



**Santa Cruz County
Resource Conservation District**

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The mission of the Santa Cruz County Resource Conservation District is to help people protect, conserve and restore natural resources through information, education and technical assistance programs.

We are on the Web!

www.sccrcd.org

This newsletter has been funded through a 319(h) Clean Water Act grant from the United States Environmental Protection Agency and administered by the California State Water Resources Control Board.

Resources

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Resource Conservation Districts have had a presence in Santa Cruz County since 1941, when the Pajaro RCD was formed in South County. Later, in 1978, the Redwood RCD was formed to serve the central portion of the County. As the County began to grow in population and development began to encroach on more mountainous and sensitive land, the need arose to address the resource issues beyond the present boundaries of the two districts. In 1978, the Directors of the Districts petitioned the Local Agency Formation Commission (LAFCO) to extend the District boundaries countywide, excluding the territories of the four incorporated cities. This new District was named the Santa Cruz County Resource Conservation District with a service of over 260,000 acres. The City of Capitola was subsequently annexed to the District in 1983, at the request of the City of Capitola.

The Santa Cruz County Resource Conservation District (SCCRCD) is a special district organized under state law. The SCCRCD is also a public resource agency and has no enforcement or regulatory functions. The District works closely with the USDA Natural Resources Conservation Service, through a mutual agreement, in responding to the soil and water management needs of Santa Cruz County land users. The Resource Conservation District (RCD) and Natural Resources Conservation Service (NRCS) relationship was created through the Soil Conservation Act of 1935. Districts were to be led by an elected board. The purposes of the District's were to advocate soil and water conservation, to sponsor the federal partner (NRCS) at the local level, to enter into cooperative conservation agreements with landowners, and to advise NRCS on what conservation work needed to be done at the local level. Thus, the conservation partnership was born.

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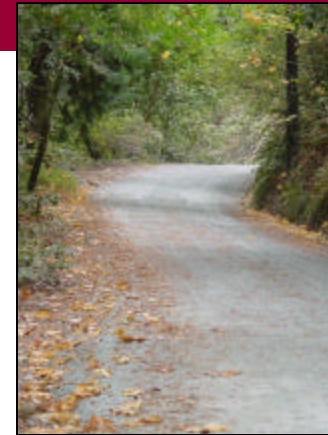
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San Luis Obispo, CA 93401-7906
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Volume 1

December 2003



Special points of interest:

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- Technical Advisory Committee
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- Road Maintenance Guide
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News From the Road

Santa Cruz County Resource Conservation District
Serving Santa Cruz County residents since 1941

San Lorenzo Private Roads Cost-Share Program

In March 2003, the Santa Cruz County Resource Conservation District (RCD) was awarded a 319(h) Clean Water Act grant from the State Water Resources Control Board for *Cost-Share Implementation of Erosion and Sediment Control Best Management Practices for Private Roads in the San Lorenzo River Watershed*. This program was created to expand on the District's previous 319 (h) grant funded program for erosion and sediment control projects in the San Lorenzo River Watershed.

The previous program targeted both streambank and road drainage improvements. The current program is focused solely on road drainage improvements. The focus on roads comes from the results of studies done in the San Lorenzo River Watershed including the *San Lorenzo Watershed Management Plan* and the *San Lorenzo Watershed Total Maximum Daily Load Report* that have identified poor construction and maintenance of road networks in the watershed as a major source of sediment impacting the water quality of the San Lorenzo River

and its tributaries. In fact, the San Lorenzo River is on the State Water Resources Control Board's list of impaired water bodies for sediment /siltation. Erosion is a natural occurrence in most of our local watersheds. However, population growth has brought development which has increased impacts on the river system. Improperly constructed and poorly maintained roads is a common cause of erosion and excessive sediment entering our local streams.

The sediment imbalance in the watershed can cause an increase in costs of treating the drinking water that originates from the San Lorenzo River Watershed, supplying water to customers in the City of Santa Cruz and outlying areas from Davenport to 41st Avenue. Additionally, this sediment overload is also impacting the river ecosystem.

