

**CB20 NOISE MITIGATION MEASURES
PROJECT NO. EN14034
STATUS UPDATE: NOVEMBER 30, 2013**

Provide sound mitigation measure for an imported recharge turnout (CB-20) in the City of Upland. The site is located within a residential area at the corner of Winston Avenue and E 18th Street. While the equipment is running, residents have complained to the City of the loud sound of rushing water. The majority of the noise is generated from a 24-inch flow control valve (Clay Valve) and a conical water discharge pipe. The sound produced by the equipment is above City Ordinance noise levels. A temporary measure was implemented to reduce the current noise levels by placing thin sound blankets over the valve and discharge pipe. The temporary measures have not fully reduced noise levels below the City Ordinance. A permanent solution is required to stay in compliance with City Ordinance. This project will be implemented by using a design/build approach.

Schedule:

	<u>Project Budget</u>		<u>Actual Cost to Date</u>		
	\$160,000		\$502		
<u>Phase</u>	<u>Start</u>	<u>Finish</u>	<u>Status</u>	<u>Projected Cost</u>	<u>Actual Cost</u>
Project Development	09/25/13A	01/16/14	In Progress	\$11,382	\$502
Design	01/17/14	02/27/14	Not Started	\$9,090	\$0
Construction	02/28/14	06/30/14	Not Started	\$139,528	\$0
				<u>\$160,000</u>	

Project Update:

The project is in the RFP phase to solicit design/build service to develop and install the noise enclosure system. The RFP was released on October 15, 2013. A pre-proposal meeting was held on November 12, 2013. Two interested General Contractors attended. The proposal request will close on December 5, 2013. The contract will be awarded before January 15, 2014.

Project Photos:



CB-20 Turnout Facility



CB20 Outlet while in use

JURUPA PUMP STATION HVAC IMPROVEMENTS
PROJECT NO. EN14040
STATUS UPDATE: NOVEMBER 30, 2013

The Jurupa Pump Station (PS) is a key recharge contributor that delivers storm water runoff, local runoff, and recycled water to RP-3. The electrical equipment, such as the motor control center, variable frequency drives (VFDs) and communication equipment is critical to the operation of the pump station. Due to the high temperatures experienced, vital electrical equipment has been experiencing temperature related failures and PS shutdowns. The project includes installation of a permanent air conditioning system, roof thermal insulation, controls, etc. for the electrical equipment at the Jurupa PS.

Schedule:

<u>Phase</u>	<u>Project Budget</u>		<u>Actual Cost to Date</u>		
	<u>Start</u>	<u>Finish</u>	<u>Status</u>	<u>Projected Cost</u>	<u>Actual Cost</u>
				\$300,000	\$993
Project Development	09/02/13A	10/15/13	Completed	\$1,000	\$993
Design	10/16/13A	02/28/14	In-Progress	\$45,000	\$0
Bid and Award	03/01/14	05/15/14	Not Started	\$4,000	\$0
Construction	05/16/14	09/30/14	Not Started	\$100,000	\$0
				<u>\$300,000</u>	

The total project cost was originally \$300,000. Through the Pre-design Phase the Agency has been able to evaluate the details of the project and simplify the scope. The updated total project cost is not-to-exceed \$150,000, with a Chino Basin Watermaster (CBWM) 50% cost share of \$75,000.

Project Update:

The Preliminary Design Report (PDR) review meeting was held on December 5, 2013 with the design consultant, Kitchell. The PDR is being updated to reflect additional cost-effective options: 1) VFD panel-mounted air conditioning unit, 2) A/C unit with direct ducting to the VFD panel. The Agency anticipates receiving the 100% Design Submittal in early February 2014.

Project Photo:



MCC Control Panel



Pumping System

RW & GWR COMMUNICATION SYSTEM UPGRADES
PROJECT NO. EN12019
STATUS UPDATE: NOVEMBER 30, 2013

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 twenty-seven existing sites to be upgraded for integration with the new communication network, and seven monopoles necessary to improve the line-of-sight communication. The project will use a design/build approach in implementing the communication upgrades.

Schedule:

<u>Project Budget</u>	<u>Actual Cost to Date</u>
\$1,245,000	\$4,172

<u>Phase</u>	<u>Start</u>	<u>Finish</u>	<u>Status</u>	<u>Projected Cost</u>	<u>Actual Cost</u>
Project Development	11/11/11A	01/27/14	In Progress	\$5,864	\$4,172
Equipment Pre-purchase	11/11/11A	08/06/14	In Progress	\$0	\$0
Design	01/28/14	08/06/14	Not Started	\$135,092	\$0
Permits	03/25/14	03/13/15	Not Started	\$46,000	\$0
Bid and Award	08/07/14	08/07/14	Not Started	\$0	\$0
Construction	08/07/14	07/02/15	Not Started	\$1,058,044	\$0
				<u>\$1,245,000</u>	

The Agency is currently seeking additional funding through available grants. The Agency is also seeking a state revolving fund (SRF) loan through the Santa Ana Watershed Project Authority.

