

Attachment 6

Performance Measures

**Santa Ana One Water One Watershed IRWM Prop 84,
Round 2 Implementation Proposals**

Attachment 6 - Performance Measures

Proposal Title: Santa Ana One Water One Watershed IRWM Prop 84, Round 2 Implementation

Project Title: Project (A) Perris Desalination Program – Brackish Water Wells 94, 95 and 96 (Eastern Municipal Water District)

	Project Goals	Desired Outcomes	Targets	Performance Indicators	Measurement Tools and Methods
(a)	Reliable Water Supply	New supply source	2,100 AF/yr	3,000 AF/yr produced @ wells	Well logs/annual report
(b)	Reliable Water Supply	Reduce dependency on State Water Project (SWP)	2,100 AF/yr	3,000 AF/yr produced @ wells	Well logs/annual report
(c)	Preserve/Enhance Environment	Reduce TDS and Nitrate in Perris South GW Management Zone	6,000 tons/yr salt 25.5 tons/yr nitrate	3,000 AF/yr produced @ wells	Well logs/annual report water quality sampling and analysis
(d)	Preserve/Enhance Environment	Reduce energy use and GHG emissions	3,591 MWh/yr 2,000 tons CO ² /yr	3,000 AF/yr produced @ wells	Well logs/annual report
(e)	Sustainable Water Solutions	Provide TIN/TDS offset for recycled use	6,000 ton/yr salt 25.5 tons/yr nitrate	3,000 AF/yr produced @ wells	Well logs/annual report
(f)	Sustainable Water Solutions	Protect good quality water in adjacent sub-basins	Zero contaminant migration	Groundwater quality modeling	Observation wells/ water quality analysis annual reporting
(g)	Ensure High Quality Water	Deliver feed water to desalter for compliance with MCLs	Nitrate < 10 mg/L Perchlorate < 6 µg/L	3,000 AF/yr produced @ wells	Well logs/annual report
(h)	Economically Effective Solutions	Utilize existing infrastructure to maximize ROI	3,000 AF/yr utilization of existing treatment, brine, and potable service systems	3,000 AF/yr produced @ wells	Well logs/annual report
(i)	Drought Preparedness	Develop new local supply sources	2,100 AF/yr	3,000 AF/yr produced @ wells	Well logs/annual report

Attachment 6 - Performance Measures

**Proposal Title: Santa Ana One Water One Watershed IRWM Prop 84, Round 2 Implementation
Project Title: Project (B) Quail Valley Subarea 9 Phase 1 Sewer System Project (Eastern Municipal Water District)**

	Project Goals	Desired Outcomes	Targets	Performance Indicators	Measurement Tools and Methods
(a)	Public Health	Remove raw sewage and greywater from neighborhood	Zero discharge	Sewer Systems Residential Hookups Wastewater Treatment	Inspections/Compliance Complaints to County Health Department
(b)	Public Health	Remove potential for contamination of local drinking water delivery system	Zero discharge	Sewer Systems Residential Hookups Wastewater Treatment	Inspections/Compliance Complaints to County Health Department
(c)	Preserve/Enhance Environment	Remove septic leakage from surface and groundwater	Zero discharge	Sewer Systems Residential Hookups Wastewater Treatment	Inspections/Compliance Complaints to County Health Department
(d)	Ensure High Quality Water	Protect water quality in adjacent sub basins and Canyon Lake Reservoir	Zero discharge	Sewer Systems Residential Hookups Wastewater Treatment	Inspections/Compliance Water quality analysis and reporting
(e)	Sustainable Water Solutions	Increase recycled water supply	44 AF/yr	Sewer Systems Residential Hookups Wastewater Treatment	Construction Inspections and reporting
(f)	Economically Effective Solutions	Utilize existing infrastructure to maximize ROI	44 AF/yr	Sewer Systems Residential Hookups Wastewater Treatment	Construction Inspections and reporting
(g)	Drought Preparedness	Develop new local recycling supply sources	44 AF/yr	Sewer Systems Residential Hookups Wastewater Treatment	Regional Water Reclamation Operations Documentation
(h)	Recreation	Protect water quality in Canyon Lake Reservoir	Zero discharge	Sewer Systems Residential Hookups Wastewater Treatment	Inspections/Compliance Water quality analysis and reporting
(i)	Disadvantaged Community Assistance	Provide sewer service to residences with MHI of \$31,650	Zero discharge	Sewer Systems Residential Hookups Wastewater Treatment	Inspections/Compliance Complaints to County Health Department

Attachment 6 - Performance Measures

Proposal Title: Santa Ana One Water One Watershed IRWM Prop 84, Round 2 Implementation

**Project Title: Project (C) Forest First-Increase Stormwater Capture and Decrease Sediment Loading through Forest Ecological Restoration
(US Forest Service)**

	Project Goals	Desired Outcomes	Targets	Performance Indicators	Measurement Tools and Methods
(a)	To provide 725 acre-feet per year of new water supply	Achieve the increase in water supply through reduced evapotranspiration from removal of vegetation	The Forest First project will reduce vegetation from the project areas in a phased approach over the project life. Progress in treated acres will be reported annually.	Reduced basal area by 50% on average over project area. Additionally, USGS gages downstream of project area will have data analyzed and compared to historical flow of similar precipitation years.	Contract inspection of removed trees to match the silviculture treatment plan as defined by the NEPA documents. USGS gaging stations are supported by partners' dollars; data analysis will use standard statistical techniques.
(b)	To provide water quality improvement by avoiding sediment addition from treated watersheds.	By lowering the risk of high intensity wildfire and reducing the risk of debris flows from wildfires that do occur, the project avoids sediment cleanout costs.	The Forest First project will improve 4-6 miles of roads and hydrologically disconnect two crossings from a road (reducing annual sediment generated). The project will also reduce the risk of high intensity wildfire.	Contracts administered to standard for silviculture and engineering portions of the Forest First project. If a fire occurs, then the Burned Area Emergency Response report will focus on a comparison between treated and untreated acres and sediment generated will be tracked on site and downstream by Flood Control.	Contract inspection of removed trees to match the silviculture treatment plan as defined by the NEPA documents. Contract inspection of road engineering improvements. Best Management Practices monitoring during implementation and after each rainy season will document adherence to design criteria and measure whether sediment has been delivered in the wet season. Comparisons will be made with untreated areas. San Bernardino Flood Control will collect sediment basin measurements and cleanout values through the project life. If a fire occurs, then sediment generated will be measured and intensity levels measured.

