 1992 - Building - #92000268) Also known as Garfield Park Library 705 Woodrow Ave., Santa Cruz
Glen Canyon Covered Bridge (added 1984 - Structure - #84001194) Also known as Delaveaga Covered Bridge Branciforte Dr., Santa Cruz
Golden Gate Villa ** (added 1975 - Building - #75000482) Also known as The Monte Carlo 924 3rd St., Santa Cruz
Hihn Building (added 1973 -Building - #73000450) Also known as Superintendent's Office 201 Monterey Ave., Capitola
Hinds, A. J., House (added 1983 - Building - #83001241) 529 Chestnut St., Santa Cruz
Hotel Metropole (added 1979 - Building - #79000553) Also known as Plaza Books; Paper Vision 1111 Pacific Ave., Santa Cruz
Judge Lee House (added 1980 - Building - #80000868) Also known as Julius Lee Home 128 E. Beach St., Watsonville
Lettunich Building (added 1992 - Building - #92001278) 506 Main St., Watsonville
Live Oak Ranch (added 1975 -Building - #75000483) Also known as Hagemann House

105 Mentel Ave., Santa Cruz
Looff Carousel and Roller Coaster on the Santa Cruz Beach Boardwalk *** (added 1987 - Structure - #87000764) Also known as The Big Dipper Along Beach St., Santa Cruz
Madison House (added 1984 - Building - #84001195) Also known as Mitchell Resetar House 335 East Lake, Watsonville
Mangels Ranchhouse (added 1978 - Building - #78003513) Aptos Creek Rd., Aptos
Mansion House Hotel (added 1983 - Building - #83001242) Also known as Mansion House 418-424 Main St., Watsonville
McHugh and Bianchi Building (added 1999 - Building - #72001551) Also known as Block Pacific Ave. and Mission St., Santa Cruz
Mission Hill Area Historic District ** (added 1976 - District - #76000530) Mission St., Santa Cruz
Neary-Rodriguez Adobe ** (added 1975 - Building - #75000484) Also known as Neary-Hopcroft Adobe 130-134 School St., Santa Cruz
Octagon Building (added 1971 - Building - #71000193) Also known as Hall of Records Corner of Front and Cooper Sts., Santa Cruz
Old Riverview Historic District (added 1988 - District - #87000626) Blue Gum Ave., Capitola Ave., Riverview Ave., Riverview Dr., and Wharf Rd., Capitola
Pacific Avenue Historic District (added 1992 - District - #87000004) Also known as Pacific Garden Mall Roughly bounded by Pacific Ave., Water, Front, and Cathcart Sts., Santa Cruz
Phillipsburst-Riverwood (added 1983 - Building - #83004369) Also known as Blake Hammond Manor CA 9, Ben Lomond
Rispin Mansion (added 1991 - District - #91000286) 2200 Wharf Rd., Capitola
Robinson, Elias H, House (added 1998 - Building - #97001634) 363 Ocean St., Santa Cruz
Santa Cruz Downtown Historic District (added 1989 - District - #89001005) Also known as Downtown Neighborhood' Roughly Rincon St., Church St., Chestnut St., Walnut St., Cedar St., Laurel St., Myrtle St., and Lincoln St., Santa Cruz
Scott, Hiram D., House (added 1977 - Building - #77000348) Also known as Scott House 4603 Scotts Valley Dr., Scotts Valley
Six Sisters-Lawn Way Historic District (added 1987 - District - #87000623) Roughly bounded by San Jose Ave., Capitola Ave., and Esplanade, Capitola
Stoesser Block and Annex (added 1983 - Building - #83001243) 331-341 Main St., Watsonville
US Post Office--Santa Cruz Main (added 1985 - Building - #85000139) Also known as Santa Cruz Main Post Office 350 Front St., Santa Cruz
Valencia Hall (added 1984 - Building - #84001201) Valencia Rd., Aptos
Venetian Court Apartments ** (added 1987 - District - #87000574) Also known as Venetian Court 1500 Wharf Rd., Capitola
Veterans Memorial Building (added 1992 - Building - #92000423)

Also known as Vets Hall 842--846 Front St., Santa Cruz
Watsonville City Plaza (added 1983 - Site - #83001244) Also known as The Plaza Bounded by Main, Peck, Union, and E. Beach Cts., Watsonville
Watsonville-Lee Road Site (added 1976 - Site - #76000532) Also known as Costanoan-Ohlone Cemetery Site; Ca-SCr-107 Address Restricted, Watsonville

