Enhanced Compliance Action (ECA) Proposal to the State Water Resources Control Board and North Coast Regional Water Quality Control Board

Name of Project:	West County Water Quality and Recycled Water Supply Feasibility Project with Stakeholder Committee	
Project Applicant Address:	Russian River County Sanitation District (District) 18400 Neeley Road, Guerneville, CA 95446	
Contact Person and Title:	Michael Thompson Assistant General Manager Sonoma Water 404 Aviation Blvd Santa Rosa, Ca 95403	
Contact Phone and Email:	707.975.2388 Michael.Thompson@scwa.ca.gov	
PROJECT CATEGORIES	 Pollution prevention Pollution reduction Public Health Improving impaired waters Groundwater Protection Surface Water Protection Water Reuse 	

PROJECT LOCATION

WEST AND CENTRAL SONOMA COUNTY

ECA PROJECT OVERVIEW

Existing wastewater systems in western Sonoma County (West County) are challenged by small customer bases and unusually high wastewater rates for the economically disadvantaged communities several of them serve. The North Coast Regional Water Quality Control Board (Regional Water Board) estimates that up to 12,000 Onsite Wastewater Treatment System (OWTS) owners in this area must comply with Russian River Pathogen Total Maximum Daily Load (Pathogen TMDL). Additionally, during the recent drought, a recycled water shortage occurred in Sonoma County as demand exceeded supplies for this important water source. Climate change and the planned decommissioning of PG&E's Potter Valley Hydroelectric Project (Potter Valley Project) are anticipated to put further stress on the region's water supplies and increase the importance of recycled water supply.

The District's proposed ECA project (Project) consists of conducting a high-level feasibility study to evaluate potential regional projects that could improve water quality, water supply reliability, Pathogen TMDL compliance, and climate change resiliency in the Russian River watershed, and address ratepayer costs for West County wastewater systems by exploring the cost savings of regionalization.

The feasibility study would be coupled with a stakeholder program to help inform and identify community support for potential regional solutions to the many wastewater challenges and water resource opportunities in the West County. A roadmap for the advancement of feasible projects that obtain broad and/or consensus support from existing wastewater treatment systems will be prepared at the conclusion of this Project. This roadmap is anticipated to include exploration of many potential side streets that could create new avenues of opportunity for collaboration or consolidation. The ECA's primary deliverable will be a Final Feasibility Study Report, which may determine a series of feasible solutions that will then need to be funded, go through environmental review, and be implemented. As discussed below, the ECA will generate data needed to make better decisions for a future of resiliency in West County, including data and analysis to support long term improvements, and data that will support the near term implementation of the pathogen TMDL.

Although the District cannot currently commit to any future projects since no projects have yet been identified or scoped, the District and Sonoma County Water Agency have a solid history of advancing projects within the region. This history provides a reasonable expectation of the continued commitment of future resources, staffing, and funding for future projects deemed to be feasible.

PROJECT GOALS AND OBJECTIVES:

(1) Investigate the feasibility of creating regional wastewater treatment and reuse systems to provide more reliable and cost-effective services to local rate payers.

(2) Study the feasibility of expanding water recycling systems and pipelines in West Sonoma County.

(3) Survey wastewater connection and consolidation opportunities for onsite wastewater treatment systems (OWTSs), especially failing OWTSs in areas subject to TMDL requirements, due to their proximity to pathogen and nitrogen impaired waterbodies.

(4) Explore the feasibility of increasing climate change resiliency, especially to counter the impacts of extended drought and seasonal flooding.

PROJECT TASKS DESCRIPTION

Although the specificity of the Project, and the details of the information provided to stakeholders may change during the Project, descriptions of the planned feasibility study and stakeholder engagement tasks are described below:

Feasibility Study

A feasibility study is proposed to assess a range of potential regionalization alternatives that could provide the benefits previously described. The proposed feasibility study would include the assessments of the following:

• West County Wastewater Regionalization

Through the ECA, the District will explore the feasibility of connecting some or all of the small West County districts, which could include constructing pipeline(s) to convey wastewater to the Santa Rosa Sub-regional Water System (SRSWS) and/or other treatment plants for reliable tertiary

level treatment. Additional pipelines would be explored to convey tertiary recycled water back to West County districts for distribution to their current and future recycled water users.