(c)	Restoration of habitat	Returning the forest to a healthier system will improve species habitat. Reduction of meadow encroachment will benefit multiple species.	The Forest First project will reduce vegetation from the habitat areas in a phased approach over the project life. Progress in treated acres will be reported annually.	Biological monitoring will occur during contract administration to track vegetation removal in wildlife intense areas. Biological reports will be reported annually.	The Forest Service employs expert biologists that will ensure that NEPA design criteria established to protect threatened, endangered, and sensitive plant and animal species are provided for.
(d)	Greenhouse gases avoided	By lowering the risk of high intensity wildfire, the project avoids some GHG emissions that would otherwise occur	Reduction of vegetation throughout the project area will lower the risk of high intensity wildfire. As with avoided sediment, the reduced risk lowers the long term average GHG potential from the area.	A smoke management plan will be used for any prescribed burning. If a wildfire occurs, then coordination with the AQMD will be used to gather appropriate data.	Contract inspection of removed trees to match the silviculture treatment plan as defined by the NEPA documents. If a fire occurs, then GHG generated will be measured to the extent possible in relation to where the fire burned the most.
(e)	To improve public and fire fighter safety	By lowering the risk of high intensity wildfire through the project area and tying the project into other fuels treatments, the Forest First project protects communities of Big Bear and Running Springs	The Forest First project will create areas where wildfire is predicted to become a surface fire that can be fought using direct methods with reduced flame lengths. These areas have resulted in earlier control of fires. This, in turn, protects communities and the public.	If a wildfire occurs, then flame lengths should be reduced compared to untreated areas.	Measuring safety is difficult and is dependent on individual wildfire situations. If a wildfire occurs in the project area post-treatment, then methods of suppression will be tracked within and adjacent to the treated areas.

Describe the performance measures that will be used to quantify and verify project performance. Provide a discussion of the monitoring system to be used to verify project performance with respect to the project benefits or objectives identified in the Proposal. Indicate where the data will be collected and the types of analyses to be used. Include a discussion of how monitoring data will be used to measure the performance in meeting the overall goals and objectives of the IRWM Plan.

This attachment presents the planned project monitoring, assessment, and performance measures that will demonstrate that the Proposal will meet its intended goals, achieve measurable outcomes, and provide value to the State of California. The purpose of Attachment 6 is to provide a preview of the information that would go into a monitoring plan.

The monitoring associated with the Forest First project has six main components.

1. Silviculture/fuels reduction contract administration – basal area reduction, acres accomplished towards meeting healthy forest, lower modeled flame lengths, firefighter safety, GHG avoided

Fuels reduction projects: Project and program management is performed by various USFS personnel, both in the office and in the field. The work leaders are typically the Forest Fuels officer, the District Fuels officer, and the crews consist of Assistant Fuels officers, Fuels technicians, Contracting Officer Representatives (CORs), Inspectors, and resource specialists for wildlife, botany, and heritage. Depending on the complexity of the task and availability of personnel, any of these employees could be responsible for parts of the work.

2. Biological design criteria monitoring – protection of threatened, endangered, sensitive plant and animal species through avoidance of certain trees, maintenance of canopy closure design [NEPA design criteria differ based on species]
3. Road construction contract administration – prevention of sediment delivery during construction

Construction contract administration is handled by San Bernardino National Forest engineering staff. CORs and inspectors certified through the Forest Service National Construction Certification Program will administer the project in accordance with current Federal and Forest Service Acquisition Regulations. All construction and construction management will be contracted to a general contractor with sufficient satisfactory past experience performing projects similar to the proposed road project.

4. Best Management Practices design criteria monitoring – implementation monitoring of landings, skid trails, wet weather operations, road maintenance, stream crossing diversions, ground cover, riparian areas, meadow health

Forest Service BMPEP monitoring is done to ensure that BMPs are implemented and effective. BMPs are used to make sure that sediment generated during the implementation of fuels and roads work does not deliver to water channels in significant quantities. Implementation monitoring is done during and just after project activities, as well as before the winter season. Effectiveness monitoring is used to determine if the BMPs that were implemented

were effective. Problems found are corrected and noted for adaptive management purposes. After each winter season and spring snowmelt, the treated areas are monitored to check for BMP compliance.

On an annual basis, the GS-9 staff person will conduct monthly BMP monitoring inspections for the 6 wettest months and be scheduled to inspect following summer thunderstorms in the area during the dry season. Senior watershed staff (GS-12) will provide supervision and recommendations for fixes, as needed. The number of hours of work varies annually based on the phased nature of the implementation schedule and the travel distance to each of the locations (detailed in the Budget attachment).

5. USGS gage monitoring for increased water flow – comparison with previous similar precipitation years for gages on Bear Creek and Santa Ana River (for Bluff Mesa) and on Plunge Creek (for Santa Ana Unit 3)

Project partners, San Bernardino Valley Municipal Water District and Western Municipal Water District, have pledged to use internal resources (in-kind services) to continue to fund USGS stream gage data collection program which will be used to analyze water flows from project areas in an effort to quantify changes in flow which may be attributable to fuels reduction.

6. Sediment removal from downstream basins – avoided costs from less intense wildfires, Seven Oaks Dam longevity and Plunge Creek sediment basins

San Bernardino County Flood Control keeps records of material removed from relevant basins and performs an annual aerial survey of each one of the debris basins.

Attachment 6 - Performance Measures

Proposal Title: Santa Ana One Water One Watershed IRWM Prop 84, Round 2 Implementation

Project Title: Project (D) Wineville Regional Recycled Water Pipeline and Groundwater Recharge System Upgrades (Inland Empire Utilities Agency)

