

Section G: Projects

The Project List included in this Integrated Regional Water Management (IRWM) Plan represents the implementing element of the Plan. The projects are intended to carry out the goals and objectives of the Plan, and reflect the collaborative spirit of the IRWM planning effort.

Note that the process for soliciting projects from stakeholders and for ranking the projects is described in the previous section (Section F, Project Review Process). The process for tracking the implementation of projects, along with associated monitoring data, is described in Section K, Data Management. The process for evaluating progress made toward achieving Plan objectives, via project implementation, is described in Section J, Plan Performance and Monitoring.

This section lists the projects included in the IRWM Plan through 2014. Three separate lists of projects are shown in Tables G-1, G-2, and G-3 on the following pages:

- *Proposed Implementation Projects:* Projects proposed by stakeholders in the region for grant funding. This is what we typically refer to as the “Project List” for the IRWM Plan. Projects have been ranked according to an approved ranking process. The Regional Water Management Group (RWMG) will choose from this list when applying for IRWM grant funds and other grant funds. This list is shown as Table G-1 below.
- *Funded IRWM Plan Projects:* Implementation projects that were previously included on the IRWM Plan Project List but have been funded either through the IRWM Grant Program or other source of funds (i.e., projects from previous IRWM Plan Project Lists that have “graduated” and are now implementing the Plan). This list is shown as Table G-2 below.
- *Concept Proposals:* Concept proposals are ideas submitted by stakeholders for projects that are not quite far enough along in their development to be submitted for grant funding. It is the intention that concept proposals will eventually grow into “full-fledged” implementation projects. This list is shown as Table G-3 below.

The projects listed in the tables below consist of all projects that have been submitted for inclusion in the IRWM Plan through April 2014. These project lists will change over time as projects get implemented and new projects are included in the Plan. The most current project lists are available on the Greater Monterey County IRWM website at <http://www.greatermontereyirwmp.org/projects/>.

G.1 PROPOSED IMPLEMENTATION PROJECTS (“THE PROJECT LIST”)

Table G-1 below constitutes the official ranked “Project List” for the IRWM Plan—the list from which the RWMG will choose when applying for IRWM grant funds. The 2014 Project List consists of 38 implementation projects. These projects have undergone a full project review and have been prioritized according to an approved project ranking process. The projects are ranked according to how well they address both the IRWM Plan objectives and the priorities of the State IRWM Grant Program (as described in Section F, Project Review Process). Table G-1 includes a brief summary of each project and project costs.

It is important to note that the Project List is a continually evolving element of the IRWM Plan. Projects will be removed from the list as they get implemented, and new projects will be added to the list with every new IRWM Plan project solicitation (which is expected to occur approximately every two years or with each new IRWM grant solicitation). Thus, the Project List printed in this section should be considered more of a “sample” Project List rather than a fixed list for the IRWM Plan.

Table G-1: Ranked Project List for 2014 IRWM Plan Implementation Projects

Ranking	Project Proponent & Project Title	Score (out of 100)	Project Summary	Requested Amount	Local or Federal Matching Funds	Other State Funds	Total Project Cost
1	The Nature Conservancy: Salinas Multi-Benefit Floodplain Management	80	The Multi-Benefit Salinas River Management Project is a collaborative partnership with growers, water resource managers, county, state and federal agencies, conservation groups and other stakeholders to develop an adaptive approach to flood risk reduction, groundwater recharge, community health and safety, and riparian and coastal biodiversity. Partners will organize into “management neighborhoods” to model flood risk, nutrient fate and transport, and water balance to design integrated management strategies to build consensus on existing conditions, costs of different management strategies, and how to optimize benefits. Strategies will include off-channel flood attenuation and storage areas (e.g., ponds, bypasses, compound channels), coordinated passive and active management of native vegetation for enhanced habitat, flood conveyance, and water quality treatment; and removal of Arundo. Market mechanisms and tools, such as risk pools, cost shares, and benefits transfers, will be developed in coordination with regulatory agencies, industry and other partners to maximize positive outcomes across socioeconomic and ecological benefits.	\$866,053	\$288,684		\$1,154,737
2	San Jerardo Cooperative, Inc: Disadvantaged Community Water Quality and Conservation Program	75	The program will address severe water supply and water quality needs for three disadvantaged communities. The Alpine Court and San Vicente Road communities in rural south Monterey County have drinking water wells with samples testing in excess of public health standards for nitrates. Septic systems on sites are aging and one has been deemed in need of complete replacement. The contaminated wells and failing septic systems will be replaced with new, deeper well installations and upgraded wastewater systems. These improvements qualify as meeting critical water supply and critical water quality needs of two disadvantaged communities. The Wastewater Treatment Plant at the San Jerardo Cooperative will be upgraded to meet state guidelines and county code requirements to allow recycled treated water to be used for on-site irrigation. In addition, storm water improvements will be installed at the entrance to the Cooperative to divert storm-related flows and prevent seasonal flooding of public roadways. Finally, a water conservation program consisting of installation of “water saver” plumbing fixtures, grey water connections, rainwater collection features	\$2,500,000			\$2,500,000

			and low water use landscaping will be included for all three projects participating in the Disadvantaged Community Program. The program will include workshops with training provided by Ecology Action.				
3	Central Coast Wetlands Group: Water quality enhancement of the Tembladero Slough Phase II	73	This project is Phase II of <i>Water quality enhancement of the Tembladero Slough and Coastal Access for the Community of Castroville</i> , Phase I of which has been funded by an IRWM Round 1 Implementation Grant. During Phase I, CCWG is working with county agencies, agricultural landowners and the community of Castroville for design and permitting of a select set of water quality/wetland management structures. These projects will utilize a variety of water quality management innovations including the treatment train approach (i.e., detention/sedimentation features, pollutant filtration/biological degradation of pollutants and water polishing areas). During Phase II of this project, 20 acres in total (approximately six projects) will be constructed based on the plans from Phase I that support and integrate the multiple objectives of the Greater Monterey County IRWM Plan, emphasizing urban and agricultural water quality enhancement, flood management, habitat restoration and support of various watershed planning and permit processes. Features are selected based on available space, hydrologic requirements, and adjacent landowner concerns, but preferentially support projects that enhance habitat and open space as well as improve water quality.	\$727,650	\$242,550		\$970,200
4	Central Coast Wetlands Group: Northern Gabilan Mountain Watershed Management Project	69	The project consists of three phases to restore a sub-watershed within the upper Gabilan watershed, and serve as a model for restoration of watersheds within the Central Coast. Phase I provides the foundational watershed characterization and process analysis necessary to develop meaningful and effective watershed management. It includes a review of previous relevant studies and preparation of original analysis along with a compilation of spatial data and key watershed processes. Analysis will be integrated with research and planning projects done by others. The synthesis of this information will be used to target planning and restoration for one sub-watershed. This will be accomplished by addressing the changes in the watershed functions and processes (physical, chemical and biological) that are caused by agriculture and urban activity that affect watershed health. Additionally, we will conduct a community-based engagement process to review Phase I information and watershed management options. Phase I will result in a management methodology and a master restoration plan for one of three sub-watersheds. Phase II will develop site design for prioritized restoration locations within the chosen sub-watershed and Phase III will implement those designs.	\$841,961	\$280,654		\$1,122,615

5	Resource Conservation District of Monterey County: Monterey County Farm Water Quality Assistance Program	67	The RCD of Monterey County, in close partnership with University of California Cooperative Extension Crop Advisors and USDA Natural Resources Conservation Service, will provide a bilingual on-farm erosion, irrigation, and nutrient management evaluation program for Monterey County farmers. The service will 1) evaluate erosion potential, irrigation system and application efficiency, and nutrient budgeting; 2) develop recommendations as needed for field configuration, soil stabilization, and refined water and nutrient applications; and 3) assist growers' voluntary implementation of those recommendations to help reduce excess soil, water and nutrient movement off area farms while optimizing farm productivity. This work is already underway on a smaller scale, and incorporation into the Greater Monterey County IRWM Plan and the requested funding would support development of a full program for the next three years.	\$583,000	\$191,000		\$774,000
6	City of Salinas and Monterey Regional Water Pollution Control Agency: Drought Relief through Stormwater Diversion for Water Supply	66	This project focuses on stormwater management and water reclamation/water supply. The project will divert dry weather urban surface water discharge from south Salinas into the City's Blanco Detention Basin. Water from the Detention Basin will then be sent to the MRWPCA regional wastewater treatment plant. Once reclaimed, diverted water could be used for dry-season water supply (e.g., as agricultural irrigation water). In Phase II, wet weather and dry weather surface water runoff from the City's northern neighborhoods will be similarly diverted for reuse. Surface water runoff that currently flows into the Reclamation Ditch will be diverted and reclaimed. After treatment, MRWPCA will direct the recycled water to where it will mitigate seawater intrusion and provide additional water for agriculture in the northern Salinas Valley as part of the Castroville Seawater Intrusion Project (CSIP). This project will reduce pollution to downstream receiving waters and add to recycled water supplies.	\$730,000	\$366,000		\$1,096,000
6	Elkhorn Slough Foundation & ESNER: Ridgeline to Tideline: Water Resource Conservation in Elkhorn Slough	66	Ridgeline to Tideline is a comprehensive approach to addressing water resource issues in an estuarine watershed. The project area encompasses 427 acres of Elkhorn Slough and uplands set in a 4,000-acre block of protected lands. The three phases of this work include: 1) increasing tidal range and circulation in part of the Slough with consistently poor water quality and greatly reduced estuarine function, coupled with restoration of an adjacent upland buffer, 2) acquiring two adjacent farmland properties that are chronic sources of Slough degradation, and 3) re-contouring and stabilizing their steep eroding slopes and restoring native vegetation. Reduced groundwater extraction on these lands will improve water balance in the basin, resist seawater intrusion, prevent	\$6,178,438	\$2,050,694		\$8,229,132

			nitrate pollution and promote freshwater spring re-emergence. Over the past three decades we have demonstrated these integrated actions can measurably improve ecological function, tidal, freshwater and groundwater quantity and quality, and provide habitat for a diverse array of plants and animals. We have demonstrated a statistically significant drop in nitrate in receiving waters subsequent to restoration of similar lands, which techniques we will apply to this work.				
6	Monterey County Redevelopment & Housing Office: Well Replacement and Pipeline - San Lucas Water District	66	The community of San Lucas is an impoverished, predominately Hispanic, farmworker village. The San Lucas Water District operates the community's drinking water and wastewater systems, and has approximately 90 service connections. The District's water supply is derived from a single groundwater well located in the center of an agricultural field. The District has very limited financial capacity and operational capacity. The County of Monterey Redevelopment and Housing Office has been providing on-going assistance with the goal of supporting the existing community. Since March 2011 all customers of the Water District have been on an indefinite "Do Not Drink" order from the Monterey County Division of Environmental Health (DEH) due to excessive levels of nitrates in water being pumped from the District's single well. The DEH has directed the Water District to implement a new source of water that meets all public water quality requirements as soon as possible. In addition, the RWQCB has been unable to certify approval of the District's recently upgraded wastewater treatment and disposal system due to high TDS in the treated effluent, which is a direct result of high TDS in the community's water source. As a result, the District cannot approve any new service connections to the sewer system until this issue is resolved. Studies recommend relocation of the well to a location about 1,800 feet west of the existing well. The first phase of implementation will be to acquire a temporary construction easement and drill a test well at the indicated location. A comprehensive sampling and testing regime will then be undertaken. If the testing program indicates the selected location is appropriate for a long-term reliable public water source, the next steps will be to prepare a Project Description, conduct CEQA environmental review, acquire permanent easements for the production well and pipeline, prepare final engineering plans and specifications, advertise for bids, and construct the improvements.	\$465,000			\$465,000
7	Central Coast Wetlands Group: Implementation of	65	This project will involve restoration of 120-acres of the Moro Cojo Slough containing tidal and brackish water marsh that receive fresh water inputs from agricultural lands. The project will restore the	\$1,450,636	\$483,545		\$1,934,181

