



TURNER BASIN IMPROVEMENTS PROJECT NO. WR11017.00 STATUS UPDATE: SEPTEMBER 24, 2014

The project involves grading and hauling activities and the design and installation of new pipes, gates, and controls for two new recharge basins east of Turner Basin No. 4. This project also connects an existing flood control retention facility, Basin No. 5, to capture additional stormwater and recycled water for groundwater recharge by constructing new stormwater piping from Deer Creek Channel into Basin No. 8 which feeds into Basin No. 5. This will allow the Turner Basin site to receive and capture channel flow further upstream and increase recharge potential. The goal of the project is to bring in an additional 600 acre-feet of annual recharge through stormwater and recycled water.

Schedule:

	Project Budget \$1,275,000		Actual Cost to Date \$1,251,557		
<u>Phase</u>	<u>Start</u>	<u>Finish</u>	<u>Status</u>	Projected Cost	Actual Cost
Project Development	11/01/11	02/22/12	Completed	\$32,622	\$35,380
Pre-design	02/22/12	04/01/12	Completed	\$13,419	\$75,548
Environmental Impact	03/01/11	12/20/12	Completed	\$72,892	\$74,197
Design	04/02/12	02/22/13	Completed	\$120,772	\$122,203
Permits	03/30/12	12/20/12	Completed	\$9,927	\$9,927
Bid and Award	12/21/12	02/20/13	Completed	\$2,736	\$2,747
Construction	02/20/13	02/27/15	In Progress	\$1,022,632	\$931,555
			-	\$1,275,000	\$1,251,557

This project is partially funded by the Bureau of Reclamation with a grant of \$406,712.

Cost Sharing Document: 2014 Amendment to the Turner/Gausti Cost Sharing Agreement 2012

Project Update:

The dirt hauling and grading activities are the remaining tasks under this project. GRB Engineering will commence with the work on October 1st. They are scheduled to complete excavation by December 20 and finalize material processing and removal by February 27, 2015.

Project Photos:



Completed junction structure



Completed valve and structure



Completed new south basin



New north basin - grading/hauling in progress





WINEVILLE PROOF OF CONCEPT PROJECT NO. EN13031.00 STATUS UPDATE: SEPTEMBER 24, 2014

The Wineville Basin Proof of Concept Project (POC) was developed to provide information and data to determine the likely benefit if the basins were improved to facilitate artificial groundwater recharge. The primary objectives of the POC were to measure basin infiltration rates and use those rates to estimate the likely annual recharge capacity of the basin. The investigative project consisted of six cells designed to test and evaluates infiltration rates at strategic locations throughout the Basin. Each of the test cells were 0.5 acres in size and excavated at different depths to gather percolation data for soils above and below identified clay layer. The study was completed in April 2014 and concluded that the basin presents an opportunity for groundwater recharge.

Schedule: Project Budget Actual Cost to Date \$361,303 \$424,300 Projected Cost Actual Cost <u>Phase</u> <u>Finish</u> <u>Status</u> <u>Start</u> Design 01/11/13 04/30/14 Completed \$22,000 \$22,000 09/01/13 Weeding 09/30/13 Completed \$28,000 \$28,000 Permits 04/24/13 01/17/14 Completed \$2,200 \$2,200 Environmental Assist. 03/01/13 11/30/13 \$22,600 Completed \$18,800 Survey 09/01/13 11/30/13 Completed \$21,000 \$11,767 Construction 06/19/13 04/30/14 Completed \$208,000 \$208,000 10/01/13 11/30/13 \$7,500 Extra Equipment Completed \$7,500 **Ontario Pump Costs** 10/01/13 11/30/13 Completed \$19,967 \$19,967 CM/Testing Support 09/01/13 04/30/14 Completed \$43,069 \$50,000 \$43,033 Contingency \$424,300 \$361,303

Cost Sharing Document: Task Order No. 6 of the Master Agreement of 2014

Project Update:

The study was completed in April 2014. It concluded and recommended that the basin presents an opportunity to use the existing facility for the dual purpose of flood control and groundwater recharge. The proposed improvements to the basin were a part of the projects listed within the 2013 Amendment to the 2010 Recharge Master Plan Update.

