

Meeting Date: 1/12/2016

Report Type: Consent

Report ID: 2015-01074

Title: Recycled Water Principles of Agreement with Sacramento Regional County Sanitation District

Location: Citywide

Recommendation: Pass a Motion authorizing the City Manager or the City Manager's designee to execute the Recycled Water Principles of Agreement with the Sacramento Regional County Sanitation District.

Contact: Dan Sherry, Engineering Manager, (916) 808-1419; Michelle Carrey, Supervising Engineer, (916) 808-1438, Department of Utilities

Presenter: None

Department: Department Of Utilities

Division: Cip Engineering

Dept ID: 14001321

Attachments:

- 1-Description/Analysis
- 2-Background
- 3-Vicinity Map
- 4-Agreement

City Attorney Review

Approved as to Form
Joe Robinson
12/22/2015 10:21:20 AM

Approvals/Acknowledgements

Department Director or Designee: Bill Busath - 12/7/2015 10:45:09 AM

Description/Analysis

Issue Detail: Evaluating the potential for a non-potable water recycling program within the City requires the development of an institutional understanding between the City and the producer of recycled water, the Sacramento Regional County Sanitation District (SRCSD). City and SRCSD staff have developed Principles of Agreement between the City and SRCSD to provide a framework for negotiating and developing a recycled water policy and program that addresses terms such as ownership and operation of future facilities, design and construction responsibilities, cost sharing, permitting, and pricing. These principles anticipate a phased approach, whereby SRCSD will be the owner and operator of a Phase 1 pipeline, which will travel through the City to serve a Sacramento Power Authority cogeneration facility, with institutional arrangements for future expansion phases within the City to be determined.

Policy Considerations: This endeavor is consistent with the Council focus areas of Sustainability and Livability and Public Safety by evaluating projects that improve water supply.

Economic Impacts: Not Applicable

Environmental Considerations: The Community Development Department, Environmental Planning Services has reviewed the proposed Principles of Agreement and has determined that evaluating and negotiating with SRCSD over the future of recycled water is an exempt planning and feasibility study under the California Environmental Quality Act (CEQA) Guidelines, Section 15262. The Principals of Agreement is an administrative activity seeking to understand the feasibility of a future project. No physical changes in the environment will occur as a result of this evaluation and negotiation process. Any future action related to carrying out a project will be subject to environmental review if required pursuant to CEQA.

Sustainability Considerations: There is no direct impact on sustainability contained within the Principals of Agreement, though this agreement between the two agencies clarifying the role of recycled water in the City, and the roles of the City and SRCSD pertaining to recycled water, is a fundamental component of advancing a program that potentially benefits sustainability. Proponents of recycled water often identify water quality benefits to river systems through lowered raw water diversions. The program has the potential to add an additional, albeit non-potable, water supply to the City.

Commission/Committee Action: Not Applicable

Rationale for Recommendation: Establishing the institutional understanding between SRCSD and the City is fundamental to evaluating the costs and benefits of a future recycled water program.

Financial Considerations: There is no direct fiscal impact anticipated by this agreement. City staff will continue tracking internal labor costs associated with evaluating the potential for recycled water and negotiating with SRCSD. Sufficient funds are available in the Department of Utilities FY2015/16 operating budget to fund these evaluation studies through June 30, 2016. Studies after July 1, 2016, and through the duration of the evaluations are subject to funding availability in the adopted budget of the applicable fiscal year(s).

Local Business Enterprise (LBE): Not Applicable

Background:

The City has been evaluating the potential for adding non-potable recycled water to its supply portfolio for a number of years now. The most opportune source for this water would be disinfected tertiary treated effluent from the Regional Wastewater Treatment Plant operated by the SRCSD, which would be available upon completion of the plant upgrades (EchoWater Project), scheduled for 2021-2023.

2013 Water Supply Master Plan:

In July 2013, the Department of Utilities completed its Water Supply Master Plan, which evaluated a number of options to provide recycled water to existing and future City customers north and south of the American River. The conclusion was that all of the options were technically feasible, but none of them were cost-competitive compared to delivering potable water. A separate Water Conservation Master Plan also identified a suite of water conservation measures that, from a cost-benefit perspective, are generally more attractive options to reducing potable demand.