	<p>the Moro Cojo Slough Management and Enhancement Plan: Restoration of the Upper Slough</p>	<p>hydrologic connectivity of the upper, middle, and lower reaches of the Moro Cojo Slough by linking multiple marsh areas with new lands previously lost to agriculture. This effort addresses a critical action defined within the Moro Cojo Management Plan that until now has been left incomplete. Because of new interest by farmers to provide access to restorable marshlands we are able to move forward to implement this key action outlined in the Management Plan. The result of this project will be to reestablish hydrologic connectivity and ecosystem function, enhance wildlife habitat, reestablish wetland habitat that supports endangered species, and improve water quality flowing out of the watershed into several state marine reserves and the Monterey Bay National Marine Sanctuary. This will be a four-year project with three major outcomes: 1) protection of wetland marsh and adjacent upland habitats through easement or acquisition, 2) filtration of agricultural runoff with sediment basins and treatment wetlands prior to water entering the main slough 3) restoration of the main slough to increase open water habitat and overall system complexity, and 4) regain wetland habitat continuity between the three main sections of the Moro Cojo Slough.</p>				
<p>8</p>	<p>Naciminto Regional Water Management Advisory Committee: Interlake Tunnel between Lake Naciminto and Lake San Antonio</p>	<p>The project is to build an interlake tunnel between Lake Naciminto and Lake San Antonio. The project would explore various options for size, type, input and exit structures of the tunnel. Additionally numerous technologies for alternative energy generation will be evaluated, specifically in-line hydro-electric power generation and solar power for pumping and other systems. With the recent changes in allowed water storage derived from the modification of the Lake Naciminto dam spillway due to the completion of the Salinas Valley Water Project there has been a renewed interest in capturing all of the rainwater run-off. This past year (2012), despite the increased storage capacity of Lake Naciminto, tens of thousands of acre feet of water were released for flood control, ultimately flowing to the ocean as wasted water. Over the same period Lake San Antonio had a minimum of 20% of its storage capacity available - twice what was needed to store the extra runoff from Lake Naciminto. During the winter season, this tunnel would transfer the extra rainwater that would be released. The water from these two lakes would then be used downstream for groundwater recharge, abatement of saltwater intrusion, and the promotion of fish habitats. Increasing the total available supply of water will benefit all of these uses, industries and communities.</p>	<p>\$8,600,000</p>	<p>\$2,150,000</p>		<p>\$10,750,000</p>

8	Resource Conservation District of Monterey County: Livestock and Land: Rangeland and Livestock Facility Water Quality, Vegetation Management and Wildlife Enhancement Program	62	The purpose of this program is to achieve immediate and lasting reductions in nutrient, sediment and pathogen pollution to surface and ground waters and enhance wildlife habitat through implementation of best management practices on livestock facilities and rangelands in the Greater Monterey County IRWM region. The proposed program utilizes an incentives-based approach to achieve the cultural change needed for livestock facilities to voluntarily adopt management measures that improve the healthy functioning of watersheds. Projects are implemented in high priority areas identified by TMDLs and other regional and local plans. Water quality and wildlife goals will be achieved through implementation of projects, project design, technical assistance, recruitment and training. We will employ a systematic evaluation process to measure program effectiveness through participant surveys, before and after site load reduction modeling and site-specific erosion and runoff assessments.	\$899,852	\$293,000		\$1,192,852
9	Pajaro/Sunny Mesa Community Services District: Springfield Water Project	61	Funds are requested for construction of a new well, storage tank, and associated distribution system in order to comply with the nitrate maximum contamination level (MCL) and saltwater intrusion regulations for the Springfield water system. The Springfield water system is made up of 35 connections supplying water to about 165 low-income farmworkers. The system has exceeded the nitrate MCL since at least 1986. The District took over the Springfield water system in 2004. Water containing nitrates in excess of 45 ppm present a risk to the health of humans when continually used for drinking or culinary purposes; the current level of nitrates is 293 ppm into Springfield. The project proposes that a new well be drilled on a site next to the Moss Landing Middle School on Springfield Road. The District obtained title to the site in 2006 and drilled a test well. The test well meets regulatory standards and can provide sufficient water for the Springfield water system and the Moss Landing Mobile Manor located within a mile of the water system. The Springfield water system could consolidate the Moss Landing Mobile Manor water system with this project. The project also consists of constructing a 210,000-gallon storage tank on the same site. The system is currently on a demand basis without water storage. The tank constructed at this site would be at a higher elevation than the distribution system, allowing the system to be gravity fed.	\$3,000,000			\$3,000,000

10	Marina Coast Water District: Recycled Water Element of the Regional Urban Water Augmentation Project (RUWAP)	58	<p>RUWAP is the urban water augmentation project developed by MCWD in cooperation with Fort Ord Reuse Authority (FORA). The Recycled Water element of RUWAP consists of the backbone facilities needed for a recycled water distribution system that will provide up to 3,000 AFY of recycled water to urban users in the MCWD service areas, specifically including the former Fort Ord, and potentially the Monterey Peninsula. The Recycled Water element of RUWAP includes the following specific features: 1) A connection to the SVRP that includes a pump station referred to as the Water Augmentation Pumping Plant. 2) A new distribution pipeline system consisting of approximately 40,000-LF of ductile iron and plastic pipe installed within existing roadway right-of-ways and easements. Thousands of linear feet of Recycled Water conveyance pipelines have already been installed throughout the community, in particular a small section of backbone facility within CSUMB and an approximately 3-mile extension of the backbone facility southerly down General Jim Moore Boulevard. 3) One intermediate pump station referred to as the Fifth Avenue Pump Station located in the City of Marina. 4) One storage tank referred to as the Blackhorse Reservoir will provide more than 1.5-million-gallons of operational storage. The Blackhorse Reservoir will be located at an existing MCWD storage tank site just east of General Jim Moore Boulevard. 5) The installation of a variety of appurtenant features.</p>	TBD	TBD	TBD	TBD
11	Resource Conservation District of Monterey County: Salinas River Watershed Invasive Non-native Plant Control and Restoration Program	57	<p>Wildlife habitat, flood control and water availability on the Salinas River and its tributaries are compromised and threatened by invasive nonnative plants, including the second-largest invasion in California of the noxious weed, <i>Arundo donax</i>. <i>Arundo</i> is a nonnative aggressive perennial grass that has overtaken approximately 2,500 acres of the Salinas River, forming enormous monocultures with virtually no food or habitat value for native wildlife. Aerial GPS-linked photo reconnaissance of the Salinas River and several tributaries by the RCDMC in May 2011 identified Tamarisk (<i>Tamarix ramosissima</i>) as another major invasive plant that is displacing native vegetation and actively migrating into the Salinas River from several tributaries. The project proposal is for the first 3-year stage of treatment (of a 10+ year program) and will target arundo and tamarisk and other invasive weeds in the channel, floodplain and terraces of the Salinas River between King City and Soledad. All non-native invasive weeds present in these areas will be treated using a combination of physical, chemical and biological techniques, and selected sites will be revegetated with native plants as appropriate to the site (considering flood risk, natural</p>	\$1,215,500	\$419,000		\$1,634,500

			recruitment potential, and landowner interest). The methods and approach of this program are based on successful riparian noxious weed eradication efforts conducted throughout California, as well as at the headwaters of the Salinas River in northern San Luis Obispo County and at Camp Roberts in southern Monterey County.				
12	Monterey County Water Resources Agency: Salinas River Flood Risk Reduction Project	55	The project will fund the preparation of a combined NEPA/CEQA document for the Salinas River Flood Risk Reduction Project, which allows channel maintenance activities on the mainstem of the Salinas River. MCWRA has partially funded this effort but additional funding is requested to complete the work, allowing the Salinas River Flood Risk Reduction Project to be implemented. Flooding of agricultural lands within the Salinas Valley, adjacent to the river, has occurred during conditions when in-channel sandbars and riparian vegetation including invasive plants impede high flows. Additionally, limited flood flow capacity in high rainfall years has caused damage or destruction to public infrastructure and private property. As such, MCWRA developed and administers the Salinas River Flood Risk Reduction Project to enhance flood protection, improve riparian habitat and reduce flood damage.	\$420,000	\$140,000		\$560,000
13	Central Coast Wetlands Group: Study of environmental services from nutrient reducing BMPs	48	State agencies have identified management measures to address agricultural nonpoint sources of pollution that affect state waters. These include practices and plans installed under various programs in California, called best management practices (BMPs). These BMPs range in action from on-farm nutrient management to cover crops to constructed treatment wetlands. To be effective, BMPs should be targeted by location and type; however, we currently lack the information necessary for precise targeting. This project is intended to fill existing economic and ecological gaps in knowledge about select nutrient load reducing BMPs, supporting current conservation programs, and to explore innovative Payment for Environmental Services (PES) potential. Tasks include an ecosystem service assessment to identify the location and size of existing nutrient reducing BMPs; nutrient reduction research to address gaps in the understanding of the effectiveness of selected BMPs at load reduction; ecosystem service valuation to economically assess the multiple benefits of BMPs; and an ecosystem services analysis to determine if PES is feasible. The results of the project will be beneficial to many different users. In particular, the ecosystem service valuation will have widespread utility in cost benefit assessments of environmental projects, and the load reduction study will help farmers, conservation groups and regulators.	\$372,000	\$124,000		\$496,000