Final Project Data:

Scenario	Infiltration Rate	Stormwater Recharge	Supplemental Water Recharge	Total Annual Recharge
No. 1	0.13 ft./day	820 AFY	940 AFY	1,760 AFY
No. 2	0.24 ft./day	2,080 AFY	1,750 AFY	3,830 AFY

Table 1 - Projected	Basin Performance	Summary in Acre	-Feet per Year (AFY)
Table I - Flojecieu	Dasin Ferrormance	Summary in Acre	-ieetpei ieai (Aii)

Eiguro 1 Imago tho of the	tomporary infiltration to	st calls constructed at Minovilla
Figure 1- initiage the Or the		st cells constructed at Wineville







JURUPA PUMP STATION HVAC IMPROVEMENTS PROJECT NO. EN14040 STATUS UPDATE: SEPTEMBER 24, 2014

The Jurupa Pump Station (PS) is a key recharge facility that directly conveys storm water runoff, local runoff, imported and recycled water to Cell 1A at the RP-3 Basin. The PS is located on the north-east corner of Jurupa Basin which acts as a pass through basin for flows intercepted at the nearby San Sevaine Channel. The PS' electrical equipment, such as the motor control center, variable frequency drives (VFDs) and communication equipment, is critical to the operation of the pump station. With high temperatures experienced at the PS, vital controls and switches have been experiencing temperature related failures and shutdowns. The HVAC improvements will address these critical failures by installing a permanent air conditioning system, roof thermal insulation, controls, etc. for the electrical equipment at the Jurupa PS.

Schedule:

	Project Budget \$300,000		Actual Cost to Date \$75,025		
<u>Phase</u>	<u>Start</u>	<u>Finish</u>	<u>Status</u>	Projected Cost	<u>Actual Cost</u>
Project Development	09/02/13	03/20/14	Completed	\$3,000	\$3,031
Pre-design	10/31/13	03/03/14	Completed	\$5,000	\$2,731
Proposal	03/04/14	05/14/14	Completed	\$12,000	\$7,257
Design/Build	05/14/14	10/06/14	In Progress	\$186,000	\$62,006
				\$206,000	\$75,025

Cost Sharing Document: Task Order No. 5 of the Master Agreement of 2014

Project Update:

The total project cost was originally \$300,000. Through the use of available surplus equipment and a design/build project delivery method, the Agency was able to meet the project goal substantially below the projected cost and complete construction ahead of the project schedule completion date of November, 31, 2014.

Staff is in process of closing the project. Final cost will be provide before the end of October.

Project Photos:



Existing MCC control panel



Existing pumping system



Installed AC unit



Installed ceiling insulation and AC air ducting



Schodulo



SAN SEVAINE IMPROVEMENTS PROJECT PROJECT NO. EN13001 STATUS UPDATE: SEPTEMBER 24, 2014

San Sevaine basins consist of five, soft-bottomed basins along the San Sevaine Channel. The basins encompass approximately 93 acres with the potential to recharge up to 8,500 acre-feet per year (AFY) of recycled water (RW), storm water (SW) and imported water. The basins currently operate by delivering most flow to Basin No. 5, which has the lowest infiltration rate as compared to the other basins. This has limited current recharge to approximately 500 AFY.

As part of the 2013 Amendment to the 2010 Recharge Master Plan Update, this Project will evaluate, design and construct basin improvements needed to maximize infiltration and recharge capture at the San Sevaine Basins. Depending upon the final recommendation from the preliminary development report, either one or more of the following designs may be implemented as part of construction: (1) a new stormwater/recycled water pump station and pipeline, (2) extend the existing RW pipeline, (3) re-grade and deepen basin, (4) construct internal berms.

<u>Project Budget</u>				
\$3,550,00	0*	\$97	,844	
<u>Start</u>	<u>Finish</u>	<u>Status</u>	Projected Cost	Actual Cost
10/01/12	10/01/14	In Progress	\$252,300	\$80,215
06/26/13	03/31/15	In Progress	\$32,200	\$8,942
01/15/15	07/31/15	Not Started	\$216,200	\$0
05/15/13	12/22/15	In Progress	\$107,300	\$8,687
07/15/15	10/18/15	Not Started	\$11,600	\$0
12/23/15	04/03/17	Not Started	\$2,930,400	\$0
			\$3,550,000	\$97 <i>,</i> 844
	\$3,550,000 <u>Start</u> 10/01/12 06/26/13 01/15/15 05/15/13 07/15/15	\$3,550,000*StartFinish10/01/1210/01/1406/26/1303/31/1501/15/1507/31/1505/15/1312/22/1507/15/1510/18/15	\$3,550,000* \$97 Start Finish Status 10/01/12 10/01/14 In Progress 06/26/13 03/31/15 In Progress 01/15/15 07/31/15 Not Started 05/15/13 12/22/15 In Progress 07/15/15 10/18/15 Not Started	\$3,550,000* \$97,844 Start Finish Status Projected Cost 10/01/12 10/01/14 In Progress \$252,300 06/26/13 03/31/15 In Progress \$32,200 01/15/15 07/31/15 Not Started \$216,200 05/15/13 12/22/15 In Progress \$107,300 07/15/15 10/18/15 Not Started \$11,600 12/23/15 04/03/17 Not Started \$2,930,400

