Greater Monterey County Integrated Regional Water Management Plan
Ranked Project List for 2012 IRWMP Projects

Ranking	Project Proponent & Project Title	Score (out of 100)	Project Summary	Requested Amount	Primary Resource Area(s)
1	Central Coast Wetlands Group: Northern Gabilan Mountain Watershed Management Project	74	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	natural resource enhancement + water quality
1	Central Coast Wetlands Group: Water quality enhancement of the Tembladero Slough Phase II	74	This project is Phase II of *Water quality enhancement of the Tembladero Slough and Coastal Access for the Community of Castroville*, Phase I of which has been funded by the IRWMP Round 1. During Phase I, CCWG will work with County agencies, agricultural land owners 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 degredation of pollutants and water polishing areas). During Phase II of this project, twenty 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 GMCIRWMP, 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 land owner concerns, but preferentially support projects that enhance habitat and open space features as well as improving water quality.	$609,525	water quality + natural resource enhancement
2	Elkhorn Slough Foundation: Ridgeline to Tideline: Water Resource Conservation in	69	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	$6,178,438	natural resource enhancement + water quality

	Elkhorn 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 sea water intrusion, prevent 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. That this work can accomplish these goals is of utmost importance to the local community, including Las Lomas.		
3	Nacimiento Regional Water Management Advisory Committee: Interlake Tunnel between Lake Nacimiento and Lake San Antonio	66	The project is to build an interlake tunnel between Lake Nacimiento 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 Nacimiento dam spillway due to the completion of the Salinas Valley Water Project there has been a renewed interest in capturing all of the rain water run-off. This past year, despite the increased storage capacity of Lake Nacimiento, tens of thousands of acre feet of water were released this past year 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 which was needed to store the extra runoff from Lake Nacimiento. During the winter season, this tunnel would transfer extra rainwater that would be released which travels the Salinas River and ends up wasted in the Pacific Ocean. The water from these two lakes would then be used 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.	$8,600,000	water supply
3	RCD of Monterey County: Monterey County Farm Water Quality Assistance Program	66	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 GMCIRWMP and the requested funding would support development of a full program for the next three years.	$583,000	water quality

4	Central Coast Wetlands Group: Implementation of the Moro Cojo Slough Management and Enhancement Plan: Restoration of the Upper Slough	63	This project will continue to address the goals of the Moro Cojo Slough Management and Enhancement Plan, the Northern Salinas Valley Watershed Restoration Plan, and the Central Coast Regional Toxic Hot Spot Cleanup Plan for Moss Landing Harbor. This project will involve the restoration of 120-acres of the Moro Cojo Slough containing tidal and brackish water marsh (a state marine reserve) that receive fresh water inputs from agricultural lands above. This project will restore the 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. The project will reestablish an interconnected brackish water wetland ecosystem. 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 marsh lands 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 (brackish water snail and tidewater goby), 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.	$1,450,636	natural resource enhancement + water quality
5	Marina Coast Water District: Recycled Water Element of the Regional Urban Water Augmentation Project (RUWAP)	59	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 back-bone 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 (WAPP). 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. The pipeline will vary in diameter from 20-inches to 16-inches. Thousands of linear feet of Recycled Water conveyance pipelines have already been installed throughout the community, in particular a small section of back-bone facility within CSUMB and an approximately 3-mile extension of the back-bone facility southerly down General Jim Moore Boulevard. 3) One intermediate pump station referred to as the Fifth Avenue Pump Station (FAPS) located in the City of Marina near CSUMB. 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.	TBD	water supply

5	RCD of Monterey County: Livestock and Land: Rangeland and Livestock Facility Water Quality, Vegetation Management and Wildlife Enhancement Program	59	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 BMPs 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 the TMDLs and other regional and local plans. Water quality and wildlife goals will be achieved through implementation 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	water quality
6	Monterey County Redevelopment & Housing Office: Well Replacement and Pipeline - San Lucas Water District	57	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 about one mile south of the community. 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 due to excessive levels of nitrates in water being pumped from the District's single well. The Monterey County Division of Environmental Health 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. A "Hydrogeologic Characterization and Test Well Feasibility Analysis" was prepared in Sept 2010 regarding the Total Dissolved Solids issue. A supplemental Technical Memorandum regarding the Nitrate contamination issue was prepared in June 2011. Both reports recommend relocation of the well to a location about 1,800 feet west of the existing well, closer to the Salinas River. 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 must 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.	$543,149	water supply