13	Ecology Action: Monterey Bay Green Gardener Training & Certification Program/ Monterey Bay Friendly Landscaping Program	48	The Monterey Bay Green Gardener Certification Program provides bilingual, hands-on training in ecological landscaping methods for landscaping industry professionals, public agency landscape maintenance staff, and home gardeners. Green Gardener graduates are trained to be watershed stewards who are actively reducing landscape water demand and preventing urban non-point source pollution. In partnership with California Water Service Company, the Mission Trails Regional Occupation Program, and Hartnell College Center for Sustainable Construction, the project would: 1) Expand Green Gardener training beyond the Gabilan watershed and City of Salinas to the communities of Gonzales, Soledad, and King City. 2) Incorporate hands-on training experiences at water-wise demonstration sites on both public and private properties. In addition, property owners will be offered additional financial incentives (over local rebates) to implement Monterey Bay Friendly Landscaping practices. The Monterey Bay Friendly Landscaping Program provides public recognition and financial incentives for property owners, property managers, and landscape contractors who implement ten required ecological landscape practices and an ecological landscape maintenance agreement. Practices include, e.g., turf replacement with climate appropriate landscaping, rainwater harvesting, run-off redirection to Low Impact Development features, and impervious surface removal. The project aims to provide rebates for, certify and publicly recognize 20 commercial landscapes, 20 civic landscapes, and 20 residential landscapes for achieving Monterey Bay Friendly Landscaping Certification.	\$178,975	\$47,685		\$226,660
13	Monterey County Water Resources Agency: Aquatic Invasive Species Inspection Project	48	The purpose of this project is to provide an inspection process at the Agency-owned lakes that assesses and manages the risks of aquatic invasive species (AIS) without shutting the waters to all recreational boating. MCWRA and/or its partners will monitor incoming vessels at the entry gates and the public launch ramps at Lake Nacimiento and Lake San Antonio. All vessels will be screened and/or inspected prior to launch to determine if the vessel, trailer, etc. poses high risk of carrying AIS. Upon completing the screening or inspection process, it will be determined if the vessel is clean, drained and dry and therefore eligible to launch. The transport of AIS vectors by trailered, recreational boaters is not the only way such vectors may enter a watershed, but as a controllable point of entry, vehicle inspection programs have proven useful in reducing the spread of AIS in other regions of the country.	\$471,000	\$160,000		\$631,000

14	Monterey County Water Resources Agency: Granite Ridge Regional Water Supply Project	47	MCWRA is proposing to implement the Granite Ridge Regional Water Supply Project (Water Supply Project) to alleviate existing water supply and water quality deficiencies in the Granite Ridge area of northern Monterey County. Groundwater is the single source of water supply for the Granite Ridge area and is highly limited due to an underlying granitic formation. As a result, Monterey County and the MCWRA are proposing the project to serve existing lots of record experiencing water supply problems in the Granite Ridge area. The Water Supply Project will enable MCWRA to provide potable water service in a way that complies with US EPA and California Department of Public Health drinking water standards. The Water Supply Project will enable MCWRA to improve the reliability of water supply by interconnecting existing smaller systems into a consolidated water supply system with a new groundwater well to improve supply reliability.	\$6,625,000	\$19,875,000		\$26,500,000
15	Monterey County Water Resources Agency: Coastal Dedicated Monitoring Well Drilling	46	The project will drill 12 dedicated monitoring wells. The wells will be drilled under the oversight of a Professional Geologist (PG). The 4” diameter wells will be drilled using a sonic drilling method that allows discrete evaluation of geology to determine where well perforations will be placed. The wells will be strategically placed in Monterey County right-of-way locations with the goal to fill water quality and water level data gaps in front of and behind the 2009 500 mg/L chloride seawater intrusion fronts for the Pressure 180-Ft. and Pressure 400-Ft. aquifers.	\$691,200	\$230,400		\$921,600
16	Monterey County Water Resources Agency: Ground Water Conservation and Extraction Monitoring Expansion Project	44	This Project will fund the expansion of the Ground Water Conservation and Extraction Program (GWCE) into MCWRA Zone 2C. The MCWRA maintains a GWCE that provides critical data about water conservation practices and groundwater extractions (withdrawals) in Zones of Benefit. “Zones of Benefit” are geographic areas that receive hydrologic benefit from managed conservation releases from the dams at the Nacimiento and San Antonio reservoirs. The current GWCE Program has operated successfully within the boundaries of Zones 2, 2A, and 2B since 1993. In 2003, MCWRA designated a new Zone of Benefit – Zone 2C, which encompasses a larger geographic area than the original areas of Zones 2, 2A, and 2B. The GWCE Program ordinances require agricultural and urban well operators (and ultimately well owners) to submit annual reports of monthly groundwater pumped from each of their wells with a discharge pipe having an inside diameter of three inches or greater. Conservation Plans describe water conservation practices that will be implemented in the upcoming year, and which practices were implemented in the previous year. The Agricultural Plans include an additional form, the Water and Land Use Form, which asks	\$400,702	\$133,568		\$534,270

			agricultural water users for the amount of water applied and the number of irrigated acres for each crop category.				
16	Monterey County Water Resources Agency: Nacimiento Dam Low Level Outlet Works Rehabilitation	44	The Low Level Outlet Works (LLOW) at the Nacimiento Dam consists of a concrete intake structure, penstock and a downstream control structure. The downstream control structure is the focus of this proposed upgrade. Many of the valves have become harder to operate, corrosion of varying degrees has occurred on the gooseneck discharge diffusers, and erosion of the concrete stilling basin has occurred over time. Rehabilitation to the existing downstream control structure would include the following. Replacement of all six 24” valves, five of which would be replaced with plug type valves and one would be upgraded to a new energy dissipating, multi-orifice (MOV) type valve. Replacing/upgrading existing valves will increase operational integrity and flexibility in that regulation of normal discharge flows could occur in one of the six valves. All new valves shall be electronically and/or hydraulically actuated to increase efficiency in implementing reservoir release changes. New gooseneck discharge diffusers will be installed adjacent to associated valves, and designed to reduce erosion within the concrete stilling basin. The concrete stilling basin will be structurally reinforced to prevent further erosion. Protective steel covers/grating above the stilling basin has deteriorated and need to be replaced along with security fencing around the perimeter of the downstream control structure. The project will safely allow bypass of the hydroelectric power plant for increased releases and maintenance activities.	\$384,000	\$128,000		\$512,000
16	Monterey County Water Resources Agency: San Antonio Dam Butterfly Valve Project	44	The project will rehabilitate the Butterfly Valve Operator System at San Antonio Dam. The purpose of this project is to update/modify an existing 56-year-old facility to enhance reliability, efficiency, and safety. The associated butterfly valve is operated via its original hydraulic operator system. Since its installation in 1965, the butterfly valve and associated operator/control systems have been subject to normal operational wear and tear. However the butterfly valve’s operator appears to be experiencing difficulty in effecting complete valve closure in a desired time period. Rehabilitation to the existing butterfly valve system would include installation of a new hydraulic operator system, including hydraulic control panel, ram, latching system, and associated mechanical appurtenances. The new hydraulic operator system will have the capability to operate/exercise the butterfly valve locally (in the valve chamber) as well as remotely (in the control house). Remotely augmenting the associated butterfly valve will not only increase operational flexibility, but will also provide an added layer of safety.	\$200,000	\$80,000		\$280,000

16	Monterey County Water Resources Agency: Water Supply Reliability Project	44	The Water Reliability Project is designed to address the deferred maintenance and improvement of MCWRA facilities used in its operations. The age of many of the facilities critical to the operation of the MCWRA are 20-60 years old. While operational, most of these older facilities have had maintenance or improvements, due to new requirements, deferred. This project consists of several discrete maintenance tasks and improvements at several facilities including the Nacimiento Dam and Hydroelectric Facility, San Antonio Dam, Rec Ditch, Castroville Seawater Intrusion Project, and Salinas River Diversion Facility. Performing these maintenance tasks and improvements are critical to MCWRA's operations that provide conservation, flood control, recreation, fight seawater intrusion, and increase water source diversity.	\$2,605,800	\$868,600		\$3,474,400
17	Central Coast Wetlands Group: Coastal Wetland Erosion Control and Dune Restoration	43	The proposed project will enhance and restore wetland and sand dune ecosystems in central Monterey Bay, and control erosion in salt marshes directly behind the dunes around Moss Landing. These marshes are critical buffers to prevent salt water from entering surrounding farmland, especially the Salinas Valley, yet they are eroding away at accelerating rates. Sand dunes help retain fresh water at the coast, recharge groundwater, retard saltwater intrusion, and minimize storm damage from the sea. Currently much of the physical dune structure around Monterey Bay is fairly intact, but is also highly degraded with invasive non-native plants, which continue to spread. Monterey Bay is the largest indentation widely open to the sea on the Pacific Coast of the US, with correspondingly large and ecologically important dune systems, and is the core area of the Monterey Bay National Marine Sanctuary. The target area for this project, the central Monterey Bay, has the lowest and most degraded sand dunes in the region. They will be the first to fail as sea level rises from storms, El Nino cycles, and climate change. Should they fail, salt water will overflow into the Salinas Valley, compromising one of the nation's most productive agricultural centers.	\$1,070,164	\$356,721		\$1,426,885
18	Central Coast Wetlands Group: Development and Evaluation of Climate Change Response Strategies in the Elkhorn Slough, Gabilan and	42	This project implements key steps in climate change planning outlined by the DWR 2011 Climate Change Handbook for Regional Water Planning. This project will further and more accurately investigate regional climate change impacts and seeks to recommend adaptation response strategies (a priority action defined within the TAC-driven climate adaptation chapter of the Greater Monterey County IRWM Plan) to address the impacts of sea level rise, storm surge, coastal inundation and coastal erosion for the Elkhorn Slough, Gabilan, and Salinas River watersheds. The first phase of the project focuses on collecting and	\$392,300	\$106,450		\$498,750