*The project budget was recently amended from \$2.5 Million to match the projected budget

within the approved 2013 Amendment to the 2010 Recharge Master Plan Update.

The project was approved for a \$750,000 grant from the Department of Water Resources through the Santa Ana Watershed Project authority as part of Proposition 84.

Cost Sharing Document: Task Order No. 8 of the Master Agreement of 2014

Project Update:

A final draft copy of the proposed design improvements was completed and submitted to IEUA. A report will be circulated for review in October. Soil investigation work was completed in September. The collected data will be incorporated into the final preliminary design report. Currently the report is basing the rates on historical data.

Project Photo:



Aerial view of San Sevaine Basin No. 5





GWR SCADA UPGRADES PROJECT NO. EN14047 STATUS UPDATE: SEPTEMBER 24, 2014

The Inland Empire Utilities Agency's existing Supervisory Control & Data Acquisition (SCADA) system is comprised of a wide range of equipment that is located at various remote sites and facilities throughout the IEUA's RW and GWR facilities. During the master planning process, a thorough and comprehensive review and evaluation of the recycled water and groundwater recharge SCADA system was conducted. The Master Plan recommended SCADA upgrades to the RW and GWR SCADA systems. The purpose of these upgrades will provide the foundation of a robust, reliable and seamless control system that will sustain and support the continued growth of the RW and GWR programs.

Schedule:

	<u>Project Buc</u> \$892,000		<u>Actual Cost t</u> \$37,46		
<u>Phase</u>	<u>Start</u>	<u>Finish</u>	<u>Status</u>	Projected Cost	Actual Cost
Project Development	11/11/11	02/24/14	Completed	\$927	\$422
Design	02/26/14	12/01/14	In Progress	\$129,900	\$37,046
Permits	09/12/14	12/01/14	Not Started	\$10,000	\$0
Bid and Award	12/02/14	02/18/15	Not Started	\$428	\$0
Construction	02/19/15	04/16/16	Not Started	\$750,745	\$0
			-	\$892,000	\$37,468

This project qualified for a \$139,650 grant and a 1% interest 30-year loan at \$740,145 from the Santa Ana Project Water Authority and Clean Water State Revolving Fund loan program respectively.

Cost Sharing Document: Task Order No. 4 of the Master Agreement of 2014

Project Update:

Staff is requesting to increase the projected construction budget by \$91,400 to meet the recommended improvements on the Programmable Logic Controller (PLC) replacements at the five Rubber Dam/Basin Systems. The original design was to only replace the five PLCs at the Rubber Dam controller because it was out dated and no longer supported. However after careful evaluation of the system, DCS staff and MSO Technologies, the design consultant, concluded with a recommendation to replace the Basin PLC along with the Rubber Dam PLC so that one PLC is used for each facility. The added cost is in the construction effort. The design is scheduled for completion on December 1, 2014.

Project Photo:



San Sevaine turnout control panel





COMMUNICATION UPGRADES PROJECT NO. EN12019 STATUS UPDATE: SEPTERMBER 24, 2014

This project will transition the communication equipment within the remote GWR and RW sites (totaling over 20 sites) onto the new, faster and more reliable communication network. The upgrade will replace the radio equipment for each site and add several new communication towers to send all communication onto the Agency's new 18GHz Motorola network back-haul. The Communication System Upgrades anticipates all remote sites to be upgraded for integration with the new communication network, and seven monopoles necessary to improve the line-of-sight communication. After the completion of a predesign study, which will determine the required location and number of towers, the project will move forward with a design/build approach in implementing the communication upgrades.

