

Salton Community Services District

SPECIAL MEETING *Agenda*

December 6, 2023

Closed Session 1:00 p.m.

Open Session 2:00 p.m.

1209 Van Buren Ave.

Salton City, CA 92275

www.saltoncsd.ca.gov

BOARD OF DIRECTORS:

Michelle Gilmore, President
Michael Friese, Vice President
Manuel Ramos, Director
Lidia A. Sierra, Director
Dale Johnson, Director

STAFF:

Emmanuel Ramos, Interim General
Manager
Thania Garcia, Board Secretary
Christina Sutton, Finance Officer

1. CALL TO ORDER: 1:00 p.m.

2. ROLL CALL:

3. PUBLIC COMMENTS:

Pursuant to California Government Code Section 54954.3, the public has the right to address the board regarding any closed session items listed on the **closed session agenda** prior to the board adjourning into closed session. Anyone who wishes to address the Board, please come to the microphone. Public comments are limited to (3) minutes for each person.

4. CLOSED SESSION ITEMS:

A. CONFERENCE WITH LEGAL COUNSEL—EXISTING LITIGATION
(Paragraph (1) of subdivision (d) of Section 54956.9) Name of case: JALYNDA ELLEN ALEXANDER, Petitioner, vs. SALTON COMMUNITY SERVICES DISTRICT Respondent, Immanuel Ramos; Manuel Henry Ramos Real Parties in Interest. (Imperial County Superior Court Case # ECU003061)

5. OPEN SESSION: 2:00 pm

6. PLEDGE OF ALLEGIANCE: Michelle Gilmore, President

7. ANNOUNCEMENT OF CLOSED SESSION ACTIONS:

8. PUBLIC COMMENTS:

Pursuant to California Government Code Section 54954.3 members of the public may address the Board at this time on any items of public interest that are within the Board's subject matter jurisdiction. The Ralph M. Brown Act, however, prohibits the Board from taking action on any matter not appearing on the agenda. Those who wish to address the Board should come to the microphone. Members of the public will be given three (3) minutes to address the board on any items of public interest.

9. NEW BUSINESS

- A. TKE and RCAC will be attending and will discuss the plan of study. No action will be taken.

10. ADJOURNMENT:

Sonia Thania Garcia, Secretary of the Board

Upon written request, this agenda will be made in appropriate alternative format to persons with disabilities as required by Section 202 of the American with Disabilities Act of 1990. Any person with a disability who requires a modification or accommodation in order to participate in a meeting should direct such request to the Secretary of the Board at least 72 hours before the meeting. Any public record, relating to an open session agenda item, that is distributed within 72 hours prior to the meeting is available for public inspection at 1209 Van Buren St, Suite 1, Salton City, California 92275.

CLEAN WATER STATE REVOLVING FUND (CWSRF)

PLAN OF STUDY

DRAFT

October 2023

Prepared For:

Salton Community Services District
1209 Van Buren Street
Thermal, CA 92274

Prepared By:



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2305 Chicago Avenue
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1. Overview

This Plan of Study is prepared for the Salton Community Services District (SCSD) in an effort to secure financial assistance under the Clean Water State Revolving Fund program. SCSD is located in Salton City, a census designated place, in California, approximately 35 miles south of the City of Coachella and greater Coachella Valley area. SCSD serves the communities of Salton City and Desert Shores, California. SDSC provides wastewater service to approximately 2,700 connection and about 6,300 residents. The SCSD is planning for the design and construction of a mechanical treatment plant and recycled water conveyance system at its Thomas R. Cannell (TRC) Wastewater Treatment Facility (WWTF).

The proposed mechanical treatment plant would provide tertiary treatment and allow for beneficial reuse of existing wastewater, significantly reducing the use of, and potentially eliminating the need for the existing onsite evaporation ponds which pose a surface water quality and public health risk to the community. In addition, the proposed Project includes a recycled water storage and conveyance system to provide recycled water to customers, specifically, the Salton City Solid Waste Site (SCSWS or landfill) owned by County of Imperial. Due to SCSD and the TRC WWTF proximity to the Salton Sea, the groundwater levels are shallow and the soil is loose. This provides varying levels of difficulty when implementing the proposed Project. Over the last decade, SCSD has continued to struggle with effluent management at the TRC WWTF and the Lansing WWTF; specifically, with secondary treated wastewater surfacing around the perimeter of each facility.

SCSD has previously sought financial assistance for the future design and construction of a mechanical treatment plant and recycled conveyance system to allow for the reuse of existing wastewater to eliminate the need for onsite evaporation ponds. SCSD has reviewed the TRC WWTF Waste Discharge Requirements (WDR) Permit and is in the process of a permit amendment to increase the current disposal capacity from 0.185 million gallons per day (MGD) to 0.30 MGD. This WDR amendment is in process with the Colorado River Basin Regional Water Quality Control Board (RWQCB).