	Salinas River Watersheds		compiling data to further evaluate coastal inundation threats and responses in these watersheds. This data includes an inventory of water control structures that manage current flood control conveyance and topographic data using Light Detection and Ranging technology (LiDAR). The second phase of this project focuses on creating a climate change adaptation and response strategy plan followed by an economic evaluation of these different strategies. The outcome of this project will be a comprehensive report recommending feasible and long-term adaptation and response strategies to climate change impacts, necessary to prepare for future threats rather than respond to emergencies. This project will help support the climate change planning efforts of multiple stakeholders in the Greater Monterey County IRWM planningh region. We intend to seek separate grant funds for climate planning.				
19	Monterey County Water Resources Agency: Dedicated Monitoring Well Expansion Project	41	This project will fund the expansion of the Dedicated Monitoring Well Program (DMW) within the Salinas Valley Ground Water Basin (Basin). The current DMW program consists of 35 wells located throughout the Basin but does not provide enough coverage for a robust data analysis and extrapolation. Up to 100 wells, 25 per subarea (Pressure, East Side, Forebay, and Upper Valley) will be drilled under the oversight of a Professional Geologist (PG). Geology during the drilling process will be evaluated for each well to determine where perforations will be placed. The wells will be strategically placed in Monterey County right-of way locations with the goal to fill water quality and water level data gaps throughout the entire Basin and to provide sufficient data to complete a robust analysis and extrapolation to the remaining areas of the Basin and the subareas. Water quality and water level data will be provided to CEDEN and CASGEM, respectively, at the end of each monitoring event.	\$8,525,010	\$2,841,670		\$11,366,680
20	Ecology Action: Drought Response: Achieving water demand reduction and LID BMP implementation through expanded incentive programs	40	To address overdraft in groundwater basins and oversubscription of surface water supplies in the Greater Monterey County region, a watershed-wide approach to water demand reduction will be implemented that provides enhanced incentives and assistance to accelerate water conservation and low impact development (LID) BMP retrofits. The project will target high priority commercial sites and expand residential direct install/rebate programs beyond water district boundaries. For key BMP rebates that are not provided by water suppliers, this program will provide a drought specific rebate within service areas. As a first step, top commercial water users in the area will be identified and offered a consistent and enhanced commercial direct install retrofit incentive program. As a second priority to commercial	\$750,000	\$200,000		\$950,000

			retrofits, residential sites outside water district areas within overdrafted aquifers will be offered rebate programs consistent with current local rebate programs. Where possible the project will leverage LID opportunities.				
20	Monterey County Water Resources Agency: Test Well for Regional Desalination Project – Slant Well	40	The Monterey area has had long-standing difficulties with its water supply. The area has no imported water sources and local supplies have sometimes been insufficient to provide the expected amount of water. Over the past several decades, local sources have been further constrained due to legal decisions, and several proposed projects meant to increase the region’s water supply have been rejected by local voters. In response to the Seaside Basin overdraft and to address the 2006 State Board’s Division of Water Rights Cease-and Desist Order to Cal-Am to reduce its Carmel River well water withdrawals, an alternative “Regional Water Project, Phase I” was proposed. This alternative proposed using vertical and slant wells to produce and treat brine water by reverse osmosis, and then deliver the potable water for use on the Monterey Peninsula to remove the State Board Cease and Desist Order. This proposal would fund the slant test well drilling component of the abovementioned project to determine project feasibility. The project includes four sets of monitoring wells to be located at the project site within about 200 feet of the surface of the slant well. The proposed wells would be constructed and tested over a period of about one year.	\$3,000,000	\$1,000,000		\$4,000,000
21	California State Parks: Big Sur River Steelhead Enhancement Project	38	The Big Sur River provides spawning and rearing habitat for the federally threatened South-Central California Steelhead (<i>Onchorhynchus mykiss</i>). Six and a half of the 8½ miles (75%) of the river that are passable to steelhead are within Andrew Molera State Park (AMSP) and Pfeiffer Big Sur State Park (PBSSP). For this reason, California State Parks authorized development of the Big Sur River Steelhead Enhancement Plan (BSRSEP), which was completed in 2003. The project is made up of the following components: 1) Constructing a clear-span bridge to replace an existing double squashed culvert crossing at Post Creek in PBSSP campground. Permitting and design has already been funded. 2) Conducting riparian re-vegetation, exclusionary fencing and bank stabilization in degraded riverside campsites and the day use picnic area within PBSSP. 3) Relocating a portion of the Beach Trail in AMSP away from the river. 4) Installing steelhead lifecycle and regulation interpretive displays. 5) Removing invasive, non-native plant species and re-vegetation with natives along the riparian corridor in AMSP.	\$400,738			\$400,738

22	Monterey Bay Sanctuary Foundation: Making Monitoring Count	37	<p>This project is necessary to document the IRWM Plan efforts and their effectiveness throughout the Greater Monterey County region. The project will implement the tracking system developed to inventory projects designed to address the goals of improved water quality, water supply, flood control and environmental protection outlined in the IRWM Plan. The Monterey Bay National Marine Sanctuary’s Synthesis, Analysis and Management (SAM) program initiated this effort in 2006 by conducting an initial compilation and assessment of water quality data collected on the Central Coast. This effort led to the development of the <i>Strategic Plan for Central Coast Water Quality Monitoring Coordination and Data Synthesis</i>. This project will further the tasks described in that plan by developing a framework for improving regional capacity to coordinate monitoring, synthesize information, communicate more effectively between key groups, understand environmental changes, and respond to changes and new knowledge with adaptive management. Water quality data have historically been stored in disparate formats at diffuse locations throughout the region, making them difficult to use collectively. Combining this with tools developed in the Tahoe Basin to measure effectiveness of practices and load reductions will be extremely valuable to the IRWM process.</p>	\$324,000	\$81,000		\$405,000
23	Central Coast Wetlands Group: Ecosystem Condition Profile for the Lower Salinas River Watershed using the Level 1-2-3 Framework	36	<p>The goal of this project is to provide cost-effective, scientifically based, and integrated information on stream ecosystem condition in the Salinas River watershed to inform management decisions and optimize ecological monitoring activities. To address this goal, the EPA’s 1-2-3 Framework will be used and tailored to the region’s interests. The 1-2-3 part of the Framework relates to three different levels of data collection that address different types of resource management questions. <i>Landscape Assessments (Level 1)</i> are inventories of streams in a watershed. They generate a base map of the extent and distribution of stream ecosystems in each watershed and help determine what role the organizations can take to maintain or improve stream conditions. <i>Rapid Assessments (Level 2)</i> evaluate the overall, or ambient, condition of riverine wetlands inexpensively and in a comparatively short timeframe. <i>Intensive Assessments (Level 3)</i> provide finer resolution field data to evaluate the performance of mitigation sites, establish baseline conditions, and help to understand the cause of declines in habitat conditions. The information at the three levels will be synthesized into an integrated report of stream condition within the main stem of the Salinas River and in two smaller sub-watersheds watershed. Profiles also identify the stressors affecting condition, risks and consequences of</p>	\$517,875	\$172,625		\$690,500

			unmitigated stressors, and recommended actions to maintain or improve condition. Because a majority of the land ownership or control over streams relative to the vast drainage network in each watershed is in private hands, the assessments help to clarify what role public agencies and regional organizations can take to protect stream condition and how to engage others to help implement solutions.				
23	Monterey County Water Resources Agency: Salinas River Flood Risk Reduction and Habitat Improvement Project	36	The project provides long-term guidance and outlines maintenance procedures that will be used by the participants along the Salinas River mainstem and portions of San Lorenzo Creek, Bryant Canyon Channel, and Gonzales Slough to conduct stream maintenance activities (i.e., non-native and native vegetation treatment, sediment management) on a voluntary basis to maximize flood flow capacity and minimize bank erosion, while minimizing environmental effects, helping to protect against flooding during and after major storm events. As conditions change or are updated, or as environmental regulations evolve, the project would also evolve to keep pace. MCWRA proposes to administer the project for up to 10 years. The central tenet of the project is that maintenance activities are conducted using an informed and systematic approach to minimize stream impacts while providing improved flow conveyance.	\$787,500	\$262,500		\$1,050,000
23	Rural Community Assistance Corporation (RCAC): Greater Monterey Bay Disadvantaged Community Wastewater Management Pilot Program	36	The Greater Monterey Bay Disadvantaged Community Wastewater Management Pilot Program will form a collaboration of experts, students, community leaders and local government to implement an Inspection and Monitoring program of community onsite wastewater systems. This program will include creating a local entity to manage multiple systems to ensure the systems are operating properly. The program will create an on-going operation and maintenance program, including groundwater monitoring, for selected disadvantaged communities that are served by individual septic systems that may not be able to afford traditional sewer systems. The project will help disadvantaged communities limit public health hazards and environmental pollution through better wastewater management.	\$677,000	\$12,000		\$689,000
23	Save Our Shores: Save Our Shores Watershed Protection Program - Annual Coastal Cleanup Day in Monterey County	36	Save Our Shores (SOS) has been coordinating Annual Coastal Cleanup Day (ACC) in Santa Cruz since 2007 and has grown the event from 1,929 volunteers and 42 beach sites to 3,800 volunteers and 52 beach and river sites, in just two years. While SOS has been running ACC in Santa Cruz, California State Parks had been running ACC in Monterey since 2001 and no longer had the staff or resources to continue running this event after 2009. Because of the success that SOS has had in expanding the event in Santa Cruz, State Parks and the Coastal	\$12,000	\$12,000		\$24,000

			Commission asked SOS to take over this responsibility in Monterey in 2010. SOS ran the program in Monterey based on best practices from Santa Cruz and increased the number of volunteers from the previous 1,400 average to over 2,000 the first year and increased the number of sites by including river cleanups through our partnership with Return of the Natives, and involving businesses through sponsorship and employee participation. In the coming years, volunteers will continue to gain a valuable experience in understanding the problem of marine debris and learning ways that they can help solve the problem, and the thousands of visitors that Monterey beaches attract will benefit by experiencing cleaner beaches.				
24	Monterey County Water Resources Agency: Salinas River Fisheries Enhancement Project	35	The SRFEP is a culmination of the fisheries-related work that is necessary for the implementation of the Salinas Valley Water Project (SVWP). There are three main purposes for the SRFEP: (1) population monitoring to quantify the presence of the Endangered Species Act listed <i>Oncorhynchus mykiss</i> (steelhead trout) in the lower Salinas River system; (2) monitor river flows to ensure adequate water for fish passage (migration monitoring); (3) monitor water quality to determine habitat suitability. Tasks that identify the presence and/or enhance the population of <i>O. mykiss</i> will be performed within the Salinas River Watershed in the Salinas River, the Salinas River Lagoon, the Nacimiento River and the Arroyo Seco River.	\$867,000	\$290,000		\$1,157,000
25	Central Coast Wetlands Group: Expansion of a Coastal Confluence Water Monitoring System to support the Greater Monterey IRWM Plan	34	We anticipate that the cumulative results of regional water quality enhancement efforts will lead to improvements in water quality of receiving waters. However, we currently do not have the robust monitoring systems in place to successfully document these improvements. This project aims to expand the coverage of the continuous monitoring LOBO (Land/Ocean Biogeochemical Observatory) buoy monitoring array from the current location at the end of the Gabilan/Old Salinas River Channel (and several within the Elkhorn receiving waters) to the two additional priority coastal confluence locations that drain significant portions of the Salinas Valley (the Moro Cojo Slough and Salinas River mouth). Additional less costly nutrient monitoring equipment will be installed at the confluence of multiple sub-drainages in order to further document the cumulative effects of nutrient management strategies within the sub-drainages of each watershed. Funds will support the construction of a new LOBO buoy for the Salinas River and the refurbishment of a buoy currently being used within the Elkhorn Slough, which will be redeployed within the Moro Cojo Slough. Funds will also support three years of half-time	\$599,130	\$216,153		\$815,283

			staff and student support for the LOBO system including one station currently deployed within the Elkhorn Slough. This will document the enhancement of water quality within receiving waters due to watershed management practices.				
26	City of Salinas: Integrated Industrial Wastewater Conveyance and Treatment Facility Improvements	33	This project will include new gravity sewers with capacity to collect more of the City’s industrial wastewater and convey it to the IWTF, upgrades to the IWTF to treat increased industrial flows (expanded electrical system and aeration treatment and related upgrades), and a system to filter the IWTF effluent through soil at the IWTF. After extraction the water would be available for reuse. New monitoring points around the soil bed filtration system will monitor system efficiency and assess its performance and success, such as producing high quality water with low suspended solids. The City has identified multiple potential beneficial uses for treated water including the following: 1) Encourage groundwater re-charge. 2) Combat saltwater intrusion. 3) Transfer to the Monterey Regional Water Pollution Control Agency for high quality diluent in its groundwater recharge project. 4) Use as low-salt feed water for potential upgrade to potable water for the City of Salinas. 5) Use after some desalting for agricultural irrigation or without desalting for non-agricultural irrigation water (golf course, playing fields, etc.). 6) Discharge to the Salinas River for reuse by others when withdrawn at the inflatable dam. The potential quantity of water now exceeds about 2,500 acre feet annually and could increase to several times that amount as the IWS grows. The water quality would be substantially improved since the effluent will have filtered through the soil column, removing algae and other suspended solids and some trace constituents. For the IWS, such withdrawal would enhance both disposal pond and the percolation bed percolation rate, effectively increase effluent disposal capacity, and hence, treatment capacity.	\$10,720,000	\$7,190,000		\$17,910,000