Project Update:

The project is in the proposal phase where a request for proposals (RFP) was issued on October 22, 2013. A pre-proposal meeting was held on November 5, 2013. On November 21, 2013, the Agency received one proposal from Dahl, Taylor & Associates. Currently a negotiation meeting is being scheduled. The final date the award the Design/Build contract set for January 15, 2014. In the meantime an Environmental Consultant will be preparing the California Environmental Quality Act (CEQA) research and documentation.

Project Photo:



Basin Communication Tower

**RW & GWR SCADA SYSTEM UPGRADES
PROJECT NO. EN14047
STATUS UPDATE: NOVEMBER 30, 2013**

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>Phase</u>	<u>Project Budget</u>		<u>Actual Cost to Date</u>		
	<u>Start</u>	<u>Finish</u>	<u>Status</u>	<u>Projected Cost</u>	<u>Actual Cost</u>
				\$892,000	\$0
Project Development	11/11/11A	02/06/14	In Progress	\$3,942	\$0
Equipment Pre-purchase	11/11/11A	07/24/14	In Progress	\$0	\$0
Design	02/07/14	07/24/14	Not Started	\$98,240	\$0
Permits	04/02/14	11/24/15	Not Started	\$33,000	\$0
Bid and Award	07/25/14	09/17/14	Not Started	\$2,140	\$0
Construction	09/18/14	01/15/16	Not Started	\$754,678	\$0
				<u>\$892,000</u>	

The Agency is currently seeking additional funding with available state and federal grants. The Agency is also seeking a state revolving fund (SRF) loan through the Santa Ana Watershed Project Authority.

Project Update:

On November 6, 2013 staff released a solicitation request for design services proposal. A pre-proposal meeting was held on November 21, 2013. The Agency is scheduled to receive proposals on December 12, 2013 and award the design contract as early as January 15, 2014.

Project Photo:



San Sevaine Turnout Control Panel

**SAN SEVAINE BASIN IMPROVEMENTS PROJECT
PROJECT NO. EN13001
STATUS UPDATE: NOVEMBER 30, 2013**

San Sevaire basins consist of five, soft-bottomed basins along the San Sevaire 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). The basins currently operate by delivering RW only to basin 5, which has the lowest infiltration rate as compared to the other basins. This has limited current RW recharge to approximately 500 AFY.

The Project will evaluate and construct improvements needed to maximize infiltration and recharge of RW at the San Sevaire Basins.

Schedule:

<u>Project Budget</u>	<u>Actual Cost to Date</u>
\$2,500,000	\$69,866

<u>Phase</u>	<u>Start</u>	<u>Finish</u>	<u>Status</u>	<u>Project Cost</u>	<u>Actual Cost</u>
Pre-Design	10/01/12	12/30/13	In Progress	\$65,000	\$57,712
Soil Investigation	09/15/13	11/15/13	Not Started (1)	\$60,000	\$12,154
Final Design	03/01/14	04/15/15	Not Started	\$160,000	\$0
Construction	07/15/15	09/15/16	Not Started	\$2,215,000	\$0
				<u>\$2,500,000</u>	

Project Update:

The project is in the Preliminary Design phase. Tom Dodson and Associates is currently reviewing basin improvements to determine CEQA and other environmental impact requirements. The results of TDA's finding will be included as part of the predesign report.

<u>Recent Activities:</u>	<u>Date</u>	<u>Status</u>
▪ Perform Soil Investigation	September 2013	Delayed (2)
▪ Obtain CEQA and Impacts from TDA	12/30/13	In Progress
▪ Complete Project Development Report	01/15/14	In Progress

Notes:

(1) Includes permit and environmental survey costs.

(2) To expedite soil investigations and reduce efforts needed in obtaining a new ACOE permit, Agency staff has been coordinating with ACOE to allow the activities to be included as part of the Agency's ACOE O&M permit. This approach will not require the Agency to file for a new permit and will eliminate additional biology surveys and a potential 12 month review period. Tentatively scheduled to receive authorization by November 2013

Project Photos:



San Sevaine Basin 5 - Berm

**TURNER BASIN RECHARGE IMPROVEMENTS
PROJECT NO. WR11017.00
STATUS UPDATE: NOVEMBER 30, 2013**

The project involves the grading and hauling to create two new recharge basins east of Turner Basin No. 4. It will also install new pipes, gates, and controls for the two new recharge basins. This project will also connect to an existing flood control retention facility, Basin 5, by constructing a new stormwater piping from Deer Creek Channel into Basin 8. This will allow the Turner Basin site to receive and capture channel flow further upstream and increase recharge potential.

