

## Lead Agency:

Agency: Lake Hemet Municipal Water District

Project Director: Thomas Wagoner

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## General Project Information:

Name: Bautista Pond Optimization

Description:

The Bautista Ponds are located in a narrow strip of land between the Ramona Expressway and the improved Bautista Creek Channel north of Florida Avenue (Highway 74). The site is approximately 10.4 acres in size and contains six recharge ponds that were constructed in the 1960's. The property is owned by Riverside County Flood Control and Water Conservation District (RCFC&WCD). Vacant property, approximately 17.5 acres in size, lying north of these existing facilities is also owned by the RCFC&WCD. The site is suitable for expansion of much need recharge facilities in the San Jacinto Upper Pressure and Canyon Basins.

The proposed Bautista Pond Optimization project, as identified in the Hemet/San Jacinto Groundwater Management Plan (GWMP), will expand upon the existing recharge facilities effectively increasing storage volume and water recharge. The project includes construction of five basins and related improvements together with inlet and outlet facilities for greater capture and recharge of historic surplus irrigation water together with new capture and recharge of storm water, blended recycled water, and imported water during years of availability, in addition to enhanced flood protection. Each is discussed below:

Based on current records, approximately 200-300 AFY of surplus irrigation water is captured and recharged in the existing basin. However, currently irrigation water supply is reduced due to limited existing recharge capacity with only half the available water being delivered. In addition, these supplies typically carry upstream naturally occurring and urban runoff contaminants. The projects natural filtration will improve water quality for subsequent uses.

Storm water from a large 32,000 acre tributary area is conveyed through the adjacent storm water channel. Storm flow from the channel will be diverted from the channel to the recharge basins. Should the basin systems be completely occupied with water, the system is designed to return flow back to the channel. Diversion of flood waters into the basin systems will enhance flood protection to downstream areas. Capture and recharge of these storm water flows will reduce peak flow quantities to the unimproved San Jacinto Channel.

Recycled water is a reliable source of water year round. Recycled water facilities already exist 3 miles from the project and could be extended to provide additional water supplies during periods of surplus supplies.

Existing State Water Project (SWP) raw water facilities are located adjacent to the project and are capable of delivering water supplies to the basins during period of surplus SWP water, typically during wet years using existing water rights. In addition, Metropolitan Water District (MWD) is obligated by the Soboba Tribe Settlement Agreement to provide an average supply of 7,500 AFY to the Canyon and Upper Pressure Management Zone. The project will provide a connection to the existing raw water pipeline.

The project's goals and objective include multi-source water recharge to enhance local conservation and reduce waste due to evapotranspiration and to reduce the region's reliance on costly imported water supplies. In addition, the project will help meet litigation settlement agreement (LSA) requirements with the Soboba tribe and reduce overall water cost benefiting the disadvantaged communities (DAC) served by LHMWD.

The project will recharge water from a combination of sources. Currently, surplus irrigation water diverted to the existing Bautista Ponds is limited to 2,500 gpm as the ponds are not of sufficient capacity to accommodate available irrigation water. The proposed Bautista Ponds will more than double recharge area and allow the full 5,000 gpm of irrigation water to be delivered to the ponds. Additionally, approx. 19,000 AFY of storm water flows through the Bautista Creek in an average rainfall year, accounting for losses. The proposed project will recharge approx. 900 AFY of storm water to the basins for recharge.

Further, MWD is obligated by the Soboba Tribe LSA to provide an average supply of 7,500 AFY to the Canyon and Upper Pressure Management Zone and the agreement called for construction of a 100 acre recharge facility. To date, only 35 acres have been constructed. While the project's goals include reducing dependence on imported water, the project will make use SWP water supplies during wet years and will aid the region in meeting the Soboba Tribe LSA requirements.

LHMWD service area encompasses a total of approx. 12,700 acres covering portions of Hemet, San Jacinto, and Riverside County includes a mixture of residential, commercial, institutional, and agricultural uses. LHMWD serves predominantly DAC's which makes up approximately 50% of their service area. Reducing LHMWD's reliance on purchasing costly imported water supplies to meet current and future demand will help reduce their cost to provide water to DAC's and stabilize water rates.

