COUNTY OF SONOMA

575 ADMINISTRATION DRIVE, ROOM 102A SANTA ROSA, CA 95403



SUMMARY REPORT

Agenda Date: 9/10/2024

To: Board of Directors, Sonoma County Water Agency

Department or Agency Name(s): Sonoma County Water Agency

Staff Name and Phone Number: Parastou Hooshialsadat 707-547-1961

Vote Requirement: Majority Supervisorial District(s): First

Title:

Seismic Resiliency for Sonoma Aqueduct and Oakmont Pipeline at Bennett Valley Fault Zone

Recommended Action:

Authorize Sonoma County Water Agency's General Manager to execute an agreement with Kennedy/Jenks Consultants, Inc., in substantially the form as the draft presented to this Board, for engineering and design of seismic resiliency for Sonoma Aqueduct and Oakmont Pipeline at Bennett Valley Fault Zone through December 31, 2028, in the not-to-exceed amount of \$252,000. (First District)

Executive Summary:

Sonoma Water's water supply aqueducts are vulnerable to earthquakes and earthquake-related hazards where they cross the Bennett Valley fault zone. Sonoma Water has completed preliminary design of the fault crossing, developed 30% design plans, and now seeks engineering services to develop a final design package to publicly bid and implement the Seismic Hazard Mitigation for Sonoma Aqueduct and Oakmont Pipeline at Bennett Valley Fault Zone (Project).

Discussion:

HISTORY OF ITEM/BACKGROUND

Sonoma Water owns and maintains over 83 miles of water transmission pipeline that provides drinking water to more than 600,000 residents and businesses in Sonoma and Marin counties. Two essential components of the transmission system, known as the Sonoma aqueduct and Oakmont pipeline, serve the eastern portion of the City of Santa Rosa and the Sonoma Valley.

Sonoma Water completed a natural hazard reliability assessment of its water supply and transmission system in July 2008 (NHRA). The NHRA identified earthquakes and earthquake-related hazards as the most significant threat to Sonoma Water's water transmission infrastructure. Fault mapping conducted in 2022 near the Spring Lake area shows that the 20-inch Sonoma aqueduct and the 24-inch Oakmont pipeline cross the approximately 1,500-foot-wide Bennett Valley Fault Zone near Montgomery Drive and Channel Drive and are vulnerable to rupture during a seismic event. Sonoma Water's ability to provide safe and reliable drinking water would be compromised if either pipeline ruptured during a seismic event.

Sonoma Water's Local Hazard Mitigation Plan (LHMP) identifies specific projects that would reduce seismic vulnerabilities in the water transmission system. Projects completed to date include the Rodgers Creek Fault

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Crossing, the River Diversion System Ground Improvements, the Water Transmission System Isolation Valves project, and Russian River and Mark West Creek crossings projects. Implementation of the current Project will further reduce water transmission system vulnerability to seismic events and improve Sonoma Water's resilience to catastrophic earthquakes.

Sonoma Water completed preliminary design services and developed 30% design plans for the project in 2023. If authorized by the Board, Sonoma Water and the selected consultant will progress the 30% design and develop final design documents (plans and specifications) to publicly advertise the Project for construction. The Project will provide a seismically resilient replacement pipeline and isolation valves on both sides and beyond the limits of the fault zone to provide operational flexibility and isolation capability at this important and critical infrastructure fault crossing.

SELECTION PROCESS

Kennedy/Jenks Consultants, 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. [list memo 21/22-074]

Consultant was selected for the subject work from the list based on its experience with design of similar water supply infrastructure crossing other faults and related services.

SERVICES TO BE PERFORMED

Under the agreement, Consultant will provide engineering and design services for the Seismic Hazard Mitigation for Sonoma Aqueduct and Oakmont Pipeline at Bennett Valley Fault Zone including, but not limited to, design, drafting, specification preparation, furnishing design and bid documents, and assistance during bidding and construction. The cost of services will not exceed \$252,000; the term end date is December 31, 2028.

Under the agreement, the General Manager shall have the ability to extend the term of the agreement for 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

This item meets Strategy: Fund and implement the planned capital and maintenance projects on schedule to ensure reliable services.

Action: Fund Capital Improvement Program budgets to meet infrastructure needs to provide a seismically resilient crossing at Bennett Valley fault zone.

Seismic retrofit of Sonoma Aqueduct and Oakmont Pipeline will protect our existing water supply, minimize life cycle costs, and prepare for the future

Racial Equity:

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

No

Prior Board Actions:

07/21/2021: Approved agreement between Sonoma Water and Kennedy/Jenks Consultants, Inc. for Hazard Mitigation at Bennett Valley Fault Zone and Sonoma Valley Creek Crossings. Cost \$425,000; term end May 31,2024.

FISCAL SUMMARY

Expenditures	FY24-25	FY25-26	FY26-27
	Adopted	Projected	Projected
Budgeted Expenses			
Additional Appropriation Requested	\$252,000		
Total Expenditures	\$252,000		
Funding Sources			
General Fund/WA GF			
State/Federal			
Fees/Other	\$252,000		
Use of Fund Balance			
General Fund Contingencies			
Total Sources	\$252,000		

Narrative Explanation of Fiscal Impacts:

Appropriations in the Sonoma Aqueduct Capital Fund in the amount of \$126,000 and Storage Facilities Fund in the amount of \$126,000 will be included in Sonoma Water's Q1 Consolidated Budget Adjustments.

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

Narrative Explanation of Staffing Impacts (If Required):

N/A

Attachments:

Attachment 1: Competitive Selection Process Memo

Attachment 2: Agreement

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

None