Additional recommendations in the Water Supply Master Plan included the following:

1. The City should continue to work with Sacramento Regional County Sanitation District (SRCSD) to secure grants or other outside funding to conduct planning studies and construction to make City recycled water projects economically viable.
2. Develop an understanding of the future roles for the City and SRCSD in implementing a recycled water program in the City. For example, which of these agencies should retail the water? Who should build, own and operate/maintain the transmission/distribution system?
3. Implement recycled water projects that are cost competitive when compared to potable water projects. Some projects are not cost competitive today but may become competitive in the future with grants or if the economics change for any reason.

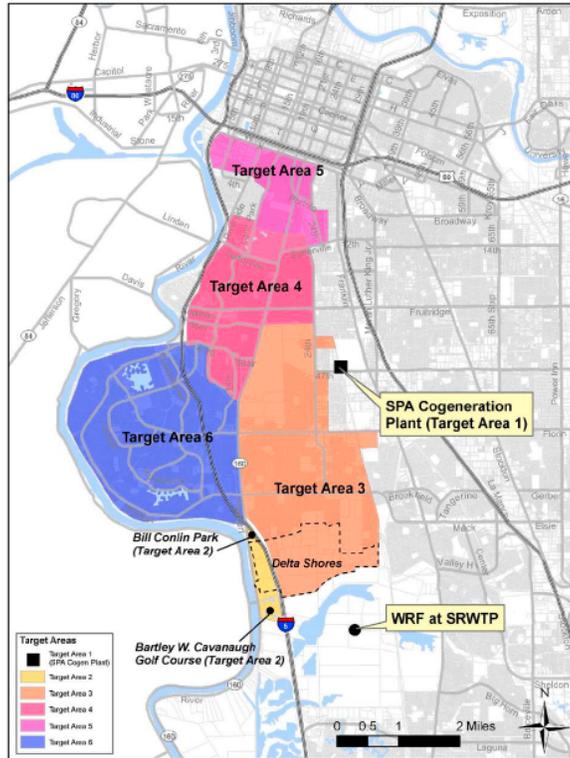
The most promising recycled water opportunities identified in the Water Supply Master Plan are located in the southwest portion of the City due to their close proximity to the Regional Waste Water Treatment Plant. In particular, the Sacramento Power Authority (SPA) Cogeneration Plant (Cogen Plant) located in unincorporated Sacramento County is currently using potable water from the City to supply its cooling tower water needs, and could be converted to recycled water without significant changes to its operation.

2015 SRCSD/SPA/City of Sacramento Recycled Water Feasibility Study

In May 2012, the United States Bureau of Reclamation awarded SRCSD a \$40,000 Water Smart grant to develop a Feasibility Study for the potential recycled water uses in the southern part of the City. City staff collaborated with SPA and SRCSD staff on this study which was completed in January 2015. This effort included:

- A Market Assessment
- A Water Supplies Evaluation
- An Evaluation of Groundwater Recharge Potential
- Seasonal Storage Analysis
- Conveyance Facilities Alternatives Development
- Environmental, Regulatory, Legal and Institutional Requirements
- Recycled Water Program Alternatives Evaluation Environmental, Regulatory, Legal and Institutional Requirements

Overall the study considered the delivery of recycled water to SPA as a Phase 1 project and then to City of Sacramento customers in phases 2-6. The Regional Plant is identified on the following map as "WFR", or Water Recycling Facility. (*Attachment A provides a larger scale phasing map*).



The eventual conclusion was that Phase 1 was the most cost-effective project, though none of the alternatives carried a favorable cost to benefit ratio, and that future evaluations should be limited to Phase(s) 1-3.

On November 12, 2014, the SRCSD Board approved the SRCSD/SPA/City Water Recycling Pipeline Project and certified the Environmental Impact Report (EIR), which included environmental review for the three phases recommended for implementation in the Feasibility Study.

Business Case Evaluation:

To aid City staff in future negotiations with SRCSD, a separate consultant-supported business case evaluation for recycled water is being conducted. This will include a review of previous cost estimates for program implementation, an identification of funding opportunities and options, an evaluation of the potential rate impact to City customers, and an evaluation of lost revenue to the City’s water fund. This study is anticipated to conclude prior to the end of the current fiscal year.

Principals of Agreement (POA):

The continued exploration and potential implementation of water recycling program within the City requires that an institutional framework be developed between the City and the producer of recycled water (SRCSD).

The POA between SRCSD and the City states that SRCSD and City anticipate negotiating and developing a recycled water policy and program that addresses terms such as ownership and operation of future facilities, design and construction responsibilities, cost sharing, permitting, and pricing.

