

# Non-RMPU Ongoing Projects



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**GWR AND RW SCADA UPGRADES**  
**PROJECT NO. EN14047**  
**STATUS UPDATE: December 4, 2017**

During Inland Empire Utilities Agency’s asset review of the existing Supervisory Control & Data Acquisition (SCADA) system, a thorough and comprehensive evaluation of the recycled water (RW) and groundwater recharge (GWR) control system was conducted. A Master Plan was developed; and it recommended critical upgrades to the RW and GWR SCADA systems. The purpose of this project is to provide control system improvements to sustain and support the continued growth of the RW and GWR programs. Under this project, five recharge basins which operate a rubber dam system will be replaced with newer, reliable and fully supported programmable logic controllers (PLCs). The current PLCs are outdated and lack critical product and technical support. The upgrade will extend the site’s reliability by 10 years and provide the initial development model when transitioning other sites to newer controllers.

**Schedule:**

	<u>Project Budget</u>		<u>Actual Cost to Date</u>		
	\$892,000		\$690,365		
<u>Phase</u>	<u>Start</u>	<u>Finish</u>	<u>Status</u>	<u>Projected Cost</u>	<u>Actual Cost</u>
Project Development	11/11/11	02/24/14	Completed	\$422	\$422
Design	02/26/14	01/15/16	Completed	\$186,512	\$186,512
Permits	09/12/14	01/15/16	Completed	\$42	\$42
Bid and Award	01/18/16	04/20/16	Completed	\$3,461	\$3,461
Construction**	04/21/16	10/31/17	In Progress	\$520,053	\$499,928
				<u>\$710,490</u>	<u>\$690,365</u>

\*Projected cost was increased but remains below the project budget of \$892,000.

**Grant/Loan Update:**

Awarded 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:**

Trimax is nearing contract completion. They completed a majority of the new equipment installation and programming updates to all rubber dam basin sites and the computer screen interface modifications at the DCS (distributed control system) level. Currently IEUA staff and Trimax are finalizing system checks before completing and closing out the project. The project is scheduled to close out by the end of December or early January.

The projected cost has exceeded initial estimates by roughly \$100,000 due to the extended construction, but it remains below the project's approved budget.

**Project Photos:**



San Sevaine Turnout control panel



Rubber Dam control panel



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**UPPER SANTA ANA RIVER WATERSHED HABITAT CONSERVATION PLAN**  
**PROJECT NO. RW15002**  
**STATUS UPDATE: December 4, 2017**

The purpose of the Habitat Conservation Plan (HCP) 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>	<u>Actual Cost to Date</u>
\$160,000	\$137,873