SCSD recently completed a wastewater rate study to identify the rates required to meet both current and future revenue needs. In accordance with Proposition 218, the rate study developed a 5-year rate structure and annual fee schedule to meet the SCSD's operating and capital financial needs. Additionally, SCSD and TKE Engineering completed a Preliminary Engineering Report (PER) in December, 2019 to assess the existing wastewater facilities and propose potential upgrades to assess deficiencies.

2. System Information

2.1. General

In 1955 the Desert Shores Community Services District was chartered by the State of California through Articles A through H of Section 61601 of the Government Code. In 1957 the Salton City area was annexed to that district and the name was changed to Salton Community Services District (again SCSD) rather than going through the process of forming a new District to encompass both Desert Shores and Salton City. The SCSD is empowered to construct, operate, maintain, repair, and replace wastewater system facilities as needed to provide wastewater service in compliance with applicable standards and regulations. The SCSD routinely constructs new facilities, maintains them, and replaces them as necessary to maintain adequate, reliable, and safe wastewater service to its customers.

SCSD currently employs eight personnel to maintain the TRC, Lansing, and Desert Shores Wastewater Treatment Facilities. This is currently one person shy of the adequate number of personnel per capita of the population they serve.

Population projections are based on information provided by the SCSD and a review of historical and anticipated population growth rates in various communities in northern Imperial County. The population within the SCSD is condensed mainly within the unincorporated communities of Salton City, Salton Sea Beach, and Desert Shores. The 2020 U.S. Census reported a population of 5,155 in Salton City, up 1,392 from the 2010 Census total of 3,763. The SCSD indicates that the Desert Shores area has experienced population growth that is not registering on Census data (or related databases such as ESRI), as many new residents in Desert Shores are undocumented. The SCSD estimates that the current population of Desert Shores is between 1,500 and 2,000 residents. The collection system of the TRC WWTF consists of approximately 1,650 connections.

SCSD has been experiencing an increase in effluent Biochemical Oxygen Demand (BOD) compared to that of the influent BOD. These occurrences were indicative of a lack of dissolved oxygen present in the treatment process. High BOD in the effluent implies that an increased amount of organic matter was present in the percolation ponds, resulting in poor percolation rates. SCSD has implemented an increase in aeration time to the treatment process to add dissolved oxygen to the treatment system. By adding dissolved oxygen, the effluent BOD has decreased significantly and has become more consistent. SCSD will continue monitoring the aeration timing to ensure the efficiency of the treatment process is maintained. Due to the location of the Salton Community and its distance from other existing systems, consolidation is not an option for the SCSD system.

2.2. Collection System

The TRC WWTF is supplied by two lift stations, Lift Station No. 22 and Lift Station No. 24. Both lift stations were constructed in 2008 and considered to be in good working condition, suitable for continued use. Wastewater flows from the