G.2 FUNDED IRWM PLAN PROJECTS

Seven implementation projects included in the Greater Monterey County IRWM Plan were awarded grant funds from Round 1 of the Proposition 84 IRWM Implementation Grant Program (in 2011). Table G-2 below provides a brief summary of these seven projects, along with the award amounts and each project’s primary resource areas. The Greater Monterey County IRWM region received a total of \$4,139,009 in Implementation Grant funds from Round 1. The seven projects that received support from this round are currently being implemented.

Table G-2: IRWM Plan Projects funded through Round 1 IRWM Implementation Grant Program (in 2011)

Project Proponent & Project Title	Project Summary	Awarded Amount	Primary Resource Area(s)
City of Soledad: Soledad Water Recycling/ Reclamation Project	The City of Soledad is designing and constructing, in fundable phases, the balance of the Soledad Water Reclamation Project. The 5.5 million-gallon/day (MGD) Water Reclamation Facility was substantially complete on February 24, 2010. This project includes completion of design of a recycle water delivery system to both agricultural and recreation areas in and near the City of Soledad. The project also includes research on the use of recycled water for agricultural uses. The entire project costs an estimated \$45M. The first phase, which is being implemented through this grant, is to construct the recycled water pump station and to design and construct the transmission mains needed to connect the recycled water transmission mains already constructed to the pump station. Completion of this phase will enable delivery of recycled water to multiple landscaped areas currently being irrigated with potable water. This first phase will also include a feasibility study and preliminary conceptual design for the neighboring communities of Gonzales and Greenfield for delivery of their cities' wastewater to the Soledad Water Reclamation Facility for processing.	\$904,480	water supply
Castroville Community Services District: Castroville CSD Well 2B Treatment Project [DAC project]	The project consists of construction of a well pump and arsenic removal treatment system for an existing well in Castroville, CA. This is a water supply enhancement project. Castroville's wells are in the 180/400-Foot Aquifer of the Salinas Valley Groundwater Basin, and were experiencing increased salinity due to seawater intrusion. The overall project is to construct a new well in the deeper 900-Foot Aquifer and reduce pumping from the shallower aquifers. In 2007, Castroville Water District (now the Castroville Community Services District) drilled a new well, No. 2B, into the 900-Foot Aquifer. Water quality testing indicated that arsenic levels in the new well (17 parts per billion [ppb]) exceeded the maximum contaminant level (MCL) for drinking water (10 ppb). The District has designed the well pump and treatment system for the new well, but has not initiated construction.	\$581,000	water supply + water quality
San Jerardo Cooperative, Inc.: San Jerardo Wastewater Project [DAC project]	This project consists of construction to upgrade the wastewater facility at San Jerardo Cooperative, a farm-worker housing collective. San Jerardo is a DAC that is confronted with serious drinking water, wastewater, and human health concerns. The community runs its own wastewater system in the form of four ponds, leach fields, and a machine room. The area's groundwater, and hence the community's drinking water, is threatened by nitrate contamination and other issues. The community urgently needs to upgrade the wastewater system to prevent further water quality deterioration. In addition, the current system is at capacity, and the proposed repairs and upgrade are necessary to ensure compliance with the Central Coast Regional Water Quality Control Board's (RWQCB) Waste Discharge Requirement Order No. R3-2003-0054 and to prevent further groundwater contamination in the Salinas Valley - East Side aquifer. The project is in close collaboration with a number of entities, including: Monterey County; the Central Coast RWQCB; Rural Community Assistance Corporation; Engineers Without Borders; and the Environmental Justice Coalition for Water.	\$924,455	water quality

<p>Elkhorn Slough Foundation: Integrated Ecosystem Restoration in Elkhorn Slough</p>	<p>In this project, the Elkhorn Slough Foundation, in partnership with the Elkhorn Slough National Estuarine Research Reserve, the Moss Landing Harbor District, the Monterey County Water Resources Agency and the County of Santa Cruz, will restore up to 90 acres of tidal salt marsh and a 30-acre native grassland buffer to provide habitat and reduce non-point source pollution in Elkhorn Slough. The marsh will be restored through the placement of sediment to be removed from Moss Landing Harbor and benches along the Pajaro River, making harbor maintenance and flood protection projects more effective and with fewer impacts on the environment. The project will address these specific problems through a collaborative approach and using a phased implementation approach. Prior phases included property acquisition and establishment of a buffer between farmland and the estuary. The next phase, the focus of this grant, includes: planning to finalize the project description and conduct California Environmental Quality Act (CEQA) compliance, engineering to a 30% design, establishment of native grassland in portions of the vegetated buffer, and site preparation for receiving sediment.</p>	<p>\$822,242</p>	<p>natural resource enhancement + flood management + water quality</p>
<p>Central Coast Wetlands Group at Moss Landing Marine Labs through San Jose State Research Foundation: Water Quality Enhancement of the Tembladero Slough and Coastal Access for the Community of Castroville</p>	<p>This project aims to enhance the thoroughly degraded Tembladero Slough, a water body that currently has 14 303(d) listed pollutants, which flows untreated into the Monterey Bay National Marine Sanctuary (MBNMS). Enhancement will be achieved through a collaborative effort between County planners, farmers, scientific researchers, and the community. In this first phase of the project, the Coordination Team will redesign the form and function of the lower drainage to include wetland enhancement projects, water quality treatment areas, and public access, while addressing agriculture discharge permits, the Castroville Redevelopment Plan, and the County Flood Control Program. In the second phase, the Coordination Team will improve water quality through the purchase of easements and creation of treatment wetlands in strategic locations along the slough, improve flood plain open space areas, create enhanced habitat, and construct public access trails where possible.</p>	<p>\$341,698</p>	<p>flood/watershed management + natural resource enhancement + water quality</p>
<p>Monterey Bay National Marine Sanctuary, Central Coast Wetlands Group, and the Resource Conservation District (RCD) of Monterey County: Watershed Approach to Water Quality Solutions</p>	<p>This project will take a watershed approach to improve water quality in Santa Rita Creek, an impaired water body located within the Lower Salinas River Watershed. This approach will address impacts from agriculture and urban areas and will incorporate creek restoration while engaging the community. Santa Rita Creek flows into the Salinas Reclamation Ditch, Tembladero Slough and ultimately to the MBNMS. These water bodies are considered the most polluted water bodies on the Central Coast with 37 Total Maximum Daily Load (TMDL) listings, 7 of them on Santa Rita Creek. Agricultural efforts will focus outreach and referrals to leverage existing programs and funding for implementation of irrigation and nutrient management practices and the Livestock and Lands program. In addition, management measures will control erosion from strawberry crops. Two restoration projects along Santa Rita Creek will promote environmental stewardship, reduce illegal dumping, stabilize banks and increase biofiltration of pollutants through revegetation of native plants. This holistic approach will inform resource managers on the geographic scale at which we can see improvements to water quality and habitat.</p>	<p>\$372,413</p>	<p>water quality + flood/watershed management</p>
<p>University of California, Davis (Granite Canyon Marine Pollution Studies</p>	<p>In order to protect the beneficial uses of aquatic habitats, many cities are now mandating LID treatment systems such as bioswales. Information on the ability of urban bioswales to reduce toxicity is an important component for evaluating impacts of regional urban stormwater runoff.</p>	<p>\$192,721</p>	<p>water quality</p>

Laboratory): Evaluation of Potential for Stormwater Toxicity Reduction by Low Impact Development (LID) Treatment Systems	This project will evaluate the efficacy of bioswales in reducing the concentrations of contaminants that contribute to stormwater toxicity in the City of Salinas. Looking at four sites in the City of Salinas, the project will: 1) assess toxic effects of stormwater runoff to aquatic organisms prior to treatment by bioswales; 2) evaluate efficacy of bioswales to reduce toxicity to aquatic organisms; 3) determine stormwater and pollutant load reduction through bioswales; and 4) provide data to stormwater agencies, water quality managers, LID engineers, and others to be incorporated into future land-use planning and management decisions.		
TOTAL AWARD AMOUNT		\$4,139,009	

G.3 CONCEPT PROPOSALS

Table G-3 below lists the 2014 concept proposals included in the Greater Monterey County IRWM Plan. As noted previously, the concept proposals are not ranked, but have been reviewed and vetted for inclusion in the Plan. The Project Review Committee reviewed concept proposals according to the following criteria:

- Does the project meet the minimum IRWM Plan standards (as described in Section F.2.1, Project Review Process)?
- Are there potential environmental justice impacts or impacts to disadvantaged communities (DACs)?
- Do there appear to be potential problems or conflicts either with IRWM Plan objectives or with other projects?
- Are there possibilities for integration with other projects?

All of the 37 concept proposals included in this IRWM Plan meet the minimum IRWM Plan standards. None of the projects appear to present potential environmental justice impacts or impacts to DACs (as of the writing of this Plan); and several of the projects show potential opportunity for integration with other IRWM Plan projects. The RWMG will encourage those project proponents to consider combining projects or project elements with other IRWM Plan projects, as appropriate. The RWMG will also consider opportunities to develop regional programs that would efficiently combine individual projects.