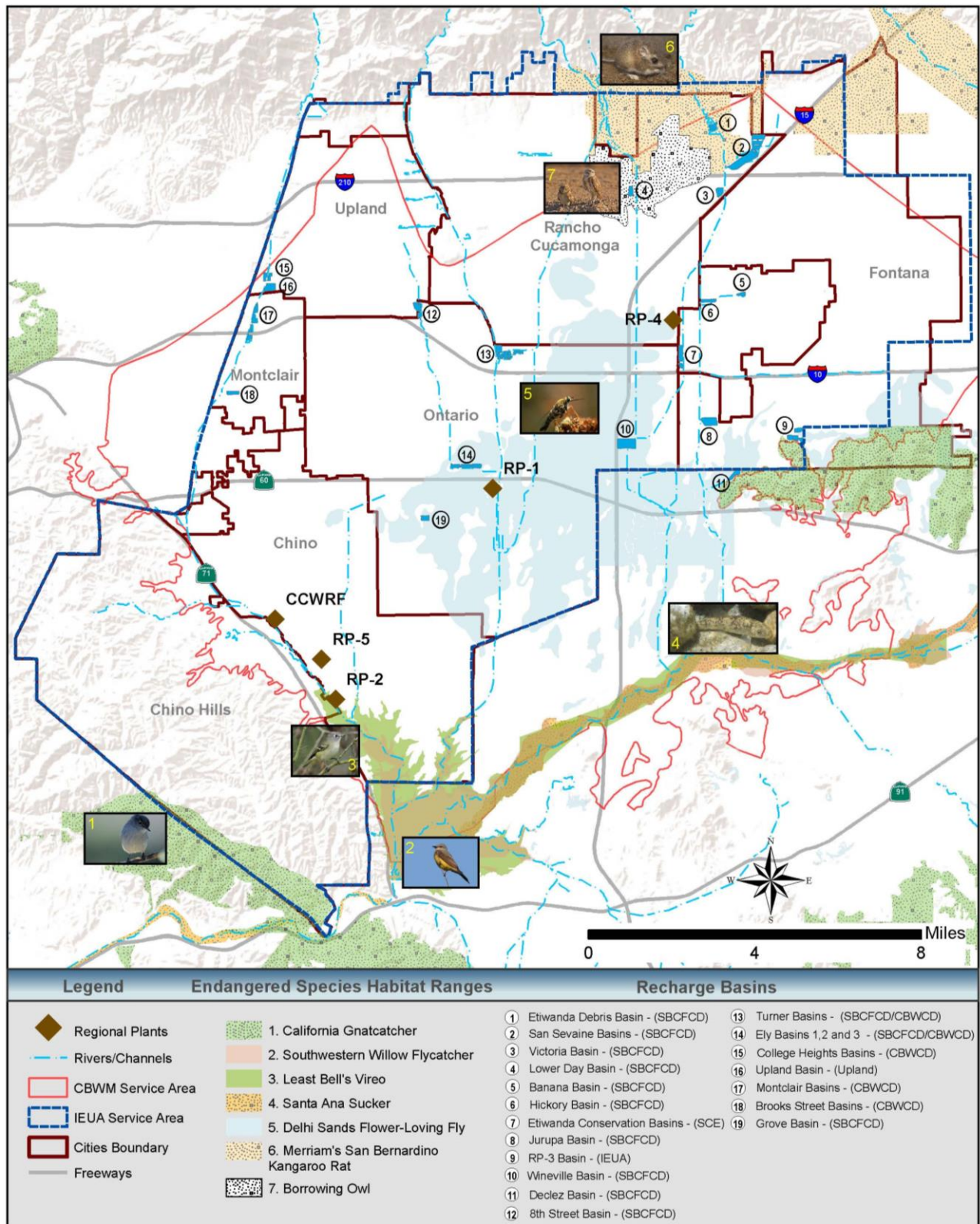
<u>Phase</u>	<u>Start</u>	<u>Finish</u>	<u>Status</u>	<u>Projected Cost</u>	<u>Actual Cost</u>
Investigate/Plan	07/01/14	06/30/18	In Progress	\$160,000	\$137,873
				\$160,000	\$137,873

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

**Project Update:**

IEUA continues to work with the HCP team to complete the study by June of 2018.





# RMPU PROJECTS



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**SAN SEVAINE IMPROVEMENTS PROJECT**  
**PROJECT NO. EN13001**  
**STATUS UPDATE: December 28, 2017**

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> \$797,507
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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	In Progress	\$25,000	\$25,000
Bid and Award	12/13/16	09/20/17	Completed	\$5,000	\$5,000
Construction	09/21/17	09/21/18	In Progress	\$5,740,000	\$27,427
				\$6,460,000	\$797,507