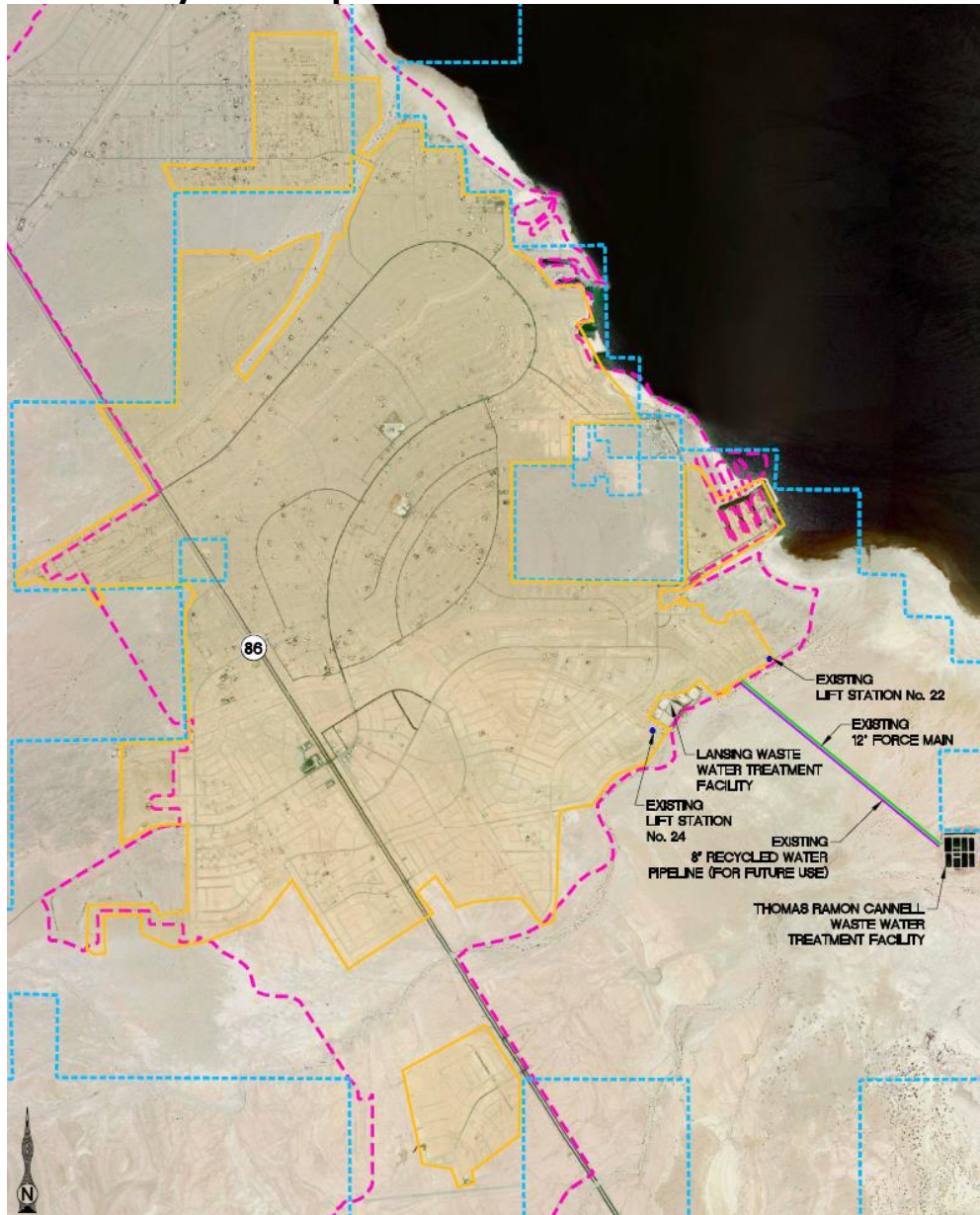
system's 1,652 connections are carried through mostly 8" VCP gravity sewer pipes and concrete manhole structures to Lift Station No. 22 and Lift Station No. 24. These wastewater flows are then lifted and conveyed through approximately 9,000 feet of 12" C-900 force main piping to the TRC WWTF. Both the TRC and Lansing WWTFs serve the Salton community through shared sewer lines.

SCSD's SCADA system consists of monitoring and alarm equipment. The lift stations are equipped with level alarms that will register faults that may occur at the lift station. Also, SCSD has Smart Covers for their manholes which monitor levels in their manholes. If alarms occur at any of their lift stations or manholes SCSD operations staff receive text message alert notifications indicating the fault and its location to assess the situation and apply corrective action.

2.3. System Map

Figure 1 shows a majority of the SCSD's service area boundary, outlined in blue, that contributes wastewater flows to the TRC and Lansing WWTFs. Not shown is the Desert Shores area for clarity as it's a separate system.

Figure 1
System Map with Service Area Boundaries



2.4. Treatment Facilities

The SCSD has three wastewater treatment facilities within its service area; the Desert Shores WWTF, the TRC WWTF, and the Lansing WWTF. The total peak capacity for all three facilities combined is 0.505 MGD. The SCSD is held responsible to the WDRs by the RWQCB (Board Order No. R7-2012-0034). The State Water Resource Control Board (SWRCB) sets a performance standard of 85 percent capacity, in that once 85 percent of a plant's treatment capacity is met, the agency or plant operator, by law, must notify the SWRCB.

The Desert Shores facility is located approximately 1.2 miles west of the Salton Sea. The facility is adjacent to Coolidge Springs Road, west of State Highway (SH) 86, and approximately one mile southwest of the community of Desert Shores, California. There are approximately 1,043 sewer accessible lots in Desert Shores. The Desert Shores WWTF has seven (7) total evaporation and percolation ponds and a maximum capacity of 0.20 MGD. The facility treats wastewater biologically through oxidation, evaporation, and infiltration.

The TRC WWTF was completed in 2008. The treated effluent at the TRC WWTF is disposed of by means of percolation and evaporation. The TRC WWTF currently provides secondary treatment of wastewater by providing biological oxidation, evaporation, and percolation for final disposal. This occurs on-site through two (2) aeration ponds, two (2) clarifiers, six (6) percolation/evaporation ponds (with a combined surface area of approximately 5,860 square feet) and an emergency wastewater pond. Each pond has a 6-foot operating depth with 2-feet of freeboard. Additionally, there is also a 1,900 square foot Emergency Wastewater Pond on site. The TRC WWTF was designed for 0.50 MGD but is limited to 0.185 MGD through Board Order No. R7-2012-0034, which is the sum of the original design capacity of 0.16 MGD and 0.025 MGD of the emergency disposal pond.

The average daily flow (ADF) of the TRC WWTF is approximately 0.20 MGD, but can vary seasonally. Treated water from the clarifiers is conveyed to one of the six (6) onsite percolation and evaporation ponds. The treated water is disposed of via percolation into the ground and evaporation. Sludge and biosolids are accumulated and collected through the 0.25 MGD tertiary clarifier's sludge collection system. The SCSD contracts with a private contractor for the removal and disposal of accumulated pond sludge. The sludge is further processed offsite by the contractor to remove pathogens and is then subsequently sold as a soil amendment.

