

Implementation Action	Implementing Parties(s) <sup>1</sup>	Progress Description <sup>2</sup> (e.g. milestones, deliverables, submittals)	Time-Schedule <sup>3</sup> (expected completion date)	Summary <sup>4</sup>	Overall Progress <sup>4</sup>					
					Not Started	Some Progress	Moderate Progress	Significant Progress	In Place and On-going	Complete
A. Increase presence at Pre-Harvest Inspections to 100% of Class I and Class II watercourses (watercourses supporting use for domestic water supply, fish, and/or aquatic habitat for non-fish aquatic species).	RWQCB	% Inspected annually of total waived permits	November 2005 and annually thereafter	Since November 2005 Water Board staff attended two of four (50%) of the CDF preharvest inspections (PHIs) scheduled for proposed timber harvest plans in the San Lorenzo River watershed. For the two PHIs that Water Board staff was not able to attend, staff conducted an inspection after the CDF PHI. Water Board staff completed all inspections prior to issuance of a waiver of waste discharger requirement or waste discharger requirement.					X	
B. Perform Post-Harvest Inspections 3 to 5 years after harvest on Timber Harvest Plans with Class I and Class II watercourse crossings.	RWQCB	% Inspected annually of total waived permits	November 2005 and annually thereafter	Water Board staff attended 40% (3/8 plans completed as of April 2007) of total waived permits.					X	
C. Convene a Working Group of federal, state, and local agencies, and timberland owners and foresters to develop specific timber harvesting management practices for the San Lorenzo River Watershed.	NMFS, CDF, County Planning, RWQCB, Timber Land Owners	Status of workgroup efforts to develop practices	November 2006	Process was partially implemented.  Prior to the TMDLs, the Board of Forestry adopted a few new rules for the County, although they mainly pertained to noticing requirements. The County also determined the zone districts within which timber harvest operations could occur.			X			

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D. Enforce erosion control ordinance following 3-year Timber Harvest Plan maintenance period.	County Planning	Report of number of violations, calls, or cases	November 2005 and annually thereafter	<p><i>This action was in-process with CDF to attend work completion inspections in 2007 and thereafter.</i></p> <p><i>The Planning Department enforced the Erosion Control Ordinance on properties with active permits or applications, properties for which a complaint was received, and properties with egregious violations that were viewable from public and private roads.</i></p> <p><i>County representatives responsible for review of timber harvests requested to receive advanced notice in order to attend the work completion inspection with CDF to review erosion control measures.</i></p> <p><i>Between 2003 and 2004, the Planning Department received several complaints on one parcel for which a Timber Harvest Plan was prepared in 1990. The County issued a red tag for illegal road grading, grading within a riparian corridor, and grading and land clearing in a sensitive habitat. All violations were corrected and the County resolved the case in 2007.</i></p>		X				

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E. Develop strategy for more effective enforcement of County code violations pertaining to erosion control and sedimentation prevention throughout the San Lorenzo Watershed.	County Planning	Report of number of valid complaints received and red tags issued	November 2005 and annually thereafter	<p>The County restructured the Code Compliance organizational chart – this allowed the Planning Department to better abate violations involving grading, erosion control, and riparian corridor development, which all contributed to increased sedimentation.</p> <p>The County reported milestones, including annual violations (ranging from 51-70) and red tags issued (ranging between 13-35). Process improved – 179 inspections in the San Lorenzo River (SLR) watershed.</p> <p>A private non-profit organization (the LWC) reported concern for the level of erosion-related code compliance (e.g. land use, riparian area management, grading). The LWC and Water Board staff notified the County of these concerns.</p>				X		
F. RWQCB will review evidence of Timber Harvest Plan Best Management Practices developed pursuant to Section 916.9 of 2001 Forest Practices Act during Pre-Harvest and Post-Harvest Inspections.	CDF, THP Submitter, RWQCB	BMPs developed	November 2005 and annually thereafter	<p>Water Board staff conducted review as part of Actions A and B;</p> <p>Water Board staff reviewed evidence pursuant to the Forest Practices Act.</p> <p>Water Board staff proposed modifying existing Actions to include language that requires THP submitters to 1) comply with General Conditional Waiver of Waste Discharge Requirements - Timber Harvest Activities in the Central Coast Region and 2) implement management practices to control sediment discharges (e.g. for “high” erosion hazard ratings, per available studies).</p>					X	
G. Create public road database to inventory and	County Public	Database created	November 2006	The County of Santa Cruz (County) Department of Public Works created a public road database to inventory and prioritize					X	

