



COUNTY OF SONOMA

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

SUMMARY REPORT

Agenda Date: 10/20/2020

To: Boards of Directors, Sonoma County Water Agency; and Occidental, Russian River, Sonoma Valley, and South Park County Sanitation Districts

Department or Agency Name(s): Sonoma County Water Agency; and Occidental, Russian River, Sonoma Valley, and South Park County Sanitation Districts

Staff Name and Phone Number: Dale Roberts / 707-547-1979

Vote Requirement: Majority

Supervisory District(s): Countywide

Title:

Amend Climate Adaptation Plan Preparation

Recommended Action:

- A) Authorize Sonoma County Water Agency's General Manager to execute the Fourth Amended Agreement for Climate Adaptation Plan Preparation with CH2MHill to provide a climate adaptation plan. The amended agreement increases the amount by \$108,000 and expands the scope of work to include additional quantitative analysis tasks, for a new not-to-exceed agreement total of \$937,214 and no change to term end date of June 30, 2021.
- B) Authorize Sonoma County Water Agency's General Manager to amend the agreement provided amendments do not cumulatively increase the total amount of the agreement beyond \$20,000, extend the term, or make modifications to the scope of work.

Executive Summary:

This item requests authority for Sonoma County Water Agency's (Sonoma Water) General Manager to execute an amended agreement with CH2MHill to provide a climate adaptation plan. The amended agreement increases the amount by \$108,000 and expands the scope of work to include additional quantitative analysis tasks, for a new not-to-exceed agreement total of \$937,214 and no change to term end date of June 30, 2021. CH2MHill will assist with the preparation of a Climate Adaptation Plan (Plan) that will assess and prepare for potential impacts of climate change to Sonoma Water's water supply infrastructure and operation. The Plan will also cover the sanitation districts operated by Sonoma Water, and Sonoma Water's stream maintenance and flood control operations. The Plan will build on the Climate Adaptation Workplan (Workplan) developed by Sonoma Water with prior assistance from CH2MHill.

Discussion:

HISTORY OF ITEM/BACKGROUND

Over the past several years, Sonoma Water has partnered with the U.S. Geological Survey, the National Oceanic and Atmospheric Administration, and Scripps Institute of Oceanography Center for Western Weather and Water Extremes to evaluate the potential impacts of climate change on the North Bay/Russian River Watershed. Sonoma Water has also collaborated with the Sonoma County Regional Climate Protection Authority and the North Bay Climate Adaptation Initiative to assess climate risk and impacts to regional water resources. These studies indicate that water resources in Sonoma County will experience the effects of

climate change. In addition to sea level rise and higher ambient temperatures, we can expect to see variations in rainfall patterns that could adversely impact the operations of Sonoma Water. In order to assure that Sonoma Water is prepared to continue providing services to protect the health and safety of Sonoma County residents, staff recommended development of a Climate Adaptation Plan (Plan) that addresses Sonoma Water operations and planning for future projects and infrastructure.

In a professional services agreement approved by the Board on June 24, 2014 CH2MHill developed the Workplan that outlines the steps necessary to prepare a Plan. These steps include:

1. Project Chartering and Initiation
2. Review and Summarize Climate Science
3. Conduct Vulnerability Assessment
4. Perform Risk Assessment
5. Identify and Evaluate Adaptation Options
6. Develop Adaptation Options
7. Prepare Climate Adaptation Plan Report

The Plan will assess Sonoma Water's water supply, flood control, and sanitation infrastructure and operations in order to identify threats to infrastructure and operations and develop adaptation strategies to reduce vulnerabilities created by climate change. Some of the risks are specific to Sonoma Water infrastructure and operations, while other risks involve broader watershed impacts that affect the community as a whole.

Based on the Work Plan completed above, Sonoma Water and CH2MHill (Consultant) entered into an agreement for Climate Adaptation Plan Preparation, dated July 19, 2016 in the amount of \$829,214. The agreement was amended twice to extend the term at the request of Sonoma Water. The Plan is nearly fully developed, but during preparation of the vulnerability assessments and risk assessments, Sonoma Water and Consultant found additional modeling of floods, sediment loading, fire risk, and water quality would be necessary to complete the Plan to better inform the adaptation strategies and actions. This amended agreement would authorize that work to be completed.

SERVICES TO BE PERFORMED

Under the proposed amended agreement, Consultant will provide a climate adaptation plan; the update expands the scope of work to include extensive field visits of Sonoma Water's water supply, flood management, and wastewater systems and additional quantitative analysis tasks.

Through the course of the vulnerability assessment process, five areas were identified for which additional quantitative analysis were conducted to support the climate adaptation planning effort. Only the water supply element was included in the initial scope. The additional four areas identified for quantitative analysis were for Sonoma Water's flood control and sanitation systems:

- Santa Rosa Creek Flood Modeling: HEC-HMS and HEC-RAS modeling to better understand climate-flood related vulnerabilities.
- Russian River Flood Modeling: HEC-RAS modeling to better assess the flood elevations and risk to the Mirabel and Wohler collectors, and Russian River Sanitation Zone.
- Sediment Loading Estimates for Flood Control Operations: Better understand the distribution of sediment load, and potential changes in sediment loading for Zone 1A.
- Fire Risk and Water Quality Modeling: To address growing wildfire risks, as experienced during 2017

and 2019, initial modeling of fire risks was performed to better understand the probability, location, and extent of fire risk, and impacts on intake water quality.

The additional cost is \$108,000, for a new not-to-exceed agreement total of \$937,214. There is no change to end date of June 30, 2021.

The agreement includes two options for Sonoma Water to extend this agreement for a period of one year each by providing written notice to Consultant thirty days in advance of the expiration date of the agreement and of the first extension option.

Prior Board Actions:

08/30/2016: Approved agreement between Sonoma Water and CH2MHill for climate adaptation planning services. Cost \$ \$829,214; term end June 30, 2018.

06/24/2014: Approved agreement between Sonoma Water and CH2MHill to provide consulting services related to climate change planning (Workplan development).

FISCAL SUMMARY

Expenditures	FY 20-21 Adopted	FY21-22 Projected	FY 22-23 Projected
Budgeted Expenses	108,000		
Additional Appropriation Requested			
Total Expenditures	108,000		
Funding Sources			
General Fund/WA GF			
State/Federal			
Fees/Other	108,000		
Use of Fund Balance			
Contingencies			
Total Sources	108,000		

Narrative Explanation of Fiscal Impacts:

Budgeted amount of \$108,000 is available from FY 2020/2021 appropriations for the Sustainability/Renewable Energy fund. No additional appropriation is required.

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

Agenda Date: 10/20/2020

Narrative Explanation of Staffing Impacts (If Required):

N/A

Attachments:

Draft Amended Agreement with CH2MHill

Related Items “On File” with the Clerk of the Board:

None.