1. Phase 1 Project: SRCSD to replace City potable water service to SPA with recycled water:
 The Phase 1 project will provide a recycled water pipeline from the Regional Plant to SPA to support its cooling tower needs. The POA states that SRCSD will maintain responsibility for all aspects of the recycled water service, including permitting, production, facility ownership & maintenance, and retail service concerns.

The portions of this pipeline that are within SRCSD property are currently under construction, and the remainder, which will travel through the City and eventually connect to SPA, are in design. No encroachment permit has been granted yet.

SPA has expressed concern about reliability of the service and has requested that the potable connection to the City be maintained, which the City will continue to provide under its standing service agreement.

City staff are facilitating the design of this project, and are ensuring that the proposed project maintain compliance with City construction standards, and other permitting agencies.

2. *Future Phases: An expansion into providing recycled water within the City of Sacramento's Retail Area.*

Institutional arrangements for future expansion phases within the City have not been determined. The POA indicates willingness by both parties to collaborate on identifying opportunities for expansion of the recycled program and identifies a series of topics that will guide the negotiation. These include:

- *Design and Construction Roles*
- *Facilities' Ownership, Operation and Maintenance, and Program Administration:*
- *CEQA obligations*
- *Permitting Roles*
- *Cost Sharing*
- *Recycled Water Pricing*
- *Recycled Water Policy*