	Project Goals	Desired Outcomes	Targets	Performance Indicators	Measurement Tools and Methods
(a)	Reduce dependency of the Chino Basin water users on imported State Project Water	Provide another source of drought proof water supply by providing recycled water for irrigation and industrial purposes, thus preserving the available potable water	1,500 acre-feet per year of recycled water in direct re-use	Recycled water billing records will provide the data for the measurement of the recycled water that was used, which replaced the use of potable water	The benefit over the life of the project can be measured when the individual customer recycled water meter is read for usage on a monthly basis. Monthly readings are reported by IEUA's member agencies (retail water purveyors) to IEUA
(b)	Offset groundwater pumping that exceeds the Basin's safe yield	Increase the groundwater storage in the Chino Basin	3,000 acre-feet per year of RW	Recycled water meter read at the turnouts at RP-3 and Declaz will record the additional groundwater that is recharged into the Chino Basin	Monthly records of the meters at the basins will record the additional groundwater that is recharged; However, since recharge is variable depending on the weather, the project performance should be evaluated over a period of ten years.
(c)	Improve groundwater quality in the Basin by integrating the desalter program, the recycled water program, and the recharge program into one Optimum Basin Management Plan	Integrate the recycled water program with the recharge program to maximize the recharge capacity and meet desalter water replacement obligations	Recharge 30,000 AFY over ten years from project commencement, which includes recycled water, imported water and storm water	Annual recharge volumes measured by IEUA will be used to verify achievement of target.	Quality improvement will be proven by the salt exports total from desalter brine that is monitored on a quarterly basis, and pounds of VOCs removed. Quantity measurements will be achieved by similar methods stated in (b)
(d)	Increase the number of times that a drop of water in the Santa Ana Watershed is used before it reaches the ocean.	Increase recycled water use by utilizing it for groundwater recharge and direct non-potable reuse	(a) + (b) = 4,500 AFY	Trend total annual IEUA plant RW discharges to demonstrate less "drops" are being sent through Prado dam and thus are being reused.	IEUA on a daily basis measures the quantity of water that is discharged to the creek, which can be tabulated and provided on a quarterly basis to show the trend in decrease of creek discharge/increase in reuse of water over ten years

Attachment 6 - Performance Measures

Proposal Title: Santa Ana One Water One Watershed IRWM Prop 84, Round 2 Implementation

Project Title: Project (E) Plunge Creek Water Recharge and Habitat Improvement (San Bernardino Valley Water Conservation District)

	Project Goals	Desired Outcomes	Targets	Performance Indicators	Measurement Tools and Methods
(a)	SBKR Habitat Enhancement	To create an improved San Bernardino Kangaroo Rat (SBKR) habitat and to identify habitat areas to protect threatened and endangered species with a goal of improving habitat substrate quality of 50%. See Narrative	Primarily San Bernardino Kangaroo Rat with ancillary benefits to Santa Ana Woolly Star and Slender horned Spine flower; all threatened or endangered species	Increased SBKR population, expanded higher quality Riversidian alluvial fan sage scrub (RAFSS) habitat	#####
(b)	Water Recharge Enhancement	Improvement of stream system for better groundwater recharge in a modified but natural setting supporting habitat and recharge within the historic range of Plunge Creek	Widening of Plunge Creek See Narrative-Water Recharge Monitoring and Analysis	Benefit to the groundwater basin and to the water users of the basin which reduces imported water need	Hydraulic modification to restore function to the creek by removing vegetation and organic surface soils thereby exposing underlying sandy substrate and providing increased permeable surface area for GW percolation
(c)	Groundwater Management	#####	1000-1250 collected additional acre feet per year, stream management would provide additional meanders in the stream course under moderate to higher flows increasing recharge and habitat opportunities as well	Recorded flows and recharge in the channel, improved local groundwater levels possible	Measurement and estimation of flows in CFS into the stream reach and exiting the reach will be made to estimate recharge above hydrologic conditions prior to the project, substrates will be characterized and delineated with GPS and documented for area
(d)	Flood Management Benefits	Very limited alleviation to the existing concentration of flood flows that occur in the lower end of this reach of Plunge Creek	Restoration of more natural stream function and widening of the existing channel, potentially easing stress on the confluence of the Elder Creek Flood Control Channel and Plunge Creek	Wider more natural braided stream characteristics.	designed in coordination with County Flood Control to assist in mitigating the outflow problems that currently exist at outlet of the Elder Creek Channel
(e)	Climate Change and Greenhouse Gases	To contribute a small but positive benefit to water supply availability through its enhancement of recharge capability to the Bunker Hill Groundwater Basin reducing imported water that requires CO2 emissions to import.	Estimated reduction of over 1,250 metric tons of CO2 per year from reduced water imports	Amount of additional water percolation See groundwater	See Groundwater

SBKR Habitat Monitoring and Analysis

One of the primary goals of the project is the creation of improved SBKR habitat. The project will compare baseline existing conditions monitored in the pre-project baseline with the results of post-project monitoring. The project area is 110 acres; the project has a goal of improving habitat substrate quality by 50% of the 110 acres in accordance with the process below.

Baseline – Biological field work for the Habitat Conservation Plan identified areas which have high potential for improvement SBKR habitat. These areas are the focus of activities under this project to improve SBKR habitat and groundwater recharge capabilities. Areas 1-5 will have a pre-project survey for presence-absence and abundance of SBKR. The survey will confirm the number of acres and level of habitat which will form the baseline for analysis.

Monitoring and Analysis – During each phase of the project, SBKR occurrences will be monitored in key locations. The monitoring measures will include presence-absence and abundance measurements assessed through monitoring. At the completion of the project the post-project survey will confirm the number of acres and level of habitat for analysis. This analysis will be reported as the effectiveness of the project for SBKR Habitat and any other incidental improvements in other habitat contributing to the 50% improvement goal.

Water Recharge Monitoring and Analysis

The second primary goal of the project is improvement of the stream system to allow better recharge of surface water into the groundwater for use by groundwater producers. The restorations of more natural braided stream hydrology will be done through artificial manipulation of flows and hydraulic stream course widening and increased permeability of the surface substrate. The project area is 110 acres; the project has a goal of improving recharge of native waters through the creek by improving recharge quality by 50% of the 110 acres. The project has a goal of recharging a long term average of 1250 acre feet of water per year. The measurement of acres improved and acre feet recharged will be assessed in accordance with the process below.

Baseline - Increased surface permeability will be created within the broader, historic stream course of Plunge Creek by hydraulically removing vegetation and organic surface soils thereby exposing underlying sandy substrate. The increased groundwater percolation will be achieved by increasing the permeable area of the stream bottom in Plunge Creek, slowing the water which flows through the area with small diversions or sugar dams, maintaining the low flow areas for recharge, and potentially supplying water flow when available from supply canals. During the Design phase of the project historic flows and current recharge will be estimated. This will form the baseline condition for analysis.

Monitoring and Analysis – The number of acres of improved percolation substrate will be estimated at the end of the project and compared to the pre-project conditions. Additionally, the performance measures used to quantify and verify project performance for recharge in the project area will be on a weekly or more frequent measurement of the flow of water entering the project area upstream of the extension of Abby Way and minus the flows crossing Orange Street which will both be listed on the District's Daily Flow Report. Monitoring data will be used to calculate the annual number of acre feet recharged. This annual recharge will be compared to the long term baseline recharge, resulting in the calculation of the percentage of the 1250 acre foot goal achieved. This additional water is assumed to be the amount of State Project Water that was not imported and will be used to calculate greenhouse gas avoided at 1.01 tons per Acre Foot.