Potential Benefits include:

- Provide more reliable and cost effectives services.
- The Graton Community Services District, Occidental County Sanitation District, and Forestville County Water District currently serve small communities with low population densities and financial hardships. Sewer service rates are very high in these districts. Alternatives for regionalizing these systems, either locally or by connection to the SRSWS, would be assessed. By regionalizing, these small wastewater districts would likely realize significant economy of scale benefits that could potentially stabilize or reduce ratepayer costs, improve funding for infrastructure maintenance and replacement, and improve the reliability of their systems. This approach could take advantage of excess treatment capacity and excess recycled water storage capacity at the SRSWS.
- The District could potentially realize similar regionalization benefits and/or could benefit Water Quality by providing service to nearby communities subject to the Pathogen TMDL.
- Regionalization could also benefit Water Quality by decreasing the number of surface water discharge points and make it easier for smaller West County wastewater systems to comply with the seasonal discharge limits/prohibitions and manage flood events.
- The Project would assess the feasibility and benefits of multiple potential regionalization options.

• Pathogen TMDL Compliance/Unsewered Community Scope

- The Regional Water Board estimates that up to 12,000 OWTS will be subject to the Russian River Action Plan's Advanced Protection Management Program associated with the Pathogen TMDL. Many of these properties are located in the economically disadvantaged communities of Hacienda, Hollydale, Monte Rio, Villa Grande, Camp Meeker, and Guerneville. Regionalization projects could provide an option for these communities to comply with the Pathogen TMDL.
- The Project will attempt to identify unsewered communities along any proposed pipeline pathways to allow for those communities to potentially connect to sewers and local wastewater treatment/recycling facilities. These connections could provide incremental progress toward TMDL compliance and a corresponding regional Water Quality benefit.
- The Project would evaluate the potential for regional projects to serve these small, rural, and potentially disadvantaged communities. (Separate community-level feasibility studies needed for each of these communities would be beyond the scope of the Project.)

• Increased Recycled Water Supply

- Regionalization projects could increase the amount of recycled water available to meet current and future recycled water demands in the Russian River watershed.
- Recycled water regionalization options could include increasing the number of systems connected to the SRSWTP and/or interconnecting existing West County

recycled water systems to those that serve the Highway 101 and/or Highway 12 corridors.

- Presently, only a fraction of the West County's wastewater water is beneficially reused. Initial estimates suggest that the West County could generate over 1,000 acre feet of new recycled water per year.
- Beneficial reuse provides a Water Quality benefit by allowing potable water to be focused for municipal/drinking water use while recycled water could be used for irrigation purposes. If direct potable reuse becomes feasible, having a larger supply will provide additional benefits.
- Regionalization could also enable small districts to better access public funding for recycled water projects. Individual agencies might see cost savings from regional projects that could free up income from rates for debt service or for providing a local match for grants.
- The Project would assess the amount of recycled water that could be available for reuse through wastewater and/or recycled water regionalization, and would be consistent with the Governor's Water Supply Strategy to increase recycled water supply statewide.

• Increased Climate Change Resiliency

- The Project falls within the California Water Plan's parameters of providing for equity, climate adaptation, and drought resiliency.
- Regionalization could assist to temper the impacts of extreme events, such as extended drought and seasonal flooding. Seasonal flooding impacts the West County area, which can exacerbate rainfall induced infiltration and inflow, and can result in more frequent or larger sewer spills.
- Effectively managing these events on a regional basis might assist with sewer system management and Water Quality compliance, by reducing upset and bypass events, and thereby reducing the potential financial impact of fines and citizen suits.
- \circ $\;$ The Project would assess the benefits of regionalization on climate adaptation and resiliency.

Technical memos and a feasibility study report will be prepared that present the findings of the assessments. The feasibility study report will include descriptions of the regionalization options and communities served, order of magnitude range estimates for construction costs, estimated recycled water supply volumes, and potential ratepayer costs. This report would be provided to the Stakeholder Group to identify feasible regionalization options supported either broadly and/or by existing wastewater system communities.