Source: National Registry of Historic Places, Santa Cruz County
URL: http://www.historicdistricts.com/CA/Santa+Cruz/state.html

Appendix E. List of Plants Not to be Spread or Introduced as Part of the Program

Plant species that shall not be Spread or Introduced as Part of the Santa Cruz Countywide 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	–	?
Ailanthus altissima	Tree-of-heaven	x	x
Ammophila arenaria	European Beachgrass	x	x
Arundo donax	Giant Reed	x	x
Bromus rigidus	Rip gut grass	–	–
Calystegia sepium	Hedge Bindweed	?	?
Carduus pycnocephalus	Italian Thistle	–	–
Carpobrotus edulis	Iceplant	x	x
Centaurea solstitialis	Yellow Star Thistle	x	x
Cirsium vulgare	Bull Thistle	–	–
Conium maculatum	Poison Hemlock	–	x
Cortaderia jubata	Jubata Grass	–	x
Cortaderia selloana	Pampas grass	–	x
Cynodon dactylon	Bermuda grass	x	x–
Cytisus scoparius	Scotch Broom	x	x–
Cytisus striatus	Portuguese (Striatus) Broom	x	x–
*C. franchetti, C. pannosa**, C. lacteal*	Cotoneaster	x	x
Dactylis glomerata	Orchardgrass	x	x
Delaireia odorata	Cape Ivy	–	x
Ehrharta erecta, Ehrharta calycina	Veldt grass	x	x
Eucalyptus globulus	Eucalyptus	x	x
Erechtites glomerata	Australian fireweed	–	–
Erechtites mimima	Australian fireweed	–	–
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	–	?
Hordeum leporinum	Famer's foxtail	–	?
Leptospermum sp.	Australian tea tree	x	x
Lolium multiflorum	Italian rye grass	?	x–
Lolium perenne	perennial rye grass	x	?
Marrubium vulgare	horehound	x	x
Medicago hispida	bur clover	–	–
Melilotus albus	white sweet clover	–	?
Myosatis latifolia	Forget-me-not	x	x–
Oxalis pes-caprae	Bermuda buttercup	x	x–
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	–	–
Silybum marianum	milk thistle	–	x–
Sonchus oleraceus	common sow thistle	–	–
Spartium junceum	Spanish Broom	x	x–
Tamarix ramosissima	salt cedar, tamarisk	x	x
Tradescantia sp.	Wandering Jew	x	x
Ulex europaea	Gorse	x	x–
Vinca major	Periwinkle	x	x
Xanthium stumarium	cocklebur	–	x

1/ (–) indicates that species is not commonly planted

2/ **x)** indicates species **is** uncontrollable; **(x–)** indicates that species may be uncontrollable depending on patch size

*** much worse* than ***other species***

Appendix F. Declining Amphibian Population Task Force Fieldwork Code of Practice

The Declining Amphibian Populations Task Force (DAPTF) Fieldwork Code of Practice

1. Remove mud, snails, algae and other debris from nets, traps, boots, vehicle tyres and all other surfaces. Rinse cleaned items with sterilized (eg. boiled or treated) water before leaving each study site.
2. Boots, nets, traps etc. should then be scrubbed with 70% ethanol solution and rinsed clean with sterilized water between study sites. Avoid cleaning equipment in the immediate vicinity of a pond or wetland.
3. In remote locations, clean all equipment as described above (or with a bleach solution) upon return to the lab or "base camp". Elsewhere, when washing-machine facilities are available, remove nets from poles and wash with bleach on a "delicates" cycle, contained in a protective mesh laundry bag.
4. When working at sites with known or suspected disease problems, or when sampling populations of rare or isolated species, wear disposable gloves and change them between handling each animal. Dedicate sets of nets, boots, traps and other equipment to each site being visited. Clean and store them separately at the end of each field day.
5. When amphibians are collected, ensure the separation of animals from different sites and take great care to avoid indirect contact between them (e.g. via handling, reuse of containers) or with other captive animals.
   Isolation from unsterilized plants or soils which have been taken from other sites is also essential. Always use disinfected/disposable husbandry equipment.
6. Examine collected amphibians for the presence of diseases and parasites soon after capture. Prior to their release or the release of any progeny, amphibians should be quarantined for a period and thoroughly screened for the presence of any potential disease agents.
7. Used cleaning materials (liquids etc.) should be disposed of safely and if necessary taken back to the lab for proper disposal. Used disposable gloves should be retained for safe disposal in sealed bags.