7	RCD of Monterey County: Salinas River Watershed Invasive Non-native Plant Control and Restoration Program	56	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, *Arundo donax*. *Arundo* 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 (*Tamarix ramosissima*) 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 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.	$1,215,500	natural resource enhancement + flood control + water quality
8	Monterey County Water Resources Agency: Salinas River Flood Risk Reduction Project	52	The project will fund the preparation of a combined National Environmental Policy Act/California Environmental Quality Act (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	flood control
8	Pajaro/Sunny Mesa Community Services District: Springfield Water Project	52	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	$3,000,000	water supply + water quality

			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.		
9	Ecology Action: Monterey Bay Green Gardener Training & Certification Program	49	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 the watersheds of the Monterey Bay National Marine Sanctuary. Individual graduates with business and/or contractors licenses are promoted to the community on www.green-gardener.org. To date, the Monterey Bay Green Gardener Program has matriculated 422 graduates, 225 of whom graduated from certification-level courses held at the Salinas Adult Education Center. In partnership with California Water Service Company, the Mission Trails Regional Occupation Program (ROP), 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. Ecological landscape practices reinforced at demonstration sites include strategies for turf replacement with low-water use plants, irrigation system efficiency retrofits, graywater irrigation design, installation and maintenance, rainwater harvesting systems, and stormwater management with low-impact design methods.	$38,975	natural resource enhancement + water quality
10	City of Salinas and Monterey Regional Water Pollution Control Agency: Dry Weather Runoff Diversion Program	48	In Phase 1 the City would divert dry weather urban surface water discharge from south Salinas into the City's Blanco Detention Basin. Water from the Detention Basin would then be sent to the MRWPCA regional wastewater treatment plant, or to another location. The City would install a shunt at the City's former wastewater treatment plant site to connect the two existing systems. Water in the basin will settle and filter through the soil as a pretreatment, then flow into a junction point for transfer to the MRWPCA-operated conveyance system. Shoulder-season wet weather events could be similarly diverted, provided flows do not exceed MRWPCA capacity benchmarks. All diversions would reduce the amount of pollutants entering the Salinas River. Once reclaimed, diverted water could be used for dry-season water supply (e.g., as agricultural irrigation water). In Phase 2, dry-weather surface water runoff from the City's northern neighborhoods would be similarly diverted for reuse. Surface water runoff that currently flows into the Rec Ditch would be diverted and reclaimed. This phase includes using existing water quality data for the City's stormwater outfalls and determining flow volumes from the largest sub-watershed within the City--the Rec Ditch. The City would develop site planning, design, and construction of Rec Ditch diversion facilities later as resources permit. This project also would reduce pollution to downstream receiving waters, and potentially add to recycled water supplies.	$408,000	water supply + water quality

10	Monterey County Water Resources Agency: Aquatic Invasive Species Inspection Project	48	Monterey County Water Resources 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 aquatic invasive species (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 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. 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	natural resource enhancement + water supply
11	Central Coast Wetlands Group: Coastal Wetland Erosion Control and Dune Restoration	44	Our 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	natural resource enhancement + flood control
11	Monterey County Water Resources Agency: Granite Ridge Regional Water Supply Project	44	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 United States 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	water supply
12	Central Coast Wetlands Group: Study of Environmental Services from	43	The SWRCB, CCC, and other State agencies have identified management measures (MMs) to address agricultural nonpoint sources of pollution that affect State waters. The agricultural MMs 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	$372,000	water quality

	Nutrient Reducing BMPs		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.		
13	Monterey County Water Resources Agency: Coastal Dedicated Monitoring Well Drilling	41	The twelve dedicated monitoring wells will be drilled under the oversight of a Professional Geologist (PG). The four inch diameter wells will be drilled using 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	water supply
14	Central Coast Wetlands Group: Development and Evaluation of Climate Change Response Strategies in the Elkhorn Slough, Gabilan and Salinas River Watersheds	40	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 GMCIRWMP) 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 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 GMC IRWMP region. We intend to seek separate grant funds suggested by DWR available for climate planning.	$392,300	flood control + natural resource enhancement + water quality + water supply

14	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 withdrawls, 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, (RO), 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 proposed 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	water supply
15	Central Coast Wetlands Group: Ecosystem Condition Profile for the Lower Salinas River Watershed using the Level 1-2-3 Framework	36	The goal of this project is to provide cost-effective, scientifically-based, and integrated information on stream ecosystem condition in the Salinas watershed to inform management decisions and optimize ecological monitoring activities. To address this goal, the Environmental Protection Agency's 1-2-3 Framework will be selected 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. *Landscape Assessments (Level 1)* 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. *Rapid Assessments (Level 2)* evaluate the overall, or ambient, condition of riverine wetlands inexpensively and in a comparatively short time frame. *Intensive Assessments (Level 3)* 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, referred to as Stream Ecosystem Condition Profile, 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 unmitigated stressors, and recommended actions to maintain or improve condition. Because the 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 through partnership or advocacy to help implement solutions.	$517,875	natural resource enhancement

