NORTH COAST INTEGRATED REGIONAL WATER MANAGEMENT PLAN

Implementation Grant Proposal
Proposition 84, Round 2

ATTACHMENT 6:

Monitoring, Assessment & Performance Measures

Integrated Regional Water Management Program
Applicant: Humboldt County

North Coast Integrated Regional Water Management Plan
Proposition 84, Round 2 Implementation Grant

Attachment 6. Monitoring, Assessment and Performance Measures

The North Coast Integrated Regional Water Management Plan (NCIRWMP) was established in 2005 as "the first major milestone in a cooperative adaptive management process for the North Coast." The Phase I NCIRWMP provided an initial guide for evaluation, planning, collaboration, project prioritization and implementation; this foundation was built upon to include detail about issues of concern and opportunities for improvement in the Phase II NCIRWMP, including a change in governance to incorporate Tribal leadership and governance on the Policy Review Panel and Technical Peer Review Committee. As Phase III is developed, the NCIRWMP continues to evolve through an adaptive management process. The NCIRWMP is re-evaluated for relevance, current information (especially with respect to Key Issues), and possible modification biennially.

Evaluation and measurement mechanisms of the North Coast IRWMP are based on the same adaptive management approach that guides the NCIRWMP process. Each project has identified appropriate performance measures (*Project Performance Measures Tables*) to assess how it is meeting intended goals; results will be analyzed and fed back into the evaluation and management process. Lessons learned from project-specific monitoring efforts will be made available on the NCIRWMP website and will be used to improve planning and implementation of similar projects in the future, in part through use as a screening tool during project proposal prioritization and selection. Thorough data analysis and availability will also allow for identification of systematic data gaps, thereby directing new data collection and analyses in the appropriate direction. Water quality monitoring will be SWAMP compatible and all other monitoring will be conducted in adherence to state agency (DWR, DFW, SWRCB, etc.) standards. All projects that affect surface water quality will include a monitoring component that allows the integration of data into the California Environmental Data Exchange Network (CEDEN).

Each project will develop and implement monitoring system to verify project performance. In some cases (e.g., Big Rock CSD, Stabilize Water Tank), performance measures will be simple and of short duration (photo-monitoring and administrative documentation) while for others (e.g., Yurok Tribe, Restoration of Lower Klamath River Habitats), they will be more complex (photo-monitoring , salmonid surveys, habitat assessments) and occur over a longer time period (independent of grant funding) as part of an effort to not only evaluate project effectiveness, but to also provide long-term environmental data to inform the adaptive management process. The more complex monitoring efforts are often associated with projects that are components of a larger project, which will provide important, ongoing information about water and habitat quality and in some cases, contributions towards TMDL attainment. In all cases, photo-monitoring will be conducted during key phases of project implementation to demonstrate progress. If problems occur during monitoring, the appropriate agency will be contacted immediately to provide technical advice, for example, coordination with the NCRWQCB if a waterway is adversely impacted during the construction process or after project implementation. For information about specific performance measures, please see *Project Performance Measures Tables*.

Data collection will occur in site-specific locations appropriate to measure variables of interest. Each project will determine data collection locations based on state accredited protocols (where applicable), parameters of interest and likely extent of project impacts. Types of analyses will vary depending upon the project being evaluated; multiple parameters such as water quality and habitat surveys will be used to determine effectiveness of habitat restoration and enhancement projects while simple counts and records comparisons will be used to determine success of tank stabilization or water supply reliability projects. For restoration and enhancement projects, habitat parameters taken from a list of core indicators will be evaluated against a set of benchmarks that define what “success” looks like (DMP 2010). For water infrastructure projects, water production, water usage, electric usage, and other data will be collected and compared in a “before” vs. “after” scenario to quantitatively evaluate project success.

