



# COUNTY OF SONOMA

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

## SUMMARY REPORT

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**Agenda Date:** 3/26/2024

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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:** Todd Schram 707-524-1173  
**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. 5 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 to continue post-wildfire-related research for a new end date of April 1, 2025, with 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.

During the first ten years, Lawrence Berkeley National Laboratory 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.

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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 added tasks to the scope to implement the water quality monitoring and study plan that was developed under the scope of the original agreement 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 additional cost to Sonoma Water.

Amendment No. 3 to the Agreement extended the end date and increased the amount by \$400,000 to continue the project to study potential impacts from subsequent wildfires for a new not-to-exceed amount of \$575,000 and end date of November 30, 2022.

Amendment No. 4 to the Agreement extended the end date to November 30, 2023, at no additional cost to Sonoma Water.

**SERVICES TO BE PERFORMED**

Under Amendment No. 5, Lawrence Berkeley National Laboratory will continue the development of several important datasets, assessments, and modeling capabilities to evaluate post-wildfire water quality conditions.

The amendment extends the term end date for a new end date of April 1, 2025, at no additional cost to Sonoma Water. Extending the term is necessary because Lawrence Berkeley National Laboratory was unable to complete the tasks due to staffing limitations and the support needed to commence the research project evaluating streambed clogging impacts on riverbank filtration (approved by the Board on December 13, 2022).

**County of Sonoma Strategic Plan Alignment**

N/A

**Sonoma Water Strategic Plan Alignment**

N/A

**Racial Equity:**

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

No

**Prior Board Actions:**

1/31/2023: Approved Amendment No. 4 between Sonoma Water and The Regents of the University of

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California, Lawrence Berkeley National Laboratory for Post-Wildfire Research on Russian River Water Quality. Cost \$575,000; term end November 30, 2023.

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**

<b>Expenditures</b>	<b>FY23-24 Adopted</b>	<b>FY24-25 Projected</b>	<b>FY25-26 Projected</b>
Budgeted Expenses			
Additional Appropriation Requested			
<b>Total Expenditures</b>	<b>\$0</b>		
<b>Funding Sources</b>			
General Fund/WA GF			
State/Federal			
Fees/Other			
Use of Fund Balance			
General Fund Contingencies			
<b>Total Sources</b>	<b>\$0</b>		

**Narrative Explanation of Fiscal Impacts:**

There is no fiscal impact associated with this item.

<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>

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

N/A

**Attachments:**

None

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

None