The DAPTF Fieldwork Code of Practice has been produced by the DAFTF with valuable assistance from Begona Arano, Andrew Cunningham, Tom Langton, Jamie Reaser and Stan Sessions. For further information on this Code, or on the DAPTF, contact John Wilkinson, Biology Department, The Open University, Walton Hall, Milton Keynes, MK7 6AA, UK. E-mail: DAFTF'@open.ac.uk. Fax: +44 (0) 1908-654161

EXHIBIT D

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL OCEAN SERVICE

Monterey Bay National Marine Sanctuary
299 Foam Street
Monterey, California 93940

March 28,2005

County of Santa Cruz Planning Commission
701 Ocean Street
Santa Cruz, CA 95060

SUBJECT: SUPPORT FOR COUNTYWIDE MASTER PERMIT

Dear Colleagues:

I would like to express my support on behalf of the Monterey Bay National Marine Sanctuary for the proposed issuance of a Master Permit by the County of Santa Cruz for the Santa Cruz Countywide Partners in Restoration Permit Coordination Program. The Santa Cruz County Resource Conservation District (RCD), U.S.D.A. Natural Resources Conservation Service (NRCS), and the non-profit organization, Sustainable Conservation have worked in partnership with the federal, state, and local regulatory agencies over the past two years to reach this point of issuing the final regulatory approvals for this innovative program to encourage restoration on private lands in Santa Cruz County.

The health and resources of the Monterey Bay National Marine Sanctuary (MBNMS) are dependant upon good water quality, which is susceptible to non-point source pollution from urban, rural and agricultural lands. In response to these threats, the MBNMS developed a Water Quality Protection Program (WQPP) with five issue-orientated action plans that detail strategies to reduce pollution to the MBNMS. A component of the WQPP is the Agricultural and Rural Lands action plan, which provides a framework for working with growers and rural land owners to implement management measures. A key strategy in this plan recognizes the need for permit coordination program that remove a regulatory and financial burden to those who are seeking to improve water quality.

The MBNMS was an active participant in the development of the Elkhorn Slough Partners in Restoration Permit Coordination Program, the pilot project upon which the Santa Cruz program is based. The MBNMS recognized that the Permit Coordination Program was an effective tool in encouraging landowners to implement conservation practices that would reduce the introduction of pollutant-laden sediment from entering the ecologically sensitive Elkhom Slough system and sanctuary. The Partners in Restoration project got its start in 1998 in the Elkhorn Slough Watershed, a 44,000-acre coastal wetland marsh in Monterey County. At the time, strawberry farmers in the area were losing topsoil at an alarming rate due to erosion. The agricultural runoff was also causing damage to

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL OCEAN SERVICE

Monterey Bay National Marine Sanctuary
299 Foam Street
Monterey, California 93940

the Slough, a six mile waterway that drains into the MBNMS. While federal funds were available to pay for as much as 75% of the construction costs to land owners interested in implementing soil conservation measures, the process of obtaining permits from various local, state and federal agenaes discouraged some farmers from taking action. In some cases, the costs of permit compliance – including fees for highly paid consultants to help navigate the complex labyrinth of environmental requirements – could cost more than the construction work itself.

Before the Permit Coordination Program began, fanners in the region often needed permits from up to eight agencies when attempting to restore or enhance natural resource conditions on their property. The Elkhorn Slough Permit Coordination Program now offers farmers "one-stop shopping," requiring only a single permit to engage in restorative processes. In the first five years of the pilot program in Elkhorn Slough, more than forty projects enrolled in the program through the NRCS and RCD of Monterey County. These projects have prevented more than 40,000 tons of sediment from entering Elkhorn Slough, its tributaries, and the MBNMS.