Table G-3: 2014 Concept Proposals

Project Proponent & Project Title	Project Summary	Primary Resource Area(s)
Big Sur Land Trust, City of Salinas, CSUMB Watershed Institute and Return of the Natives: Carr Lake Property Acquisition	The goal of this project is the acquisition of the 450-acre Carr Lake basin, and its conversion into parkland for the multiple uses of recreation, restored wetlands and riparian wildlife habitat, stormwater detention, open space, and water quality enhancement for downstream areas including the Reclamation Ditch and the MBNMS. The restored Carr Lake Regional Park will connect via trails to Natividad Creek Park, which lies immediately upstream. Re-creation of wetlands and floodwater detention areas will provide reduction of flood impacts to the City of Salinas and to downstream agricultural and community lands. Water quality will also improve due to restored wetlands and natural vegetation, via sediment capture and the biological treatment of constituent chemicals.	natural resource enhancement + flood control + water quality#
Central Coast Regional Water Quality Control Board: Healthy Functioning Watersheds: Green Infrastructure and the Preservation and Protection of Hydrologic Processes	The RWQCB's Vision of Healthy Watersheds calls for watershed protection in part through the use of green infrastructure. Green infrastructure is the set of practices that mimic natural processes to retain and use stormwater. Through infiltration, evapotranspiration, and harvesting stormwater throughout the landscape, green infrastructure preserves and restores the natural water balance of a watershed. Environmental benefits include reducing flooding, improving water quality, providing habitat, reducing the urban heat island effect, mitigating global warming and increasing groundwater recharge. Healthy sustainable watersheds supported by green infrastructure use less energy for imported water, have fewer greenhouse gas emissions, and a lesser carbon footprint than unhealthy watersheds. With this concept proposal the RWQCB is encouraging organizations to implement green infrastructure projects.	flood control + water quality + natural resource enhancement + water supply
Central Coast Regional Water Quality Control Board: Healthy Functioning Watersheds: Irrigation Efficiency and Nutrient Management on Agricultural Lands	With this concept proposal the RWQCB is encouraging organizations to work with farmers to implement irrigation and nutrient management projects. The RWQCB's Vision of Healthy Watersheds calls for watershed protection through the implementation of irrigation efficiency, and nutrient as well as pesticide and sediment management on agricultural lands. This includes conducting irrigation evaluations and corresponding actions designed to address pollutant loading from tailwater, creating un-farmed buffers that improve water quality (e.g., filter and infiltrate runoff), and protecting or improving habitat (e.g., stabilize streambanks and shade streams) between intensive agriculture and wetland/riparian areas. The Central Coast Water Board has prioritized implementation in the Salinas watershed and other impaired waterbodies included in the Greater Monterey County region. Irrigation and Nutrient Management, especially related to protection of shallow domestic drinking water wells, continues to be one of the RWQCB's highest priorities. Implementation would be carried out via various partnering organizations in collaboration with growers.	water quality
Central Coast Regional Water Quality Control Board: Safe and Affordable Drinking Water for Disadvantaged Communities	This concept proposal is focused on prioritizing projects that address the immediate drinking water needs of disadvantaged communities (DACs) and is in alignment with the RWQCB's highest priority of preventing and correcting threats to human health. Nitrate pollution of groundwater is one of the most significant threats to human health in our region. Domestic wells and small water system wells within or adjacent to intensive agricultural areas are the most at-risk of nitrate pollution in the Salinas Valley, and DACs generally shoulder a disproportionately higher share of the health and economic-related cost associated with nitrate pollution. In many cases DACs can't afford to address drinking water pollution, don't qualify for available funding, and have	water quality + water supply

	difficulty navigating the myriad of drinking water related funding and regulatory programs. This concept proposal is focused on a three-pronged strategy to address the immediate needs of DACs who currently do not have a safe and affordable drinking water supply. The three-pronged strategy includes: 1) comprehensively and uniformly identify the drinking water problems and associated needs of DACs with the Greater Monterey County IRWM funding area; 2) the provision of interim safe water supplies (e.g. bottled water, etc.) to residents until more permanent solutions are implemented; 3) the evaluation and implementation of long-term safe and affordable drinking solutions (e.g. treatment, new water supply, consolidation, etc.). This concept proposal is focused on prioritizing projects that resolve drinking water contamination problems with an emphasis on, but not limited to, nitrate pollution and DACs.	
Central Coast Wetlands Group: Historic and Existing Drainage Network Mapping Project: Phase 1	This project proposes to utilize available public domain digital elevation models and orthophotography as a base for a GIS based mapping of drainage networks in the Salinas River, Elkhorn Slough, and Moro Cojo watersheds with two primary goals. The first, to recreate the pre-development drainage network of the subject area watersheds based on existing topography, historical records and field verification to determine historical surface drainage conditions. Secondly, to map the existing drainage network of the subject watersheds based on existing topography and drainage infrastructure.	flood control + natural resource enhancement + water quality
Central Coast Wetlands Group: Sustainable Agriculture and Sustainable Development - Field Station and Demonstration Area	This project proposes to establish a large acreage (100-640 acres) sustainable agriculture and sustainable development field research station to develop innovative sustainable land use practices for agriculture, residential, and commercial development on a landscape scale. The site will provide continuous monitoring of practices to ensure that the desired outcomes are achieved, establish long-term data sets and allow for new innovations and practices to be developed. The field station will also provide a demonstration area that can be reviewed and studied by other landowners and land managers to determine applicability to their individual projects or farms. The primary goal of this project is to improve water resources on and offsite in the context of modern land use.	water quality
City of Salinas: Replacement Raw Sewage Pipeline to Monterey Regional WWTP and City of Salinas Industrial Wastewater Treatment System Expansion	The City has identified two potential projects at a conceptual development level—expanding the City’s capacity to treat and reuse industrial wastewater and increasing conveyance capacity for transferring raw sewage from the City to the MRWPCA wastewater treatment plant (WWTP), for treatment, followed by reuse or disposal.	water quality + water supply
Coastal Watershed Council: Community-Based Water Research and Education	This project involves Community-Based Participatory Research (CBPR) with a goal of engaging diverse individuals and groups in future discussions of water supply, water quality, and other environmental issues. This approach lends greater legitimacy to future plans and actions by ensuring community involvement. Outcomes from this research will help elected officials and water agency boards to best serve their constituents and establish connections that will benefit all future planning and implementation efforts. This process further benefits the entire region, as it empowers and engages the public in crucial water issues where they might not otherwise be informed or active. The Coastal Watershed Council will lead the efforts to administer the CBPR on a specific watershed-by-watershed basis. Ultimately, this approach could foster the creation of specific watershed	flood control + water quality + natural resource enhancement + water supply

	management and/or restoration plans, filling a noticeable void within the region. The holistic approach of this CBPR project would also address numerous objectives in all seven goals outlined in the region’s IRWM Plan.	
Coastlands Mutual Water Company & Big Sur Land Trust: Post Creek Water Supply and Watershed Restoration Project	The Post Creek Water Supply and Watershed Restoration Project includes two objectives: (1) securing a water supply system and (2) restoring watershed function to a degraded coastal stream and its receiving watershed. The water supply system portion of the project will include the rehabilitation of the Coastlands Mutual Water Supply Company spring box intake and 3000 feet of the company’s water supply distribution line servicing 60 customers in Big Sur. The water supply system is the only supply for the 60 water customers and was destroyed in the Basin Complex Fire of 2008. The project’s other objective is to work to restore geomorphic function back to the Post Creek drainage and to rehabilitate the watershed from the effects of the Basin Complex Fire. Currently the Post Creek watershed is drained through a 24-inch culvert located within the creek bed at Coast Ridge Road. Due to the presence of debris from the Basin Complex Fire and the continual source of sediment and materials coming from the burned watershed, the undersized culvert fills with sediment and debris and results in road failure and sediment deposition in Post Creek and ultimately to the Big Sur River. The project proposes the placement of a box culvert at the location of the existing culvert to provide proper drainage and for a more natural sediment flow through the drainage without road failures and debris flows as in the current conditions.	water supply + natural resource enhancement + water quality
CSUMB Return of the Natives: Return of the Natives Restoration Education Project—An IRWMP partner	The Return of the Natives Restoration Education Project (RON) is the education and outreach branch of Watershed Institute of the California State University Monterey Bay. For this concept proposal, RON would like to present their organization as a partner to other IRWM Plan projects. They offer to bring the marriage of native plant restoration and community engagement, which has become known as “community based habitat restoration” to IRWM Plan projects. RON’s social goal is to bring people and nature together on restoration and garden projects in the watersheds of the Monterey Bay. RON’s partnership has the capacity to bring tens of thousands of native grasses, forbs, shrubs, and trees to restoration projects. The plants grown by volunteers and RON staff and CSUMB students are eventually planted by these same volunteers on restoration sites. RON has the capacity to grow and out-plant from 25,000 to 50,000 native plants annually.	natural resource enhancement
CSUMB Watershed Institute: Monitoring Water Quality Improvements with BMPs	The Watershed Institute is offering to conduct monitoring for IRWM Plan projects, as requested and as needed, to test water quality as a result of urban, suburban, rural, and agricultural management practices.	water quality
Marina Coast Water District: Monterey Bay Regional Desalination Project	The Regional Desalination Project will provide approximately 10,500 AFY of potable water on an average annual basis to both the California American Water Company (CalAm) and MCWD service areas. The Regional Desalination Project generally consists of a reverse osmosis desalination plant to treat a mix of seawater and brackish groundwater water extracted from the seawater-intruded 180-Foot Aquifer of the Salinas Valley Groundwater Basin to produce 10 million gallons per day of product water. Intake facilities include intake wells and an intake pipeline that will convey the extracted water to the desalination plant for treatment. The desalination facilities will include a pretreatment system, the RO system, a post-treatment system, clearwell tanks, and brine disposal. The brine from the desalination plant will be blended with treated effluent from the MRWPCA’s Regional Treatment Plant and disposed of via MRWPCA’s existing ocean outfall. Distribution	water supply