The Lansing WWTF was built in 1972 and has five (5) total evaporation and percolation ponds with a maximum capacity of 0.12 MGD. The Lansing WWTF was decommissioned in October 2008 with the completion of the TRC WWTF. To assist with daily demand, the Lansing WWTF was reopened in 2012 with a capacity of 0.12 MGD through order R7-2012-0035.

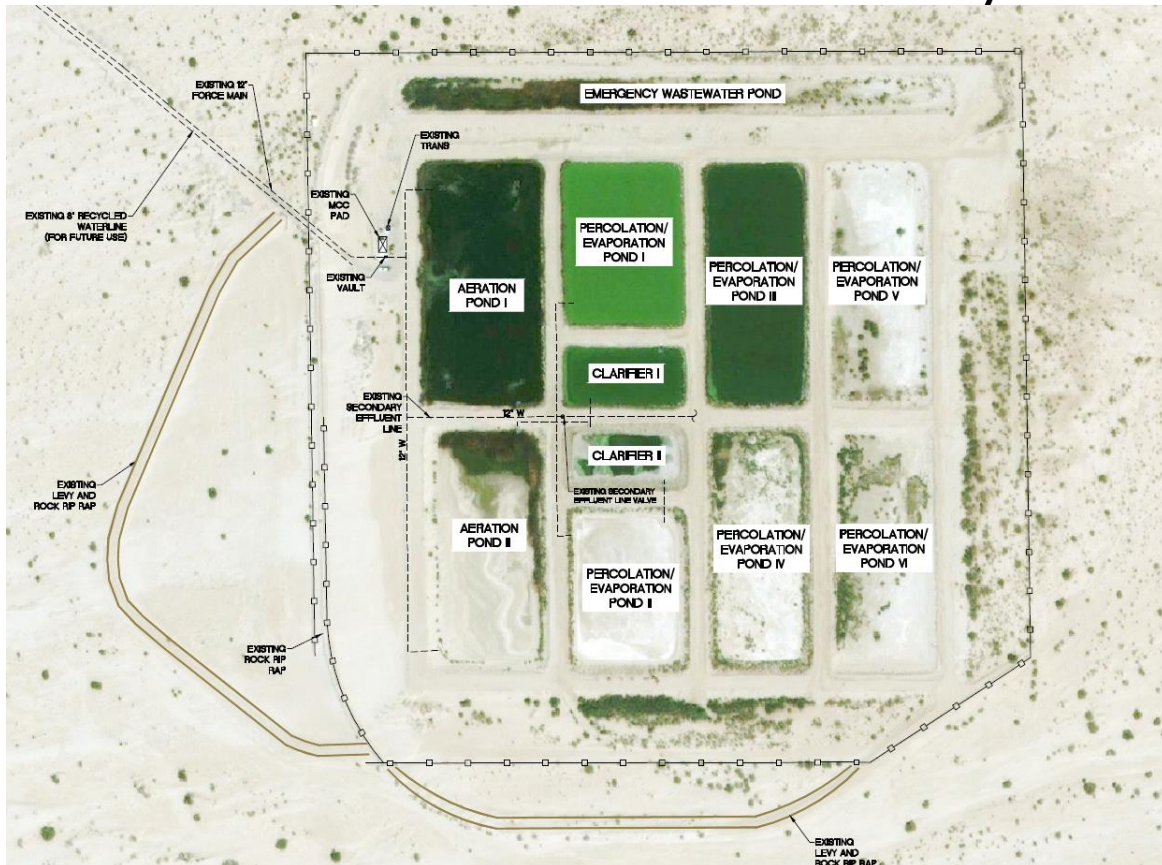
Aging collection system facilities in many areas require maintenance due to degradation over time. As a result, SCSD began a cured-in-place pipe (CIPP) rehabilitation program where field staff are systematically rehabilitating piping throughout its collection system. This rehabilitation program ensures extended lifecycle and increased integrity of SCSD's collection system.

2.5. Treatment Facility Map

Figure 2 shows an overview of the TRC WWTF. As described above, the two (2) aeration ponds provide the initial treatment and the two (2) clarifiers aid in removing solids. From there, the treated wastewater can go to any of the

six (6) percolation and evaporation ponds for disposal. The emergency wastewater pond runs along the northern portion of the site.

Figure 2
Thomas R. Cannell Wastewater Treatment Facility



2.6. Project Area Onsite Wastewater Treatment Systems (OWTS)

SCSD does not have any OWTS within the project area that will be added to the existing collections system or new treatment systems in the future.