Flood Control

Because there are very limited benefits and this is not a significant goal of the project there is no numeric monitoring goal. At the end of the project the San Bernardino County Flood Control and Water Conservation District (a project partner) will be asked to provide a qualitative indication of any flood related benefit from the project.

Attachment 6 - Performance Measures

Proposal Title: Santa Ana One Water One Watershed IRWM Prop 84, Round 2 Implementation

Project Title: Project (F) Prado Basin Sediment Management Demonstration Project (Orange County Water District)

	Project Goals	Desired Outcomes	Targets	Performance Indicators	Measurement Tools and Methods
(a)	Critical habitats for various wildlife in the project area	Monitoring for target species nesting birds. No Santa Ana Sucker shall be encountered in the project area at all time.	Maintain a minimum number of colonies for the Least Bell's Vireo in its critical habitat. Protect the Santa Ana Sucker in its critical habitat.	Target bird species activities (travel and formation of new colonies) will be monitored before, during and after this project. Visual counts of various bird species will be conducted. Santa Ana Sucker will be protected in its critical habitat.	Project area and its surrounding will be monitored before, during and after this project. Visual counts of the bird species will be conducted. Project area will be blocked to make sure no Santa Ana sucker is in this area.
(b)	Restore natural sediment transport through Prado Basin and develop new method to manage sediment movement in Santa Ana River watershed	Optimum sediment management and elimination of Arundo Donax and other invasive species.	Achieve and implement the best sediment management in Santa Ana River. Eliminate Arundo Donax and invasive species while protecting wildlife habitats.	More natural supply of sand past Prado Dam and reverse adverse trends in sediment characteristics in Santa Ana River. Enhancement of natural environment by removal of Arundo Donax and invasive species.	Sediment will be tracked throughout the project by using the methods and measurement tools of river cross sectional surveys, visual observations and aerial topographic surveys. Arundo Donax will be removed physically and surgically.

Attachment 6 - Performance Measures

**Proposal Title: Santa Ana One Water One Watershed IRWM Prop 84, Round 2 Implementation
Project Title: Project (G) San Sevaine Ground Water Recharge Basin (Inland Empire Utilities Agency)**

	Project Goals	Desired Outcomes	Targets	Performance Indicators	Measurement Tools and Methods
(a)	Reduce dependency of the Chino Basin water users on imported State Project Water for all hydrologic conditions	Improve basin design and infiltration characteristics to increase the conjunctive use of recycled water	Recharge approximately 4,500 acre-feet per year of recycled water	Monthly meter reads at the Recharge Basin to record the increased recycled water and storm water recharge	Basin water level, and recycled water flow meter data monitored by SCADA and recorded for trending. Reports can be prepared on a quarterly basis for the performance
(b)	Improve groundwater quality in the Basin by integrating the desalter program, the recycled water program, and the recharge program into one Optimum Basin Management Plan	Integrate the recycled water program with the recharge program to maximize the recharge capacity and meet desalter water replacement obligations	Recharge additional 350 acre-feet of storm water on average over a period of ten years compared to the base years	Infiltration data and monthly meter reads at the Basin	Basin water level, and recycled water flow meter data monitored by SCADA and recorded for trending. Reports can be prepared on a quarterly basis for the performance
(c)	Increase the number of times that a drop of water in the Santa Ana Watershed is used before it reaches the ocean.	Increase recycled water use by utilizing it for groundwater recharge and direct non-potable reuse	(a) + (b) = 4,850	Trend total annual IEUA plant RW discharges to demonstrate less "drops" are being sent through Prado dam and thus are being reused.	IEUA on a daily basis the quantity of water that is discharged to the creek, which can be tabulated and provided on a quarterly basis to show the trend in decrease of creek discharge/increase in reuse of water over ten years

Attachment 6 - Performance Measures

Proposal Title: Santa Ana One Water One Watershed IRWM Prop 84, Round 2 Implementation

Project Title: Project (H) Corona/Home Gardens Well Rehabilitation and Multi-Jurisdictional Water Transmission Line Project (City of Corona)

	Project Goals	Desired Outcomes	Targets	Performance Indicators	Measurement Tools and Methods
(a)	Provide new water supply for customers.	Construct two new wells that produce a new local source of water.	New wells that produce 1,600 AFY of water and 11,770 LF of pipeline to convey water to treatment plant.	Two new wells that produce 1,600 AFY of water. Construction of 11,770 LF of pipeline.	Well-head flow meter readings. Measurement of LF of pipeline constructed.
(b)	Improve water quality.	Decreased nitrates in well water.	Reduce Nitrate Levels to State Requirement	Nitrate levels.	Water quality testing.
(c)	Decrease reliance on State Water Project Supplies.	Lower cost of water purchased.	Reduced wholesale rate between the two parties as compared to MWD's Tier 2 wholesale rate.	Acre Feet per Year. Rate +/- as compared to Metropolitan Water District's Tier 2 Rate.	Water bills.
(d)	Reduce green-house gas emissions.	The reduction of green-house gases (GHGs) by eliminating the energy used to pump 1,600 AFY of imported water over the Tehachapi Mountains from the State Water Project to Southern California.	Reduction of: Carbon dioxide: -1,029 tons. Methane: -85.29 lbs. Nitrous oxide: 22.96 lbs.	Formula for electricity use necessary to pump 1,600 AFY over the mountains.	The reduction in energy usage is estimated to reduce GHGs by a factor of 3.39. This results in a reduction of 1,029 tons of carbon dioxide, 85.92 pounds of methane, and 22.96 pounds of nitrous oxide released into the atmosphere annually.

