
Annual Summary Report on Public Water Quality Benefits for Calendar Year 2023

TO: James Nachbaur, State Water Resources Control Board
CC: Amy Young, Water Storage Investment Program Manager – California Water Commission
SUBMITTED BY: Heidi Oriol, Harvest Water A-PMO Program Coordinator – SacSewer
DATE: April 30, 2024
RE: 2023 Annual Summary Report for WSIP Contract for Administration of Public Water Quality Benefits (CAPB)

1. BACKGROUND AND PURPOSE

The Sacramento Area Sewer District (SacSewer, formerly known as the Sacramento County Regional Sanitation District or Regional San) is developing the Harvest Water Program in southern Sacramento County. Harvest Water is one of seven projects within the California Water Commission’s (Commission) Water Storage Investment Program (WSIP). Harvest Water is a conjunctive use program that will use recycled water deliveries for irrigation to enhance groundwater levels, ecosystem function, and agricultural sustainability in the southern Sacramento County area. Harvest Water will deliver up to 50,000 acre-feet per year (AFY) (with an associated salt load of approximately 85 to 100 tons per day).

On June 5, 2023, SacSewer entered into a Contract for Administration of Public Water Quality Benefits (CAPB) with the State Water Resources Control Board pursuant to the WSIP regulations. On January 22, 2024, SacSewer entered into a Funding Agreement with the California Water Commission to receive grant funds pursuant to WSIP regulations.

The recycled water deliveries within the Harvest Water service area are anticipated to reduce salt loads to 303(d)-listed waterways in the Sacramento – San Joaquin River Delta (Delta). This element provides a Public Water Quality Benefit under the Water Storage Investment Program (WSIP). This Annual Summary Report documents the progress and status of the Public Water Quality Benefit provided, including a description of any changes to Project Implementation Actions, during calendar year 2023.

SacSewer submitted regular progress reports on the Harvest Water Program to the Commission between October 2018 and May 2023, which are available on the Commission’s website¹.

2. HARVEST WATER IMPLEMENTATION UPDATE

Over the course of calendar year 2023, Harvest Water accomplished several significant milestones to move the Program forward. Harvest Water negotiated and executed three crucial documents: the CAPB for public ecosystem benefits with CDFW, the CAPB for public water quality benefits with State Water Resources Control Board, and the Final Funding Agreement with the California Water Commission.

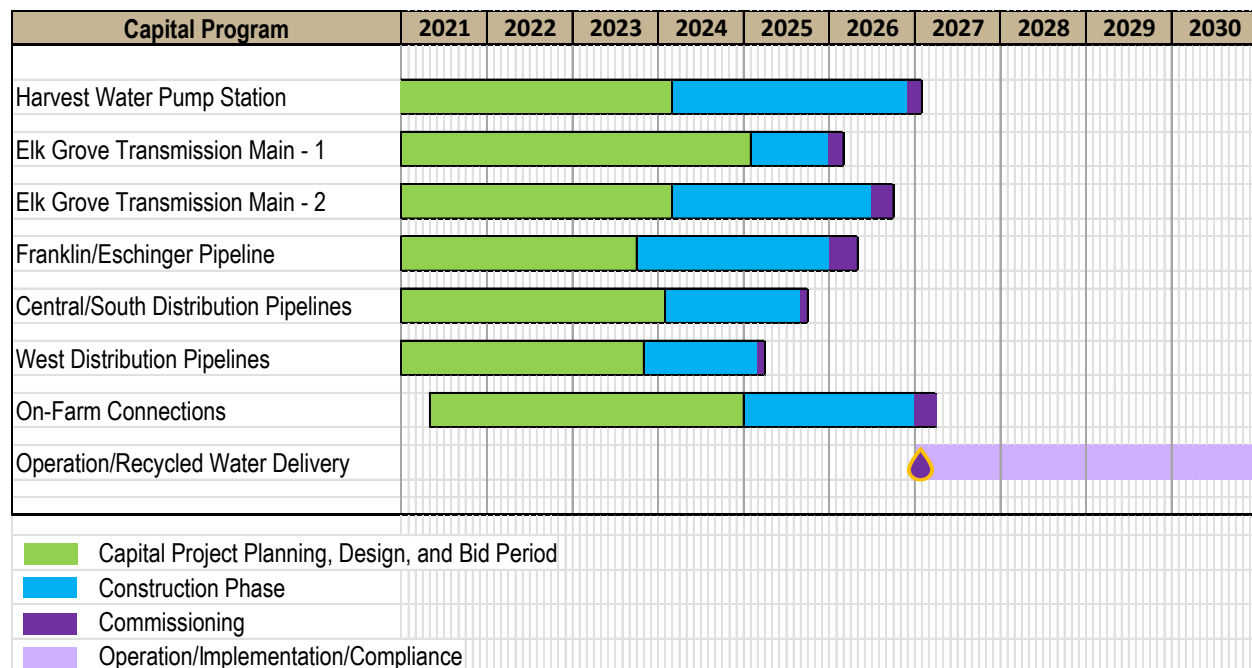
¹ <https://cwc.ca.gov/Water-Storage/WSIP-Project-Review-Portal/All-Projects/Harvest-Water-Program>

The Harvest Water team continued extensive outreach with the landowners in the service area regarding upcoming project construction, the location for on-farm connection assemblies (turnouts and meters) on the customers' properties, and the template for the Recycled Water Service Agreement. The template was approved by the SacSewer Board in December 2023 and will be used to begin executing contracts with landowners in 2024.