Need:

The purpose of the project is to improve water supply reliability, enhance water conservation, improve groundwater quality, and stabilize local water rates. The project is located in an area of considerable overdraft, in an area with excellent percolation rates, and in an area that provides more than 200' of natural filtration. It also responds to legal requirements of the Soboba LSA.

According to the GWMP, the overall basin experiences approx. 10,000 AFY of overdraft. The combination of existing overdraft together with climate change and continued reduction of imported water supply reliability, enhanced water conservation projects are vital. Based on available records, far greater capture of surplus irrigation water and storm water can be achieved by the project site. The project is needed to increase the capacity for available irrigation water and to recharge a portion of the 19,000 AF of storm water available annually. The channel includes diversion facilities that deliver irrigation and storm water runoff to the ponds for recharge.

Because the project design and regulatory compliance processing are essentially complete, its implementation will provide immediate benefits. The project site's hydrogeology, sub-basin interaction, engineering and land use suitability, and environmental impacts have already been fully investigated.

Currently, storm water runoff from Bautista Creek combines with runoff in the San Jacinto River which flow to Mystic Lake. According to the Western Riverside County Agriculture Coalition, all flows that enter Mystic Lake completely evaporate and do not provide any recharge benefit. Therefore, storm water recharge upstream of Mystic Lake will provide the best benefit to the groundwater basin.

In addition, the project will recharge quality water that will undergo treatment by natural filtration. These water supplies will be blended with existing groundwater with moderate levels of TDS, effectively improving overall groundwater quality.

Meets statutory eligibility gates of 2015 IRWM Grant Funding: Yes

IRWM Goals: The project will meet an OWOW goal of maintain a reliable and resilient water supplies and reduce dependence on imported water through the conjunctive use storage and increased surplus irrigation water and storm water recharge. Another OWOW goal achieved by the project is accomplishing effective, equitable, and collaborative integrated watershed management through engaging with both disadvantaged communities and tribes alike. Finally, the project meets an OWOW goal of protecting beneficial uses to ensure high quality water for human and natural communities by reducing non-point source pollution through natural attenuation.

IRWM Type

OWOW 2015 Funding

Project Type: Construction

Latitude: 33.76067 Longitude: -116.90864

Project Location: The project is located in the City of Hemet. More specifically, the project is adjacent to Ramona Expressway between Cedar Avenue and Florida Avenue (Highway 74). Additionally, the project is bound by the Bautista Creek, an improved channel, along the east and the San Jacinto River along the north.

Benefit Zone Area (mi2): 161

## Project Benefits:

Benefits	Applicable
Water supply reliability, conservation and water-use efficiency	Yes
Stormwater capture, storage, cleanup, treatment and management	Yes
Removal of invasive species; wetlands creation or enhancement; acquisition, protection and restoration of open space	No
Non-point source pollution reduction, management, monitoring	Yes
Groundwater recharge and management	Yes
Contaminant and salt removal, reclamation, desalting and conveyance to users	No
Water banking, exchange, reclamation and improvement of water quality	Yes
Multipurpose flood and stormwater management programs	Yes
Watershed protection and management	Yes
Drinking water treatment and distribution	No
Ecosystem and fisheries restoration and protection	No

## Where Benefits Accrue:

Jurisdiction: Multiple Communities

Explanation: The project benefits accrue in the City of Hemet, City of San Jacinto, and Valle Vista (all of which are listed as DAC's in OWOW 2.0 Table 5.11-2), Portions of Unincorporated Riverside County, and the Soboba Tribal Lands; See DAC Map Attachment.

Watershed/Sub-region: Single Sub-region

Explanation: The project benefits accrue in the San Jacinto Watershed, which is one of the largest groundwater basins in the Santa Ana Watershed per OWOW 2.0.