Schedule:

	Project Budge	<u>et</u>	Actual Cost to	<u>Date</u>	
	\$1,245,000		\$176,680		
<u>Phase</u>	<u>Start</u>	<u>Finish</u>	<u>Status</u>	Projected Cost	Actual Cost
Project Development	11/11/11	01/17/14	Completed	\$5,771	\$47,639
Design	01/20/14	12/29/14	In Progress	\$135,129	\$129,410
Permits	03/17/14	03/05/15	In Progress	\$6,000	\$0
Construction	01/21/15	08/31/15	Not Started	\$1,098,100	\$0
				\$1,245,000	\$176,680

This project qualified for a \$192,850 grant and a 1% interest 30-year loan at \$1,022,105 from the Clean Water State Revolving Fund loan program, as part of the Proposition 50 grant program, and a Department of Water Resources Proposition 84 grant program through Santa Ana Project Water Authority.

Cost Sharing Document: Task Order No. 3 of the Master Agreement of 2014

Project Update:

The pre-design effort from Dahl Taylor & Associates, the design engineer, is completed and their findings are shown within the provided table. Due to the higher cost of adding new communication towers, staff is recommending to delay the towers to later improvement projects (i.e. the RMPU), but proceed in updating the current communication system at all sites to meet the Agency's new high speed network. Staff will solicit and contract the updated task to a qualified communication contractor as a Design/Build project approach.

Site	Remote Site	Distance	Tower Height (Feet)	Antenna Height
8th Street Basin	6-В	6.3 miles	Existing 55'	40' or above
Brooks Street Basin	6-B	10.8 miles	Existing 55'	55'
CB-11 MWD Turnout	6-B	1.6 miles	No tower (Need at least 45')	40' or above
CB-14 MWD Turnout	6-B	3.8 miles	No tower (Need at least 25')	20' or above
CB-15 MWD Turnout	6-B	2.5 miles	No tower (Need at least 20')	15' or above
CB-18 MWD Turnout	6-B	5.2 miles	No tower (Need at least 35')	30' or above
CB-20 MWD Turnout	6-B	4.8 miles	Need 10' extension on 25' square	30' or above
			monopole or new 35' tower	
College Heights	CCWRF	8.2 miles	Exitsing 55'	40' or above
Declez Basin	6-B	10.2 miles	Existing 55'	40' or above
Ely 3 Basin	RP-1	0.5 miles	Existing 55'	15' or above
Grove Basin	6-B	10.8 miles	Existing 55'	40' or above
Hickory Basin	6-B	6.1 miles	Existing 55'	40' or above
Hickory FMM Turnout	RP-4	1.3 miles	Existing 55'	40' or above
Jurupa Basin	6-B	8.8 miles	Existing 55'	40' or above
Lower Day Basin	6-B	2.9 miles	Existing 55'	15' or above
Montclair Basin	CCWRF	7.3 miles	Existing 55'	40' or above
Orchard RW Turnout	6-B	10.2 miles	No tower (Need at least 20')	15' or above
RP-3	6-B	10.4 miles	Existing 55'	40' or above
San Sevaine 5RW Turnout	6-B	4.5 miles	Existing 55'	40' or above
San Sevaine Basin 5	6-B	4.6 miles	No tower (25' lamp post or new 25' tower)	25' or above
Turner Basin 1	6-B	6.4 miles	Existing 55'	40' or above
Turner Basin 4	6-B	6.4 miles	Existing 55'	50' or above
Upland Basin	CCWRF	8.0 miles	No tower (Need at least 45')	40' or above
Victoria Basin	6-B	4.7 miles	Existing 55'	40' or above
Wineville Basin	6-B	8.8 miles	No tower (Need at least 45')	40' or above

The following table summarizes Dahl's findings:

Sites that need attention





CB20 NOISE MITIGATION PROJECT NO. EN14038 STATUS UPDATE: SEPTEMBER 24, 2014

In 2010, a recharge basin turnout structure was constructed within the Metropolitan Water District's right-of-way in the residential area of the City of Upland. The turnout was to provide immediate access to available raw water for the purpose of groundwater storage. The Noise Mitigation Project is to reduce the impact of operating noise to the surrounding residences. Current sound studies reveal the facility generates noise levels above the allowable limits permitted by Upland's Ordinances. As a public service effort, IEUA and Chino Basin Watermaster initiated a capital project to design and build a sound enclosure by a qualified sound specialist. The objective is to maintain compliance with City Ordinance and reduce the impact of noise to nearby residents.