Stakeholder Program

Large-scale public works projects that offer multiple benefits require broad public and decision maker support. Without such support, it will be difficult if not impossible to advance projects identified through the feasibility study. A robust and strategic stakeholder program is necessary to help inform and guide the feasibility study. The following tasks are proposed for the stakeholder program:

• Stakeholder Interviews

- A series of confidential interviews will be conducted to better understand current perceptions regarding West County wastewater management. The interviews will involve a broad and inclusive cross-section of stakeholders in the West County, including wastewater districts, cities, the Local Agency Formation Commission (LAFCO), County of Sonoma, North Coast Regional Water Quality Control Board, municipal advisory committees, agricultural entities, environmental community, and business interests.
- An interview summary report will be created documenting common themes derived from these interviews to help inform the feasibility study.

• Outreach and Education

 Based on the results of the interviews, outreach and education will be performed to establish a clear, common understanding of water quality, water supply, wastewater, regulatory, financial interests, and priorities across relevant parties and to report on the progress of the feasibility study. This effort will focus on assessing the current understanding of wastewater issues in the West County and the potential benefits of comprehensive solutions to these issues.

• Stakeholder Committee

 A Stakeholder Committee will be formed and organized with individuals trusted by wastewater districts and unsewered communities in the West County to ensure equitable and inclusive representation of all interests. The Stakeholder Committee will also be involved with reviewing and commenting on the technical memos and draft feasibility.

Assess Support

- Once the Feasibility Study is complete, the Stakeholder Committee will work to identify feasible options that have broad support and/or support from existing wastewater systems, and will develop recommendations for advancement of supported options.
- This committee will also consider the variety of funding sources to pay for any feasible projects or portfolio of projects to align those projects with funding. For example, loans, grants, and matching funds will be explored along with opportunities for collaboration or consolidation to pool funding. The committee will also explore the Regional Water Board's stated commitment to partner with the District to seek funds for future projects.
- As a final deliverable, a Project Advancement Report will be prepared that presents a roadmap for the advancement of feasible projects that obtain broad support and/or consensus support from existing wastewater treatment systems. Additional grant funding would be needed to implement any feasible project(s).

WORK PLAN

 Table 2 PROJECT NAME - West County Water Quality and Recycled Water Supply Feasibility

 Project

Project Timeline: Summer 2023 to mid-2026

Tasks	Estimated Schedule
Submission of Proposed ECA	May 2023
Regional Board Approval of ECA	July 2023
Task 1	
• Feasibility Study	
Award Feasibility Study Consultant Agreement	November 2023
Feasibility Study Assessments	December 2023 to December 2024
Draft Feasibility Study Report Preparation	January 2025 to June 2025
Final Feasibility Study Report Preparation	July 2025 to December 2025

Task 2:	
Stakeholder Program	
Award Stakeholder Consultant Agreement	November 2023
Stakeholder Interviews	December 2023 to February 2024
Stakeholder Committee Formation and Meetings	December 2023 to June 2025
Project Advancement Report Preparation	December 2025 to May 2026

DELIVERABLES

Milestones: The proposed ECA will consist of the following milestones by component as described in more detail below:

- Consultant Selection and Agreements Execution: November 2023
- Stakeholder Interview Summary: March 2024
- Stakeholder Committee Meeting Minutes: Included in Quarterly Reports
- Draft Feasibility Report: June 2025
- Final Feasibility Study Report: December 2025
- Project Advancement Report: May 2026

Details of Development of Program: See Project Description.

Quarterly Reports: The District will provide quarterly progress reports to the Regional Water Board's designated representative and the Division of Financial Assistance of the State Water Board. Each progress report will describe the tasks completed along with budget expended for each task since the last report, and provide a statement of progress towards compliance with the Project timetable and milestones. The quarterly reports shall also include summaries of findings and outreach conducted, and copies of any supporting materials utilized for the program. Progress reports would be due on the end of the month following each calendar quarter.

RRCSD ECA Proposal

Final Report and Certification of Completion: A final report will describe the tasks completed, include an accounting of funds expended, and describe whether the project was successfully completed. A final report and certification of completion will be made available to the Regional Water Board within 30 days of completion.

PROJECT COSTS

The total estimated cost for the proposed ECA was derived based on similar work previously conducted. The funding proposed for Project may exceed the fine obligations for this ECA.

Table 3. Budget SummaryProject: West County Water Quality and Recycled Water Supply Feasibility ProjectProject Timeline: September 2023 – May 2026		
Tasks	Total Cost	
Feasibility Study	\$600,000	
Contingency for cost overruns	\$40,000	
Stakeholder Process	\$227,000	
Contingency for cost overruns	\$20,000	
TASKS TOTAL	\$827,000.00	
Contingency for cost overruns	\$60,000	
TOTAL MAXIMUM PROJECT COST	\$887,000	

ECA Payment Schedule

Table 4 presents the proposed timing to fund the \$880,000 maximum project cost (ECA Amount), per the payment schedule below. Timely payment of the ECA amount does not relieve the District of its responsibility to fully implement and complete the Project.