Attachment 6 - Performance Measures

**Proposal Title: Santa Ana One Water One Watershed IRWM Prop 84, Round 2 Implementation
 Project Title: Project (I) Enhanced Stormwater Capture and Recharge along the Santa Ana River
 (San Bernardino Valley Municipal Water District)**

	Project Goals	Desired Outcomes	Targets	Performance Indicators	Measurement Tools and Methods
(a)	Increase utilization of local stormwater and provide a reliable water supply	Capture and recharge up to 80,000 ac/ft of local stormwater in a single year at a max instantaneous flow rate of 500 cfs	Up to 80,000 ac/ft in a single year at a maximum instantaneous flow rate of 500 cfs	<ul style="list-style-type: none"> - Measure amount recharged annually - Measure flow rate diverted 	<ul style="list-style-type: none"> - Parshall Flume stage recorder - New flow meter on PPP, phase 1 - Monitor flow daily

Attachment 6 - Performance Measures

**Proposal Title: Santa Ana One Water One Watershed IRWM Prop 84, Round 2 Implementation
Project Title: Project (J) Regional Residential Landscape Retrofit Program (Inland Empire Utilities Agency)**

	Project Goals	Desired Outcomes	Targets	Performance Indicators	Measurement Tools and Methods
(a)	Reduce Regional Residential Water Demand	Decrease of imported water quantity by approximately 1,000 AF / YR.	Reduce per capita water use by 10% by 2015 (5 GPCD)	Evaluate IEUA's annual water use profile for the residential sector, IEUA's Annual Water Use Report by participating retail member agency and analyze current and historical water use trends.	Pre and post water use monitoring and tracking by participant and through customer surveys
(b)	Conserve State Water Project (SWP) Water from the Bay-Delta	Decrease of imported water quantity by approximately 1,000 AF / YR.	1,000 AF / Yr.	Evaluate IEUA's annual imported water purchases by participating retail member agency.	1) Pre and post water use monitoring and tracking by participant, 2) follow-up site visits on equipment operability, and 3) customer surveys
(c)	Meet Regional Compliance with The Water Conservation Act of 2009 (20% reduction X 2020)	Reduce per capita water use by 20% by 2020	Reduce 13 gallons per capita / day by 2020	Evaluate IEUA's Annual Water Use Report by participating retail member agency and analyze current and historical water use trends.	Pre and post water use monitoring and tracking by participant and through customer surveys
(d)	Improve Regional Integration and Coordination	Meet multiple regional goals that span across jurisdictional boundaries	1) Involvement of eight retail water agencies serving a population of 850,000, and 2) support eight regional efforts.	1) Involvement of multiple jurisdictions and agencies in Project participation and funding, and 2) Increase regional integration through collaboration of multiple agencies on other regional efforts.	1) Quantify the number of jurisdictions/agencies that participate, and 2) Quantify the number of regional efforts which claim benefit from the Project.

(e)	Provide Residential Public Education on Water Conservation and Landscape Efficiency Measures	#####	Distribute materials to 600 participants.	Track the number and type of materials distributed to customers through participation	1) Pre and post water use monitoring and tracking by participant, 2) follow-up site visits on equipment operability, and 3) customer surveys
(f)	Reduce Greenhouse Gas Emissions for Water Conveyance	Reduce energy used to transport imported water from the Bay-Delta	1,297 metric tons of CO ₂ /YR and 3,300,000 Kwh/YR per AF saved	Evaluate IEUA's annual imported water purchases by participating retail member agency.	Pre and post water use monitoring and tracking by program participant

Conserving water for this region is vital. Without efforts to reduce water use, the need for water would exceed availability of imported supplies and local supply would not meet the full demand. By implementing conservation programs, such as the one proposed, the steady demand can be offset and better managed. During times of drought, emergencies or supply restrictions, the region can pull from imported supplies, if necessary. However, without conservation, the local demand would continue to far out-weigh the availability, thus increasing the need for additional imported water supplies to the region.

Over the last drought that ended in 2011, and environmental restrictions on the State Water Project supplies, local demand remained constant due to a diversification of water supplies. However, as agencies were very successful in managing local sources, the results have left much of our local supplies depleted. Water use reduction efforts that address long-term changes, especially through outdoor water use management and education, will make those emergency efforts to conserve more effective and allow us to manage the limited supplies more efficiently. This program would help offset approximately 1.5% of total demand. This offset is substantial. With an overall goal of reducing demand by 20% to meet the Water Conservation Act of 2009, this project serves a core element of an overarching, larger program that will help IEUA achieve that goal, and sustain it for the long-term through implementing programmatic changes to water use patterns.

(1) This project addresses many factors that cannot otherwise be delivered in traditional water conservation programs. The installed weather based irrigation controller adjust for weather/climate changes that, when left to human intervention, are often ignored for months, if not years. The excessive water use and run-off from improperly programmed irrigation controllers on a consistent basis is one of the highest water wasters in the residential sector. The high efficiency sprinkler nozzles also address climate change and improved technology that otherwise would not be widely used at most residential sites. Many people never adjust their sprinkler locations/angles, check on accuracy or even breakage. The installation of these types of sprinklers will help with some of the most basic problems at a residential site, especially larger sites, including: overspray due to high water pressure (i.e. these do not mist as easily); better coverage with less water application due to increased droplet size. Local weather patterns in this area include some very substantial winds that greatly impact traditional sprinkler-spray, which the new heads help to alleviate. Adjustment and repairs on these high efficiency sprinkler nozzles are simpler than traditional pop-ups because they are designed as an adaptation to existing heads.

It is important to note that without these types of programs, many of these large residential landscapes would never be upgraded. This is truly a sustainable program. It makes the large residential landscape far more “user friendly” and reaches the customer that otherwise pays the bill regardless of cost and is not aware there are options and solutions available due to homeowner detachment with how water is used in, and around, the home.

(2) This program is considered to be a direct offset for the need to import additional water supplies from the northern California Bay-Delta – State Water Project. As with most retail water agencies, the optimal use of water is to use the local supplies before relying on the more expensive imported supplies. When there is a reduction in water use, it is a direct reduction from the expensive imported water source and the goal is to keep that demand at the lower baseline levels and design programs for permanent change, such as this one. Therefore, the conserved water will remain in the northern California Bay-Delta.