Figure 1 - Vicinity Map for the Study Area

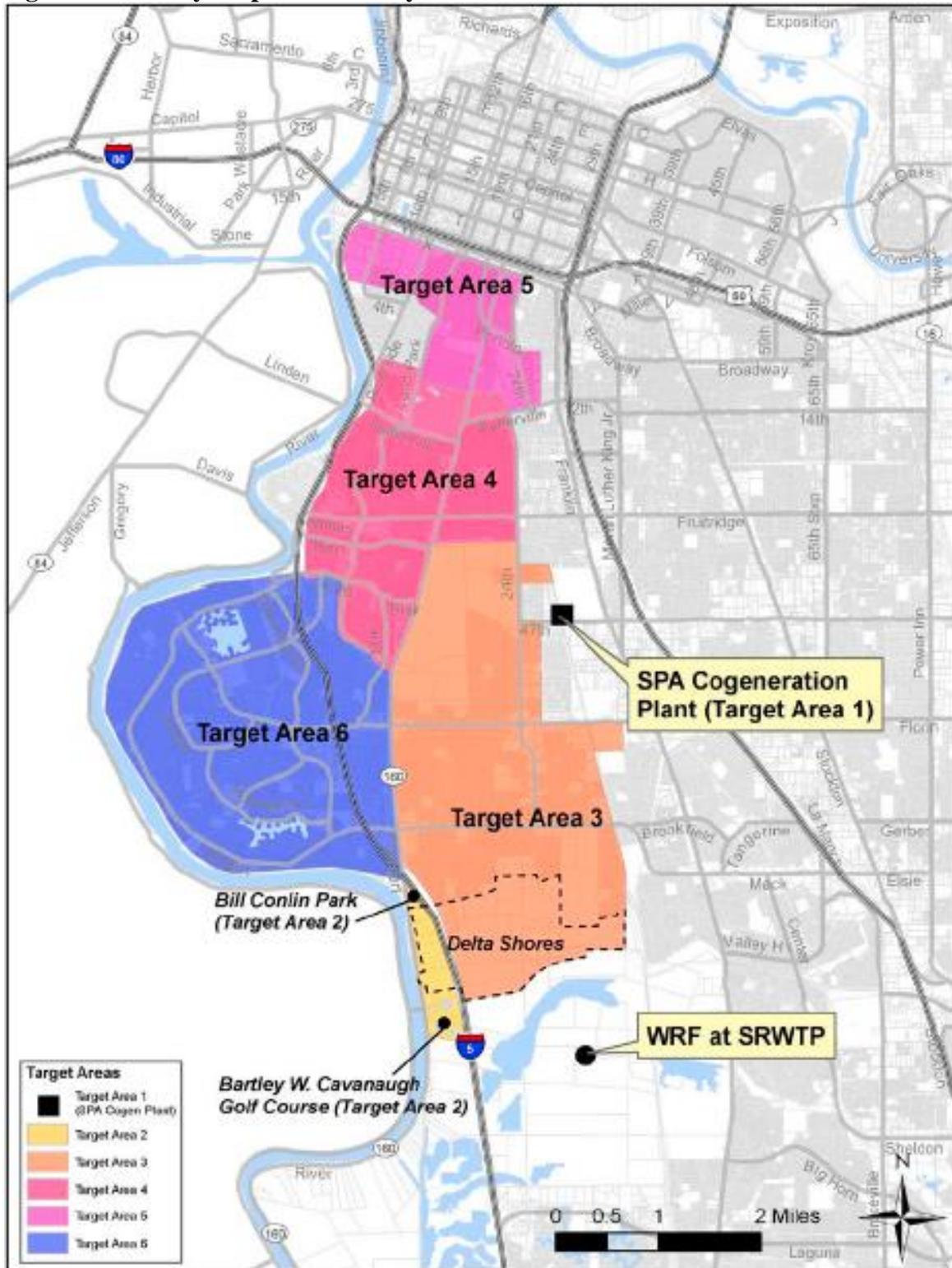


Figure 2 - Vicinity Map for the