

RMPU PROJECTS



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**SAN SEVAINE IMPROVEMENTS PROJECT
PROJECT NO. EN13001
STATUS UPDATE: OCTOBER 9, 2020**

As part of the 2013 Amendment to the 2010 Recharge Master Plan Update (RMPU), this Project will evaluate, design, and construct basin improvements needed to maximize infiltration and recharge capture at the San Sevaire Basins. The final recommendation from the preliminary development report proposes to implement: (1) a new stormwater / recycled water pump station in Basin 5, (2) directly tying it into an existing RW pipeline, (3) place new pipelines and headwalls into Basins 1, 2, and 3, and (4) install monitoring wells and lysimeters. The proposed improvements will add 642 acre-feet per year of stormwater and 4,100 acre-feet per year of recycled water for groundwater recharge.

Schedule:

<u>Project Budget</u> \$6,460,000	<u>Actual Cost to Date</u> \$6,225,003
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<u>Phase</u>	<u>Start</u>	<u>Finish</u>	<u>Status</u>	<u>Projected Cost</u>	<u>Actual Cost</u>
Pre-design	10/01/12	05/14/15	Completed	\$160,000	\$159,898
Environmental Impact	06/26/13	01/20/16	Completed	\$30,000	\$24,283
Design	05/15/15	12/12/16	Completed	\$500,000	\$555,899
Permits	05/15/13	01/31/18	Completed	\$25,000	\$25,000
Bid and Award	12/13/16	09/20/17	Completed	\$5,000	\$5,000
Construction	09/21/17	01/31/19	Completed	\$5,740,000	\$5,454,923
Minor Task/Warranty	02/02/19	Pending	In-Progress		
				\$6,460,000	\$6,225,003

Grant/Loan Update:

Awarded a \$750,000 state grant from the Department of Water Resources through the Santa Ana Watershed Project Authority as part of Proposition 84 and a \$375,000 federal grant from the US Bureau of Reclamation. Awarded Clean Water State Revolving Fund (SRF) for the construction of the project. This awarded financing includes a \$2.5 million forgiveness grant against the principal.

Cost Sharing Document:

- Task Order No. 8 of the Master Agreement of 2014 (August 2014)
- 1st Amendment Task Order No. 8 of the Master Agreement of 2014 (April 2015)
- 2nd Amendment Task Order No. 8 of the Master Agreement of 2014 (May 2017)

Project Update:

- Since January 31, 2019, all major construction activities were completed. The following construction contracts are closed:
 - Gwinco Construction (Basin Improvement Construction)
 - Yellow Jacket Drilling (Monitoring Well Construction)
 - WA Rasic (Edison Conduit Construction)
- Continuing to address a potential warranty issue with pumps. The pumps were removed and sent for evaluation to determine failure cause. The initial findings for both pumps are the following:
 - Bearing cover on the units had seized, heated and cracked
 - Thrust bearings failed
 - Lower bearings failed
 - Bearing nut & washer damaged
 - Rotor wear on both bearing journals
 - Rotor bent
 - Impeller wear ring shows rub marks
 - Case wear ring shows rub marks

The initial report posits the failure to Electrical Fluting. Fluting is the characterized appearance of lined ridges (wear or erosion) on the bearing raceway surface. It reduces the bearings' ability to rotate efficiently and effectively. The fluting is created by an unintended electrical current or voltage crossing from the motor shaft through the bearing housing. This is common for variable drive system. IEUA is not in full agreement with the findings because the system is not using a variable drive system. The manufacture continues to evaluate the problem, and in the meantime, they have requested to assess the identical spare pump to record any similar occurrences. The spare is to be picked and evaluated in October. Further updates to follow.

- On a Thursday evening, September 24, the American Society of Civil Engineers (ASCE) San Bernardino-Riverside Branch presented the Inland Empire Utilities Agency and Chino Basin Watermaster with the Sustainable Category Award for the San Sevaine Basin Improvements Project. The event took place over a virtual held banquet where other cities and districts were in attendance to be recognized for certain accomplishments in the field of Civil Engineering. Recently, the Los Angeles Section of ASCE has announced the Project was also awarded the Sustainable Engineering Project of the Year. The award presentation is scheduled for October 22, virtually.