Attachment 6 - Performance Measures

Proposal Title: Santa Ana One Water One Watershed IRWM Prop 84, Round 2 Implementation

Project Title: Project (K) Canyon Lake Hybrid Treatment Process (Lake Elsinore & San Jacinto Watersheds Authority)

	Project Goals	Desired Outcomes	Targets	Performance Indicators	Measurement Tools and Methods
(a)	Reduce algal blooms in Canyon Lake by reducing nutrients in the water column	Reduce bioavailable nutrient pool to a sufficient level to eliminate water quality impairments caused by eutrophic conditions in Canyon Lake	Reduce water quality response targets annual average chlorophyll-a to less than 25 ug/L; Increase dissolved oxygen to controllable levels; Prevent occurrences of ammonia toxicity	Concentration data for nutrients before and after alum application; monitoring data for chlorophyll-a	Comparison of nutrient concentrations before and after 2 of the proposed alum applications to reductions assumed in the lake water quality model for the proposed dosage
(b)	Increase dissolved oxygen levels throughout Canyon Lake	Dissolved oxygen conditions improved to a level that is controllable. Anoxic conditions still occur, but at a frequency similar to a pre-development watershed condition	Increase dissolved oxygen to controllable levels. Controllable exceedences of DO objective are those that would not occur given a completely natural watershed. The exact target is still under investigation by the Task Force	Continuous monitoring of dissolved oxygen throughout the study period	Assess the potential to determine if there is a need for supplemental in-lake BMP to achieve desired oxygen levels
(c)	Prevent occurrences of ammonia toxicity	Reduce release of ammonia from lake bottom sediments to a sufficient level to eliminate the occurrence of ammonia toxicity	Maintain ammonia below levels estimated to cause toxicity as a function of ammonia concentration and pH	Concentration data for nutrients before and after alum application; monthly monitoring data for ammonia and pH to estimate potential for toxicity	Assess the potential to determine if there is a need for supplemental in-lake BMP to achieve meet limits on ammonia toxicity

Attachment 6 - Performance Measures

Proposal Title: Santa Ana One Water One Watershed IRWM Prop 84, Round 2 Implementation

Project Title: Project (L) 14th Street Groundwater Recharge and Storm Water Quality Treatment Integration Facility (City of Upland)

	Project Goals	Desired Outcomes	Targets	Performance Indicators	Measurement Tools and Methods
(a)	Groundwater recharge	Provide an increased and reliable water source.	The proposed project is estimated to capture and convey approximately 400 acre-feet per year of rain storm flows.	Flow meter will be placed on the inlet pipe into the basin in order to determine actual rain storm flows into the basin and recorded.	Flow meter will be placed on the inlet pipe into the basin in order to determine actual rain storm flows into the basin.
(b)	Provide flood protection from small to large storm (100-year) events.	Prevent yearly flooding.	Protect public and private infrastructure from flood damage and prevent disruption of service to the community.	Eliminate flooding along Mountain Avenue by capturing and conveying storm flows to the proposed basin, which has a capacity of 79 ac-ft and a system to convey additional flows to the Upland Basin.	By performing site inspections during severe rain storm events and documenting the amount of rain storm flows captured and conveyed to the proposed basin.
(c)	Reduce greenhouse gas emissions for water conveyance	Reduce energy used to transport imported water from both the Delta and Colorado River.	Reduction of 690 metric tons of CO2 per year	Decrease in the amount of imported water purchased per year.	Document the number of ac-ft of imported water purchased before and after the proposed project.
(d)	Improve water quality	Manage salinity by increasing rain storm water into the aquifer and diluting the salt content.	Decrease the amount of TDS in local wells.	Compare before and after TDS readings from local groundwater wells within the area downstream of the project.	Monitor TDS by sending samples and lab analysis and meter rain storm flow to calculate the TDS within the rain storm flow entering the basin and comparing the TDS quantity against the local wells TDS content.

Attachment 6 - Performance Measures

Proposal Title: Santa Ana One Water One Watershed IRWM Prop 84, Round 2 Implementation

Project Title: Project (M) Customer Handbook to Using Water Efficiently in the Landscape (Western Municipal Water District)

	Project Goals	Desired Outcomes	Targets	Performance Indicators	Measurement Tools and Methods
(a)	To educate customers of the watershed about using water efficiently in the landscape.	1. Improve customer knowledge 2. Motivate to take action	1. 10 percent of the households in the watershed download the handbook	1. Website visits and downloads	1. Use web-based analytic tools to track and monitor traffic to the handbook online
(b)	Reduction of imported supply for the Santa Ana Watershed	Reduce imported water supply	1. Reduce supply by 7,240 AFY	1. Quantification of deliveries to water agencies	1. Metered water deliveries to Santa Ana Watershed agencies with weather normalization
(c)	Reduction of Greenhouse Gas Emission for the Santa Ana Watershed	Reduce Greenhouse Gas emissions	1. Reduce 11,012 metric tons of CO2e/year	1. Quantify reduction in water deliveries and calculate using numbers from the California Energy Commission	1. Use metered water deliveries with weather normalization and quantify reduction

Attachment 6 - Performance Measures

**Proposal Title: Santa Ana One Water One Watershed IRWM Prop 84, Round 2 Implementation
Project Title: Project (N) Vulcan Pit Flood Control and Aquifer Recharge Project (City of Fontana)**

Project Goals	Desired Outcomes	Output Indicators	Outcome Indicators	Measurement Tools and Methods	Targets (Implementation by 2014)
Improve flood protection	Reduce/eliminate flooding of rail corridor, streets, local businesses and residential properties	Observation of flooding mitigation	Successful implementation of the project and reduced flooding	Reduced City Maintenance Costs and photographic documentation.	Capture and convey storm flows for up to 100-year storm events; mitigate rail corridor, streets, local businesses and residential flood hazards
Recharge Stormwater and Recycled Water	Reduce groundwater overdraft, Increase groundwater supply, and Stabilize water rates	Change in groundwater monitoring well elevation, Basin storage volume records	Increased available potable water supply and decreased dependence on supplemental import water	Increased water level monitoring near the basins and data collection from local groundwater monitoring wells	Capture and recharge 1,900 acre-feet of storm and recharge 1,900 acre-feet of recycled water; Stabilize water rates
Improve groundwater quality	Reduction of urban runoff pollutants and groundwater degradation	Observation of improved groundwater quality through water supply and water quality testing	Storm water quality monitoring program	Installation of lysimeters around basin and water quality data collection	Detectable improvement in groundwater quality

The project includes construction of the Arrow Storm Drain along Arrow Boulevard from Sierra Avenue to the Basin and the Sultana/Valencia Storm Drain along the Pacific Electric Bike Trail and Sultana Avenue from Baseline Avenue to the Basin. Approximately 21,800 linear feet of reinforced concrete pipe with diameters ranging from 48" to 144". The drainage system is designed to capture and convey 100-year storm water volumes from a 2,400 acre tributary area and to provide 100-year flood protection to the SCRRA commuter rail and approximately 1,140 acres of business and residential areas where flooding has occurred during storm events. Additionally, the project includes construction of the Baseline Recycled Waterline along Baseline Avenue from the Rialto Feeder turnout at Interstate 15 to Cherry Avenue, approximately 7,100 feet of 24" diameter pipeline. Lastly, the proposed project will construct the Vulcan Basin to further reduce peak flows by flood storage, naturally treat (filtration) urban runoff and storm water flows, and recharge greater quantities of storm water. It will effectively recharge greater quantities of runoff during wet years. The project will effectively provide 100-year flood protection the SCRRA commuter rail corridor. As previously mentioned the basin volume is nearly twice as large as required for flood control adding additional space for greater conservation of both storm and recycled water. The proposed project includes monitoring, assessment, and performance measures to document and track how the Project will effectively contribute to meeting the program goals and objectives.

