



SUMMARY REPORT

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**Agenda Date:** 11/5/2024

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**To:** Board of Directors, Sonoma County Water Agency  
**Department or Agency Name(s):** Sonoma County Water Agency  
**Staff Name and Phone Number:** Jason Roberts, 707-791-4461  
**Vote Requirement:** Majority  
**Supervisorial District(s):** Countywide

**Title:**

Ralphine No. 1 Tank Rehabilitation

**Recommended Action:**

Authorize Sonoma County Water Agency's General Manager to execute an agreement with Harper & Associates Engineering, Inc., in substantially the form as the draft presented to this Board, for engineering and design services through November 30, 2026, in the not-to-exceed amount of \$305,514.

**Executive Summary:**

The Ralphine No. 1 Tank Rehabilitation Project (Project) is a part of Sonoma County Water Agency's (Sonoma Water) overall Tank Maintenance Program (Program) - an essential element of Sonoma Water's Capital Improvement Plan (Plan) that protects the transmission system's 18 above-grade welded steel tanks through targeted proactive maintenance actions, structural repairs, and cathodic protection systems. The Project includes design and construction activities to maintain the functional life of the Ralphine No. 1 Tank, and will require highly specialized tank inspection, assessment, repair, recoating, and structural services.

**Discussion:**

HISTORY OF ITEM/BACKGROUND

Sonoma Water's Plan identifies key infrastructure projects to meet the needs of the water transmission system, wastewater districts, and flood management facilities within its jurisdiction. The Plan describes the infrastructure projects that are planned over the next five years and includes the Program with a goal to maintain and protect the 18 above-grade welded steel water storage tanks in Sonoma Water's water transmission system. Water storage tanks are an integral component of the water transmission and supply system that provide a source of water when demand rates exceed production capacity. In total, Sonoma Water's 18 tanks provide approximately 129 million gallons of storage, which is three times the average daily system demand.

Sonoma Water's average tank age is approaching 40 years. Without intervention, welded-steel tanks are susceptible to corrosion and have a limited functional lifespan of 25 to 50 years without recoating. With regularly scheduled and targeted maintenance and monitoring activities, welded-steel water storage tanks can attain a lifespan of up to 100 years. Sonoma Water's Program specifically targets the protection and maintenance of steel tanks by routinely inspecting, cleaning, and monitoring the condition of each tank to identify needs and deficiencies. When inspections and monitoring indicate more substantial rehabilitation efforts are required or as coatings reach end of useful life, Sonoma Water develops design plans and tank

rehabilitation projects that include recoating, structural repairs, and installation of cathodic protection systems to maximize the functional life of the facility.

Ralphine No. 1 Tank is connected to the Santa Rosa Aqueduct in the City of Santa Rosa at the Ralphine Tank Farm located adjacent to Spring Lake. The welded steel tank was constructed in 1958 and has a capacity of 6.0 million gallons. The interior was recoated and the exterior repainted in 1995. Recent dive and drained inspections and observations from staff indicate Ralphine No. 1 Tank needs coating and paint removal and replacement, repair of corroded structural elements, structural modifications to preserve the original design life of the structure, and seismic retrofit to meet Sonoma Water seismic reliability goals.

The Project will restore the Ralphine No. 1 Tank to its original character and condition, protect against premature structural failure, and maximize facility lifespan. The Project will require coating and paint removal and replacement, structural design, and construction with significant support from a highly-specialized coating inspection and tank rehabilitation design consultant.

SELECTION PROCESS

Harper & Associates Engineering, Inc. (Consultant) was selected from a list of qualified consultants developed from a competitive selection process. Attached is a memo that explains the competitive selection process.

Consultant was selected for the subject work because of its expertise and considerable experience conducting welded-steel water tank inspections, assessments, and rehabilitation designs for structural repairs and coating reapplications. Consultant has recently completed similar-sized water tank recoating projects for Sonoma Water’s Cotati No. 1, Cotati No. 3, and Kastania tanks.

Sonoma Water may seek to amend or enter into subsequent agreement(s) with Board approval if required, relying upon this competitive selection process, after the preliminary or initial work is completed for the Project.

SERVICES TO BE PERFORMED

Under the agreement, Consultant will conduct meetings; submit monthly progress reports; gather and review existing data; conduct field investigations to assess the condition and status of the tank for structural, safety, and coating conditions; develop a design report with recommended actions; submit 50%, 90%, 99%, and final engineering designs for the Project; and provide bid period and construction period services.

The cost of services will not exceed \$305,514; the term end date is November 30, 2026.

Under the agreement, the General Manager shall have the ability to extend the term of the agreement for up to two additional years by providing written notice to the other party thirty days in advance of the expiration date. The extension shall be formalized in an amended agreement or amendment signed by the parties.

**County of Sonoma Strategic Plan Alignment:**[?](#)

N/A

**Sonoma Water Strategic Plan Alignment:**

Goal: Planning and Infrastructure

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Strategy: Conduct planning that integrates and balances operational, maintenance, and infrastructure priorities

Action: Continue to engage in planning efforts and partnerships to protect and enhance our water supply

The Project will include design of targeted maintenance activities that protect the Ralphine No. 1 Tank from premature failure and will therefore improve the reliability and resilience of water storage facilities along the transmission system, thereby protecting and enhancing the regional water supply.

**Racial Equity:**

**Was this item identified as an opportunity to apply the Racial Equity Toolkit?**

No

**Prior Board Actions:**

**06/06/2023:** Approved agreement between Sonoma Water and Harper & Associates Engineering, Inc., for engineering and design services of Cotati No. 3 Tank Project. Cost \$150,000; term end December 31, 2025.

**11/16/2021:** Approved agreement between Sonoma Water and Harper & Associates Engineering, Inc., for engineering and design services of Cotati No. 1 and Kastania Tank Project. Cost \$300,000; term end December 31, 2024.

**FISCAL SUMMARY**

<b>Expenditures</b>	<b>FY24-25 Adopted</b>	<b>FY25-26 Projected</b>	<b>FY26-27 Projected</b>
Budgeted Expenses	\$305,514		
Additional Appropriation Requested			
<b>Total Expenditures</b>	<b>\$305,514</b>		
<b>Funding Sources</b>			
General Fund/WA GF			
State/Federal			
Fees/Other	\$305,514		
Use of Fund Balance			
General Fund Contingencies			
<b>Total Sources</b>	<b>\$305,514</b>		

**Narrative Explanation of Fiscal Impacts:**

Budgeted amount of \$305,514 is available from FY 2024/2025 appropriations: \$192,036 for the Water Transmission fund and \$113,478 for the Storage fund. No additional appropriation is required.

<b>Staffing Impacts:</b>			
<b>Position Title (Payroll Classification)</b>	<b>Monthly Salary Range (A-I Step)</b>	<b>Additions (Number)</b>	<b>Deletions (Number)</b>

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**Narrative Explanation of Staffing Impacts (If Required):**

N/A

**Attachments:**

Attachment 1: Draft Agreement with Harper & Associates Engineering, Inc.

Attachment 2: Competitive Selection Process Memo

**Related Items "On File" with the Clerk of the Board:**

None