**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.

**Cost Sharing Document:**

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

**Project Update:**

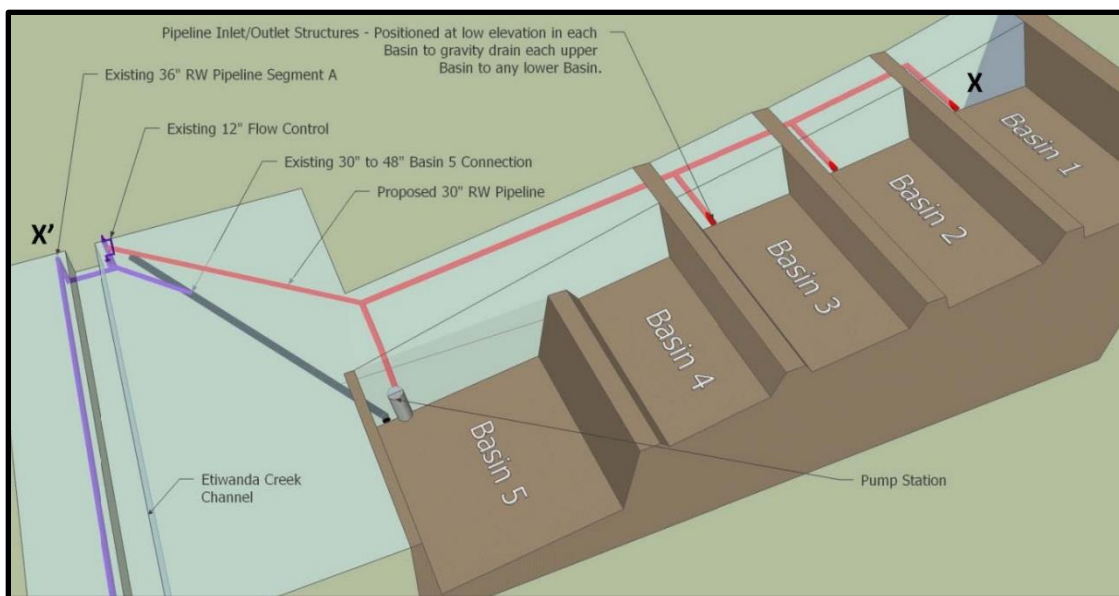
The Monitoring Well and Basin Improvement request for public bids closed on June 1 and July 13, respectively. The lowest responsible/responsive bidders were Yellow Jacket Drilling for the

Monitoring Well and Gwinco Construction and Engineering for the Basin Improvements. Both are scheduled for IEUA Board approval on September 20, 2017.

The basin improvement construction is still on schedule. Over 90-percent of the submittals were reviewed and approved. IEUA anticipates all remaining permits will be issued before any field work commences which is scheduled for January 2018.

In the meantime, effort for a portion of the monitoring well construction is on temporary hold until further investigation of recycled water impacts to the nearby drink well at the Unitex properties is completed. Current findings are showing the surface recharge of recycled water may not have the required retention time before reaching the Unitex well. The one mounding monitoring well adjacent to the basins is not impacted and will continue. The intermediate monitoring well is the portion on hold.

### Conceptual Design:



Isometric View of the Recommended Basin Improvement



Monitoring Well Locations (SS2 and SS3)



**POST 2014 STORMWATER RECHARGE PROGRAM  
PROJECT NOS. RW15003.00/.01/.02/.03/.04/.05/.06 & RW15004.00  
STATUS UPDATE: December 27, 2017**

On November 17, 2016, the Watermaster Board approved the “Post 2014 Stormwater Recharge Program” as part of the results and findings presented from the completed preliminary design report on the yield enhancement projects under the 2013 Amendment to the 2010 Recharge Master Plan Update. The following are the projects under the “Post 2014 Stormwater Recharge Program” that are recommended for final design, bid and construction:

PID	Basin Projects	Post 2014 Stormwater Recharge Program <sup>(2)</sup>	Initial Yield		Updated Yield <sup>(1)</sup>	
			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 <sup>(3)</sup>	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
			<b>4,327</b>	<b>3,025</b>	<b>4,085</b>	<b>3,025</b>

