



Legislation Details (With Text)

File #: 2020-1242
Type: Consent Calendar Item **Status:** Agenda Ready
File created: 11/20/2020 **In control:** Sonoma County Water Agency
On agenda: 1/5/2021 **Final action:**
Title: Sonoma Valley Hydrologic and Hydraulic Modeling
Sponsors: Sonoma County Water Agency
Indexes:
Attachments: 1. Summary, 2. Resolution, 3. Agreement

Date	Ver.	Action By	Action	Result
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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: Carlos Diaz (707) 547-1956
Vote Requirement: 4/5th
Supervisory District(s): First

Title:
Sonoma Valley Hydrologic and Hydraulic Modeling

Recommended Action:

- A) Authorize Sonoma County Water Agency's General Manager to execute an agreement with Environmental Science Associates for hydrologic and hydraulic modeling services through October 20, 2023, in the not-to-exceed amount of \$468,219.
- B) Adopt a Resolution authorizing adjustments to the Board adopted budget for fiscal year 2020/2021 for the Flood Control Zone 3A Fund in the amount of \$26,589 for Sonoma Valley Hydrologic and Hydraulic Modeling.

(4/5th Vote Required)(First District)

Executive Summary:

Under this agreement, Environmental Science Associates will develop a hydrologic and hydraulic model of the Sonoma Valley watershed, including hydraulic models of Sonoma, Nathanson, and Fryer Creeks that can be used 1) to better understand flood dynamics and risk within the Sonoma Valley, 2) to evaluate conceptual projects in the future, and 3) to inform other watershed management efforts.

Discussion:

HISTORY OF ITEM/BACKGROUND

Sonoma County Water Agency (Sonoma Water) is responsible for a wide variety of public services that include providing potable water for approximately 600,000 people in Sonoma and Marin counties, managing eight County Sanitation Districts and Flood Control Zones within Sonoma County, managing flood control projects, and maintaining flood control works such as channels and drainage systems within Sonoma County.

Specific watersheds within Sonoma County may offer feasible opportunities to implement multi-objective water supply resiliency projects capable of capturing storm water for flood reduction and providing groundwater recharge. Based on existing knowledge of flood risks and groundwater basins, Sonoma Water and its technical partners initiated a Stormwater Resources Groundwater Recharge Initiative in 2010 and have conducted scoping studies for three watersheds. An integrated approach to water management may offer significant benefits in terms of both flood impact mitigation and ground water supply.

Sonoma Water, in coordination with Flood Control Zone 3A advisory committee and other local stakeholders, has been actively involved in planning efforts to identify feasible opportunities to develop multi-objective projects to capture stormwater, recharge groundwater, and reduce flooding. Sonoma Water desires to develop a watershed-wide hydrologic model and hydraulic models of Sonoma, Nathanson, and Fryer Creeks to evaluate flooding conditions within the Sonoma Valley and assess the benefits of multi-benefit flood risk reduction projects. The modeling tools developed under this agreement will serve as an important tool in further developing these planning efforts.

SELECTION PROCESS

On February 14, 2017, Sonoma Water issued a Request for Statements of Qualifications (RFQ) to the following 11 firms:

1. Brown & Caldwell Rancho Cordova, CA
2. ENERCON Sacramento CA
3. Environmental Science Associates; Petaluma, CA
4. Geosyntec, Oakland, CA
5. GHD; Santa Rosa CA
6. Parker Groundwater Sacramento CA
7. Prunuske Chatham Sebastopol, CA
8. RMC Water & Environment San Francisco, CA
9. Sonoma Ecology Center, Eldridge, CA
10. Todd Groundwater Alameda , CA
11. West Yost, Santa Rosa CA

The RFQ was also posted on the Sonoma County Water Agency and Purchasing websites.

The seven firms listed below submitted Statements of Qualifications (SOQs):

1. CBEC; Petaluma, CA
2. Environmental Science Associates; Petaluma, CA
3. Geosyntec; Oakland, CA
4. GHD; Santa Rosa CA
5. RMC Water & Environment; San Francisco, CA
6. West Consultants; Folsom, CA
7. West Yost; Santa Rosa CA

The following criteria were used to evaluate each firm.

- 1) Thoroughness of SOQ
- 2) Professional qualifications and demonstrated ability to perform the work

3) Exceptions to standard terms in the sample agreement

Based on the evaluations, all respondents were selected for the list of qualified consultants. Environmental Science Associates was chosen from the list to perform the work for this agreement because they submitted a thorough SOQ that presented the strongest professional qualifications. While other firms have conducted similar work, Environmental Science Associates’ experience with watershed-scale hydrologic and hydraulic modeling was seen as advantageous. Moreover their involvement with prior modeling of Sonoma Creek as part of a U.S. Army Corps of Engineers funded effort and with the Sonoma Valley Stormwater Management - Groundwater Recharge Scoping Study provides important experience and background within the watershed.

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.

SERVICES TO BE PERFORMED

Under the proposed agreement, Environmental Science Associates will develop a hydrologic and hydraulic model of the Sonoma Valley watershed. Tasks include the following:

1. Conduct field reconnaissance and a topographic ground survey
2. Develop coupled hydrologic-hydraulic model of Sonoma Valley watershed and Sonoma creek channel and floodplain
3. Develop a report to document the development and results of the coupled hydrologic-hydraulic model
4. Conduct meetings and prepare monthly reports

Prior Board Actions:

11/2/2010: Approved agreement between Sonoma Water and Environmental Science Associates for developing the Sonoma Valley Stormwater Management and Groundwater Recharge Scoping Study. Cost \$265,820; term end June 30, 2013.

FISCAL SUMMARY

Expenditures	FY 20-21 Adopted	FY21-22 Projected	FY 22-23 Projected
Budgeted Expenses	\$441,630		
Additional Appropriation Requested	\$26,589		
Total Expenditures	\$468,219		
Funding Sources			
General Fund/WA GF			
State/Federal			
Fees/Other	\$441,630		
Use of Fund Balance	\$26,589		
Contingencies			
Total Sources	\$468,219		

Narrative Explanation of Fiscal Impacts:

Budgeted amount of \$441,630 is available from FY 2020/2021 appropriations for the Flood Control Zone 3A

Fund. Additional appropriations of \$26,589 are required to process this expense. With Board approval of the attached Resolution, appropriations of \$26,589 will be made in the Flood Control Zone 3A Fund, which is funded by property taxes. Fund balance at the end of FY 2020/2021 is expected to be above target, consistent with prior years, and will not be negatively impacted by this Board item.

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

Narrative Explanation of Staffing Impacts (If Required):

None

Attachments:

- Resolution
- Agreement with Environmental Science Associates

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

None