Schedule:

	Project Budge \$160,000	<u>et</u>	Actual Cost to \$28,865	<u>Date</u>	
<u>Phase</u>	<u>Start</u>	<u>Finish</u>	<u>Status</u>	Projected Cost	Actual Cost
Project Development	09/25/13	01/23/14	Completed	\$11,319	\$182
Design	01/24/14	09/23/14	In Progress	\$9,057	\$28,683
Construction	09/24/14	12/19/14	Not Started	\$137,237	\$0
				\$157,613	\$28,865

Cost Sharing Document: CBFIP, Phase II Cost Sharing Agreement of 2006

Project Update:

C.E. Pickup concluded its additional sound survey analysis which confirmed that additional design improvements are required to meet municipal code requirements. The study mapped the measured noise level impact to the nearby residence without any mitigation and mapped the anticipated noise level impact with proper mitigation measures. The results of the study are summarized in the following page.

The project schedule has been extended to address the additional design efforts. Currently there is no immediate impact to the project budget of \$160,000 due to the placed contingencies within design and construction.



Estimated noise level at 1st level without mitigation





Estimated noise level at 1st level with mitigation

Estimated noise level at 2nd level with mitigation

Noise Level, dBA

	>	80
75	-	80
70	-	75
65	-	70
60	-	65
55	-	60
50	-	55
45	-	50
	<=	45





HICKORY BASIN ARIZONA CROSSING PROJECT NO. EN12025 STATUS UPDATE: SEPTEMBER 24, 2014

The Hickory Basin Arizona Crossing Project designed and constructed a new soil cement access road and culvert over the inlet channel at the Hickory Basin. The purpose of the access road was to provide immediate maintenance and operational access for IEUA and San Bernardino Flood Control District (SBCFCD) personnel to the north area of the Basin without interrupting recharge or storm water detention operations. The goal of the project is to minimize maintenance costs and mitigate recharge interruptions due to basin dewatering when accessing critical pumping equipment for routine or emergency maintenance. Secondly, the access crossing was also a required condition with the Flood Control as part of a maintenance agreement to utilize the basin for continuous recharge. This project was a part of the Chino Basin Facilities Improvement Program, Phase II which was deferred due to Flood Control permitting approvals. In January 2012, the project re-commenced bidding after receiving full permitting documents from the District.

Schedule:

	<u>Project Bu</u> \$332,97		<u>Actual Cost</u> \$220,4		
<u>Phase</u>	<u>Start</u>	<u>Finish</u>	<u>Status</u>	Projected Cost	Actual Cost
Design	10/01/11	12/31/11	Completed	\$7 <i>,</i> 200	\$7,200
Permits	10/01/11	01/12/12	Completed	\$2 <i>,</i> 000	\$1,518
Bid and Award	01/12/12	03/21/12	Completed	\$1,200	\$307
Construction	03/22/12	04/17/13	Completed	\$222,571	\$211,392
Added Contingencies				\$100,000	
				\$332,971	\$220,417

The added contingency was included into the project towards the later phase of construction to address potential change orders with the General Contractor.

Cost Sharing Document: CBFIP, Phase II Cost Sharing Agreement of 2006

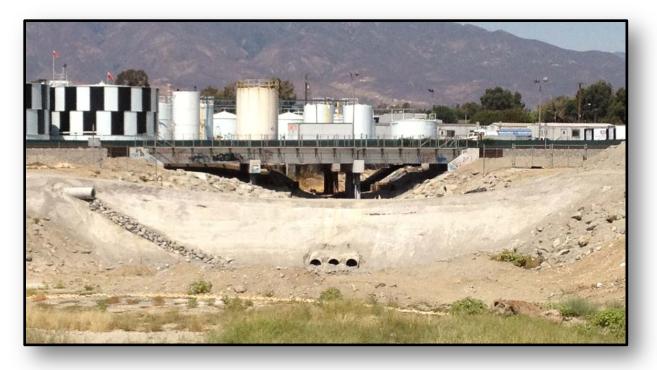
Project Update:

The project was fully completed and operational on April 2013 with a final total project cost of \$220,417. In mid-September, IEUA legal counsel concluded the lawsuit against IEUA from the General Contractor, Kaveh Engineering and Construction with an agreed settlement of \$55,000. As soon as the cost is finalized IEUA will coordinate with Watermaster on addressing the reimbursement billing.