2.7. Rate Study

Through a technical services request, SCSD has been working with the Rural Community Assistance Corporation (RCAC) to conduct a wastewater rate study to ascertain rates that would meet its existing and future revenue needs. The key objective of the rate study was to develop a sustainable, fair, and justifiable rate structure, while ensuring compliance with the California Proposition 218 process. In addition, the goal was to identify a suitable five-year wastewater rate structure and annual fee schedule that produces revenues adequate to meet the operating and capital financial needs of SCSD.

Following a careful review of SCSD's financials, assets, other data, and consultations with SCSD staff, RCAC recommended the following rate adjustments over the course of the next 5-years:

1. An increase of on all sewer user charges in the first year. The current annual charge of \$640.74 for all residential units should be increased to \$838.41. That is an annual increase of \$197.67 or approximately \$16.47 per month. The commercial use charge should also increase from \$7.70 to \$10.08 per hundred cubic feet of water usage (obtained via the water purveyor).
2. Incremental increases of 4 percent in subsequent years to the base and usage rates so that the system is financially viable, without causing undue burden on customers. In the first 4 years, the SCSD will not have sufficient revenue to fully fund reserve accounts. However, shortages will be recovered in the final year, with a 5-year total reserve funding projected at \$2,379,072. It will be necessary for SCSD to rely on non-operating revenue to fully recover all costs for the first 4 years.

3. Project Information

3.1. Project Details

SCSD received a noncompliance letter from the RWQCB regarding the effluent limitation violations at the TRC WWTF. Board Order R7-2012-0034, Effluent Limitations 8.1 states that the Average Weekly BOD Effluent Limitation is 65 mg/L and the Average Monthly Effluent Limitation for BOD is 45 mg/L. The reported monitoring results were in violation of the effluent limitations for BOD from December 2016 through June 2017. This violation continued from 2016 to 2020. In addition, the TRC WWTF was also in violation of effluent limits for pH in 2016, 2017, 2019, and monthly flow in 2018. Additionally, the TRC WWTF does not have any excess capacity to accommodate peak flows and future growth. Often the TRC WWTF experiences flows above the permitted disposal capacity. The original design capacity of the TRC WWTF was 0.50 MGD with an ultimate capacity of 1.0 MGD. Due to surfacing of wastewater around the perimeter of the facility the Water Board established a permitted disposal capacity of 0.185 MGD for the site.

The projected population of Salton City will be 7,911 by the year 2040.¹ Based on this rate of population growth SCSD expects the needed disposal capacity at the TRC WWTF to increase to 0.33 MGD over the next 20 years. It is anticipated that the number of new connections will increase to 3,490 over the next 20 years. This will only increase the need for correction of the existing treatment facilities, as well as additional treatment capacity.

There has been no attempt to address these issues previously aside from mitigation measures taken by SCSD, due to the lack of funding. A Surface Water Quality Protection Program Preliminary Engineering Report was prepared in

¹ Salton Community Services District Service Area Plan, July 2021, p. 15

December 2019 (2019 PER), but SCSD could not implement any changes without outside funding assistance. Due to the compliancy issues, SCSD was issued a Cease-and-Desist Order by the RWQCB. The Imperial County Local Agency Formation Commission (LAFCO) adopted a resolution of Intent to Dissolve SCSD. SCSD was given 12 months to prove the viability of the district or be forced to dissolve. RCAC was brought in to provide technical assistance for the completion of the Clean Water State Resolving Fund Planning Application. In addition, RCAC brought in TKE Engineering to assist in the funding process and to complete this Plan of Study. SCSD's goal is to eliminate WWTF NOVs for good and better manage wastewater treatment in accordance with the WDR permits in the future.

SCSD has been working diligently to manage the issues described above. SCSD currently optimizes the TRC WWTF operations by strategically storing effluent volumes throughout the six (6) ponds to help accommodate the peak flows. Additionally, SCSD has increased maintenance on their aerators and are taking samples from multiple areas of the infiltration ponds, as well as addressing any vegetation within the ponds in an effort to manage BOD and pH levels. As a result, SCSD has seen a significant reduction both BOD and pH levels. In the near-term, SCSD has plans to also plant non-fruit bearing trees and install an irrigation system fed by pond effluents around the site perimeter as a means of reducing water amounts contained within the ponds and thus temporarily safeguarding against said peak flows and short-term future growth.

SCSD's long-term goal is to construct a mechanical treatment plant on-site which would reduce the need to dispose of all water on-site and accommodate future development and growth within its service area. SCSD is seeking financial assistance for the future design and construction of said mechanical treatment plant and conveyance system that would allow for beneficial reuse of existing wastewater and reduce the need for the existing onsite evaporation ponds that pose a surface water quality and public health risk to the community. SCSD is proposing to upgrade its existing TRC WWTF to tertiary treatment and make its effluent flows available for the expanded operations at the SCSWS. The proposed treatment facilities with an initial capacity of 0.25 MGD and an ultimate capacity of 1.0 MGD consists of a gravity tertiary supply line to convey secondary effluent from the secondary clarifiers to an influent pumping station with discharge to a rapid mixer followed by tertiary clarifiers, tertiary filters, and a chlorine contact tank.