Phase 1 Recycled Water Project

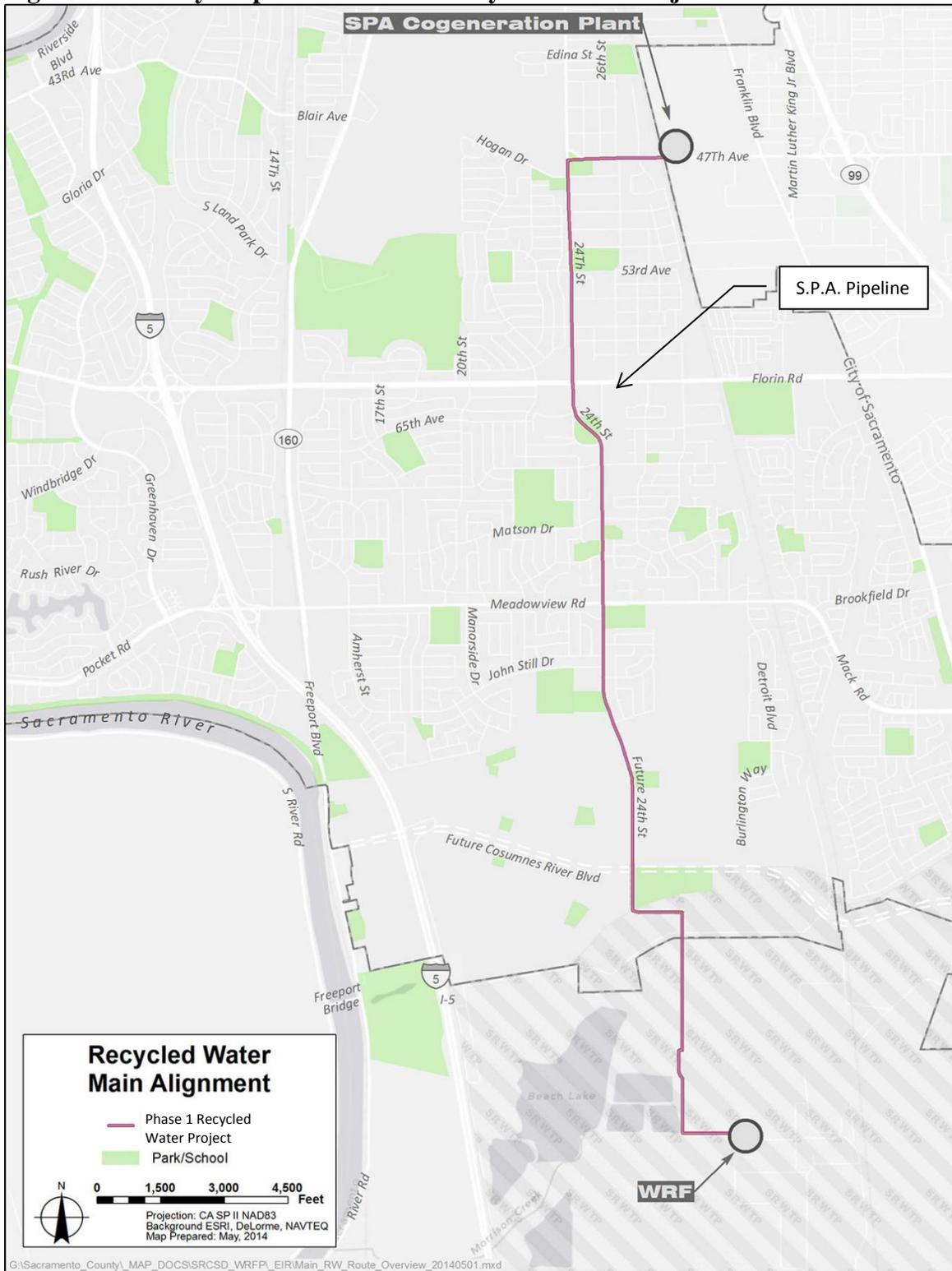
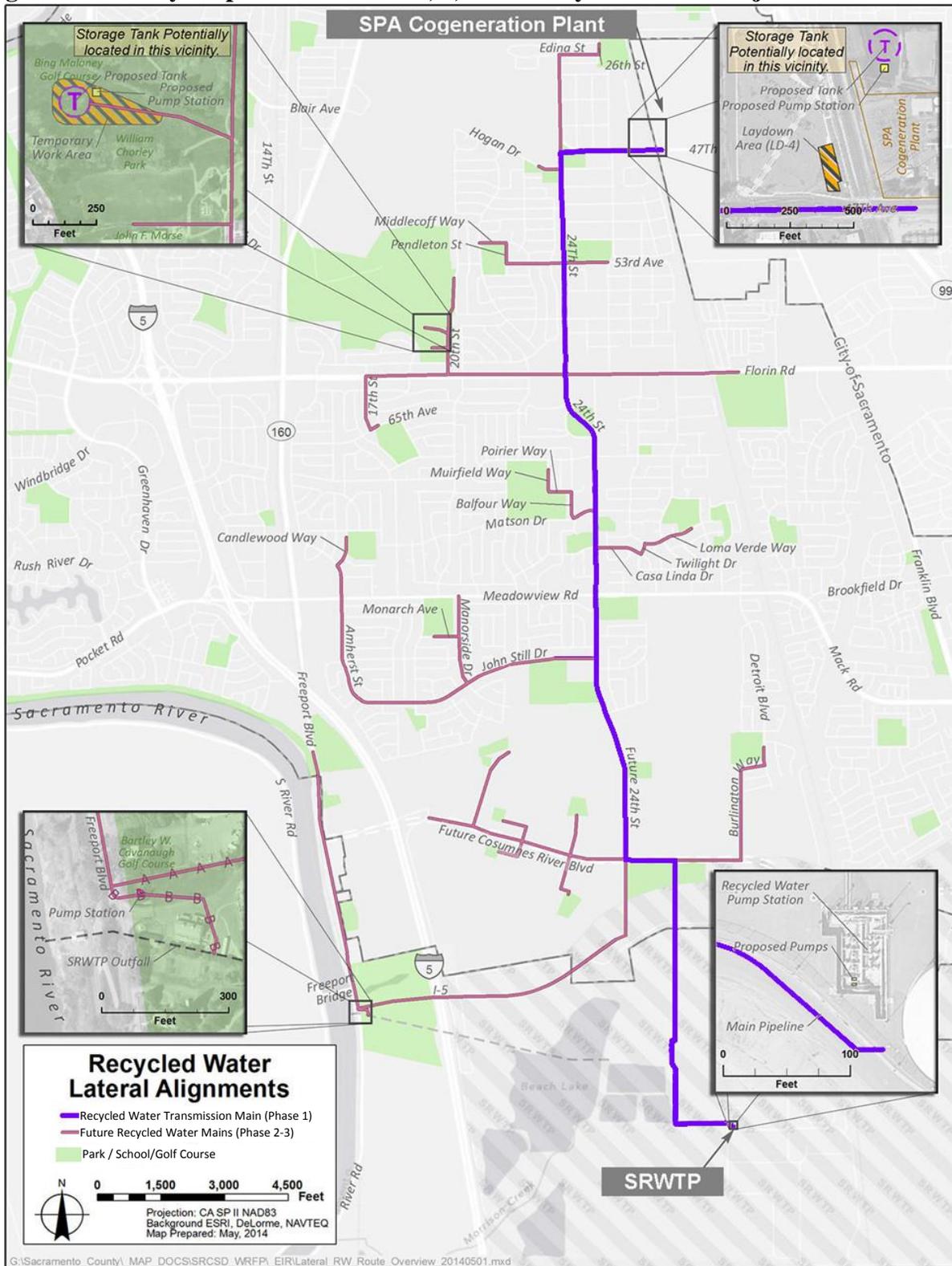