	pumping and a transmission pipeline will convey the desalinated (product) water to MCWD's and CalAm's service area for potable use. The existing Aquifer Storage and Recovery system operated by Monterey Peninsula Water Management District (MPWMD) will be expanded as part of the project to provide additional storage capacity for the desalinated water produced by the Regional Desalination Project. A portion of the facilities will be powered by Monterey Regional Waste Management District's cogeneration facility, reducing the carbon footprint of the Regional Desalination Project and GHG emissions.	
Monterey Coastkeeper/ The Otter Project: Maintenance and Flood Control Planning for the Old Salinas River Channel and Reclamation Ditch	A facilitated stakeholder process is proposed to bring people together to find common ground in regard to maintenance and flood control planning for the Old Salinas River Channel and Reclamation Ditch. Various visions for these highly modified waterways may require iterative review by consultants knowledgeable about the area and skilled in hydrology and geomorphology. Agencies such as the US EPA, RWQCB, MCWRA, NMFS, and California Department of Fish and Game (DFG) should be involved. Growers and landowners should be involved. And stakeholders such as Sierra Club, Surfrider Foundation, CA Native Plant Society, Audubon, and Monterey Coastkeeper should be involved. Such a process is the only way to bring people together, find common ground, maintain the waterways, and provide flood control. Deliverables from the process will be a 401 permit application and a Channel Maintenance Technical Memorandum.	flood control
Monterey Coastkeeper/ The Otter Project: Finding a Common Ground Approach to Salinas River Flood Management	A number of groups and agencies resisted grower and Monterey County Water Resource Agency plans to undertake bulldozing projects in the Salinas River channel without an environmental impact study. The US EPA designated the Salinas River an Aquatic Resource of National Importance (ARNI) essentially stopping the Army Corps of Engineers 401 permit process. The MCWRA has now funded environmental review. While the review may satisfy CEQA requirements, the study may do little to balance the value conflicts of growers, fish, water quality, and other users. Environmental review will certainly not address the ARNI designation. A facilitated stakeholder process is proposed to bring people together to find a common ground approach to flood management in the Salinas River.	flood control
Monterey County Public Works: Boronda County Sanitation District Guide Rail Upgrade Project	The goal of the Boronda County Sanitation District Guide Rail Upgrade Project is to replace the T-rail system and replace it with dual tube guide rail system. This project is through the beginning stage. Planning is underway between the Wastewater Collection crew and the Bridge crew to complete the project in a timely manner. This guide rail project will significantly improve performance. It is an effective way to ensure that the pump has a good seal and the flow is diverted with out seepage. Estimated project completion is within 90 days with proper funding. This project will minimize the pump seepage and reduce the amount of Sewer System Overflow occurrences.	water quality
Monterey County Public Works: Chualar Wastewater Collection and Treatment System Upgrade Project	Chualar Ponds operate as a percolation system which requires dredging, disking the ponds on an annual basis. This project requires the following repairs and items to be implemented: 1) <u>Valve replacement</u> : Each pond has a valve to allow ponds to divert flow from one pond to another. Without the pond rotation we cannot operate the ponds successfully. The Department of Public Works will also develop a way to tie in to a water supply in the area to obtain potable water. 2) <u>Monitoring</u> : Monitoring constituents in the ponds will require meters, including a dissolved oxygen meter and a pH meter. 3) <u>Back-up generators</u> : Back-up generators will be rented or purchased to ensure that the public is protected from Sanitary Sewer Overflows. 4) <u>Guide rail project for CSA-75</u> : The 30-year-old infrastructure which has the old T-rail system will be replaced. This includes replacing the base in some	water quality

	of the lift stations and replacing the T-rail system with the guide rails. 5) <u>Plan of Action</u> : This includes the process of communicating with other districts and agencies to form a one-time fee for confined space training for additional County employees. 6) <u>CSA-75 SSMH</u> : The Public Works Department will elevate three manholes to reduce the amount of water intrusion in the Sanitary Sewer System.	
Monterey County Public Works: County Service Area 72 - Las Palmas Monitoring Wells	In order to operate the wastewater facilities and to discharge recycled water via irrigation systems, a Waste Discharge Requirement (WDR) is required. The RWQCB issued a WDR Order to meet this requirement for the Las Palmas Ranch Residential Development. On December 1, 2006, the RWQCB issued Master Reclamation Requirements (MRR) that required a Groundwater Monitoring Well Work Plan. That Monitoring Plan was prepared by Schaaf & Wheeler and submitted to the RWQCB on May 31, 2007. That plan called for the installation of additional monitoring wells at an estimated cost (in 2007 dollars) of \$130,000. There are insufficient funds within the CSA 72 accounts to pay for the full costs of the plan. Grant funding consideration is requested for the installation of groundwater monitoring wells to implement the submitted Work Plan.	water quality + water supply
Monterey County Public Works: Moss Landing County Sanitation District Wastewater System Upgrade Project	The goal of the Moss Landing County Sanitation District Guide Rail Upgrade project is to improve the T-rail system and replace it with the guide rail system. This project is already in process however it is at the beginning stage. Planning is underway between the Wastewater Collection crew and the Bridge crew to complete the project in a timely manner. This guide rail system will last as long as the T-rail system is properly maintained. This project will minimize the pump seepage and reduce the amount of Sewer System Overflow occurrences.	water quality
Monterey County Public Works: SCADA Project	This concept proposal is to implement a Supervisory Control And Data Acquisition (SCADA) program for all County Sanitation Systems, which will ensure accurate monitoring for the Sanitary Sewer System. Implementing this project will be an effective way to reduce the amount of man hours as well as to efficiently monitor system performance and avoid emergency events.	water quality
Monterey County Water Resources Agency: Granite Ridge Expansion Project (tentative name)	The project described in this concept proposal represents a sustainable solution to water supply in the Highlands South/Granite Ridge subareas of the northern portion of Monterey County. The project consists of a conveyance pipeline that starts near Castroville and runs along Castroville Boulevard and ties in to the Granite Ridge Distribution System (which for the purposes of this project is assumed to be built). Along the conveyance pipeline alignment, there are laterals/spurs that would provide water to smaller areas along the pipeline route. This project would build upon the success of the Granite Ridge Distribution Project (GRDP), which provides water to an area of Monterey County that is in great need of a sustainable water supply solution. The GRDP is listed as another project in this IRWM Plan. The GRDP utilizes water from two wells and distributes the water via pumps, storage tanks, and pipelines. Conversely, the GREP utilizes the existing infrastructure from the GRDP and augments the water supply of surrounding areas, with a different source of water.	water supply
Monterey County Water Resources Agency: Implement Reclamation Ditch Improvement Plan Advisory Committee	The Reclamation Ditch Improvement Plan was developed by the Reclamation Ditch Improvement Plan Advisory Committee (RDIPAC) to address the flooding, erosion, and sediment issues impacting the Reclamation Ditch system, a 157 square mile watershed. The desired project types submitted here will implement recommendations by the RDIPAC. Some of the recommendations include the following: replace Potrero Tide Gates, increase channel capacity and embankment stabilization (various locations), conduct bridge replacements (12), modify Main Street box culvert, increase pumping capacity at pump stations (2), conduct a comprehensive watershed	flood control + water quality

Recommendations	assessment and management plan, and conduct survey of existing right-of-ways.	
Monterey County Water Resources Agency: MCWRA Reservoir Roads Assessment and Upgrade Project	This project will assess the water quality impacts of approximately 40 miles of unpaved roads that are located on land owned by the MCWRA and will create a plan to address these impacts. These roads drain directly or indirectly into either the San Antonio Reservoir in Monterey County or the Nacimiento Reservoir located in San Luis Obispo County. The majority of the land owned by the MCWRA around the reservoirs has historically been used for cattle grazing leases; many of these roads have delivered a significant amount of sediment into the reservoirs. The excess sediment impairs water quality and may be a means of carrying other pollutants such as Mercury into these water bodies. The need for this project was first documented in the San Antonio and Nacimiento River Watershed Management Plan (known as the Nacitone Plan); it was listed as a high priority project.	water quality + water supply
Monterey County Water Resources Agency: Monterey County Water Supply Augmentation Program	This project is an over-arching effort to augment the current water supply for Monterey County. It incorporates new surface water storage facilities, as well as surface water treatment, distribution systems for both agriculture and urban uses, and expanded utilization of recycled water.	water supply + water quality + flood control
Monterey County Water Resources Agency: Nacimiento Dam Hydroelectric Plant Upgrade	This proposal entails the upgrading of hydroelectric power generator unit No.2 at the Nacimiento Dam Hydroelectric Plant. The MCWRA recently completed the construction of the Salinas Valley Water Project (SVWP). This project has changed the way MCWRA schedules releases from Nacimiento Dam due to conditions dictated by state and federal regulatory agencies. In the past MCWRA typically released 25 cfs for conservation releases and/or fish passage flows. Unit No.2 was originally designed to generate power at this low-flow conservation release condition. As a result of the implementation of the SVWP, this low-flow conditional parameter has been increased from 25 to 60 cfs. Upgrading Unit No.2 to operate in and round this new conditional flow parameter shall allow for an increase in hydro-power generation efficiency.	water supply
Monterey County Water Resources Agency: Potrero Road Tide Gates Construction Project	The Reclamation Ditch Improvement Plan by the RDIPAC addresses the flooding, erosion, and sediment issues impacting the Reclamation Ditch system. The Potrero Road Tide Gates Project submitted here will implement recommendations by the RDIPAC. The Potrero Road Tide Gates Project will reduce the risk of flooding in the City of Salinas and surrounding areas from current and future flow rates in the system, minimizing crop damage and reducing erosion and sedimentation from widened channel sections in the Reclamation Ditch watershed.	flood control
Monterey County Water Resources Agency: Salinas River Diversion Facility Expansion	The project described in this concept proposal asks the question, “Can the Salinas River Diversion Facility’s functionality be expanded?” The need comes from the desire to utilize the water in Monterey County with increasing effectiveness. Monterey County receives no water from sources outside of itself, therefore needs to be both effective and efficient with the resources it does have. The MCWRA proposes to develop this concept as a feasibility analysis that would evaluate possible alternatives that could increase Salinas River Diversion Facility functionality. Increased functionality could potentially be found with: 1) develop an urban water supply component, 2) expand the availability of water for agricultural use, and 3) other alternatives that may come from an alternatives identification analysis.	water supply
Monterey County Water Resources Agency:	The Salinas River Diversion Facility Solar Enhancement Project will consist of a solar energy field located on property owned by the MCWRA around Lake Nacimiento in relatively near proximity to the substation that	water supply