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

**Schedule:**

Phases	Project Budget		Actual Cost to Date		
	Start	Finish	Status	Projected Cost	Actual Cost
Project Development	07/01/14	12/17/14	Completed	\$ 189,256	\$189,256
Preliminary Design	12/18/14	06/21/17	Completed	\$ 1,221,000	\$1,220,867
Environmental	12/18/14	12/31/17	In Progress	\$ 280,000	\$280,000
Permits	06/22/17	05/17/18	In Progress	\$ 236,200	\$74,977
Design	12/18/14	04/19/18	In Progress	\$ 1,580,262	\$324,933
Bid and Award	04/20/18	09/19/18	Not Started	\$32,500	\$0
Construction	09/26/18	12/31/19	Not Started	\$ 19,465,500	\$0
				<b>\$23,004,718</b>	<b>\$2,090,033</b>

### On Going RMPU Projects:

RMPU Project		Total Projected Expenses	Actual Cost (to date)
Lower Day Basin (PID 12)		\$4,008,000	\$319,446
Victoria Basin <sup>(4)</sup> (PID 11)		\$168,800	\$14,409
Montclair Basins (PID 2)		\$1,788,100	\$152,638
RP-3 Basin <sup>(4)</sup>	(23a)	\$1,486,700	\$124,696
Wineville Basin		\$3,588,000	\$300,941
Jurupa Basin		\$1,424,000	\$119,437
Wineville/Jurupa Force Main		\$9,984,200	\$837,417
<b>Total</b>		<b>\$22,447,800</b>	<b>\$1,893,530</b>

(4) Cost shared between IEUA and Watermaster

### Deferred RMPU Projects:

As of September 21, 2017, Watermaster stakeholders updated the list of deferred RMPU projects to the CSI Basin. The projected expenses and actual costs to each deferred project:

Project/Phase	Projected Expenses	Actual Cost (to date)
<b>East Declez</b>		
Project Development	\$114,000	\$112,829
<b>Sub-Total</b>	<b>\$114,000</b>	<b>\$112,829</b>
<b>Declez Basin (PID 27)</b>		
Project Development	\$2,600	\$2,600
Preliminary Design	\$71,000	\$3,913
Environmental	\$31,400	
<b>Sub-Total</b>	<b>\$105,000</b>	<b>\$6,513</b>
<b>Turner Basin (PID 14)</b>		
Project Development	\$1,000	\$1,000
Preliminary Design	\$28,400	\$1,605
Environmental	\$12,600	
<b>Sub-Total</b>	<b>\$42,000</b>	<b>\$2,605</b>
<b>Ely Basin (PID 15a)</b>		
Project Development	\$5,900	\$5,900
Preliminary Design	\$159,600	\$8,738
Environmental	\$70,500	
<b>Sub-Total</b>	<b>\$236,000</b>	<b>\$14,638</b>
<b>CSI Basin (PID 18a)</b>		
Project Development	\$1,000	\$1,000
Preliminary Design	\$29,000	\$29,000
Environmental	\$13,000	\$13,000
Design	\$16,918	\$16,918
<b>Sub-Total</b>	<b>\$59,918</b>	<b>\$59,918</b>
<b>Total</b>	<b>\$556,918</b>	<b>\$196,503</b>

**Grant/Loan Update:**

Received a \$300K grant award from the US Bureau of Reclamation for the RP-3 Basin Improvement and received an award notice for nearly \$8.3 million from SWRCB for the 23a project.