Table 4. ECA Payment Schedule				
No.	Amou	nt	Due Date	
1	Feasibility Study	up to \$640,000	December 2025	
2	Stakeholder Process	up to \$245,000	May 2026	
Total		\$887,000		

PROJECT READINESS

The planning and contracting for Project would begin upon execution of the ACL stipulated order and settlement agreement.

EXPECTED BENEFITS - This ECA Project would supply information to support the following:

- Identified locations of unsewered communities along proposed pipeline routes and provide options for up to 12,000 West County OWTS owners to benefit local Water Quality by providing a pathway to comply with Pathogen Total Maximum TMDL;
- Allowance for West County wastewater systems to potentially provide more reliable and cost-effective services to their rate payers and decrease the Water Quality impacts by reducing permitted discharges and correspondingly reducing the number of National Pollutant Discharge Elimination System (NPDES) permits that must be managed by the Regional Water Board;
- Increasing utilization of available treatment plant capacity and increase recycled water supply for the region;
- Adhering to the Governor's Water Supply Strategy to increase recycled water supply statewide by increasing the amount of recycled water available for beneficial use;
- Bolstering the resilience of West County wastewater systems to extreme weather events and benefit Water Quality by reducing sewer spill incidents.
- Decreasing the number of surface water discharge points, making it easier for smaller West County wastewater systems to comply with seasonal discharge limits and manage flood events;
- Identifying stakeholder support and funding sources for advancement of feasible projects; and
- Improving resilience of the Russian River watershed to drought, climate change, and anticipated changes in the Potter Valley Project.

COMMUNITY BURDENS – Disadvantaged

Western Sonoma County has previously been identified by the California Department of Water Resources as including several small and economically Disadvantaged Communities (DACs), including the wastewater districts included in this Project, some of which may be characterized as severely disadvantaged communities. The status quo of very high rates is not advantageous to these DAC communities, so the Project can explore more cost-effective options.

In addition to economic challenges, community members also face health and environmental burdens. CalEnviroScreen 4.0, the mapping tool provided by the State of California's Office of Environmental Health Hazard Assessment (OEHHA), identifies high or highly severe indicators confronting the area near the District. The highest ranked challenges include solid waste, lead in housing, impaired water, pesticides, groundwater threats, and drinking water contaminants.

RRCSD ECA Proposal

HUMAN RIGHT TO WATER

By analyzing the feasibility of connecting presently unsewered areas, the community members' human right to water will be protected by protecting surface water and local groundwater. In addition, the potential creation of additional recycled water will offset potable water supply (or in the future could be treated for direct potable supply), also protecting the human right to water.

Additional Information CLIMATE CHANGE RESILIENCY

West County wastewater systems must prepare for severe weather including drought and intense storms. Flood events can lead to unmanageable wet weather flows entering the sewer system, stream discharge challenges, and recycled water shortages during droughts. The proposed ECA will identify projects to help the region withstand the impacts of climate change.

During the recent drought, the region experienced recycled water shortages as demands exceeded supplies for this important water source. Over 800 water rights holders on the Russian River experienced water right curtailments during this drought. Climate change and the planned decommissioning of PG&E's Potter Valley Project are anticipated to put further stress on the region's water supplies and increase the importance of recycled water supply. Only a fraction of the West County's wastewater water is currently being beneficially reused. Regionalization options could allow West County recycled water help address the regional recycled water shortage. Initial estimates suggest that the West County could generate over 1,000 acre feet of new recycled water per year.

Droughts also cause challenges to small West County wastewater systems because of seasonal discharge limitations. Small wastewater systems that discharge to West County creeks cannot discharge more than 1% of the flow of the receiving creek during the late fall to early spring of each year. During droughts, these creeks can have little to no flow limiting or preventing discharges. Regionalization could reduce the number of discharge points and provide new options for managing wastewater and creating recycled water during these periods. During storm events, regionalization could allow recycled water from West County wastewater systems to be stored in reservoirs in the Central County (Highway 101 corridor).