As part of its ongoing, adaptive management approach to project planning and implementation, the NCIRWMP Phase III Plan will include its Draft Data Management Plan (2010), which is an initial framework for identifying appropriate indicators or performance measures, developing objective project and plan performance assessment, and facilitating adaptive management on both regional and local scales. Performance monitoring data from the suite of projects in this Proposal will be incorporated into the DMP process as the NCIRWMP continues to evolve to better reflect and serve the North Coast Region. As the DMP develops, greater opportunities for data sharing and regional analysis will occur, increasing the amount of data available to inform water management decisions. More information regarding the NCIRWMP Assessment, Monitoring and Data Management can be found at http://www.northcoastirwmp.net/Content/10377/North_Coast_Assessment_Monitoring_and_Data_Management.html.

Proposition 84 Round 2 Priority Projects: Tables 6.1 Project Performance Measures

A. North Coast Rivers Watershed Management Area

101- Big Rock Community Services District, Stabilize Water Storage Tank

Project Performance Evaluation Table **Project 101, Big Rock CSD, Stabilize Water Storage Tank**				
Project Goals	**Desired Outcomes**	**Targets**	**Performance Indicators**	**Measurement Tools and Methods**
Ensure Water Supply Reliability	1. New water tank 2. Reinforced concrete pad	1. One new water tank constructed 2. One concrete pad constructed	1. Construction of tank meeting AWWA construction standards 2. Construction of pad to meet current seismic codes	1. Photo-monitoring 2. Construction standards checklists and approval by county/state inspectors
Minimize Impacts to the Environment	1. Prevent catastrophic landslide 2. Limit environmental impacts during construction	1. Remove failing tank 2. Anchor new tank foundation in bedrock 3. No sediment or construction materials delivered to watercourse from construction activities	1. Successful removal and subsequent construction of tank and tank pad 2. Implementation of SWPPP measures during removal and construction	1. Photo-monitoring 2. SWPPP standards checklists and approval by county/state inspectors

320 – Mendocino County Resource Conservation District, Working Landscapes Riparian Enhancement Project

Project Performance Evaluation Table **Project 320, Mendocino County Resource Conservation District, Working Landscapes Riparian Enhancement Project**				
Project Goals	**Desired Outcomes**	**Targets**	**Performance Indicators**	**Measurement Tools and Methods**
Demonstrate Cost-effective Methods for Restoring Riparian Corridors	1. Eradication of *Arundo donax* 2. Installation of native riparian vegetation 3. Implementation of riparian bioengineering practices	1. 100% removal of 24,000 sq. ft. of *Arundo donax* after 3 years 2. 85% survival of 24,000 sq. ft. of installed native riparian plants after 3 years 3. 2,000 linear feet of successfully implemented bioengineering practices	1. Percent eradication of *Arundo donax* 2. Percent survival of installed native riparian plants 3. Number of linear feet of successfully implemented bioengineering practices	1. Photo-monitoring (SWRCB: http://www.swrcb.ca.gov/water_issues/programs/swamp/cwt_guidance.shtml) 2. Rapid Assessment and Relevé Vegetation Protocol (CDW: http://www.dfg.ca.gov/biogeodata/vegcamp/veg_publications_protocols.asp)
Provide Outreach and Education to Promote Voluntary Riparian Enhancement	1. Website containing time-lapse photos demonstrating replanting techniques 2. Tour with the working landscape community	1. 100 views of time-lapse photo demonstration of planting techniques by project completion 2. At least 15 landowners present on tour	1. Number of views of time-lapse planting technique demonstration photos 2. Number of landowners present on tour	1. Count of viewers on website 2. Count of landowners attending tour 3. Sign-in sheet for tour

Project Performance Evaluation Table Project 320, Mendocino County Resource Conservation District, Working Landscapes Riparian Enhancement Project				
Project Goals	**Desired Outcomes**	**Targets**	**Performance Indicators**	**Measurement Tools and Methods**
Receive Inquiries from Agricultural Community Regarding Riparian Enhancement/Restoration Projects	1. Inquiries leading to new invasive species removal and/or riparian restoration projects	1. At least 3 new invasive species removal and/or riparian restoration projects on private land	1. Number of invasive species removal and/or riparian restoration projects on private land	1. Count of new invasive species removal and/or riparian restoration projects on private land 2. Photo-monitoring 2. Rapid Assessment and Relevé Vegetation Protocol