**POST 2014 STORMWATER RECHARGE PROGRAM
PROJECT NOS. RW15003.00/.01/.02/.03/.04/.05/.06 & RW15004.00
STATUS UPDATE: OCTOBER 9, 2020**

“Post 2014 Stormwater Recharge Program” recommended for final design, bid and construction:

PID	Basin Projects	Post 2014 Stormwater Recharge Program ⁽²⁾	Initial Yield		Updated Yield ⁽¹⁾	
			SW	RW	SW	RW
			acre-feet per year			
12	Lower Day Basin	Increase stormwater diversion and basin storage	789	-	993	-
11	Victoria Basin	Improve the infiltration rate and increase storage by removing settled deposits	43	120	75	120
2	Montclair Basins	Increase storage and recharge capacity by directing more channel flow	248	-	96	-
18a	CSI Basin ⁽³⁾	New storage and recharge facility by deepening basin	81	-	-	-
23a	Wineville, Jurupa, RP3 & Force Main	Improve storage and recharge capacity with pumps/conveyance systems between basins and provide new diversion structures	3,166	2,905	2,921	2,905
Total			4,327	3,025	4,085	3,025

- (1) Updated to reflect new values as calculated after the completion of the PDR.
- (2) San Sevaine Basin Improvement project is a part of the “Post 2014 Stormwater Recharge Program” but it is not listed here for it has its own status update sheet.
- (3) 18a (CSI) removed from the list of ongoing RMPU projects. Yield value of 100 AFY is removed.

Project Budget:

Project Budget
\$23,016,080

Actual Cost to Date
\$5,589,122

	RMPU Projects	Total Project Cost	Actual Cost (to date)	
Ongoing Projects	Lower Day Basin (PID 12)	\$4,008,000	\$1,363,067	
	Victoria Basin (PID 11)	\$176,072	\$176,072	
	Montclair Basins (PID 2)	\$1,788,100	\$272,206	
	RP-3 Basin	(23a)	\$1,486,700	\$1,064,716
	Wineville Basin		\$14,996,200	\$2,152,053
	Jurupa Basin			
	Wineville/Jurupa Force Main			
Deferred Projects	East Decléz (Non RMPU Project)	\$114,000	\$114,000	
	Decléz Basin (PID 27)	\$105,000	\$105,000	
	Turner Basin (PID 14)	\$42,000	\$42,000	
	Ely Basin (PID 15a)	\$236,000	\$236,000	
	CSI Basin (PID 18a)	\$64,008	\$64,008	
Total		\$23,016,080	\$5,589,122	

Cost Sharing Documents:

Lower Day Basin – PID 12 (Task Order No. 2)	
Watermaster’s Share	\$2,883,000
IEUA’s Share	\$0
Grant Funding	\$1,125,000
Sub-Total	\$4,008,000
Victoria Basin – PID 11 (Task Order No. 10)⁽⁴⁾	
Watermaster’s Share	\$88,036
IEUA’s Share	\$88,036
Sub-Total	\$176,072
Montclair Basin – PID 2 (Task Order No. 11)	
Watermaster’s Share	\$1,788,100
IEUA’s Share	\$0
Sub-Total	\$1,788,100
Wineville/Jurupa/RP3/Force Main – PID 23a (Task Order No. 9)⁽⁵⁾	
Watermaster’s Share	\$7,554,135
IEUA’s Share	\$387,315
SWRCB Grant	\$8,241,450
USBR Grant	\$300,000
Sub-Total	\$16,482,900
East Declez/Declez – PID 27 /Turner – PID 27/Ely PID – 15a (Task Order No.1)	
Watermaster’s Share	\$497,000
IEUA’s Share	\$0
Sub-Total	\$497,000
CSI Basin (Task Order PENDING)⁽⁶⁾	
Watermaster’s Share	\$64,008
IEUA’s Share	\$0
Sub-Total	\$64,008
Total	23,016,080

(4) Amending TO 10 to reflect the total project cost from the projected cost of \$168,800 to the final cost of \$176,072.

(5) Includes RP-3, Wineville, Jurupa, and Wineville-Jurupa Force Main’s total projected costs

(6) Drafting a Task Order to end the scope and finalize the final cost as \$64,008

Grant/Loan Update:

RMPU Projects		Total Project Cost	Funding Program	Grant Amount
Lower Day Basin (PID 12)		\$4,008,000	Grant Prop. 84 DWR/SAWPA	\$750,000
			USBR	\$375,000
Victoria Basin (PID 11)		\$168,800	-none-	
Montclair Basins (PID 2)		\$1,788,100	SRF Loan	
RP-3 Basin	(23a)	\$1,486,700	SWRCB – Stormwater	\$743,350
			USBR	\$300,000
Wineville/Jurupa /Force Main		\$14,996,200	SWRCB – Stormwater	\$7,498,100
			2018 Water Smart Drought	\$750,000
Total		\$22,447,800		\$10,416,450