The Project will benefit State-identified DACs facing economic and environmental burdens and is also in line with State Water Board 's Comprehensive Response to Climate Change, Resolution No. 2017-0012, available to view at:

https://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2017/rs2017_001 2.pdf

PROJECT STATUS

This project is not currently required by another entity or agency.

LONG-TERM SUCCESS

The proposed ECA has identified the following measurable criteria that will assist in tracking longterm project success:

RRCSD ECA Proposal

FEASIBILITY STUDY:

- Execution of a consultant agreement for the feasibility study: This milestone will be an important step in the advancement of the Project.
- Feasibility study technical memos: During the feasibility study, memos will be prepared describing the technical results of key project components.
- Completion of the final draft and final feasibility study reports.

STAKEHOLDER PROCESS:

- Execution of a consultant agreement for the stakeholder process: This milestone will be an important step in the advancement of the Project.
- Stakeholder Interviews: An interview summary report will be created documenting common themes derived from stakeholder interviews and will help inform the feasibility study.
- Stakeholder Committee Formation: A stakeholder committee will be formed to review the technical memos and draft feasibility study and consider potential funding sources to be explored to implement projects deemed feasible. Meeting minutes can be provided in the quarterly progress reports.
- Project Advancement Report: A report will be prepared by through the Stakeholder Committee will present a roadmap for the advancement of feasible projects that have obtain broad support and/or consensus support from existing wastewater treatment systems and reliable potential funding sources.

APPLICANT EXPERIENCE

History of Project Compliance: The following shows agency experience successfully managing and completing projects with the Water Board and other agencies as shown below.

Clean Water State Revolving Fund Loan (SRF)			
Agreement No: 03-807-550-0	Amount: \$4,086,971	Dates: 9/10/2003—11/10/2024	
Loan Manager: Patrick Lam			
Project: Third Unit Process Project			

- (i) Funding Management A staff of accountants and a grant administration specialist focus solely on projects funded by state and federal grants, loans, and other external funding sources. Our financial system assigns a unique project charge code specific to each project within the Agency that can account for grant revenue and expenditures separately. Grant accountants are responsible for reimbursement requests, ensuring that expenditures are paid prior to reimbursement requests and that only allowable, reasonable, and allocable expenditures are processed.
- (ii) Reporting Reporting is coordinated by grant administrative specialists, and includes progress reports, and annual and close-out reports. Reporting periods coincide with invoice reporting periods and must accompany each invoice. All activities and expenditures are documented in the all deliverables and work items must be listed.

Clean Water State Revolving Fund Loan (SRF)

Grant #: D1901020 Amount: \$810,085

Dates: 8/28/2017 - 2/28/2060

Grant Manager: Matthew Chambers

Project: Lift Stations and Force Main Project (Planning Principal Forgiveness)

(i) Funding Management -- See above

(ii) Reporting – See above

Urgent Drinking Water Needs (UDWN)		
Agreement No: D2118157	Amount: \$2,321,273	Dates: 11/24/2021 - 11/30/2022
Loan Manager: Robert L'Heureux		
Project Force Main Replacement Project		

- (i) Funding Management -- See above
- (ii) Reporting See above

Experience and Past Performance: The District is confident in its ability to successfully complete the proposed ECA. Current and past experience will demonstrate the ability to work with others to manage a diverse scope of projects, including skills related to community outreach, engineering, compliance, operational optimization, and fiscal responsibility.

- Key experience elements include:
 - Managing complex water resource projects and programs
 - Management of wastewater systems
 - Extensive community outreach and engagement to assess, educate, and build acceptance of complex initiatives and ideas
 - o Partnering with consultants on permitting and environmental compliance
 - Working with diverse interest groups to build a portfolio of project partners, financers, and beneficiaries
 - o Management of the design and construction within schedule expectations
- Complex projects and programs
 - Creation of Groundwater Sustainability Agencies (GSAs) in Sonoma County
 - Creation of Sonoma Clean Power
 - o Design and Construction of Dry Creek Habitat Improvement projects
 - o Larkfield Estates Sewer Design and Construction
 - Mirabel Fish Ladder and Viewing Chamber
 - Forecast Informed Reservoir Operations for Lake Mendocino
 - o Laguna De Santa Rosa Restoration Plan (in progress)
 - o Multiple Natural Hazard Mitigation projects for water and wastewater systems