522 – Gualala River Watershed Council, Sediment Reduction Program: Lower Rockpile Creek Planning Watershed

Project Performance Evaluation Table Project 522, Gualala River Watershed Council, Sediment Reduction Program: Lower Rockpile Creek Planning Watershed				
Project Goals	**Desired Outcomes**	**Targets**	**Performance Indicators**	**Measurement Tools and Methods**
Improve Water Quality and Work towards TMDL Attainment Goals	1. Implementation of NPS sediment reduction projects 2. Prevent significant amounts of sediment delivery into the river system	1. Implement projects at 85 sites on 12.3 miles of road 2. Reduce 25,751 yds^3 of sediment delivery	1. Number of projects implemented 2. Number of yds^3 of sediment delivery prevented from entering river system	1. Photo-monitoring (SWRCB: http://www.swrcb.ca.gov/water_issues/programs/swamp/cwt_guidance.shtml) 2. Sediment reduction monitoring (GRWC Quality Assurance Project Plan for Monitoring Sediment Reduction: http://grwc.info/Assets/Reports/grwc-qapp-ver-3-1.pdf

Project Performance Evaluation Table **Project 522, Gualala River Watershed Council, Sediment Reduction Program: Lower Rockpile Creek Planning Watershed**				
Project Goals	**Desired Outcomes**	**Targets**	**Performance Indicators**	**Measurement Tools and Methods**
Increase Stakeholder and Community Education	1. Provision of educational forums and filed trips for stakeholders 2. Newsletter production 3. Enhancement of website capacity	1. One educational forum and three field trips for stakeholders on the subjects of conservation, restoration, and funding 2. Four newsletters published and distributed to stakeholders 3. Three additional web pages on the subjects of conservation and restoration programs, techniques, and funding	1. Number of educational forums and field trips for stakeholders 2. Number of newsletters published and distributed 3. Number of additional web pages produced	1. Photo-monitoring 2. Counts of participants in education forums and field trips; sign-up sheets 3. Copies of newsletters produced 4. Counts of numbers of newsletters distributed to stakeholders 5. Counts of number of additional web pages; hard copies of pages

B. Klamath Watershed Management Area

421 – Siskiyou County, Septage Pond Closure

Project Performance Evaluation Table **Project 421, Siskiyou County, Septage Pond Closure**				
Project Goals	**Desired Outcomes**	**Targets**	**Performance Indicators**	**Measurement Tools and Methods**
1. Protect Groundwater Quality 2. Ensure Access to Safe Drinking Water 3. Protect Surface Water Quality	1. Remove the possibility of groundwater contamination associated with continued discharge of septage waste 2. Remediate project site to ensure leaching of potentially contaminated soils does not continue to threaten groundwater quality 3. Safeguard human health and welfare by eliminating potential sources of groundwater contamination 4. Eliminate potential sources of surface water contamination associated with subsurface transport of contaminated groundwater	1. Close septage facility on or before November 1, 2013 2. Excavate septage and impacted soil from site 3. Backfill site with clean fill and graded consistent with surrounding elevation 4. Septage waste applied to adjacent agricultural land or removed to lined landfill	1. Date of closure of facility 2. Septage and impacted soil removed from site 3. Site backfilled with clean fill 4. Drying bed located and prepared 5. Septage waste properly disposed of	1. Facility closure notice 2. Photo-monitoring 3. Closure plan checklist 4. Final approval by Regional Water Quality Control Board

739 – Karuk Tribe, Lower Mid-Klamath (Red Cap / Perch Creek) Habitat Protection-Road Decommissioning Implementation Project