Figure 3 - Vicinity Maps for the Phases 1, 2, and 3 Recycled Water Projects at Buildout



Principles of Agreement for Water Recycling Program
Between REGIONAL SAN and CITY of SACRAMENTO

BASIS FOR PRINCIPLES OF AGREEMENT

1. These Principles of Agreement are between the Sacramento Regional County Sanitation District (REGIONAL SAN) and the City of Sacramento (CITY), hereafter referred to as “PARTIES”. The Principles of Agreement is an interim document that describes the proposed institutional structure for the proposed REGIONAL SAN/CITY Water Recycling Program (Program). These Principles of Agreement are intended to provide a framework for the development of potential future agreement(s) that address participation in the ownership, financing, construction, operations, and maintenance of the Program. Approval of any such agreements will be subject to compliance with the California Environmental Quality Act and any other applicable environmental laws or regulations.
2. The State of California and the Sacramento region have identified the need to improve water supply reliability and sustainability to meet existing and future non-potable water demands. Recycled water is a safe, sustainable, and proven water supply that can be used to meet non-potable water demands, such as landscape irrigation and industrial uses, and thus helps to conserve potable water sources.
3. REGIONAL SAN and the Sacramento Power Authority (SPA), in coordination with CITY, cooperated in the development of a water recycling project, referred to as the Phase 1 Project in this Principles of Agreement, that will initially deliver recycled water via a new transmission pipeline from the Sacramento Regional Wastewater Treatment Plant (SRWTP) to the SPA Cogeneration Facility (SPA Cogen) located near Franklin Boulevard and 47th Avenue. This transmission pipeline, in concurrence with CITY, was upsized to provide additional capacity to serve potential future recycled water users within CITY.
4. The Parties anticipate implementing the Program in a phased approach to facilitate performance of the necessary environmental review(s), construction activities, financing needs, and the acquisition of grants or low interest loans from federal or state agencies, or both. A Title XVI feasibility study, developed by REGIONAL SAN in 2014, recommended three phases for Program implementation. Attachment 1 includes maps of the three Program phases identified in this study.
5. The proposed Program consists of four key infrastructure components: (i) recycled water treatment facilities, (ii) recycled water transmission facilities, (iii) recycled water distribution facilities, and (iv) on-site recycled water facilities.

PURPOSE OF THE PRINCIPLES OF AGREEMENT

The following principles outline anticipated commitments and responsibilities by each of the PARTIES related to the environmental review, financing, design, construction, operations, and maintenance for each of the three Program phases identified. This document represents a good faith effort by the PARTIES to memorialize their mutual intentions consistent with the principles set forth herein, but this document is not a binding agreement nor does it commit or obligate any party to undertake or approve any future action or agreement.

PROGRAM PHASES AND PARTY RESPONSIBILITIES

The three Program phases and their key infrastructure components, as presently anticipated by the PARTIES, are described below.

Phase 1: Phase 1 includes a new recycled water transmission pipeline to convey recycled water from SRWTP to the SPA Cogen. It also includes on-site recycled water piping at the Cogen's property. Phase 1 does not include installation of distribution facilities to other users, but REGIONAL SAN, in concurrence with CITY, intends to size the transmission pipeline to allow for the connection of other uses located in CITY in the future as described in Phases 2 and 3.

CITY is not a party to the Phase 1 agreement between REGIONAL SAN and SPA. However, CITY will maintain the existing water connection to the SPA Cogen facility in the event that recycled water cannot be delivered to it, so long as REGIONAL SAN or SPA pays the applicable monthly service charge and the appropriate volumetric charges to maintain and use the existing connection to CITY's potable water system.

Phase 2: Phase 2 includes the construction, operations and maintenance of a distribution system and on-site recycled water facilities to serve potential areas west of Interstate-5, as shown in Figure 2 of Attachment 1.

Phase 3: Phase 3 includes the construction, operations, and maintenance of a distribution system and on-site recycled water facilities to serve potential areas located between the SRWTP property and the SPA Cogen.

For Phases 2 and 3, REGIONAL SAN and CITY anticipate negotiating one or more agreement(s) defining the costs, billing, and recycled water supply terms. SPA will not be a party to the Phase 2 and 3 agreement(s).