The Permit Coordination Program in Santa Cruz County will alleviate the significant permitting obstacles faang private landowners in Santa Cruz County who are interested in installing environmentally beneficial conservation and restoration projects on their land. I strongly urge you promote this effort in Santa Cruz County to encourage a greater number of high quality restoration projects to be implemented on private lands by issuing the Santa Cruz County RCD a Master Permit for implementation of this Program. *Thank* you for your consideration of this important project, and please contact me at (831) 420-1670 should you have any comments regarding our support for this program.

Sincerely,

CHRIS COBURN
WQPP DIRECTOR

coastal
Conservancy

March **28,2005**

County of Santa Cruz Planning Commission
701 Ocean Street
Santa Cruz, CA 95060

RE: County Master Permit for the Santa Cruz Countywide Partners in Restoration Permit Coordination Program

To the Santa Cruz County Planning Commission,

I would like to express my support for the proposed issuance of a Master Permit by the County of Santa Cruz for the Santa Cruz Countywide Partners in Restoration Permit Coordination Program. The Santa Cruz County RCD, U.S.D.A. Natural Resources Conservation Service (NRCS), and the non-profit organization, Sustainable Conservation have worked in partnership with the federal, state, and local regulatory agencies over the past two years to reach this point of issuing the final regulatory approvals for this innovative program to encourage restoration on private lands in Santa Cruz County.

The Coastal Conservancy has funded and supported the development of permit coordination efforts throughout California because we recognize that it is an important tool to engage private landowners in restoration by removing the significant permitting obstacles from their path. The Permit Coordination Program advances the Coastal Conservancy's Strategic Plan by improving water quality, habitat and other coastal resources within the coastal watersheds and the ocean.

Besides funding the development of the Santa Cruz County Permit Coordination Program, the Conservancy has also funded the designs and permits for approximately 80 watershed restoration projects in the County as part of the Integrated Watershed Restoration Program (IWRP) for Santa Cruz County. While several of these projects are being completed by the County Planning and Public Works Departments, many of them are being carried out on private lands and will benefit greatly from the Permit Coordination Program.

Private landowners are increasingly interested in implementing conservation practices to reduce soil erosion, improve water quality, and enhance habitat on their lands. Unfortunately, because regulations do not distinguish between development and restoration projects, the complexities of obtaining permits for conservation practices often discourage landowners from doing work that improves habitat for fish and wildlife. The Permit Coordination Program in Santa Cruz County will alleviate the significant permitting obstacles facing private landowners in Santa Cruz County who are interested in installing environmentally beneficial conservation and restoration projects on their land.

The NRCS and Sustainable Conservation have fostered support throughout the state and at the federal level, in their efforts to replicate the success of the Elkhorn Slough Program. Sustainable

1330 Broadway, 11*th* Floor
Oakland, California 94612-2530
510·286·1015 *Fax:* 510·286·0470

Conservation received the Governor's Environmental and Economic Leadership Award in **2004** in recognition of their work on the Partners in Restoration Permit Coordination Program. Efforts to develop programs similar to the proposed Santa Cruz project now **span** the **length** of California from San Diego to Humboldt and help private owners on working landscapes complete badly needed restoration projects. Thus far, projects facilitated by these permit coordination programs have prevented over 65,000 tons of soil from eroding and entering waterways, destroying habitat and degrading water quality.

I strongly urge you promote this effort in Santa *Cruz* County to encourage a greater number **of** high quality restoration projects to be implemented on private lands by issuing the Santa Cruz County RCD a Master Permit for implementation of this Program. Thank you for your consideration of this important project.

Sincerely,

Sam Schuchat, Executive Director

MONTEREY COUNTY

PLANNING AND BUILDING INSPECTION DEPARTMENT

240 CHURCH STREET, SALINAS CA 93901 PLANNING (831) 755 5025 BUILDING (831) 755-5027 FAX (831) 755 5487
MAILING ADDRESS P O BOX 1208 SALINAS CA 93902
COASTAL OFFICE 2620 1st Avenue MARINA CALIFORNIA 93933 PLANNING (831) 883-7500 BUILDING (831) 883-7501 FAX (831) 384-3261

SCOTT HENNESSY, DIRECTOR

March 24,2005

County of Santa Cruz Planning Commission
701 Ocean Street
Santa Cruz, CA

RE: Restoration Permit Coordination Program for Santa Cruz County

Dear Planning Commissioners:

While you might consider it unusual **for** the Planning Director of an adjacent county to be providing comment on a proposed project in your county, **I** feel the Restoration Permit Coordination Program warrants my comments since it is an unusual and beneficial proposal

I would like to express my support for the proposed issuance of a Master Permit by the County of Santa Cruz for the Santa Cruz Countywide Partners in Restoration Permit Coordination Program. Monterey County is home to the pilot Permit Coordination Program developed in the Elkhorn **Slough** watershed in Monterey County in **1998.** By creating an exemption to **our** County's Grading and Erosion Control Ordinances **for** this program, we have seen a greater number ***of*** environmentally beneficial erosion control and habitat restoration projects implemented in our County over the last five years than what would have been implemented if the Program had not been in place.

Landowners in Monterey County whose project fits under the auspices of the Elkhorn **Slough** Programmatic Approvals were saved the delays of obtaining an individual County grading permit (in addition to the individual permits from all of the applicable state and federal agencies) that they would otherwise need to obtain. In addition, the Permit Coordination Program saves our County staff time by not requiring review of project plans for these environmental enhancement projects, leaving more **time** to focus on projects that could potentially adversely affect resources in the County.

The Resource Conservation District (RCD), USDA-Natural Resources Conservation Service (NRCS), and the non-profit organization, Sustainable Conservation work effectively in partnership with the federal, state, and local regulatory agencies to develop efficient resource protection and restoration measures. **I** strongly urge you to support this effort in Santa Cruz County to encourage a greater number of high quality restoration projects to be implemented by issuing approval to the **Santa Cruz** County RCD and NRCS to carry out this Program. Thank you for your consideration of this important project.

If you have any questions please do not hesitate to contact me.

Sincerely,

Scott Hennessy
Planning Director, Monterey County

Arana Gulch watershed Alliance

345 Lake Ave. Suite F, Santa Cruz, California 95062
(831) 475-2379 phone/fax www aranagulch org, rjhaver@pacbell.net

March 29,2005

County of Santa Cruz Planning Commission
701 Ocean Street
Santa Cruz, CA 95060

To The Santa Cruz County Planning Commission,

I would lie to express my support for the proposed issuance of a Master Permit by the County of Santa Cruz for the Santa Cruz Countywide Partners in Restoration Permit Coordination Program. Over the past two years the Santa Cruz County RCD, U.S.D.A. Natural Resources Conservation Service (NRCS), and the non-profit organization, Sustainable Conservation have worked in partnership with the federal, state, and local regulatory agencies to reach this point of issuing the final regulatory approvals for this innovative program to encourage restoration on private lands in Santa Cruz County. I applaud their efforts. We are. one group waiting for the help needed from a Master Permit process.

Our group, the *Arana* Gulch Watershed Alliance (AGWA) is a local watershed group begun in 1997. AGWA's mission is to conserve, protect, restore, and enhance the natural resources of the *Arana* Gulch Watershed. Under the umbrella of the Santa Cruz County Resource Conservation District and in partnership with Santa Cruz Port District, AGWA is comprised of voluntary landowner and user participants. We conducted a watershed assessment and have identified restoration projects in the Arana Gulch Watershed Enhancement Plan.

Goals addressed in the *Arana* Gulch Watershed Enhancement Plan include:

- Property protection along the *stream* comdor; homes, parks, businesses, schools, and boat harbor.
- Restoring *steelhead* and wildlife habitat, allowing it to stabilize and grow.
- Improving water quality, groundwater protection and aquifer recharge zone protection.
- To help nature naturally renovate and clean the flows from Arana Gulch into the Monterey Bay.

Unfortunately, because regulations do not distinguish between development and restoration projects, the complexities of obtaining permits for conservation practices often discourage landowners from doing work that improves habitat for fish and wildlife. We have first hand experience with disincentives facing private landowners to implement restoration projects in our watershed. We look forward to a process that will help landowners to succeed at being good stewards of the land.

I strongly urge you to promote this effort in Santa Cruz County to encourage a greater number of high quality restoration projects to be implemented on private lands by issuing the Santa Cruz County RCD a Master Permit for implementation of this Program. Thank you for your consideration of this important project that will make the difference in natural resource protection.

Sincerely,

Roberta J. Haver

Roberta Haver, Watershed Coordinator
Arana Gulch Watershed Alliance
345 Lake Ave. Suite E
Santa Cruz, California 95062