Project Performance Evaluation Table **Project 739, Karuk Tribe, Lower Mid-Klamath (Red Cap / Perch Creek) Habitat Protection – Road Decommissioning Implementation Project**				
Project Goals	**Desired Outcomes**	**Targets**	**Performance Indicators**	**Measurement Tools and Methods**
Protect and Enhance Habitat of Coho and Chinook Salmon and Steelhead Trout	1. Remove sediment sources caused by roads	1. Decommission approximately 30 miles of road 2. Reduce sediment delivery to river by 22,458 tons per year	1. Number of miles of road decommissioned 2. Number of tons of sediment delivery prevented annually	1. Photo-monitoring 2. Road treatment logs 3. Periodic site visits to evaluate treatments
Benefit Local Economically Disadvantaged Community through Job Provision	1. Provide seasonal employment for locals	1. Provide seasonal employment for 10 locals	1. Number of locals employed	1. Employment records 2. W4 forms

740 – Yurok Tribe, Restoration of Lower Klamath River Habitats

Project Performance Evaluation Table **Project 740, Yurok Tribe, Restoration of Lower Klamath River Habitats**				
Project Goals	**Desired Outcomes**	**Targets**	**Performance Indicators**	**Measurement Tools and Methods**
1. Significantly Improve Salmonid Habitat 2. Support Implementation Actions Prescribed in the Klamath River Total Daily Maximum Load Action Plan	1. Increased salmonid populations in improved habitat 2. Contribute towards attainment of Klamath River TMDL	1. Install 106 constructed wood jams over two miles of creek 2. Forty acres of riparian habitat enhanced 3. Pool frequency increased by 30 – 50% in project reaches 4. Instream cover increased by 30 – 50% 5. Juvenile salmonid densities increased by 25% during winter months 6. Adult salmonid densities increased by 25% during spawning season	1. Install constructed wood jams in two creeks 2. Utilize bioengineering and tree planting to enhance riparian habitat 3. Increase pool frequency and instream cover 4. Increase juvenile salmonid densities in winter and increase adult salmonid use during spawning season	1. Photo-monitoring (SWRCB: http://www.swrcb.ca.gov/water_issues/programs/swamp/cwt_guidance.shtml) 2. Physical habitat assessments (Yurok Monitoring and Data Sharing Plan) 4. Adult salmonid spawner surveys (Yurok Monitoring and Data Sharing Plan) 5. Juvenile direct observation surveys (Yurok Monitoring and Data Sharing Plan)

Project Performance Evaluation Table **Project 740, Yurok Tribe, Restoration of Lower Klamath River Habitats**				
Project Goals	**Desired Outcomes**	**Targets**	**Performance Indicators**	**Measurement Tools and Methods**
Promote Economic Stimulus to Disadvantaged Community	Provision of employment opportunities for locals and support local businesses	1. Resource- based employment and training to 8 – 10 Yurok Tribal members and 5 other local professionals 2. Use local businesses for 80% of supply purchases and equipment rentals	1. Number of Yurok Tribal members employed 2. Number of other local professionals employed 3. Percentage of use of local business to obtain supplies or equipment	1. Employment records; W4 forms 3. Contracts; 1099 forms 4. Comparison of use of local businesses to use of businesses from outside using receipts or accounting software