Attachment 6 - Performance Measures

Proposal Title: Santa Ana One Water One Watershed IRWM Prop 84, Round 2 Implementation

Project Title: Project (O) Francis Street Storm Drain and Ely Basin Flood Control and Aquifer Recharge Project (City of Ontario)

Project Goals	Desired Outcomes	Output Indicators	Outcome Indicators	Measurement Tools and Methods	Targets (Implementation by 2014)
Attenuation of storm flows (flood control) and improve flood protection	Reduce/eliminate flooding of streets, local businesses and residential properties	Observation of flooding mitigation	Successful implementation of the project and reduced flooding	Reduced City Maintenance Costs and Photographic documentation.	Capture and convey storm flows for up to 100-year storm events
Capture and recharge of storm flows through groundwater recharge	Reduce groundwater overdraft and increase groundwater supply	Increase in basin capacity and groundwater monitoring well elevation change versus basin water levels	Groundwater elevation records resulting in increased available potable water supply	Increased water level monitoring near the basins and data collection from existing groundwater monitoring wells	Excavate existing basins deeper to provide 310 acre-feet of additional storage; capture/ recharge 772 acre-feet per year
Improve groundwater quality through natural filtration recharge	Reduction of urban runoff pollutants and groundwater degradation	Observation of improved groundwater quality through water supply water quality testing	Storm water quality monitoring program	Installation of lysimeters around basin and water quality data collection	Detectable improvement in groundwater quality

The project includes construction of the Francis Street Storm Drain along Francis Street from Campus Avenue to the West Cucamonga Creek, approximately 8,500 feet of reinforced concrete pipe with diameters ranging from 18” to 132”. The drainage system is designed to capture and convey 100-year storm water volumes from a 956 acre tributary area and to provide 100-year flood protection for approximately 277 acres where flooding has occurred during storm events. Additionally, the proposed project will expand the existing Ely Basins to further reduce peak flows by flood storage, naturally treat (filtration) urban runoff and storm water flows, and recharge greater quantities of storm water. The proposed project includes monitoring, assessment, and performance measures to document and track how the Project will effectively contribute to meeting the program goals and objectives.

Attachment 6 - Performance Measures
Proposal Title: Santa Ana One Water One Watershed IRWM Prop 84, Round 2 Implementation
Project Title: Project (P) Commercial/Industrial/Institutional Performance-Based Water Use Efficiency Program
(Metropolitan Water District of Orange County)

	Program Goals	Desired Outcomes	Targets	Performance Indicators	Measurement Tools and Methods
(a)	Provide incentives to CII sites for comprehensive performance-based water savings.	An annual water savings of 75 acre-feet.	Process improvement and comprehensive site water use efficiency implementation employing best management practices.	Incentive activity; Estimated process improvement water savings.	Actual water savings based on monitored use though comparison of pre and post implementation water use.
(b)	Provide rebates to CII sites for device upgrades.	An annual water savings of 170 acre-feet.	Conversion of high water using devices to industry recognized water efficient devices.	Rebate usage; Industry recognized device water savings.	Number and type of devices replaced; Comparison of pre and post implementation water use.
(c)	The comprehensive landscape water efficiency improvements will be performed on irrigation systems in new and existing large landscape settings. A rebate or performance-based incentives will be used as a promotion.	An annual water savings of 205 acre-feet.	The removal of non-functional turf replaced with California Friendly landscape; the upgrade of antiquated irrigation timers to smart water application irrigation controllers (smart timers); and the conversion of high-volume conventional spray irrigation heads to low-precipitation-rate irrigation equipment.	Rebate usage; On-site visual verification of turf removal and installation of California Friendly Landscape, smart timer installation, and nozzle/drip installation.	Amount of non-functional turfgrass removal (square feet), installation of smart timers (quantity), and high-volume spray heads removal (quantity), rebate incentives for installation services, and visual installation verifications.
(d)	Perform a water savings evaluation as a result of the process improvements and/or device upgrades at CII and LL sites.	Determination of total water savings as a result of the process improvement, device replacement, or removal of non-functional turfgrass.	Reduced and more efficient water usage practices; less need for imported water.	Reduction/change in water consumption; Statistical water savings evaluation.	Analysis of water consumption (e.g. water meter levels) before and after process improvement, device replacement, or removal of non-functional turfgrass.

Additional Narrative – Monitoring, Assessment, and Performance Measures

Performance Measures

MWDOC plans to conduct a robust statistical water savings examination using regression analysis at the Program's conclusion. This will give the water industry another opportunity to quantify actual water savings associated with this Program. This analysis will include a statistically significant population of Program participants and will maintain 95% confidence. Participant water use data before and after participating in the Program will be used to determine changes in water use associated with the site improvements. The analysis will also normalize the pre- and post-retrofit water use data (e.g. weather, units, and capita). A written report describing the statistical methods used and evaluation results will be submitted as the final report for the Program. Results from this Program will be shared with DWR, SAWPA, Metropolitan, and MWDOC retail water agencies.

Data and Monitoring

All water agencies in the SAWPA Integrated Regional Water Management Plan area meter water use and bill customers based on volume of water use on a monthly basis. The Municipal Water District of Orange County (MWDOC) has a long standing and positive working relationship with these retail water agencies. MWDOC will work with these agencies to obtain billing and water use information for sites participating in the Program. Industry accepted device water savings will be used to establish the assumed water savings estimate to which actual water savings will be compared. We will also obtain evapotranspiration data from California Irrigation Management Information System (CIMIS) for the same time period so that we can match water use and evapotranspiration data for the same timeframes. At CII sites, unit normalization will include the production volume or occupancy during the evaluation timeframe. This information will be incorporated into a regression based statistical water savings evaluation.

IRWM Plan Goals

The IRWM Plan contains several goals that the proposed Program will help to realize. The Program water savings goal is 450 AFY. This will be achieved by targeting the following individual Program-type goals: 75 AFY for CII comprehensive process improvements, 170 AFY for CII one-to-one improvements, and 205 AFY for comprehensive LL Programs. The performance measures to be used to verify Program performance towards meeting these goals are detailed in the performance measures table and summarily described below.