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prioritize problems for correction.	Works, Caltrans, Cities	and problems prioritized		<p>problems for correction, developed a Public Roads Maintenance BMP Program, and improved public roads spoils management and disposal, implemented educational programs and modified policies and procedures to improve riparian corridor protection, The County created a Geographic Information System (GIS) system that contained all County Roads, and inventoried and prioritized problems based on fieldwork conducted through the San Lorenzo Road-Related Erosion Assessment. The final report for all San Lorenzo roads was completed in February 2005. Five high-priority projects identified through this process were scheduled for implementation in the summer of 2007. These projects included four cross-culvert repairs along Kings Creek and one culvert retrofit along Gold Gulch. Implementation of these projects will reduce the risk of culvert failure and the deposition of 3,649 cubic yards of sediment. These projects will be funded in part through grant funding from the California Coastal Conservancy, the Water Board and the County.</p> <p>The City of Santa Cruz (City), Department of Public Works, had a public road database since the 1990s that inventoried and prioritized problems for correction. The City's database included a "pavement management system" which utilized a pavement condition index number as a tool to prioritize which public roads needed to be fixed, paved, overlaid, reconstructed, etc. In addition, there were no unpaved public roads within the City (not including alleyways).</p> <p>The City of Scotts Valley has not started a road data base. Maintenance staff performed an inspection of all maintained streets and chose the top three locations that appeared to</p>						

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				experience some erosion issues. Improvements will be in place for those locations prior to Winter of 2008.						
H. Develop a Public Roads Maintenance Best Management Practices (BMP) Program.	County Public Works and Planning	Program developed ; Miles or numbers of road drainage improvement projects related to number of landowners or road segments	November 2006 and annually thereafter	This action was completed with ongoing trainings. Public Works developed a Public Roads Maintenance Best Management Practices (BMP) Program based on the FishNet 4C cooperative operations & maintenance manual "Guidelines for Protecting Aquatic Habitat and Salmon Fisheries for County Road Maintenance" adopted by the Board of Supervisors in 2004.					X	
I. Improve public road spoils management and disposal: develop spoils disposal site(s) in or near the San Lorenzo Watershed.	County Public Works and Caltrans	Disposal sites developed (One site location – complete)	November 2009	Public Works secured one spoils site in South County (Cabrillo Sand and Gravel) in March of 2004 and continued to work towards the goal of establishing four more within five years – one within each district.		X				

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J. Assess State Park roads and trails for erosion into San Lorenzo River and tributaries. Develop a program for funding and addressing any identified problems.	State Parks	Roads and trails assessed; Program developed	March 2006	<p>California Geologic Survey completed road derived sediment surveys; State Parks completed Road assessments in March 2006, a GIS database to prioritize road segments, and prescription recommendations based on the Department of Fish and Game's salmon recovery criteria.</p> <p>State Parks formed a partnership with the Santa Cruz RCD whereby they can identify top priority road segments, and develop high priority road segments into fundable projects.</p>					X	
K. Develop and implement private road improvement program.	RCD-lead, NRCS, County, RWQCB, CDFG, landowners	Program developed and implemented; Miles or numbers of road drainage improvement projects related to number of landowners or road segments; Number of field visits, workshop	Pursuant to grant completion dates	<p>Since 2003 the Rural Roads Erosion Control Assistance Program resulted in the implementation of 13 erosion control projects on rural non-county roads in the San Lorenzo River Valley; education and outreach efforts to rural landowners and road associations including the development of a BMP Training Program for local contractors, 6 road workshops, 5 watershed tours, and 4 technical training sessions for watershed groups, and education and outreach materials such as 6 individual newsletters. The program also resulted in the creation of a Private Roads Maintenance Guide for Santa Cruz County.</p> <p>The Rural Roads program relied on a diverse partnership with agencies, non profits, local governments, private consultants, and rural road associations to implement its construction, education and outreach, and monitoring work.</p> <p>In December of 2006 the SCCRCD initiated an additional grant of \$816,746 from the SWRCB to continue technical assistance, conduct new road assessments, and to design and construct an additional 9-12 rural road erosion control projects.</p>				X	X	

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		s, tours, newsletters, etc.		In 2007, Santa Cruz County received a Water Board grant, <i>Reducing NPS Sediment and Pesticide Pollution in County Road Maintenance Operations</i> , for \$ 438, 240 to reduce sediment loads from roadside maintenance operations. This project will utilize an Integrated Vegetation Management Planning Process to identify options and priorities for managing key vegetation types to reduce water quality impacts. Fisheries issues and management of roadsides adjacent to waterways will be emphasized. At least three priority projects to manage vegetation will be implemented following the planning process.							
L. Evaluate need to revise erosion control provisions in County Grading Regulations and Erosion Control Ordinance to better protect sandy-soil areas.	County Planning	Erosion control provisions evaluated and revised if needed	November 2006	The County of Santa Cruz completed a draft revision of a Grading Regulations Ordinance scheduled to be adopted in 2008.  Planning Department staff evaluated the County Erosion Control Ordinance and concluded that the Ordinance was comprehensive and did not need to be revised.		X					
M. Evaluate need to revise erosion control provisions in City of Scotts Valley Grading Regulations and Erosion Control Ordinance to better protect sandy-soil areas.	City of Scotts Valley	Erosion control provisions evaluated and revised if needed	November 2006	The City's plan was to revise erosion control ordinances when they obtained MS4 stormwater permit. Staff revised erosion controls as part of grading projects, and will change the ordinance when the Water Board adopts the SWMP.	X						