**Cost Sharing Document:**

- Task Order No. 1 of the Master Agreement of 2014 (Design Projects)
- 1<sup>st</sup> Amendment Task Order No. 1 of the Master Agreement of 2014 (Design Projects)
- 2<sup>nd</sup> Amendment Task Order No. 1 of the Master Agreement of 2014 (Design Projects)
- 2<sup>nd</sup> Amendment Task Order No. 1 of the Master Agreement of 2014 (Deferred Projects)
- Task Order No. 2 of the Master Agreement of 2014 (PID 12)
- 1<sup>st</sup> Amendment Task Order No. 2 of the Master Agreement of 2014 (PID 12)
- Task Order No. 9 of the Master Agreement of 2014 (PID 23a)
- Task Order No. 10 of the Master Agreement of 2014 (PID 11)
- Task Order No. 11 of the Master Agreement of 2014 (PID 2)

Overview of Task Orders’ cost sharing amount with grants:

<b>Deferred Projects (Task Order No.1)</b>	<b>Total</b>
Watermaster	\$497,000
IEUA	\$0
<b>Total</b>	<b>\$497,000</b>
<b>Lower Day Basin (Task Oder No. 2)</b>	<b>Total</b>
Watermaster	\$2,883,000
IEUA	\$0
Grant Funding	\$1,125,000
<b>Total</b>	<b>\$4,008,000</b>
<b>PID 23a (Task Order No. 9)</b>	<b>Total</b>
Watermaster	\$7,554,135
IEUA	\$387,315
SWRCB Grant	\$8,241,450
USBR Grant	\$300,000
<b>Total</b>	<b>\$16,482,900</b>
<b>Victoria Basin (Task Order No. 10)</b>	<b>Total</b>
Watermaster	\$84,400
IEUA	\$84,400
<b>Total</b>	<b>\$168,800</b>
<b>Montclair Basin (Task Order No. 11)</b>	<b>Total</b>
Watermaster	\$1,788,100
IEUA	\$0
<b>Total</b>	<b>\$1,788,100</b>
<b>CSI Basin (Task Order No. 12)</b>	<b>Total</b>
Watermaster	\$59,918
IEUA	\$0
<b>Total</b>	<b>\$59,918</b>

CSI Basin Task Order  
Task Order amendment required to remove CSI and show remaining cost

## **Project Update:**

- 1) The 30% and 50% design plans and specification were completed in September and November respectively. 85% submittals are due in mid-February. IEUA has extended the project design time due to the following:
  - a) Victoria Basin – Conducting additional geotechnical evaluation to validate existing spillway is suitable to maintain the additional water pressure due to the increase in water level. This was recommended by the Flood Control District to confirm the proposed improvement will not damage the spillway. If the findings show a potential impact, project scope will increase which will require discussion and stakeholder approval to continue the project.
  - b) Wineville/Jurupa Storm Water Distribution Pipeline – A segment of the pipe alignment within the Flood Control District right-of-way is requiring changes due to conditions imposed by Union Pacific. The rail company will not allow any improvement within 50-feet of their structure that supports their rails. This unforeseen condition will push the segment within Southern California Edison property. Staff is evaluating options to minimize scope and cost increase.
  - c) Montclair Basin – Army Corps design review application requires additional time to address environment comments. Staff is working with Tom Dodson to assist with the response.
  - d) Lower Day Basin – There is an extended delay in obtaining the encroachment permit to conduct final geotechnical borings at multiple RMPU Basins. The delay is due to the high number of required borings that needed approvals from two County departments: Flood Control for the access and Environmental Health Services for the permission on the bore depth.
- 2) The RP-3 Basin Improvement Basin Design Plans were completed and sent out for public bid. This was accelerated to meet grant funding deadlines that showed completing this RMPU project by before the end of this year. The plan is to start construction by May, 2018.
- 3) Stantec is taking the lead in preparing detailed plans and specifications to demolish and excavate the area within RP-3 to create the additional recharge basins as recommended during the preliminary design phase. Carollo will provide the plans for basin improvements. Both plans will be combined in December to begin the bidding process in early January.
- 4) With the adopted Program EIR which included the planning level RMPU projects, Environmental Consultant, Tom Dodson, is addressing sight specific investigations of each on-going projects to meet CEQA-Plus requirements and to complete the environmental forms for the SRF Funding application. This is expected to be completed before the end of December 2017.