Implementation of this Program is consistent with the Landscape BMP (formerly BMP No. 5) and the CII BMP (formerly BMP 9). The Program is consistent with the water use efficiency and watershed management goals contained in the California Water Plan, TMDLs, CALFED Bay-Delta objectives, AB 32, and local land use planning. This savings will assist the IRWM area in meeting its SBx 7-7 20% X 2020 water savings goals. These water conservation savings will translate into improved water supply reliability for the region increasing reservoir storage.

Attachment 6 - Performance Measures

**Proposal Title: Santa Ana One Water One Watershed IRWM Prop 84, Round 2 Implementation
Project Title: Project (Q) Peters Canyon Channel Water Capture and Reuse Pipeline (City of Irvine)**

	Project Goals	Desired Outcomes	Targets	Performance Indicators	Measurement Tools and Methods
(a)	To improve nitrogen and selenium water quality within Peters Canyon Channel.	To divert selenium and nitrogen loading from the Caltrans Groundwater Treatment Facility (GWTF), Como Channel, Edinger Circular Drain and Valencia Storm Drain	To capture 100% of nitrogen and selenium loading from GWTF, Como Channel, Edinger Circular Drain and Valencia Storm Drain during dry weather periods.	Nitrogen and selenium loads of diverted flows	Flow measurements of diverted sources, nitrogen and selenium concentrations, nitrogen and selenium loading calculations
(b)	To provide water for beneficial reuse through groundwater replenishment	To provide diverted water to OCSD and OCWD for beneficial reuse	To capture 100% of flows from GWTF, Como Channel, Edinger Circular Drain and Valencia Storm Drain during dry weather periods.	Flow volumes of diverted flows	Flow measurements of diverted sources

Attachment 6 - Performance Measures

Proposal Title: Santa Ana One Water One Watershed IRWM Prop 84, Round 2 Implementation

Project Title: Project (R) Soboba Band of Luiseño Indians Wastewater Project

	Project Goals	Desired Outcomes	Targets	Performance Indicators	Measurement Tools and Methods
(a)	Complete a Development Plan (i.e. feasibility study) to determine how best (if possible) to construct a wastewater management facility on the Soboba Indian reservation	Finish a Development Plan (i.e. Feasibility study) as a first step to constructing a wastewater treatment facility to improve water quality for the tribal community and increase water usage efficiency	Completed feasibility study.	Upon tribal council's approval of a contractor, develop and maintain a schedule of goals with the contractor to ensure the project stays on task and within the allotted time period. All data collected and published in final feasibility study.	Department of Public Works, Environmental Department, and all other necessary departments will work concurrently with contractor to finish a feasibility study that meets the needs of the tribal community and within the guideline of SAWPA and DWR.

Attachment 6 - Performance Measures

Proposal Title: Santa Ana One Water One Watershed IRWM Prop 84, Round 2 Implementation

Project Title: Project (S) Recycled Water Project Phase I (Arlington-Central Avenue Pipeline (City of Riverside))

	Project Goals	Desired Outcomes	Targets	Performance Indicators	Measurement Tools and Methods
(a)	Distribute recycled water throughout the city, to WMWD, and neighboring agencies	Offset potable water demands with recycled water	6,100 AFY recycled water use	Increased recycled water use	Metering recycled water use/monitoring per capita potable water use
(b)	Reduce import water demand	Offset import water demands with recycled water	6,100 AFY recycled water use	Increased recycled water use/reduction in import water demand	Metering of recycled water/monitoring of import water
(c)	Reduce greenhouse gases	Reduce demand on energy intensive import resources	6,060 metric tons CO ₂ e/yr	Reduction in import water demand	Metering of import water use

Attachment 6 - Performance Measures

**Proposal Title: Santa Ana One Water One Watershed IRWM Prop 84, Round 2 Implementation
Project Title: Project (T) Wilson III Basins Project and Wilson Basins/Spreading Grounds (City of Yucaipa)**

Project Goals	Desired Outcomes	Output Indicators	Outcome Indicators	Measurement Tools and Methods	Targets (Implementation by 2014)
Attenuation of storm flows (flood control) and improve flood protection	Reduce/eliminate flooding of streets, local businesses and residential properties	Observation of flooding mitigation	Successful implementation of the project and reduced flooding	Reduced City Maintenance Costs and Photographic documentation	Capture and convey storm flows for up to 100-year storm events
Provides reliable water supply, Promote sustainable water solutions, and Manage rainfall as a resource	Increase groundwater supply and decrease dependence on import water supplies	Creation of basin infiltration volume and groundwater monitoring well elevation change versus basin water levels	Storage volume records and groundwater elevation records	Increased water level monitoring near the basin and data collection from existing groundwater monitoring wells	Upon completion of Project construction, provide 200 acre-feet of recharge volume and successful operation of recharge pond
Ensure high quality water for all users	Reduction of urban runoff pollutants and groundwater degradation	Observation of improved groundwater quality through water supply water quality testing	Storm water quality monitoring program	Water quality data collection	Detectable improvement in groundwater quality
Preserve and enhance the environment, open-space, and recreational opportunities; Maintain Quality of Life, Educate Public	Preservation of existing natural open space, create public recreational area and trails, provide learning opportunities	Construction of pedestrian trails, recharge pond, natural streambed and education kiosks	Increased recreational uses in project area and regular education group tours	Visual inspection of recreational facilities, public feedback and reporting from schools and IERCD of education programs implemented	Re-vegetation of construction site and addition of trails and pond and education programs

The project includes construction of the Wilson III Basin and Spreading Grounds located southwest of the Bryant Street and Oak Glen Road intersection. The Wilson III Basin has a tributary drainage area of 3,021 acres and an estimated 100-year flow rate of 5,070 cubic feet per second. The basin is designed to mitigate a flooded area of approximately 562 acres, while still allowing some sediment to pass through during the lower level storm events, reducing contaminants in the watershed, and capturing some of the storm waters for recharge. The project includes storm water and sediment control along Wilson Creek and Oak Glen Creek, native and artificial groundwater recharge, improvement of water quality by reducing stream sediment loading, reduction of non-point source pollutants during storm events, environmental restoration and enhancements and enhanced multi-purpose trails for use by equestrians, pedestrians and bicyclists. The proposed project includes monitoring, assessment, and performance measures to document and track how the Project will effectively contribute to meeting the program goals and objectives.