Project Photo:



Completed access road leading to the north side of Hickory Basin



Completed Arizona Crossing which spans the inlet channel





UPPER SANTA ANA RIVER WATERSHED HABITAT CONSERVATION PLAN PROJECT NO. RW15002 STATUS UPDATE: SEPTERMBER 24, 2014

The purpose of the Habitat Conservation Plan is to investigate and develop a plan to offset the biological impact of future water and recharge improvement projects in the Chino Basin area that have the potential to affect federally-listed endangered, threatened or special status species. This project will be a part of a regional plan with other proposed projects within the Upper Santa Ana River Region. The goal of the project is to identify in advance sites that may require biological offset/mitigation and avoid permitting delays on future RMPU projects or other identified recharge improvement projects.

Schedule:

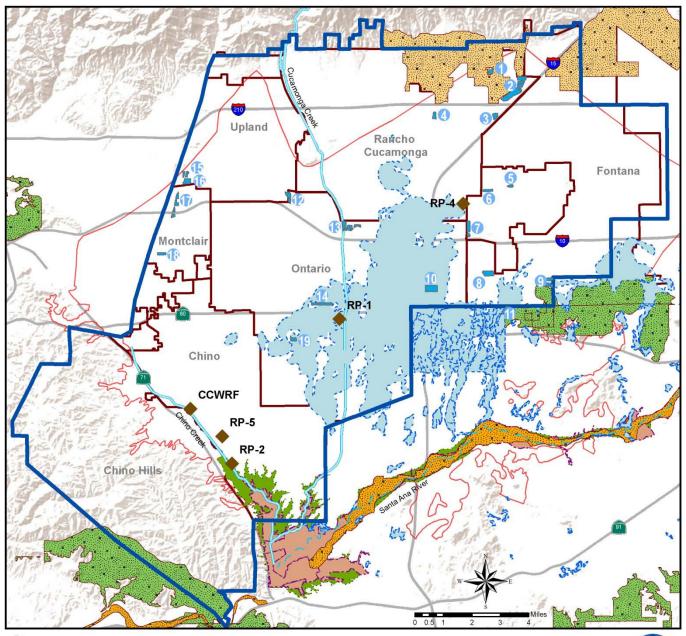
	<u>Project Budget</u> \$160,000		Actual Cost to Date \$0			
<u>Phase</u> Investigate/Plan	<u>Start</u> 07/01/14	<u>Finish</u> 06/30/17	<u>Status</u> In Progress	Projected Cost \$160,000 \$160,000	Actual Cost \$0 \$0	

Cost Sharing Document: Task Order No. 7 of the Master Agreement of 2014

Project Update:

Five projects sites, which are listed below and are part of the 2013 Amendment to the 2010 Recharge Master Plan Update (RMPU), have been determined to potentially impact federallylisted species. Currently, the Upper Santa Ana River HCP team received notice in regards to receiving grant funding. Further details on the grant amount are yet to be determined and allocated.

RMPU Projects	<u>Location</u>	Potential Species		
PID - 19a	Wineville Basin	DSF		
PID - 12	Lower Day Basin	SBKR,CAGN,BUOW		
PID - 7	San Sevaine Basins (1-5)	SBKR		
PID - 11	Victoria Basin	SBKR		
PID - 2	Montclair Basins (1-3)	CAGN		
DSF=Delhi Sands Flower-Loving Fly; SBKR=Merriam's San Bernardino Kangaroo Rat; CAGN=California Gnatcatcher; BUOW=Burrowing Owl				



Legend



Endangered Species Habitat Ranges

Delhi Sands Flower-Loving Fly



Santa Ana Sucker

Southwestern Willow Flycatcher

Least Bell's Vireo

California Gnatcatcher

Recharge Basins

Etiwanda Debris Basin - (SBCFCD)
 San Sevaine Basins - (SBCFCD)
 Victoria Basin - (SBCFCD)
 Lower Day Basin - (SBCFCD)
 Banana Basin - (SBCFCD)
 Banana Basin - (SBCFCD)
 Hickory Basin - (SBCFCD)
 Dirupa Basin - (SBCFCD)
 Uvineville Basin - (SBCFCD)
 Declez Basin - (SBCFCD)
 Ath Street Basin - (SBCFCD)
 Ath Street Basin - (SBCFCD)
 Decleg Heights Basins - (CBWCD)
 College Heights Basins - (CBWCD)
 Upland Basin - (CBWCD)
 Brooks Street Basins - (CBWCD)





2013RMPU AMENDMENT YIELD ENHANCEMENT PROJECTS PROJECT NO. RW15003 STATUS UPDATE: SEPTEMBER 24, 2014

Under the 2013 Amendment to the 2010 Recharge Mater Plan Update, the document recommended that the yield enhancement projects listed below be implemented for preliminary-design, environmental review, permitting, and final design.