Synergies: LHMWD and RCFC&WCD are project partners. RCFC&WCD recognized the added value to the region by converting existing flood control land to a regionally benefitting groundwater recharge project. As such, the RCFC&WCD has lead with the project design, will take lead role on construction, and have committed \$1,000,000 toward the construction of the project.

Additionally, LHMWD has interacted extensively with the City of San Jacinto, Hemet-San Jacinto Watermaster, Soboba Band of Luiseno Indians, and the agricultural community. Direct funding partners on the project are the City of Hemet (\$19,600) and the City of San Jacinto (\$12,500). The Riverside County Farm Bureau is a direct funding partner and has agreed to commit funding to the project (TBD). The Soboba Tribe is a direct funding partner and has agreed to commit funding to the project (TBD). The Hemet-San Jacinto Watermaster and others have also provided a letter of support for the project.

## Benefits to Disadvantaged Communities (DAC) and Native Tribal Communities (NATC)

100% DAC: No                      Portion DAC: Yes                      DAC %: 62

100% NATC: No                      Portion NATC: Yes                      NATC %: 4

Project area benefiting DAC (acres) : 35435

## Describe DAC and NATC

### Benefits:

As described in OWOW 2.0, DAC's lack the resources and in-house expertise necessary to apply for grants to help make capital improvement projects more feasible. Additionally, the OWOW 2.0 recognized that in moving forward with IRWM Planning, it is critical to help with DAC assessments and stakeholder engagement. DAC's, like LHMWD, face several challenges including: limited funding and funding sources, high infrastructure costs, limited water supplies and increased demand.

Further, as provided in DWR's final IRWM PSP, it's their intent to award not less than 10% of the available funding to projects that provide direct water-related benefits to a DAC. LHMWD's service area is predominantly a DAC. Further, the project has a direct benefit to over 35,000 acres of DAC's in the Hemet-San Jacinto Watershed area.

Lastly, Soboba Band of Luiseno Indians will benefit from the increased recharge efforts. Approximately 2,000 acres (or 26%) of Soboba tribal lands are include in the project area.

### Human Right to Water:

As a result of the drought, State Water Project (SWP) deliveries have been drastically curtailed. Communities/agencies like LHMWD rely upon SWP water to provide uninterrupted access to water for their customers. As a primary goal of the project to improve water supply reliability by decreasing dependence on imported water, the project will address Human Rights to Water. The project will efficiently use the limited rainfall resources available to achieve water supply reliability.

### Environmental Justice:

N/A

## Project Partners:

Agency Name	Contact	Phone	Email	Collab Planning	Direct Funding	In-Kind Service	Co-Manager
Riverside County Flood Control and Water Conservation District	Warren Williams	951-955-1200	bpatters@rcflood.org	Yes	Yes	Yes	No
City of Hemet	Gary Thornhill	951-765-2301	KAguiar@cityofhemet.org	No	Yes	No	No
City of San Jacinto	Tim Hults	951-487-7342	THults@sanjacentoca.us	No	Yes	No	No
Riverside County Farm Bureau, Inc.	Richard Schmid	951-684-6732	President@RiversideCFB.com	No	Yes	No	No

# Bautista Pond Optimization

Project ID:3150

5/27/2015  
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Soboba Band of Luiseno Indians	Michael Castello	951-654-5544	mcastello@soboba-nsn.gov	Yes	No	No	No
Western Riverside County Agriculture Coalition	Bruce Scott	951-692-6069	bruce@sbdfarm.com	Yes	No	No	No
Hemet-San Jacinto Watermaster	Frank Gorman	951-658-3241	fgorman@lhmwd.org	Yes	No	No	No

## Project Funding:

Category	Amount	Percent
Total Project Cost	\$2,500,000.00	100
Requested OWOW 2015 Funding	\$1,000,000.00	40
Match Contribution	\$1,500,000.00	60
Local Contribution	\$1,500,000.00	60
Federal Contribution	\$0.00	0
In-Kind Contribution	\$0.00	0
Other	\$0.00	0
SRF Loan	\$0.00	999

Annual O&M Costs: \$5,000.00

Funding Secured: Yes

**Explain:** RCFC&WCD has committed \$1,000,000 toward the construction of the project, which is reflected in the RCFC&WCD's annual budget for 2014-2015. Additionally, as described, a portion of local funding will come from the City of Hemet, City of San Jacinto, Riverside County Farm Bureau, and the Soboba Band of Luiseno Indians. LHMWD is committed to providing the remaining local contribution.