<p>Salinas River Diversion Facility Solar Energy Enhancement Project</p>	<p>currently serves the hydroelectric project. The Salinas River Diversion Facility consists of four 300 horsepower pumps that will extract water from the Salinas River that will, after treatment, be added into the recycled water storage pond for delivery to the 12,000 acres of agricultural fields in the project. Providing solar power into the grid to offset the power requirements of these large pumps will add to the combined benefits of all of these projects.</p>	
<p>Monterey County Water Resources Agency: Salinas River Lagoon Fisheries Enhancement Project</p>	<p>During minimum flows in the Salinas River, the Old Salinas River Channel (OSRC) outlets through a slide gate into the Pacific Ocean, in Monterey Bay. This outlet is seasonally disconnected from the Pacific Ocean by a naturally forming sandbar at the mouth of the river forming the Salinas River Lagoon. The OSRC was constructed to provide flood protection for adjoining farmland and controlling water surface elevations in the lagoon when flows to the ocean are not possible. South-central California coast steelhead, a federally threatened species, uses the lower Salinas River as a migration corridor between the ocean and their upstream spawning grounds. When seasonally closed to the ocean, the Lagoon may serve as rearing habitat for juvenile steelhead. An existing slide gate is opened to allow Lagoon discharges to the OSRC. Steelhead may be entrained into the OSRC (drawn into the water diversion by hydraulic forces). To protect steelhead and other fish entrainment into the OSRC, MCWRA proposes to install fish screens at the slide gate. The proposed fish screen facility is also designed to prevent back flow from the OSRC to the Lagoon, which would eliminate influxes of agricultural runoff that currently contributes to the degradation of water quality in the Lagoon. The proposed project would enhance the Salinas River Lagoon as steelhead migration and rearing habitat, limit the ability of fish to leave the closed Salinas River Lagoon while allowing an outlet for flood management, and decrease debris loading in the channel approach.</p>	<p>natural resource enhancement + water quality</p>
<p>Monterey County Water Resources Agency: San Antonio Dam Hydro Electric Power Plant</p>	<p>In the last 20 years the concept of constructing a hydroelectric power plant at San Antonio Dam had been considered as a green source of electrical power to sell to PG&E at a premium kW/hr rate. The concept of a San Antonio Dam hydroelectric power plant would be structurally similar to that which exists at Nacimiento Dam. The power plant structure would be an all-weather type facility and would house turbines, generators, controls and electrical equipment. The San Antonio power plant would also work in concert with the controlled releases for groundwater recharge to the lower Salinas River Valley. It is anticipated that the controlled releases from San Antonio Dam will continue to be less than that of Nacimiento Dam and therefore the San Antonio power plant would potentially have a lower production rate of electricity than the Nacimiento power plant. Even though the San Antonio power plant may have less production capacity of electricity than the Nacimiento power plant, there would be an added source for green electrical energy.</p>	<p>water supply</p>
<p>Monterey Regional Waste Management District: Monterey Regional Waste Management District Renewable Energy Facility</p>	<p>The Monterey Regional Waste Management District (MRWMD) is evaluating plans to construct an additional 6,000 kW cogeneration plant on the southern side of its landfill site, immediately adjacent to the proposed Regional Desalination Project facilities. The combined power from both the existing and new MRWMD cogeneration facilities would be sufficient to provide all of the power needed for operation of the Regional Desalination Project facilities, specifically the desalination water treatment plant and distribution pumping. The power would be delivered to the Regional Desalination Project through a new power transmission line running directly from the MRWMD cogeneration facilities to a substation at the desalination plant. Powering the Regional Desalination Project from the MRWMD Cogeneration Facility provides the following benefits:</p>	<p>water supply</p>

	Reduced greenhouse gas emissions and carbon footprint for the Regional Desalination Project; power potentially provided at a cost lower than buying from PG&E; and power would not be required from PG&E on a regular basis.	
Nacimientto Regional Water Management Advisory Committee: Interlake Tunnel between Lake Nacimientto and Lake San Antonio	The purpose of the project is to plan, engineer, permit, construct and operate of an interlake tunnel between Lake Nacimientto and Lake San Antonio. Lake Nacimientto and Lake San Antonio are manmade reservoirs within the Salinas River Basin that provide a number of vital functions to the area. These functions consist of flood control, water supply and recreation. Rainwater and runoff from the surrounding watershed is typically stored during winter months and then released in a controlled fashion during the dry summer months. The water supply is used for groundwater recharge in the Salinas Valley via releases from both lakes which combine in the upper Salinas River. Flood control is achieved by retaining water and limiting flow in the Nacimientto and San Antonio rivers during winter storm events. This captured water stored in the two lakes would be used later in the dryer seasons as release water which would flow downstream for groundwater recharge, abatement of salt water intrusion, and the promotion of fish habitats. Increasing the total available supply of water will benefit all of these uses, industries, and communities.	water supply
Resource Conservation District of Monterey County: Monterey County Integrated Watershed Restoration Program	The Integrated Watershed Restoration Program (IWRP) for Monterey County is modeled after the IWRP pioneered in Santa Cruz County. The flagship component of IWRP is the creation of an interagency process to identify, design, and permit high priority water quality, fish passage, and wetland restoration projects. The Santa Cruz County IWRP partner organizations and agencies recognized that implementing the recommendations of multiple assessments and plans is best accomplished by bringing together federal, state, and local resource and permitting agencies to identify the highest priority projects and assisting with locating funding sources, providing technical assistance, and facilitating permitting. While in many ways this sounds potentially redundant with the mission of the Greater Monterey County (GMC) IRWM Plan, the key distinctions with IWRP are: 1) the focus on restoration projects, 2) the closely involved role of regional Coastal Conservancy staff in supporting the IWRP process and projects, and 3) the participation of state and federal (along with local) agency representatives in the IWRP Technical Advisory Committee for a more vertically-integrated approach to facilitating, directing and supporting selected projects. As such, IWRP can be a critical asset for supporting GMC IRWM Plan restoration-focused projects, and it could facilitate coordination between neighboring IRWM regions. Typical IWRP restoration projects can include rural road erosion reduction, fish passage improvement, and wetland and lagoon restoration. The individual watershed projects will be identified by the IWRP Technical Advisory Committee based on recommendations in local watershed plans, including the Coho and steelhead recovery plans developed by DFG and the National Marine Fisheries Service (NMFS), or otherwise supported by state or federal resource agencies or local watershed groups. The IWRP will also support a number of potential projects recommended in other Monterey County IRWM Plans for the Pajaro River and the Carmel Valley and Monterey Peninsula.	natural resource enhancement + water quality
Resource Conservation District of Monterey County: Rural Roads Erosion Assistance Program for Monterey	RCD of Monterey County will serve as the program lead with regular guidance from a Rural Roads Technical Advisory Committee (TAC), in providing education and training on rural roads drainage techniques, on-site technical assistance, and funding for road erosion assessments, project design and permitting, and road drainage project implementation. The outreach aspects of the program will include demonstration workshops and trainings, outreach material development and public communications. The TAC will help to develop and review criteria to	water quality

County	select road association projects that will receive funding as well as assess program success. Road association projects that are selected will require 50% of the project costs to be contributed by the road association. This match share will be from in-kind services and/or cash contributions. In addition to the match share, a long-term maintenance agreement will be required as part of the project. Success will be measured by the amount of reduction in sedimentation coming from rural unsurfaced roads and from surfaced roads that are not maintained.	
Ventana Wilderness Alliance: Arroyo Seco Wild and Scenic River Recreational and Habitat Enhancement	The Arroyo Seco River is the only major tributary of the Salinas River that remains undammed. The purpose of this concept proposal is to demonstrate the willingness of the nonprofit Ventana Wilderness Alliance (VWA) to collaborate with the US Forest Service and other agencies to enhance the outstanding recreational and habitat values of the Arroyo Seco River. With proper funding, VWA is prepared to initiate projects on the designated Wild and Scenic sections of the Arroyo Seco River either before or after H.R. 4040 is passed. Potential projects to be initiated in conjunction with the Forest Service include: <u>Implementation Monitoring</u> : Ensure visitor information/education material is available; provide Wilderness Ranger personnel to assist in public education and help maintain the outstanding values of the river). <u>Effectiveness Monitoring</u> : Annual review of patrol logbooks for overall river corridor condition, including but not limited to amount of trash, development of fire rings, cutting of live vegetation, invasive weeds, overcrowding of campgrounds, number of dogs off-leash. <u>Adaptive Management</u> : If annual review of monitoring indicates repetitive documentation of excessive trash, development of fire rings, cutting of live vegetation, spread of invasive weeds, overcrowding of campgrounds, and dogs off-leash, then site specific environmental analysis will be conducted as appropriate and an approved process will be used to determine the appropriate corrective action.	natural resource enhancement + water quality
Ventana Wilderness Alliance: Big Sur Wild and Scenic River Monitoring and Adaptive Management	The purpose of this concept proposal is to secure funding for a collaborative approach to Monitoring and Adaptive Management along the Wild and Scenic Big Sur River. The VWA is prepared to work with the US Forest Service to conduct implementation monitoring and effectiveness monitoring as outlined in the Comprehensive River Management Plan (CRMP). Due to budget constraints, little if any of these activities have taken place since the adoption of the CRMP in 2003. The project includes Implementation Monitoring, Effectiveness Monitoring, and Adaptive Management as described above.	natural resource enhancement + water quality
Ventana Wilderness Alliance: Los Burros Abandoned Mine Survey and Remediation	Literally hundreds of abandoned gold mines and at least one mercury mine litter the southern Big Sur coast. These relics of the former Los Burros Mining District discharge liquid runoff into watersheds known to harbor spawning populations of Federally Endangered southern steelhead. Further downstream, this effluent enters the Monterey Bay National Marine Sanctuary. Prior to the VWA's Los Burros Abandoned Mine Survey project, the chemical composition of such runoff was completely unknown. Initial testing at one of the sites revealed effluent with highly elevated levels of mercury, flowing out of an abandoned adit (i.e., horizontal mine shaft) and directly into a tributary of San Carpoforo Creek. Agency officials at Los Padres National Forest have been aware of this situation for decades, but have yet to allocate funding for testing or remediation. The VWA's solution has been to address these conditions so that remediation efforts can be undertaken. Phase I of the Silver Peak/Los Burros Abandoned Mine Project has begun with testing of the most suspect sites for the presence of heavy metals, and the scheduling of biological surveys for sensitive species habitat. Future phases will pursue remediation of any toxics found and the installation of bat gates at mine openings as needed to protect sensitive species and forest users, and to deter vandalism.	natural resource enhancement + water quality

<p>Ventana Wilderness Alliance: Milpitas Special Interest Area and San Antonio River - Grazing Allotment Monitoring</p>	<p>The Milpitas Special Interest Area (SIA) contains approximately 9500 acres, located in the upper watershed of the San Antonio River, much of which is within the Ventana Wilderness. Within the Milpitas SIA is the Milpitas Grazing Allotment. Together these two entities cover virtually the entire headwaters region of the San Antonio River watershed, which is the major contributor to San Antonio Reservoir. In the Los Padres National Forest Management Plan of 2005, the US Forest Service recognized the unique aspects of the area and designated the Milpitas SIA. Due to decreases in funding and personnel, the Forest Service has been unable to develop a management plan for the SIA to achieve the desired condition. The VWA has facilitated and funded an agreement between Los Padres National Forest and Mountain Heritage Associates to create a comprehensive management plan for the area with input from the Salinan tribes, recreational users, and the local community. A key Management Objective of the management plan is to “provide forage for cattle in a way that complements ethnobotanical management objectives.” One objective is the development of a “new allotment management plan with grazing prescriptions that complement ethnobotanical resources, maintains functional riparian areas, and uses infrastructure as needed to reduce cattle grazing impacts on heritage sites.” To achieve this objective, funding is necessary to monitor grazing, study its impacts and test and assess the water quality of the San Antonio River and its tributaries. It is the VWA’s hope that this concept proposal will lead to a cooperative and collaborative Implementation Project to develop a new grazing allotment management plan on the Milpitas Special Interest Area.</p>	<p>water quality</p>
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