16	California State Parks: Big Sur River Steelhead Enhancement Project	35	The Big Sur River provides spawning and rearing habitat for the federally threatened South-Central California Steelhead (Onchorhynchus mykiss). Six and a half of the 8 ½ 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: A) 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. B) Conducting riparian re-vegetation, exclusionary fencing and bank stabilization in degraded riverside campsites and the day use picnic area within PBSSP. C) Relocation of a portion of the Beach Trail in AMSP away from the river. D) Installation of steelhead lifecycle and regulation interpretive displays. E) Removal of invasive, non-native plant species and re-vegetation with natives along the riparian corridor in AMSP.	$400,738	natural resource enhancement
16	Monterey Bay Sanctuary Foundation: Making Monitoring Count	35	This project is necessary to document the IRWMP efforts and their effectiveness throughout the Greater Monterey County region. This 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 IRWMP. 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 *Strategic Plan for Central Coast Water Quality Monitoring Coordination and Data Synthesis.* 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	$324,000	water quality
16	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 *Oncorhynchus mykiss* (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 *O. mykiss* 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	natural resource enhancement + water supply

17	City of Salinas: Integrated Industrial Wastewater Conveyance and Treatment Facility Improvements	31	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) Encourages ground water re-charge. 2) Combats 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 had 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	water supply
18	Central Coast Wetlands Group: Expansion of a Coastal Confluence Water Monitoring System to support the Greater Monterey IRWMP	30	We anticipate that the cumulative results of regional water quality enhancement efforts will lead to improvements in water quality of receiving waters. 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 bouy 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 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.	$600,557	water quality

19	Delicato Vineyards: San Bernabe Lining Project	27	The project is a continuation of initial linings which first occurred in 1998 in co-operation with PG&E and will continue, subject to available funds into the future until all water containment; both canals and reservoirs are lined. Currently we have 6 reservoirs lined along with approximately 6 miles of canals. The remaining canals and reservoirs are detailed on attached sheet. San Bernabe historically has done all the preliminary dirt work and has used outside contractors such as Sierra Geotechnical and D and S Construction for the actual install of the membrane. The lining or membrane is composed of extruded polypropylene in a 7-layer composite structure which is waterproof and impact proof. We have seen a 99% reduction in water loss due to the install which relates to reduced energy, both electrical and diesel, due to reduced pumping both at the wells and lift stations. The only containment/conveyance structures which will not be lined will be 2 reservoirs which fill naturally from springs and are left as natural habitat for mammals and waterfowl. Lining the structures not only prevents percolation and required pumping, but can provide habitat for waterfowl 365 days per year. All the structures are fenced to prevent accidental entry by hoofed animals such as deer and wild pigs, but permit the entry of waterfowl and small species. Lining reduces the use of aquacades due to no soil contact with water and yearly fuel use to clean and reshape the canals and reservoirs. Several of the structures border neighbors and will prevent the possible breakage and flood especially onto fields with leafy greens. Linings allow the pumping of water during non-peak hours reducing power demands to the grid and in most cases the water is gravity flowed into the system with no power demand. Lining will allow pumping only to water demand and not percolation.	$1,710,750	water supply
20	Save Our Shores: Watershed Protection Program - Annual Coastal Cleanup Day in Monterey County	23	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 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.	$12,000	water quality

21	Rural Community Assistance Corporation: Greater Monterey Bay Disadvantaged Community Wastewater Management Pilot Program	22	Too often we read about septic effluent influencing our agricultural lands and creating public health and other environmental hazards. If these disadvantaged communities had the opportunity to create an Inspection and Monitoring Program for their community onsite wastewater systems, they would be successful in limiting public health hazards and environmental pollution. 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 ground water monitoring, for selected disadvantaged communities that are served by individual septics that may not afford traditional sewer systems.	$677,000	water quality
22	Monterey County Public Works: Las Lomas Drive Storm Drain Improvements Project	19	Las Lomas Drive is a rural two-lane road with unimproved shoulders, no curbs, gutters and sidewalks, sub standard drainage ditches and culverts. Due to the substandard drainage ditches and culverts Las Lomas Drive is prone to flooding during the peak of the rainy season. The project proposes to improve 0.25 miles of Las Lomas Drive from Sill Road to Thomas Road. The project involves constructing new curb, gutter and sidewalks, Class II bicycle lanes, storm drains, a water treatment system, and rehabilitating the existing roadway. Las Lomas is a small disadvantaged community located in the northern part of the Greater Monterey County IRWM region with a population of 2,677 as of 2009 with an 89% of Hispanic/Latino population, according to the 2010 U.S. Census, who are predominately low-income and Spanish speaking.	$787,500	flood control