O&M Funding Secured: Yes

**Explain:** LHMWD has available funding for operation and maintenance of pipelines that will be used to maintain the basin as well.

## Project Criteria:

Criteria	Metric	Description
New Water Supply	1200 AFY	NA
Augmentation of Dry Year Yield	1000 AFY	NA
Non-Point Source Pollution Reduction	29000 lbs removed/yr	NA

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Greenhouse Gas Emissions Reduction	1451 metric tons CO2e/yr	<p>The project provides for reduction in GHG emissions through conservation of surplus irrigation water and storm water runoff that eliminates the need for imported water, in the amount of approx. 1,200 AFY. By avoiding delivery through the SWP system, a significant reduction in GHG emissions is attained. According to CARB, the energy required to deliver SWP water to Southern California is 3,519 kW/hrs per AF or 8,900 kW/hrs per MG per SAWPA. Using the recommended unit amount of 0.0004 kWh to tons of CO2, GHG emissions reduction of approx. 1,451 metric tons CO2/year for the project is achieved.</p> <p>The Project will reduce urban runoff discharge pollutants including sediment, nutrients, metals, bacteria and virus, oil and grease, organics, and pesticides. Urban runoff contributes to Santa Ana RWQCB 303(d) List of impaired segments. The Project will reduce approx. 29,000 lbs/year of contaminant laden materials based on a 20 year O&amp;M history.</p>
Flood Risk Reduction	1.7e+007 \$	NA
Natural Hydrology Function Restoration	NA	<p>The project will provide enhanced flood protection to downstream areas by diverting a portion of flood waters into the basin systems. Capture and recharge of these storm water flows will reduce peak flow quantities to the unimproved San Jacinto Channel where the potential of flooding exists as shown on FEMA flood mapping. Damage estimate is based on flooding of the 17 acres basin site as opposed to 17 acres of single family residential valued at \$1,000,000 per acre.</p> <p>Additionally, the project will restore the natural hydrology function lost when the Bautista Creek was converted from a natural stream to a concrete lined channel. Recharge of storm water in the proposed basins will restore natural recharge that was lost to the region over 50 years ago when the Bautista Creek channel was constructed.</p>

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Other Quantifiable Benefits	NA	<p>The project has an added new water supply benefit with the addition of recycled water in the future. Existing recycled water facilities are within reasonable distance for the addition of recycled water recharge in the near future. The added recycled water recharge could add as much as 1,000 AFY to water supply benefits. As described in the GWMP, LHMWD will continue to work with the Watermaster and EMWD to determine the operational constraints currently facing the availability of recycled water for replenishment and ensure all State and Federal guidelines are followed.</p> <p>The project being essentially shovel ready will begin generating project benefits as early as 2016. During the first year of operations, the project is estimated to recharge 1,200 AF of water supplies. Agricultural water is valued at \$510 per acre-foot. The project will generate an annual benefit of over \$600,000.</p>
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## Project Status:

Project Status: Final design (100%) completed

Est. Complete Date: 08/16/2016      Est. Operational Life (years): 100

Agency Constructed Similar Projects : Yes

CEQA Status: In Progress      Date: 09/29/2015

NEPA Status: Not Applicable      Date: NA

## Project Attachments:

Type	FileName
Partners	3150_Bautista Ponds Support Letters_ALL.pdf
Funding	3150_2014-2015_RCFCWD_Annual_Budget_BautistaPonds.pdf
Status	3150_LHMWD_Bautista Schedule_05-27-15.pdf
Greenhouse Gas Reduction	3150_Bautista Ponds Technical Calculations_05-15-15.pdf

Project Complete: Yes

Project Active: Yes