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N. Evaluate need to revise erosion control provisions in City of Santa Cruz Grading Regulations and Erosion Control Ordinance to better protect sandy-soil areas.	City of Santa Cruz	Erosion control provisions evaluated and revised (completed)	May 2004	The City of Santa Cruz revised the Grading Regulations and Erosion Control Ordinance in May 2004 to improve erosion control provisions. Also, at that time staff modified the Grading Ordinance, including the addition of construction site management Best Management Practices for stormwater pollution prevention.						X
O. Promote improved livestock management practices to reduce discharge of sediment.	RCD, Santa Cruz Horsemen, County Planning, County Environmental Health Services, Livestock Owners	Number of livestock facilities with management practices in place; Number of workshops, tours, trainings, field visits, etc.	March 2007	Ecology Action of Santa Cruz received a Water Board grant <i>Implementation Projects on Livestock Facilities to Reduce Nutrient, Sediment &amp; Pathogen Pollution</i> for \$ 999,900. to implement management measures on livestock facilities that are protective of water quality.  Implementing parties submitted detailed information (numbers of projects completed and estimates of load reductions) as part of progress and Final Reports.					X	
P. Implement education programs and modify policies and procedures to improve riparian corridor protection, maintain channel integrity, implement alternatives to	County Planning, DFG, Cities	Programs implemented and policies modified	November 2005 and annually thereafter	The Santa Cruz County RCD received a Water Board grant called <i>Integrated Watershed Restoration Program Phase 2</i> for \$4,048,135 to 1) construct 14 selected watershed and wetland restoration projects to improve water quality and habitat; 2) implement the Permit Coordination Program, including the construction of 6-10 additional restoration projects; and 3)			X		X	



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hard bank protection, and retain woody material.				<p>monitor to determine whether project goals and objectives have been achieved. The project also included continuing the successful IWRP model infrastructure.</p> <p>The County updated and redistributed the Stream Care Guide in 2005, and continually provided it to members of the public. Planning Department staff evaluated the Riparian Corridor Protection Ordinance for changes necessary to reflect current issues such as erosion and sediment control, clarification on riparian corridor protection, setbacks to streams, etc.</p> <p>City of Santa Cruz staff continually worked with other agencies (DFG, RWQCB, CDF, County) to prioritize and address water quality violations and erosion problems. In 2006, the City produced and disseminated a brochure for private landowners. The City had an ongoing program with the San Lorenzo Valley High School (Watershed Management Internship Program). The City continued the Urban River Project. In February 2006, the City adopted a <i>City-wide Creeks and Wetlands Management Plan</i> and Ordinance. The purpose of this plan was to map the watercourses and known wetlands, identify appropriate development setbacks, recommend management actions, define development guidelines and standards for areas adjacent to watercourses, and provide a framework for permitting development adjacent to watercourses.</p> <p>Policy and procedures were in place with a case by case consideration of riparian corridor protection with each application for any permit within 25 feet of the corridor. Subcommittee met and established recommendations.</p>						

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Q. Develop strategy to reduce erosion from discrete sources, including Mount Hermon slide, Bean Creek Road slides, McEnery Road, Skypark, Rancho Rio and Monte Fiore.	County, City of Scotts Valley	Strategy developed for each source	November 2006	<p>The County partially initiated this action. The Monte Fiore project site was fully vegetated / corrected, and settlement funds from this violation were used for a variety of projects. The City of Santa Cruz Water Department constructed a project on Zayante Road landslide in which a slough wall was designed and constructed in 2004 for \$12,640 using stipulated judgment funds as disbursed through the Santa Cruz County Fish and Game Commission.</p> <p>Both the City of Scotts valley sites were remediated.</p>		X				
R. Develop strategy to address accelerating the mitigation of quarry impacts at Hanson Aggregates site.	County Planning, California Division of Mines and Geology	Strategy developed (complete)	March 2004	<p>This action was partially implemented, and was ongoing. Hanson made significant progress since 2004 completing various reclamation projects, including a major repair of Conference Drive, installation of drainage systems, final grading of a large portion of the quarry floor, and hydroseeding throughout the site for dust and erosion control. Permanent revegetation was installed in approximately 10-acre increments and will continue for a number of years to plant the entire site. The County anticipated major grading and drainage system installation to be completed in 2007 with revegetation activities and monitoring of the site continuing well into the future.</p>			X			