Schedule:

	<u>Project Budget</u>	<u>Actual Cost to Date</u>			
	\$1,275,000	\$ 942,634			
<u>Phase</u>	<u>Start</u>	<u>Finish</u>	<u>Status</u>	<u>Projected Cost</u>	<u>Actual Cost</u>
Project Development	11/01/11A	02/22/12A	Completed	\$32,622	\$32,797
Master Plan	02/22/12A	02/22/12A	Completed	\$326	\$444
Pre-design	02/22/12A	03/30/12A	Completed	\$13,093	\$13,216
Environmental Impact	03/01/11A	12/20/12A	Completed	\$72,892	\$73,546
Design	04/02/12A	02/22/13A	Completed	\$120,772	\$122,203
Permits	03/30/12A	12/20/12A	Completed	\$9,927	\$9,927
Bid and Award	12/21/12A	02/20/13A	Completed	\$2,736	\$2,747
Construction	02/20/13A	02/28/14	In Progress	\$1,022,632	\$ 687,754
				<u>\$1,275,000</u>	

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

Project Update:

The project is in the last two months of construction. Currently the Contractor (KIP Construction) is on the east side of Basin 5 to finalize the construction of a new piping between Deer Creek Channel and Basin 8 to capture and convey channel flow further upstream of the Turner Basin System. The Contractor has completed about 98-percent of the work. They will complete the final testing and certifications in December and January. Dispatch, the grading and hauling contractor who is responsible to develop the two new basins which are east of Basin No.4 has roughly 30,000 cubic yards of material to remove before final grading.

A construction change order in the amount of \$21,800 was issued on October 16, 2013 to remove buried debris within Basin 8. On December 3, 2013, \$15,000 change order was issued

to address the thief of electrical and control wires at Basins 1 and 4. The change order will replace and secure the new cables. A third change order is pending to modify the outlet gate at Basin 8 to address maintenance access concerns.

Project Photos:



Construction of Junction Structure



Completed Junction Structure with gates



**Installed 60-inch connection pipe into Basin 8
Junction Structure**

**WINEVILLE BASIN PROOF OF CONCEPT PROJECT
PROJECT NO. EN13031.00
STATUS UPDATE: NOVEMBER 30, 2013**

The Wineville Basin Proof of Concept (POC) is an investigative project that consists of six cells designed to test and evaluate percolation rates at strategic locations throughout the basin. Each of the test cells will be 0.5 acres in size. The test cells will be excavated at different depths to allow the project to gather percolation data for soils above and below the previously identified clay layer. After completion of the testing, a final project report will be developed.

Schedule:

<u>Project Budget</u>	<u>Actual Cost to Date</u>
\$424,300	\$226,457

<u>Phase</u>	<u>Start</u>	<u>Finish</u>	<u>Status</u>	<u>Projected Cost</u>	<u>Actual Cost to Date</u>	<u>Note</u>
Design	10/2012	01/2013	In Progress	\$22,000	\$10,365	1
Weeding	09/2013	09/2013	Complete	\$28,000	\$28,000	2
Permits	03/2013	06/2013	Complete	\$2,200	\$2,200	
Environmental Assistance	03/2013	11/2013	In Progress	\$22,600	\$18,800	3
Survey	09/2013	11/2013	In Progress	\$21,000	\$11,767	4
Construction	09/2013	11/2013	In Progress	\$183,000	\$116,480	5
Extra Equipment			Complete	\$7,500	\$7,500	6
Ontario Pumping Costs	10/2013	11/2013	In Progress	\$36,000	\$15,000	7
CM and Testing Support	09/2013	11/2013	In Progress	\$36,000	\$16,345	
Testing Contingency				\$66,000		8
				<u>\$424,300</u>		

Notes:

- 1) Design complete, pending final project report and consultant support services during testing.
- 2) Weeding activities to allow work to commence prior to regulated bird nesting season. Initial project scope assumed basin would be clear of vegetation to avoid nesting season regulations. Additional weeding was necessary due to aggressive weed growth.
- 3) Additional costs incurred due to biological surveys requirements set forth in regulatory permits. Regulatory permit conditions received after initial budget established.
- 4) Additional site topographic survey requirements set forth in regulatory permits. Regulatory permit conditions received after initial budget established. Work activities include pre and post aerial surveys.
- 5) Low bid price received during bidding phase was \$183,000.
- 6) Procurement of 8 pressure transducers and data logger equipment for data monitoring and basin testing.
- 7) Estimated cost. Pending November usage costs.
- 8) Additional cost per month of testing. Includes pumping, labor, equipment, and additional

mobilization.

Project Update:

Construction was complete September 30, 2013 and testing commenced on October 1, 2013. Testing was conducted for two months and ended on November 25, 2013. The data is currently being processed and will be presented at a later date. The Contractor was scheduled onsite December 2, 2013 to restore site back to original condition. The restoration process is complete. A final aerial survey will be completed for ACOE permit compliance.

<u>Schedule Activity:</u>	<u>Finish Date</u>	<u>Notes</u>
- Testing	11/26/13	Complete
- Remove Pipe	11/27/13	Complete
- Survey Cells	12/02/13	Complete
- Restore Site	12/06/13	Complete
- Survey Site	12/25/13	Pending – Permit Requirement
- Submit ACOE Rpt	01/10/14	Permit Requirement
- Final Report	01/30/14	Not Started

There are no changes to project budget or schedule. The projected project cost is \$424,300, original project cost was amended October 24, 2013 to include an additional 30 days of testing. Refer to Table 1 for the project cost summary.

Project Photos:



**Berm removed and channel cleaned
(12/03/13)**



**Access roads removed and basin restored
to original (12/03/13)**