Draft Project Ranking for 2011/2012 IRWMP Projects for the Greater Monterey County IRWM Region

December 22, 2011 for Public Comment

Ranking	Project Proponent & Project Title	Score (out of 100)	Project Summary	Requested Amount	Primary Resource Area
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	environmental + water quality
2	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 + environmental
3	Elkhorn Slough Foundation: Ridgeline to Tideline: Water Resource Conservation in Elkhorn Slough	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 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.	$6,178,438	environmental + water quality
4	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
5	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

6	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	environmental + water quality
7	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
8	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
9	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

10	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	environmental + flood control + water quality
11	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
12	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	environmental + water quality
13	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	environmental + water supply
14	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	environmental + flood control
15	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

16	Central Coast Wetlands Group: Study of Environmental Services from Nutrient Reducing BMPs	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 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	water quality
17	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
18	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
19	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	environmental
20	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	environmental
21	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

22	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	environmental + water supply
23	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
24	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
25	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
26	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
27	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