The majority of the capital program projects completed design in 2023 and moved into the bidding and contract award phase. Construction activity has started on the transmission and distribution systems. The pump station is scheduled to begin construction in July 2024. An overview of the construction schedule is provided in Figure 1.

The Program team also completed significant efforts identifying parcels for participation in the ecological program.

Figure 1: Capital Program Schedule Overview



2.1 CAPB Program Years

Many of the implementation and benefit metrics are tied to a "Program Year," defined as "a full year of Program operations capable of delivering water." Based on the current schedule, the Program will become operational and begin full operations in January 2027. Therefore, 2027 is anticipated to be "Program Year 1" as identified in the CAPB. Table 1 identifies the projected calendar year corresponding to the Program Year milestones identified in the CAPB.

Table 1: Projected CAPB Program Years

Program Year	Projected Calendar Year	Program Year	Projected Calendar Year
1	2027	10	2036
3	2029	42	2068
5	2031		

3. PROJECT IMPLEMENTATION ACTIONS

The Project Implementation Action for the Water Quality CAPB is recycled water delivery, measured by two metrics: the percentage of contracts executed for recycled water delivery (recycled water service agreements) during Program Years 1 through 9 and the volume of program water delivered annually, beginning in Program Year 10.

3.1 Progress and Current Status

In 2023, the SacSewer Board of Directors approved the Recycled Water Service Agreement (contract) template and initiated work on the Harvest Water Rules and Regulations along with the Harvest Water schedule of rates and fees. In addition, the designer continued work on the on-farm connection assemblies (OFCAs), identifying the location of each turnout, and providing technical support for easement documentation for each OFCA location. This information will be used to begin executing contracts and securing easements in 2024 in support of beginning program water deliveries in 2027.

3.2 Challenges and/or Successes

The program team continues to make significant progress in capital project delivery and customer recruitment for successful project start-up, with the first full year of Program operations anticipated in 2027.

3.3 Metrics and Monitoring

3.3.1 Metric 1: Percentage of landowner contract execution

During Phase 1 (Program Years 1 through 9), SacSewer will report the number of recycled water delivery contracts executed and the total estimated annual recycled water delivery volume represented by all executed contracts.

The implementation milestone for this metric is: *to execute 100% of water delivery contracts for 41,250 acre-feet per year within five years of receiving the WSIP final funding award (executed in January 2024). During Phase 1, by:*

- Year 1 [January 2025], landowner contract execution representing 20 percent of annual recycled water delivery will be achieved.
- Year 3 [January 2027], landowner contract execution representing 60 percent of annual recycled water delivery will be achieved.
- Year 5 [January 2029], landowner contract execution representing 100 percent of delivery of recycled water annually will be achieved.

Table 2: Metric 1 Reporting for 2023

Reporting Component	Reporting Period Data
Percentage of Contracts Executed (% = AFY contracted / 41,250 AFY)	Contract execution is slated to begin in Q2 2024.

3.3.2 Metric 2: Volume of annual recycled water delivered

During Phase 2 (Program Year 10 through the Term of the Contract), SacSewer will report on the annual volume of recycled water delivered to Harvest Water customers. The performance threshold is to deliver an average of 41,250 AFY of recycled water to the program area based on a five-year average starting in Program Year 10, except in years when Condition 7 (delivery cutbacks) applies, as specified in Order WWW0092.

Table 3: Metric 2 Reporting for 2023 ⁽¹⁾

Reporting Component	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Recycled Water Volume delivered (monthly AF)	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<u>Notes:</u> 1. Metrics will be reported beginning in Program Year 1, anticipated in 2027.												

3.3.3 Additional monitoring for information purposes

Once operational, SacSewer will monitor and report the concentration of total dissolved solids (in mg/L) in the recycled water delivered to customers as well as the electrical conductivity (in milli-Siemens per centimeter) of the water. SacSewer will also calculate the annual average pounds per day of salts not discharged to the Delta as a result of the Program.

Table 4: Informational Reporting for 2023 ⁽¹⁾

Reporting Component	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
TDS (mg/L), Monthly Average	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Electrical Conductivity (S/m), Monthly average	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<u>Notes:</u> 1. Metrics will be reported beginning in Program Year 1, anticipated in 2027.												

3.4 Water Year Impacts on Recycled Water Deliveries

Program recycled water deliveries are subject to SacSewer’s wastewater petition Order WW0092, issued by the SWRCB’s Division of Water Rights, which includes two conditions that that will restrict water deliveries in Dry and Critically Dry water years and Shasta Critical years (as defined in Order WW0092), during the early phases of the Program. Beginning in Program Year 1, this report will include a description of how Order WW0092 conditions affected recycled water deliveries.

In addition, there are functional limits on demand for recycled water in wintertime months with high precipitation. Beginning in Program Year 1, this report will include representative monthly precipitation for the Program area and a description of how precipitation affected wintertime recycled water deliveries.

3.5 Changes to Project Implementation Actions

There were no changes to the project implementation actions in calendar year 2023.

4. CONCLUSION

For questions or comments please contact Heidi Oriol at oriolh@sacsewer.com or 916-875-6481. The next annual report will cover calendar year 2024 and will be submitted by April 30, 2025.