Steelhead trout (*Onchorynchus mykiss*) and coho salmon (*Onchrynchus kistuch*) living in the San Lorenzo River and its tributaries can be adversely affected by excessive erosion and sediment entering the stream. The sediment can fill in

spaces in the redds (nests) of these important fish species, suffocating the eggs and newly hatched young. Too much sediment can also fill in pools and riffles in streams. Deep pools provide steelhead trout and coho salmon with hiding places from predators. Riffles provide habitat for aquatic insects that juvenile steelhead depend on for food. In fact, steelhead trout are listed as threatened species under the Federal Endangered Species Act (ESA) and coho salmon are listed as endangered under California's ESA.

The San Lorenzo Roads Cost-Share Program was created to address the sediment impacts due to private road networks in the watershed. The program offers cost-share assistance to road associations for road drainage improvements. Educational workshops, technical trainings, and informational newsletters are also components of the grant. For more information on this program, contact the RCD at sccrcd@sccrcd.org or at (831) 464-2950.

Technical Advisory Committee

In order to provide the community with technical assistance, the San Lorenzo Roads Cost-Share Program is overseen by a Technical Advisory Committee (TAC). The TAC is made up of local resource professionals from the

USDA Natural Resources Conservation Service; County of Santa Cruz Environmental Health, Planning, and Public Works Departments; City of Santa Cruz Water Department; Monterey Bay National Marine Sanctuary; Certified

Professionals in Erosion and Sediment Control; and local road contractors. These technical experts bring the experience and knowledge necessary to review all technical aspects of the program.

Technical Training

On June 25, 2003 the RCD held a technical training for private road associations in the San Lorenzo Watershed as well as road contractors interested in working on private road projects. The purpose of the training was to provide technical information about road drainage improvements that will help reduce sediment runoff into the San Lorenzo River and its tributaries. The training included demonstrations of road cross drains including waterbars, rolling dips, and culverts. Additionally, the training included examples of culvert



Technical Training attendees learn about using rolling dips to improve road drainage.

inlets and outlets and a road graveling demonstration. The training was lead by Steve Bulter (Certified Professional in Erosion and Sediment Control, Registered Professional Forester, RCD Board of Directors). The installations were done with the help of Kenny Pelphrey and John Jackson. The training was hosted by the City of Santa Cruz at their Loch Lomond Reservoir property. Additional technical information was provided by USDA Natural Resources Conservation Service staff Rich Casale (District Conservationist), Kelli Camara

(Soil Conservationist), Joshua Schwartz (Roads Engineer), and Craig Ficenec (Conservation Engineer), and local road contractor and RCD Board of Directors member Howard Liebenberg. Those road contractors who attended the training were eligible to work on the road drainage improvement projects being implemented through the San Lorenzo Roads Cost-Share Program in the Summer/Fall of 2003. Another technical training will be held in late Spring/early Summer of 2004 before implementation of the 2004 private road drainage improvement projects.

Road Drainage Improvement Projects

A major component of the San Lorenzo Watershed Roads Cost-Share Program is the implementation of road drainage improvement projects. These projects are a collaborative effort between the RCD, Technical Advisory Committee, local road contractors and private road associations in the San Lorenzo Watershed. Up to eight projects will be implemented during the course of the two-year grant funded program. Each road association is required to provide 50% of the cost of their

project either through cash or in-kind services (labor/materials) while the grant program provides funding for the remaining project costs. Additionally, after receiving training from the Coastal Watershed Council, each road association is required to conduct before, during, and after photo-monitoring of the projects they implemented to document their road drainage improvements. Four projects were implemented in the Summer/Fall of 2003. Two projects were located on private

roads in Boulder Creek (Bear Creek Canyon Road and Deer Creek Road) and the other two projects were located on private roads in the Lompico area of Felton (Oceanview Road and Upper Lompico Road). Each road association worked with the RCD, TAC, and their contractors to design and implement road drainage improvements that would decrease erosion and sediment runoff from their roads that could enter adjacent streams. Four more projects will be implemented in 2004.

As a part of the Roads Cost-Share Program each road project is funded with up to \$9,375 through the grant program and each participating road association must match that funding through cash or in-kind services.



New culvert outlet drains into vegetation to dissipate drainage effect on slope.