The 2019 PER identified two layout alternatives for upgrading the TRC WWTF to improve the existing system. An addition of a mechanical treatment plant and conveyance system would allow the beneficial reuse of existing wastewater and eliminate the need for the percolation ponds, which are a surface water quality and public health risk. The proposed treatment facilities with an initial capacity of 0.25 MGD and an ultimate capacity of 1.0 MGD consists of a gravity tertiary supply line to convey secondary effluent from the secondary clarifiers to an influent pumping station with discharge to a rapid mixer followed by tertiary clarifiers, tertiary filters, and a chlorine contact tank for both alternatives. The layout alternatives were named "East Layout Option" and "West Layout Option". The 2019 PER East Layout Option is located outside of FEMA flood hazard zones, but would require additional piping

lengths for tertiary supply, filter backwash, and recycled water effluent. The West Layout Option is within a FEMA flood hazard zone based on the 2008 mapping. However, a levee facility constructed in 2014 is likely sufficient for mitigation measures to prevent any flooding. SCSW would be required to request a map amendment through FEMA to allow construction of the West Layout Option, but this method would reduce the piping lengths for tertiary supply, filter backwash, and recycled water effluent.

Three alternatives were prepared for the proposed conveyance facilities of the recycled water from the TRC WWTF to the system. The alternatives all propose the construction of a recycled water pumping station to deliver water from the TRC WWTF to a recycled water storage reservoir. The recycled water can be distributed from there to various users. The SCSWS (landfill), owned by County of Imperial, has been identified as the primary customer for recycled water. The SCSWS needs additional water supply for landfill operations, including dust control. Additionally, there will be an effluent return line to convey excess effluents to the percolation ponds in the absence of recycled water demands.

The Alternative "A" recycled water conveyance facilities consist of 9,000 linear feet (LF) of existing and 32,000 LF of proposed 8" recycled water pipeline, and a 500,000 gallon bolted steel tank. The 500,000 gallon bolted steel tank is located at elevation (-20±) which is about 40 feet higher than the reservoir site at the SCSWS. In effect, the Alternative "A" reservoir site would create service pressure of about 40 ft or 17 psi at the SCSWS (landfill), and that would permit delivery of recycled water by gravity from the storage tank, and it would also permit loading water trucks by gravity.

The Alternative "B" recycled water conveyance facilities consist of 9,000 LF of existing and 35,000 LF of proposed 8" recycled water pipeline, and a 500,000 gallon bolted steel tank. The 500,000 gallon bolted steel tank is located at elevation (+20±) which is about 40 feet lower than the reservoir site for Alternative "A." It is however located at the SCSWS. Recycled water at the SCSWS would undoubtedly have to be pumped, at least part of the time, to obtain minimum service pressure. There are three directional bores (550 LF at Highway 86, 1,500 LF at Arroyo Salada, and 1,500 LF at Surprise Wash) totaling 3,550 LF which is approximately 1,000 LF more than the directional bores required for Alternative "A." In addition to increased directional boring, the intermediate portion of the alignment is within an undisturbed area and would most likely have additional jurisdictional water crossings requiring permitting from United States Army Corp of Engineers (USACE) and California Department of Fish and Wildlife (CDFW).

The Alternative "C" recycled water conveyance facilities consist of 38,000 LF of new recycled water pipeline and a 500,000 gallon bolted steel tank located at the SCSWS. As with Alternative "B", the 500,000 gallon bolted steel tank is located at elevation (-20±) and recycled water at the landfill site would undoubtedly have to be pumped, at least part of the time, to obtain minimum service pressure. There are four directional bores (550 LF at Highway 86, 1,000 LF at Tule Wash, 2,000 LF at Tule Wash Flood Plain, and 1,500 LF at Surprise Wash) totaling 5,050 LF, which is

nearly half the length of directional bores for Alternative "B" and nearly double the length of bores for Alternative "A." In addition to increased directional boring, a large portion of the alignment east of Highway 86 portion is within an undisturbed area and would most likely have additional jurisdictional water crossings requiring permitting from USACE and CDFW.

The proposed Project for will not have any significant environmental impact based on the findings of the NEPA and CEQA, according to the 2019 Environmental Assessment prepared by Tom Dodson and Associated in conjunction with the 2019 PER. The generation and management of treatment residuals and wastes would remain as currently operated. As stated above, the SCSD contracts with a private contractor for the removal and disposal of pond sludge. The sludge is further processed offsite by the contractor to remove pathogens and is then subsequently sold as a soil amendment.