The PARTIES understand that the three phases presented herein are at a conceptual level, and are subject to change, depending on future refinements and availability of funding or as otherwise may be agreed by the PARTIES.

Table 1 summarizes the three phases and the anticipated responsibilities of each party (including construction, ownership, operations and maintenance) for the key infrastructure components of the Program phases. No party shall be obligated to undertake or approve any responsibility as shown below unless and until such responsibility is agreed to in a duly approved agreement or any subsequent amendment(s).

Table 1 - Anticipated Responsibilities for Key Program Components

Phase	Treatment	Transmission¹	Distribution	On-Site
Phase 1	REGIONAL SAN	REGIONAL SAN	Not Applicable	SPA
Phase 2	REGIONAL SAN	Not Applicable	To Be Determined ²	Users
Phase 3	REGIONAL SAN	Not Applicable	To Be Determined ²	Users

¹ The transmission facilities refer to the pipeline from the SRWTP property boundary to the SPA Cogeneration Facility. It also includes the recycled water transmission pipeline, Storage and Pumping facilities located within the SRTWP property. The Phase 1 pipeline will be sized to serve Phases 1, 2, and 3.

² REGIONAL SAN and CITY anticipate that responsibilities for the distribution system, including storage and pumping facilities outside of the SRWTP property boundary, will be negotiated and determined in a future agreement(s).

PRINCIPLES OF AGREEMENT

The principles that will govern the negotiation of agreement(s) between REGIONAL SAN and CITY are as follows:

- a. *Participation:* The objective for Phases 2 and 3 is to build the distribution system and related facilities to expand the use of recycled water in the CITY by using the excess capacity in the Phase 1 transmission pipeline. REGIONAL SAN will produce the recycled water. CITY and REGIONAL SAN will collaborate to identify opportunities for expansion of the Program to serve other customers located within the CITY’s service area and its immediate vicinity.
- b. *Design and Construction:* It is anticipated that REGIONAL SAN and CITY will negotiate the agreement(s) governing responsibilities for the design and construction of the distribution and on-site recycled water facilities to expand the Program to serve other customers located within such

areas. Any pipelines and related facilities constructed will need to comply with applicable provisions of local and state standard specifications.

- c. *Facilities' Ownership, Operation and Maintenance, and Program Administration:* REGIONAL SAN will own, operate, and maintain the recycled water treatment and transmission facilities located within the SRWTP property boundary. The ownership, operation, and maintenance of transmission, distribution, and on-site recycled water facilities for the expanded Program located outside the SRWTP property will need to be addressed by agreement(s) between CITY and REGIONAL SAN, consistent with all applicable legal requirements and limitations.
- d. *California Environmental Water Quality Act (CEQA) and National Environmental Policy Act (NEPA):* The PARTIES' respective obligations under CEQA and NEPA would need to be addressed by agreement(s) between the CITY and REGIONAL SAN.
- e. *Permits:* REGIONAL SAN and CITY intend to collaborate, as needed and when appropriate, with respect to applications for approvals necessary to comply with permitting requirements for the distribution system and other on-site recycled water facilities.
- f. *Cost Sharing:* It is anticipated that cost sharing of capital costs, operation, and maintenance will be negotiated between CITY and REGIONAL SAN.
- g. *Recycled Water Pricing:* The PARTIES intend to negotiate with each other regarding recycled water pricing, including the potential for establishment of additional rate categories and fees appropriate for each use, with the goal of a rate for recycled water that is equal to or less than the rate for the same usage of potable water. Any use of sewer or water ratepayer funds must comply with the provisions of Proposition 218, among other applicable legal requirements and limitations.
- h. *Recycled Water Policy:* It is anticipated that CITY and REGIONAL SAN will collaborate to develop a recycled water policy to promote and advance the use of recycled water within the areas identified in the CITY.
- i. *Approval:* Approval from their governing bodies will be required for REGIONAL SAN and CITY to implement Phase 2 and 3 of the Program.

IN WITNESS WHEREOF, the PARTIES have executed these Principles of Agreement upon the dates hereinafter set forth.

Attest: _____ Sacramento Regional County Sanitation District
Dated: _____ By: _____
Title:

Attest: _____ City of Sacramento
Dated: _____ By: _____
Title:

ATTACHMENT 1

**Maps of
Potential Program Phases**

Figure 2
Vicinity Map for Phase 1, 2, and 3 Projects at Buildout