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S. Develop and implement Storm Water Management Plans (SWMPs) and Storm Water Pollution Prevention Plans (SWPPPs) consistent with NPDES Phase II Stormwater regulations.	County Planning and Public Works, City of Santa Cruz, City of Scotts Valley, construction site operators and owners.	SWMP developed and municipality enrolled; % of projects that received coverage, % of projects successfully implementing SWPPPs, and total # of projects	November 2005 or upon permit enrollment, and implemented annually thereafter	<p>The County and City SWMP Plans were developed but not adopted – though they initiated implementation.</p> <p>The County submitted a revised SWMP in May 2004 to the Water Board for review and approval for general permit coverage. Despite not having received permit application approval, the County began implementing several SWMP BMPs between June 2004 and March 2006.</p> <p>The City of Santa Cruz's submitted a 2<sup>nd</sup> SWMP draft to the Water Board in April 2004. Water Board comments were pending.</p> <p>The City of Scotts Valley's SWMP was also under consideration by the Water Board.</p>		X			X	

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T. Identify the San Lorenzo River Watershed as a priority for site inspection and enforcement of control measures in SWMPs and SWPPPs. Establish mechanism by which operators and owners of one-acre and greater construction projects are notified of the requirement to prepare SWPPPs.	County Planning and Public Works, City of Santa Cruz, City of Scotts Valley, construction site operators and owners.	San Lorenzo River identified as a priority in SWMP; % of projects with SWPPPs that identify watershed as a priority; mechanism established (City of Santa Cruz - complete); number of notifications	November 2005 or upon permit enrollment, and annually thereafter	<p>Implementing parties developed plans but they were not yet adopted. Several BMPs addressed the SLR Watershed. The County and City's proposed SWMP identified and discussed the San Lorenzo River Watershed sediment TMDL. They developed the SWMP to meet the requirements of Implementation Actions S, T, and U from the TMDL and it identified the San Lorenzo River Watershed as a priority for site inspection and enforcement measures. In addition, the plans included BMPs and measurable goals for sediment control programs and projects. They notified owners and operators of SWPPP requirements during project review process to ensure compliance.</p> <p>The City identified the SLR watershed a priority for site inspection and enforcement of control measures in SWMPs and SWPPPs in the City's 2<sup>nd</sup> SWMP draft submitted to the Water Board in April 2004.</p> <p>In addition, in 2004, the City modified its discretionary (zoning) permit boiler plate conditions to include a condition that required the applicant of a construction site of one acre or greater to provide the City with proof of coverage under the State's General Permit for Storm Water Discharges from Construction Activity. Construction permits were not issued by the City for a project unless proof of coverage under this state permit, which requires that a site prepare a SWPPP, was provided.</p> <p>This action was complete and identified in the City of Scotts Valley's draft SWMP.</p>		X			X	X

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U. Consider incorporation of sediment control programs/projects into SWMPs and SWPPPs.	County Planning and Public Works, City of Santa Cruz, City of Scotts Valley, construction site operators and owners.	Consideration included in SWMP; % of projects that considered sediment in SWPPPs and the total number of projects w/SWPPPs	November 2005 or upon permit enrollment, and annually thereafter	<p>Ecology Action of Santa Cruz received a Water Board grant for the <i>Urban Pollution Prevention Program</i> for \$999,926 to decrease urban non point source pollution from commercial and residential landscape and school site operations by implementing water quality site plans, BMPs and LIDs (Low Impact Developments) at model sites.</p> <p>The County developed a Plan but it was not yet adopted. Erosion controls were contained in several BMPs. The County included BMPs and measurable goals for sediment control programs and projects in the SWMP submitted to the Water Board in May 2004.</p> <p>This Action was identified in the City's 2<sup>nd</sup> SWMP draft submitted to the Water Board in April 2004.</p> <p>This was complete and identified in the City of Scotts Valley's SWMP which was under consideration by the Water Board.</p>		X			X	
Public Education in Lompico Creek <sup>5</sup>	Lompico Watershed Conservancy	n/a	n/a	This was ongoing since formation of LWC.			X			
Land Conservation in Lompico Creek <sup>5</sup>	Lompico Watershed Conservancy	n/a	n/a	<p>Original project, and review of headwaters THP began in 2001 and was appealed to Board of Forestry in 2004.</p> <p>The Sempervirens Fund land trust purchased land for permanent watershed and wildlife protection in June 2006.</p>					X	

<sup>1</sup>Implementing parties identified in TMDL Implementation Plan

<sup>2</sup>Progress will be evaluated based on information submitted in Triennial Reporting Form

<sup>3</sup>Time-schedule to be reported on every three years

<sup>4</sup>Reported by Implementing Parties during three year review

<sup>5</sup>Action not identified in Implementation Plan, but was reported on during three year review