All improvements to be done on-site are within existing owned SCSD property. For the recycled water conveyance facilities, Alternative "A" was the recommended alternative in the 2019 PER. For Alternative "A" recycled water conveyance facilities, easements, right of ways or public streets exist for all but possibly 2-miles of pipeline, specifically along Pole Line Road, for which there is a power line right-of-way. Pole Line Road is unimproved but it is used periodically by power line maintenance crews and frequently by off road enthusiasts. Although public road easements may exist for Pole Line Road, such easements have not been confirmed; therefore, easements may need to be secured for the Pole Line Road portion of the alignment. A site (a subdivision lot) is available for the reservoir at the remote location; it will have to be fenced separately. The recycled water pipeline can be installed using routine construction techniques except at Highway 86 and Arroyo Salada where directional boring would be more appropriate since it would be more cost-effective and less damaging to the environment, especially at the multiple stream crossing, which constitutes jurisdictional water by the USACE and CDFW. Open trenching across jurisdictional water would require permitting from both agencies. The two directional bores, 550 LF at Highway 86 and 2,000 LF at Arroyo Salada total 2,550 LF.

One of the main goals for this project is to implement wastewater reuse and recycling practices. This project would allow for the beneficial reuse of existing wastewater. During design, SCSD will strive to implement the most practical energy efficient design to reduce energy consumption over time. The project alternative will employ a scalable design as to be able to grow with the area as future populations increase. This will provide a system that not only will employ the appropriate technology to meet treatment requirement but will also meet the size and needs of the community.

Table 1
Construction Items to be Evaluated and Issues Addressed

Proposed Solution	Issue/Violations/Enforcement Orders Addressed
Planting and Watering of Non-Fruit Bearing Trees around Site Perimeter	Capacity / Impact on Groundwater and Surface Water
Increased Aerator Maintenance	Capacity / Treatment Effectiveness
Taking Samples from Different Areas	Operational Management
Improve WWTF Facilities	Capacity / Impact on Groundwater and Surface Water
Improve Conveyance Facilities	Capacity / Impact on Groundwater and Surface Water

3.2. Scope of Work (Work Plan)

The Project scope of work will include an updated preliminary design report for the TRC WWTF upgrade, as well as the final design and application processing for all necessary permits. The following elements will comprise the design scope of work:

Task No. 1 – Project Administration

Project Administration will consist of the oversight of the entire project design from start to finish. This will include meeting attendance, corresponding preparation of meeting documents, updating the budget and discussions with staff, agencies, and stakeholders.

Deliverables: Agendas, Meeting Minutes, Exhibits, and Project Progress, Schedule, and Budget Updates

Task No. 2 – Recycled Water Feasibility Study

The recycled water feasibility study will identify all potential recycled water users, the backbone recycled water distribution system required to supply said users, and the cost of recycled water. This feasibility study is required to ensure that enough users are available to support the cost to develop and long-term operations and maintenance of the recycled water system.

Deliverables: Draft and Final Recycled Water Feasibility Study

Task No. 3 – Preliminary Engineering Report

Preliminary Engineering Report shall consist of updating the Preliminary Engineering Report for the TRC WWTF completed in 2019. The updated PER will evaluate all changes within the District and at the TRC WWTF, as it relates to the proposed improvements.

Deliverables: Updated PER

Task No. 4 – 30% Engineering Design

30% Design will include a preliminary design concept for the layout of the upgrades to the TRC WWTF and all related upgrades on an exhibit in plan view. The preliminary design will be established to minimize removals and identify potential impacts of construction. 30% Design will include a preliminary engineer's estimate to accompany all proposed construction items.

Deliverables: Preliminary Design Exhibit and Estimate

Task No. 5 – 60% Engineering Design and Specifications

60% Design shall include preparation of a full set of construction drawings, preliminary technical specifications and updated cost estimate. Construction drawings shall include location of proposed upgrade in relation to existing conditions in accordance with the necessary design standards and specifications. The title sheet shall include the title of the job, a vicinity map showing the project location in relationship to surrounding communities, a location map showing the project limits, a list of abbreviations used, benchmark data, general notes, construction notes, quantities, and a sheet index. The demolitions sheet shall show any required demolition of existing facilities to prepare for the proposed upgrades to the TRC WWTF. The construction sheets shall show all proposed upgrades to the facilities of the TRC WWTF with all necessary construction details. The project specifications shall be prepared in Microsoft Word with the required technical and Special Provisions with a corresponding cost estimate of all construction costs anticipated for the project.

Deliverables: 60% Design Plans, Preliminary Specifications, and 60% Cost Estimate

Task No. 6 – 90% Engineering Design and Specifications

90% Design will include incorporation District and stakeholder comments into the project design package. 90% Design will be submitted with a project summary and memorandum together with updated project specifications and estimates.

Deliverable: 90% Design Plans, Specifications, and Cost Estimate

Task No. 7 – 100% Engineering Design and Specifications

100% design will include incorporation of comments, final plans, specifications, and estimates, ready for public bidding. Final documents will include mylars and hard copy specifications with signatures and electronic copies of final documents. 100% Design will be submitted with a project summary memorandum together with an updated project schedule, additional stakeholder meeting summary, and internal plan review documentation.