Project Implementation

Several types of improvements were made on all four road drainage improvement projects implemented in 2003. The Ocean View Road project included insloping of their road, installation of a concrete inboard drainage ditch, road surfacing improvements, and installation of a rock basin energy dissipater at their drainage outlet. The Upper

Lompico Road project included road recontouring, road surfacing improvements, inboard ditch clearing, installation of waterbars and rolling dips as well as road realignment adjacent to a failing slope. The Bear Creek Canyon Road project included culvert replacements, upgraded culvert inlets and outlets, installation of rolling dips, and

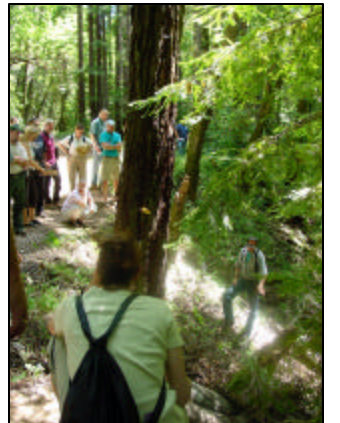
road surfacing upgrades. The Deer Creek Road project included the replacement of a culvert, culvert inlet and outlet upgrades, installation of rolling dips and road surfacing improvements. Many of the drainage improvements implemented on these projects were similar to those demonstrated at the technical training.

Upcoming Workshop and Road Projects Tour

In January 2004 the RCD will be holding a workshop and tour as a part of the San Lorenzo Roads Cost-Share Program. The workshop will focus on resources for private road associations to become better organized and to better understand legal issues surrounding road association functions. A workshop packet will be distributed with resources regarding road associations and technical information regarding road drainage improvements as well

as general information about the San Lorenzo Watershed and impacts on salmon and steelhead. Workshop speakers will include a representative from a local road association and a Community Service Area (CSA) who will share their experiences organizing their road associations. Vince Hurley, a local attorney, will also be speaking about laws pertaining to road associations. The workshop will be held on Wednesday, January 21st from 7:00 P.M. to 9:00 P.M. at the

Highlands Park Lorenzo meeting room. A project tour the following Saturday morning will highlight some of the road drainage improvement projects implemented in 2003. Tour participants will meet at the Highlands Park parking lot and carpool up to Boulder Creek to tour the road projects. Road Association representatives will be available to answer questions about their projects. The project tour will be held on Saturday, January 24th from 9:30 A.M. to 12:30 P.M.



Come join us on a tour of the road drainage improvement projects.

Updated Private Road Maintenance Guide

In January 2004, an updated version of the Private Roads Maintenance Guide to Santa Cruz County is scheduled to be released. The revised guide will include information about forming private road associations including County Service Areas. The majority of the guide includes sections of technical information pertaining to erosion, drainage, road construction, road

maintenance, slopes, and vegetation. Additional resources provided in the guide are information on the Endangered Species Act and existing laws in Santa Cruz County, a list of resource and regulatory agencies, and a list of Certified Professionals in Erosion and Sediment Control who may be able to help you with your road drainage improvements. The guide will be made available to

the public through the Resource Conservation District, the County of Santa Cruz Planning Department and at the Santa Cruz, Felton, Soquel, and Aptos branches of the Santa Cruz County Library system. For further information or to receive a copy of the guide, please contact the Santa Cruz County Resource Conservation District at (831) 464-2950 or via email at sccrcd@sccrcd.org

The revised Private Roads Maintenance Guide will also be made available on the Santa Cruz County Resource Conservation District website at www.sccrcd.org

Do you have a road drainage improvement project?

January 2004 marks the beginning of the second year of the San Lorenzo Roads Cost-Share Program. This means four more private road drainage improvement projects will be chosen to be implemented in the Summer of 2004. If you have a private road association in the San Lorenzo Watershed you may be eligible for technical and financial assistance for your road drainage improvement project. Interested private road associations will be

asked to submit an application for review by the Technical Advisory Committee. The TAC will visit each eligible project site and rank them using selection criteria. One of the things the TAC will be looking for is if your road sediment runoff may be effecting the San Lorenzo River or its tributaries and improvements would be beneficial to improving water quality in the watershed. The TAC will also want to know if your road association is well

organized and can take on the time commitment and responsibilities associated with implementing a project through this grant program. Some responsibilities would include contracting with the RCD and with road contractors, tracking expenses and in-kind services, photo-monitoring of your project and willingness to share your project outcomes through a public workshop/tour. If you are interested in applying, please contact the RCD at 464-2950.



Debris alignment racks ("trash racks") on culvert inlets help catch woody materials and vegetation that can plug culverts.