



SUMMARY REPORT

Agenda Date: 1/31/2023

To: Board of Directors, Sonoma County Water Agency
Department or Agency Name(s): Sonoma County Water Agency
Staff Name and Phone Number: Todd Schram / 524-1173
Vote Requirement: Majority
Supervisory District(s): Countywide

Title:

Post-Wildfire Research on Russian River Water Quality

Recommended Action:

Authorize Sonoma County Water Agency's General Manager to execute Amendment No. 4 to Strategic Partnerships Projects Agreement with The Regents of the University of California, Lawrence Berkeley National Laboratory, in a form approved by County Counsel. The amendment extends the agreement term by one year to continue post-wildfire-related research for a new end date of November 30, 2023, and no change to the not-to-exceed agreement total of \$575,000.

Executive Summary:

In collaboration with the United States Geological Survey, Department of the Interior (U.S. Geological Survey) and The Regents of University of California, Lawrence Berkeley National Laboratory (Lawrence Berkeley National Laboratory), Sonoma County Water Agency (Sonoma Water) has developed a water quality monitoring program and post-wildfire-related research to support assessment of the potential impacts to Sonoma Water's drinking water facilities resulting from wildfires in the Russian River watershed. Data collected under this program will also provide valuable information for other water supply systems downstream of the affected areas and inform studies on potential ecosystem impacts.

Discussion:

HISTORY OF ITEM/BACKGROUND

In 2008 Sonoma Water initiated a collaborative research partnership with the U.S. Geological Survey and Lawrence Berkeley National Laboratory to study Sonoma Water's riverbank filtration system on the Russian River that serves as the primary treatment for the drinking water production facilities at Wohler and Mirabel. This effort has resulted in an enhanced understanding of the characteristics of the physical, chemical, and biological mechanisms that result in the high-quality water from the Russian River alluvium.

Lawrence Berkeley National Laboratory has completed sampling and monitoring of the microbial community for the riverbank filtration, performed data analyses and statistics, and applied the data to the development of subsurface flow, reactive transport, and microbial modeling. A component of this research included investigating how a wildfire in the watershed may alter the surface water chemistry and physical, chemical, and microbial mechanisms that are integral to the ecosystem function of the Russian River alluvial system.

Since the post-fire water quality monitoring program began in 2017, the Russian River watershed has been

subjected to large wildfires. The importance of studying the impacts of runoff contributions from wildfire burn areas has become more evident, and the research program activities were expanded to support the then newly launched, post-wildfire water quality monitoring program.

Sonoma Water and Lawrence Berkeley National Laboratory entered into an agreement for assistance in developing and implementing a water quality monitoring program within the Russian River watershed to assess potential impacts to Sonoma Water's drinking water facilities resulting from wildfire activity in Sonoma and Mendocino counties (Agreement). The agreement was dated January 17, 2018, in the amount of \$45,000.

Amendment No. 1 to the Agreement expanded the scope of work to include post-Sonoma and Mendocino counties fire-related research and increased the Agreement amount \$130,000 for a new not-to-exceed total of \$175,000 and no change to the end date of December 31, 2019.

Amendment No. 2 to the Agreement extended the end date to December 31, 2020, at no cost to Sonoma Water for Lawrence Berkeley National Laboratory to continue the work under the Agreement.

Amendment No. 3 to the Agreement extended the end date and increased the amount by \$400,000 to provide post-wildfire related research for a new not-to-exceed amount of \$575,000 and end date of November 30, 2022.

SERVICES TO BE PERFORMED

Under the proposed Amendment No. 4, Lawrence Berkeley National Laboratory will continue the development of several important datasets, assessments, and modeling capabilities to evaluate post-wildfire water quality conditions.

The proposed amendment extends the term end date by one year for a new end date of November 30, 2023, at no cost to Sonoma Water. Extending the term is necessary because the work is dependent on the results of sediment and water quality analyses that have been delayed due to an extended shutdown of the analytical laboratory during the Covid-19 pandemic.

County of Sonoma Strategic Plan Alignment:

N/A

Sonoma Water Strategic Plan Alignment

N/A

Prior Board Actions:

- 12/15/2020: Approved Amendment No. 3 between Sonoma Water and The Regents of the University of California, Lawrence Berkeley National Laboratory for Post-Wildfire Research on Russian River Water Quality. Cost \$575,000; term end November 30, 2022.
- 07/10/2018: Approved authorization to execute Amendment No. 1 between Sonoma Water and The Regents of the University of California, Lawrence Berkeley National Laboratory for total cost of \$175,000 with term end date of December 31, 2019.

FISCAL SUMMARY

Agenda Date: 1/31/2023

Expenditures	FY 22-23 Adopted	FY23-24 Projected	FY 24-25 Projected
Budgeted Expenses	\$0		
Additional Appropriation Requested			
Total Expenditures	\$0		
Funding Sources			
General Fund/WA GF			
State/Federal			
Fees/Other			
Use of Fund Balance			
Contingencies			
Total Sources	\$0		

Narrative Explanation of Fiscal Impacts:

There is no fiscal impact associated with this item.

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:

None.

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

None.