C. Trinity River Watershed Management Area

635 – Salyer Mutual Water Company, Distribution System and Hydrants

Project Performance Evaluation Table **Project 635, Salyer Mutual Water Company, Distribution System and Hydrants**				
Project Goals	**Desired Outcomes**	**Targets**	**Performance Indicators**	**Measurement Tools and Methods**
Water Supply Reliability	1. Dedicated distribution system 2. Replacement of distribution lines that are beyond their useful life 3. Install/replace shut off valves that are beyond their useful life	1. 100 % of customers receive adequately treated drinking water 2. 50% decrease in water outages 3. 15% reduction in pumping and treatment costs 4. 10% reduction in volume of water pumped from the Trinity River 5. Removal from PUC's list of systems with Critical Water Quality Problems	1. Number of customers receiving adequately treated drinking water 2. Percent reduction in water outages 3. Percent reduction in pumping and treatment costs 4. Percent reduction in volume of water pumped from the Trinity River 5. Presence/absence on PUC's list of systems with Critical Water Quality Problems	1. Count of residential customers connected to the new distribution system 2. Count of water reduction outages; comparisons with previous years 3. Business cost records; comparisons with previous years 4. Pumping volumes from the Trinity River; comparisons with previous years 5. PUC's list of systems with Critical Water Quality Problems 6. Photo-monitoring
Community Fire Protection	1. Installation of fire hydrants	1. Fire hydrants every 500 ft in accordance with AWWA standards	1. Number of fire hydrants per 500 ft	1. Photo-monitoring 2. Count of fire hydrants installed compared to length of street covered

636 – Trinity County Resource Conservation District, West Weaver Creek – Channel and Floodplain Rehabilitation

Project Performance Evaluation Table **Project 636, Trinity County Resource Conservation District, West Weaver Creek – Channel and Floodplain Rehabilitation**				
Project Goals	**Desired Outcomes**	**Targets**	**Performance Indicators**	**Measurement Tools and Methods**
Improvement of the Quantity, Quality, and Access to Salmonid Habitat	1. Increased spawning surfaces 2. Increased in-channel rearing habitat 3. Reduce fine sediment yield to Trinity River 4. Increase in salmonids using habitat	1. 20% increase in spawning surfaces 2. 300 linear feet of floodplain secondary channel with large woody debris 3. Installation of: three step-pool sequences and 3 riffle-pool sequences 4. Two willow baffles 5. Nine large logs with intact root wad structures installed instream 6. 20% decrease in turbidity in Weaver Creek at confluence with Trinity River 7. 25% increase in number of salmonids using habitat	1. Percent increase in spawning surfaces 2. Number of linear feet of secondary channel 3. Number of step-pool sequences and riffle-pool sequences installed 4. Number of willow baffles 4. Number of large wood structures in stalled 5. Percent decrease in turbidity in Weaver Creek at confluence with Trinity River 6. Percent increase in salmonids using habitat	1. Instream habitat surveys (U.S. Forest Service Redwood Sciences Lab will use approved protocols to complete this monitoring for 3 years pre-project and for 5 years post-project) 2. Photo-monitoring (SWRCB: http://www.swrcb.ca.gov/water_issues/programs/swamp/cwt_guidance.shtml 3. Water quality monitoring, including turbidity monitoring (U.S. Forest Service Redwood Sciences Lab will use approved protocols to complete this monitoring for 3 years pre-project and for 5 years post-project) 4. Fish density, growth, and apparent survival (U.S. Forest Service Redwood Sciences Lab will use approved protocols to complete this monitoring for 3 years pre-project and for 5 years post-project)

Project Performance Evaluation Table **Project 636, Trinity County Resource Conservation District, West Weaver Creek – Channel and Floodplain Rehabilitation**				
Project Goals	**Desired Outcomes**	**Targets**	**Performance Indicators**	**Measurement Tools and Methods**
Advance Technical Methodology for Salmonid and Steelhead Restoration Project Modeling/Monitoring and Performance Measures	Development of InSTREAM (Individual-based Stream Trout Research and Environmental Assessment Model) model of the project reach	1. Completed model 2. Conduct all necessary pre- and post-project fish, hydrological, and water quality monitory	1. Presence/absence of completed model 2. Monitoring data	1. Verification of model and its accuracy in testing project performance

D. Humboldt Bay Watershed Management Area

206 – Humboldt Bay Municipal Water District, Ranney Collectors 1 & 1A Lateral Replacement