Project Update:

1) The following are updates to each of the on-going RMPU projects:

- a) **Victoria Basin** – Project completed.
- b) **Wineville/Jurupa Storm Water Distribution Pipeline** – Due to the extended time it took to receive the permits from US Army Corps of Engineers and Santa Ana Regional Water Quality Control Board, the project schedule was pushed further out. The revised completion date for the permitting phase is now late November. This is necessary to provide the additional time to ensure all required permits are fully approved and received. The permit with San Bernardino County Flood Control District is the final document needed before bidding and construction can begin. With this adjusted schedule for the activities before construction, the final project end date is projected to be May 2022.

Currently, the project is still within budget, however, recently added, projected costs may require an adjustment to the total project. These additional costs are for the following:

- \$60,000 - mitigation efforts under a permit condition to offset the project's impact within the basin.
 - \$20,000 – additional compliance requirements to ensure construction activities prevent and avoid the spread of the yellow-star thistle. This plant is regarded by state and federal agencies as invasive and non-native. It is known to invade native plant communities, reducing biodiversity, and wildlife habitat and forage. Since the area is within the Waters of the US which may attribute to spreading of the species, additional requirements are needed to manage and control the potential spread.
- c) **Montclair Basin** – Continuing to address the extended wait for a permit with US Army Corps. The Corps recently requested and received an additional permit application for the project to cover the Section 404 requirements. This additional permitting document will further delay the project construction bidding.
 - d) **Lower Day Basin** – Construction in progress. Recently, the contractor completed the down drain installation and access road restoration. Currently, they are working within the main channel to prepare for the installation of the diversion gate, the new pneumatic gate to allow stormwater within the channel to be diverted into basin at a higher volume. Also, currently, IEUA is addressing potential change orders towards revising the location of the gate's stilling well system to opposite location to meet manufacturing requirements and address hydraulic concerns. Cost for these changes are within the project's available contingencies. Further updates to follow.
Construction completion is still shown as December 2020, however, recent delays with materials and equipment and efforts with SCE due to the COVID pandemic may likely impact the end date. At this time, IEUA and the contractor continue to manage through these issues with the intent of maintaining the schedule.
 - e) **RP-3 Basin Improvement** –
 - i) Demo work completed.
 - ii) Excavation completed.
 - iii) The remaining Basin Improvement at RP-3 will be going out to bid. This was delayed due to COVID.

Schedules:

Victoria Basin (PID 11): No Schedule (Project Completed)

Wineville/Jurupa/Force main (PID 23a) & Montclair Basin (PID 2):

<u>Phases</u>	<u>Start</u>	<u>Finish</u>	<u>Status</u>
Project Development	07/01/14	12/17/14	Completed
Preliminary Design	12/18/14	06/21/17	Completed
Environmental	12/18/14	12/31/17	Completed
Permits	06/22/17	11/25/20	In Progress
Design	12/18/14	02/28/20	Completed
Bid and Award	11/25/20	02/17/21	Not Started
Construction	02/24/21	05/30/22	Not Started

Lower Day (PID 12):

<u>Phases</u>	<u>Start</u>	<u>Finish</u>	<u>Status</u>
Project Development	07/01/14	12/17/14	Completed
Preliminary Design	12/18/14	06/21/17	Completed
Environmental	12/18/14	12/31/17	Completed
Permits	06/22/17	07/19/19	Completed
Design	12/18/14	07/19/19	Completed
Bid and Award	07/19/19	12/11/19	Completed
Construction	12/11/19	12/22/20	In Progress

RP-3 Basin (PID 23a):

<u>Phases</u>	<u>Start</u>	<u>Finish</u>	<u>Status</u>
Project Development	07/01/14	12/17/14	Completed
Preliminary Design	12/18/14	06/21/17	Completed
Environmental	12/18/14	12/31/17	Completed
Permits	06/22/17	01/09/18	Completed
Design	12/18/14	12/14/17	Completed
Bid and Award	01/10/18	06/20/18	Completed
Construction	06/21/18	03/31/21	In Progress



Lower Day – Construction at Channel



Lower Day – Demolished section of channel to prepare for new gate



Lower Day – Down drains



Lower Day – Added Down Drains to Minimize deposit into basin