Deliverables: One (1) Full-Size Mylar of 100% Drawings; Hard Copy of Specifications and Estimate, Electronic Files of Final Plans, Specifications and Estimate

Task No. 8 – Survey/Mapping

Survey/Mapping shall include topographic survey of the existing facilities, preparation of a topographic map of the existing site, all required research of existing right-of-way and easements, and all necessary right-of-way/land acquisition documents for acquiring land if necessary.

Deliverables: Topographic Map, Right-of-Way Documents, Land Acquisition and Easement Documents

Task No. 9 – CEQA/NEPA Environmental Documentation

The Initial Study and Mitigated Negative Declaration (IS/MND) will include required technical studies and Tribal Cultural Resources requirements through the AB-52 process. The documentation shall include processing the IS to a final package for consideration by SCSD Staff, including the Mitigation Monitoring and Reporting Program (MMRP) for review and approval. It will also include federal cross-cutters for NEPA compliance to maintain eligibility for federal grant and SRF funding.

Deliverables: Administrative Draft, Public Draft, and Final IS/MND, Response to Comments, MMRP, All Notices (NOI, NOA, and NOD)

Task No. 10 – Geotechnical Investigations

Geotechnical Investigations will include the development of geotechnical evaluations and recommendations of grading, earthwork, trenching, and pavement design. This includes drilling, sampling, logging, and laboratory testing of necessary soil borings for evaluation of subsurface conditions throughout the project area. Testing will include evaluations for in-situ moisture content, density tests, infiltration rates, max density and optimum tests, sieve analysis, R-value, direct shear tests, consolidation and collapse tests and corrosivity characteristics of the on-site soils. Findings and recommendations will be assembled into a report.

Deliverables: Geotechnical Report

Task No. 11 – Fiscal Sustainability Plan

The Fiscal Sustainability Plan shall include review of operations and maintenance costs associated with the TRC WWTF upgrade to determine elements for fiscal sustainability.

Deliverables: Fiscal Sustainability Plan

Task No. 12 – Clean Water SRF Construction Funding Application

This task shall include preparation of Clean Water SRF construction funding application including all required attachments, exhibits, estimates and forms. Completed application shall be submitted to the State Water Board for review and approval. Application will be monitored and tracked with the State Water Board, including preparation of amendments and other requested items through completion.

Deliverables: CWSRF Construction Funding Application

3.3. Budget

The projected budget for the construction of a mechanical treatment plant and conveyance system that would allow for beneficial reuse of existing wastewater and eliminate the need for the existing onsite percolation and evaporation ponds that pose a surface water quality and public health risk to the community. The cost estimate can vary depending on which alternatives are selected. The costs (in 2023 dollars) anticipated for the recommended East Layout Option WWTF improvements and Alternative "A" recycled water conveyance facilities are \$13,000,000. The anticipated annual operations and maintenance costs would be approximately \$350,000. Table 2, below, contains a breakdown of the cost associated with completing the Project scope of work and deliverables identified in Section 3.2.

**Table 2
Planning Cost Estimate**

Task	Estimate Cost
1. Project Administration	\$74,000
2. Recycled Water Feasibility Study	\$100,000
3. Preliminary Engineering Report	\$35,000
4. 30% Engineering Design	\$250,000
5. 60% Engineering Design and Specifications	\$250,000
6. 90% Engineering Design and Specifications	\$175,000
7. 100% Engineering Design and Specifications	\$150,000
8. Survey/Mapping	\$80,000
9. CEQA/NEPA Environmental Documentation	\$203,000
10. Geotechnical Investigations	\$55,000
11. Fiscal Sustainability Plan	\$20,000
12. CWSRF Construction Funding Application	\$25,000
TOTAL:	\$1,417,000

3.4. Schedule

The proposed Project schedule is presented in Table 3 below. It is anticipated that some of these tasks can be completed concurrently. However, the overall project schedule will be around 5 years to reach the construction and implementation phase.

Table 3
Planning Deliverable Schedule

Task	Estimated Start	Estimated Draft Submittal	Estimated Final Submittal
Project Administration	0 months	N/A	N/A
Recycled Water Feasibility Study	0 months	12 months	15 months
Preliminary Engineering Report	6 months	12 months	15 months
30% Engineering Design	15 months	N/A	21 months
60% Engineering Design and Specifications	21 months	N/A	29 months
90% Engineering Design and Specifications	29 months	N/A	35 months
100% Engineering Design and Specifications	35 months	N/A	38 months
Survey/Mapping	6 months	N/A	15 months
CEQA/NEPA Environmental Documentation	21 months	27 months	30 months
Geotechnical Investigations	6 months	9 months	12 months
Fiscal Sustainability Plan	29 months	N/A	35 months
CWSRF Construction Funding Application	27 months	N/A	30 months