Project Performance Evaluation Table **Project 206, Humboldt Bay Municipal Water District, Ranney Collectors 1 & 1A Lateral Replacement**				
Project Goals	**Desired Outcomes**	**Targets**	**Performance Indicators**	**Measurement Tools and Methods**
Ensure High Quality Water Supply Reliability	Replace failing water supply infrastructure with reliable, up-to-date infrastructure	Complete installation of new laterals in Collectors 1 & 1A	Presence/absence of new laterals in Collectors 1 & 1A	Photo-monitoring
Reduce Impacts to Environmental and Water Quality	1. Limited environmental impacts during lateral replacement	1. No environmental impacts during lateral replacement 2. No sediment or construction materials delivered to watercourse from construction activities 3. Refine pumping operation to minimize impacts to recharge area	1. Presence/absence of environmental impacts 2. Implementation of Stormwater Pollution Prevention Plan 3. Development of extraction pumping schedule to minimize impacts to recharge area while optimizing production	1. Photo-monitoring 2. SWPPP standards checklists and approval by county/state inspectors 3. Extraction pumping schedule and records of extraction
Improve Energy Efficiency of the Wholesale Water System	1. Reduce operational costs	1. 10 % reduced energy needed to pump water due to increased access to a larger recharge area, which reduces water draw down in the well 2. Additional flexibility in timing of pumping, allowing for 25% more pumping during off-peak hours	1. Amount of energy needed to pump water 2. Amount of pumping during off-peak hours	1. Business cost records; comparisons with previous years 2. Pumping volumes during off-peak hours; comparisons with previous years

215 – Westhaven Community Services District, Water Tank

Project Performance Evaluation Table **Project 215, Westhaven Community Services District, Water Tank**				
Project Goals	**Desired Outcomes**	**Targets**	**Performance Indicators**	**Measurement Tools and Methods**
Protect Water Supply	Provision of a water tank system built to current seismologic standards	1. Install new tank 2. Replace roof on existing tank	1. Presence/absence of new tank 2. Presence/absence of new roof on existing tank	1. Photo-documentation 2. Construction standards checklists and approval by county/state inspectors
Improve Water Quality	Reduce disinfection by-products (DBP) Reduce dissolved organic carbon	1. Reduce DBP by 20% 2. Reduce dissolved organic carbon by 20%	1. Amount of DBP in the system 2. Amount of dissolved organic carbon in the system	1. Laboratory DBP tests 2. Laboratory DOC tests 3. Analysis of weather events and amounts of the above chemicals in the systems to understand relationships and develop improved management techniques

E. Russian River / Bodega WMA

316 – California Land Stewardship Institute, Fish Friendly Farming and Fish Friendly Ranching Environmental Certification in the Russian, Navarro, and Gualala River Watersheds

Project Performance Evaluation Table **Project 316, California Land Stewardship Institute, Fish Friendly Farming (FFF) and Fish Friendly Ranching (FFR) Environmental Certification in the Russian, Navarro, and Gualala River Watersheds**				
Project Goals	**Desired Outcomes**	**Targets**	**Performance Indicators**	**Measurement Tools and Methods**
Improve Water Quality and Enhance Riparian and Aquatic Habitat for Listed Salmonid Species	1. Reduce fine sediment delivery 2. Increase canopy cover	1. 80,000 tons of sediment retention per year 2. 20,000 acres committed to implementing sediment reduction and riparian protection and enhancement BMPs	1. Number of tons of sediment retention per year 2. Number of acres committed to implementing sediment reduction and riparian protection and enhancement BMPs	1. Photo-monitoring (SWRCB: http://www.swrcb.ca.gov/water_issues/programs/swamp/cwt_guidance.shtml
Increase Stakeholder and Community Education	1. Provision of Farming and Ranching BMP workshops	1. Series of 3 workshops per year on farming BMPs 2 Series of 3 workshops per year on ranching BMPs	1. Number of workshops on farming BMPs 2. Number of workshops on ranching BMPs	1. Photo-monitoring 2. Counts of participants in workshops; sign-up sheets 3. Copies of workshop agendas and other handouts
Outreach to Disadvantaged Communities (DACs)	Increased participation in FFF and FFR programs by residents of DACs	At least 7,000 acres of farm and ranch land in DACs enrolled in programs	Number of acres of farm and ranch land in DACs enrolled in programs	1. Map of project locations and DACs 2. Enrollment records