Basin Projects	Key Project Improvements		Recycled Water
		acre-feet per year	
CSI Storm Water Basin	Improve the site as a new storage and recharge facility by deepening and removing over 36,000 cubic yard of soil	81	-
Wineville, Jurupa, and RP3	Improve storage and recharge capacity by adding pumps and conveyance systems between basins and provide new diversion structures	3,166	2,905
Sierra	Improve storage and recharge by removing over 40,000 cubic yards of soil - (<i>Deleted per Watermaster's Request</i>)	64	-
Declez Basin	Improve storage and capacity by modifying existing or adding new structures	241	-
Victoria Basin	Improve the infiltration rate and increase storage by removing settled deposits	43	-
Turner Basin	Increase storage and recharge by raising the spillway height	66	-
Ely Basin	Improve storage and recharge by removing 470,000 cubic yard of basin material	221	-
Lower San Sevaine Basin	Construct a new storage flow through basin south-east of Victoria	1,221	-
Montclair Basins	Increase storage and recharge capacity by directing more channel flow	248	-
	5,351	2,905	

Schedule:

	Project Budget \$8,122,500		Actual Cost to Date -		
<u>Phase</u>	<u>Start</u>	<u>Finish</u>	<u>Status</u>	Projected Cost	Actual Cost
Project Development	01/07/14	02/18/15	In Progress	\$58,100	-
Preliminary Design	02/19/15	06/30/16	Not Started	\$1,475,100	-
Environmental	02/19/15	06/30/16	Not Started	\$577,100	-
Design	07/01/16	12/29/17	Not Started	\$5,605,100	-
Permits	09/30/16	12/29/17	Not Started	\$407,100	-
				\$8,122,500	-

Cost Sharing Document: Task Order No. 1 of the Master Agreement of 2014

Project Update:

Currently, staff is finalizing the project description and will begin the process of developing a scope of work to have an Engineering Consultant provide preliminary design evaluations and design approach recommendations.

Project Photo:



Aerial and site photo of the proposed location of the Lower San Sevaine







LOWER DAY RMPU IMPROVEMENTS PROJECT NO. RW15004 STATUS UPDATE: SEPTEMBER 24, 2014

This project will modify the existing intake structure and install pneumatic gates in the channel. The pneumatic gates will monitor and self-adjust to maintain a water level or rate of discharge over the gate structure in accordance with an established programmable logic controller. The basin's existing embankment will be evaluated and reconstructed to meet the requirements of a dam embankment with the Division of Safety of Dams. Improvement on the embankment may include excavation and keying to prevent piping and seepage.

The potential increase in recharge with the inlet is 1,469 acre-feet per year as per 2010 RMPU.

Schedule:

	<u>Project Bu</u> \$2,480,0	•	<u>Actual Cos</u> -	t to Date	
Phase	<u>Start</u>	<u>Finish</u>	<u>Status</u>	Projected Cost	Actual Cost
Project Development	07/01/14	12/17/14	In Progress	\$25,000	-
Pre-Design	12/18/14	04/10/15	Not Started	\$30,000	-
Design	04/13/15	11/05/15	Not Started	\$145,275	-
Environmental Impact	05/29/15	10/10/17	Not Started	\$76,200	-
Permits	07/28/15	06/01/16	Not Started	\$66,000	-
Bid and Award	06/02/16	08/26/16	Not Started	9,000	-
Construction	08/29/16	01/16/18	Not Started	\$2,128,525	-
				\$2,480,000	-

Cost Sharing Document: Task Order No. 2 of the Master Agreement of 2014

Project Update:

Currently, staff finalized the project description and coordinated/scheduled the required biological survey at the site. The request for proposal document for design services will begin this month. A draft is currently available for Watermaster's review and comment.

Project Photo:



Aerial photo of the project site



Field photo showing the location of the proposed improvement to the existing channel to increase storm water capture