317 – California Land Stewardship Institute, Russian River Watershed Agricultural Water Conservation & Water Supply Reliability Program

Project Performance Evaluation Table **Project 317, Russian River Watershed Agricultural Water Conservation & Water Supply Reliability Program**				
Project Goals	**Desired Outcomes**	**Targets**	**Performance Indicators**	**Measurement Tools and Methods**
1. Reduce Direct Diversions from Russian River 2. Address critical water quality needs in the disadvantaged City of Ukiah 3. Increase climate change adaptation	1. Provide alternative water supply for agricultural users 2. Provide option for reuse of treated wastewater 3. Reduce need for additional storage for treated wastewater 4. Reduce effects of diversion draw downs on salmonids 5. Provide increased water supply reliability	1. Construction of a 5 acre-foot storage pond, pipelines, and two ponds 2. No salmonid strandings/deaths downstream from projects during frost events 3. 50% less summer agricultural diversions	1. Presence/absence of storage pond, piplelines, and two ponds 2. Number of salmonid strandings/deaths downstream from projects during frost events. 3. Number of acre-feet of diversions in summer months	1. Photo-monitoring 2. Reports and analysis of salmonid strandings/deaths downstream from projects during frost events 3. Diversion records; comparison with previous years

523 – Gold Ridge Resource Conservation District, Coastal Watersheds Enhancement Project

Project Performance Evaluation Table **Project 523, Gold Ridge Resource Conservation District, Coastal Watersheds Enhancement Project**				
Project Goals	**Desired Outcomes**	**Targets**	**Performance Indicators**	**Measurement Tools and Methods**
Streamflow Augmentation Throughout Key Reaches of Salmonid-bearing Streams	Reduce annual summer diversions from Dutch Bill and Salmon Creeks through construction of water storage facilities and implementation of BMPs	1. Reduction of 750,00 – 900,00 gallons of diversions annually in Dutch Bill Creek 2. Reduction of 1.25 million gallons of diversions annually in Salmon Creek	Number of gallons diverted annually	1. Photo-monitoring (USDA Forest Service: http://best-practices.ltabc.ca/media/resources/monitoring-properties/Fred_Hall_PPM_Field_Procedures_1.pdf 2. Diversion records; comparison with previous years 3. Instream flow measurements (SWRCB: http://www.swrcb.ca.gov/water_issues/programs/swamp/cwt_guidance.shtml); comparison with previous years
Enhancement of Instream Salmonid Habitat in Key Reaches through Restoration of Natural Stream Complexity	Improve pool depth, shelter, and low-flow connectivity along a key salmon spawning and rearing reach of Dutch Bill Creek	Install or enhance 27 large wood structures	Number of large wood structures installed or enhanced Increase pool depth, shelter, and low-flow connectivity	1. Photo-monitoring 2. Fisheries habitat monitoring: Harris et al.: http://forestry.berkeley.edu/reports/MonImplementationEffectivenessFisheriesRestProjectsHarrisetal.pdf

Project Performance Evaluation Table **Project 523, Gold Ridge Resource Conservation District, Coastal Watersheds Enhancement Project**				
Project Goals	**Desired Outcomes**	**Targets**	**Performance Indicators**	**Measurement Tools and Methods**
Increase Stakeholder and Community Education	1. Increase community knowledge about IRWM-funded and related activities, including instream flow and habitat, salmonid monitoring, and sediment reduction 2. Increase community knowledge about installation of rainwater catchment systems	1. At least two public meetings and/or community events to present IRWM-funded and related activities, including instream flow and habitat, salmonid monitoring, and sediment reduction 2. Conduct at least one workshop on installation of roof rainwater catchment systems, including a site tour	1. Number of public meetings 2. Number of workshops	1. Photo-documentation 2. Meeting and workshop notices 3. Attendance counts; sign in sheets 4. Meeting and workshop agendas and other paperwork