



COUNTY OF SONOMA

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

SUMMARY REPORT

Agenda Date: 5/11/2021

To: Board of Directors, Sonoma County Water Agency
Department or Agency Name(s): Sonoma County Water Agency
Staff Name and Phone Number: Jay Jasperse 547-1959
Vote Requirement: Majority
Supervisory District(s): Countywide

Title:

Fire Risk Reduction Decision Support Framework

Recommended Action:

Authorize Sonoma County Water Agency's General Manager to execute an agreement with Conservation Biology Institute, to develop a Fire Risk Reduction Decision Support Framework through June 30, 2022, in the not-to-exceed amount of \$480,000.

Executive Summary:

On December 15, 2020, the Sonoma County Board of Supervisors (Board) authorized funding from Sonoma County's PG&E settlement funds to develop a Decision Support Framework (DSF) and tools to guide vegetation management activities for fire risk reduction based on a science-based and transparent methodology. Specifically, the Board authorized: (1) \$1,000,000 for Sonoma County Water Agency (Sonoma Water) to develop a landscape-level prioritization tool; and (2) \$600,000 to the U.C. Cooperative Extension (UCCE) to complete work and conduct outreach on a parcel-level decision support tool. The DSF is the synthesis of these decision support tools into a comprehensive framework that will identify areas where fire risk mitigation projects should be prioritized to protect high risk built and natural assets and then assist landowner and project proponents on the best mitigation measures at a parcel-level basis.

The overarching goal of the DSF is to focus limited funding in a way that maximizes the effectiveness of publicly funded fire mitigation measures to protect high risk built and natural assets in a science-based and transparent manner. It is also anticipated that the DSF will promote grant and third-party funding for fire mitigation projects. Sonoma Water and UCCE are coordinating the development of the DSF and will work closely with the new centralized vegetation management position which will be housed in the Agricultural Preservation and Open Space District. The proposed agreement will support Sonoma Water's efforts to implement its portion of the DSF as described above.

Discussion:

HISTORY OF ITEM/BACKGROUND

The Sonoma Complex Fires of October 2017 (Tubbs, Nuns, Pocket) collectively burned 110,000 acres, destroyed 5,300 homes, and took the lives of 24 County residents. The Tubbs fire, destroying 4,658 homes and five percent of Santa Rosa's housing stock, was the most destructive blaze of the three. More than 2 million tons of debris were hauled away, and over 950 fire departments and agencies from around the world responded to the fires. The County sustained extensive transportation infrastructure damages including

damages to roads, signs, retaining walls, guardrail, trees, and culverts. In addition, the County expended numerous resources to respond to the fires and mitigate damages, including preventing debris flow and pollution from entering the County's waterways and water supply.

Since then, and as the County has suffered significant additional fires in 2019 and 2020, the need for more outreach and education for vegetation management has been identified. Many groups have volunteers who are ready to do the work but desire more guidance ("clear, friendly rules") and training before proceeding. Individual landowners also want to do the right thing and prioritize their resources. Land and natural resource managers need prioritization tools to determine timing and appropriate vegetation management activities.

Understanding this need, UCCE and Sonoma Water are leading the development of a DSF which has two components: (1) Component 1, led by Sonoma Water, will help identify where to conduct vegetation management activities to ensure that limited resources achieve the most benefit to protecting built and natural assets in a transparent manner; and (2) Component 2 is being led by UCCE and will identify what vegetation methodologies are most appropriate on a parcel-level. Sonoma Water will also develop an interface between the two components of the DSF.

Component 1 of the DSF involves developing a tool that synthesizes science-based wildfire modeling with the locations of natural and built assets to evaluate risks to these assets and guide prioritization of mitigation projects intended to improve watershed resiliency to fire risks. This component will evaluate areas of high fire risk against built assets (e.g., roads, Wildland Urban Interface density, water supply systems, telecommunications, etc.) and natural assets (e.g., streams, habitat, sensitive species). An integral part of this project will be a robust stakeholder program to inform the development of the DSF. Sonoma Water in coordination with Conservation Biology Institute, intends to track local, regional, state and federal objectives, legislation and funding to assure adaptations to the DSF are aligned with future funding eligibility. Sonoma Water intends to retain a facilitator to assist with the outreach activities including conducting a stakeholder assessment and convening series of stakeholder meetings to provide input to the DSF developers. Input from stakeholders and community will be incorporated, with emphasis on local knowledge and data to develop prioritization criteria in the tool-building phase. In addition, a technical advisory committee will be formed, comprised of scientists and fire prevention regulatory experts in development of modeling tools to guide the technical components of the DSF. This tool will complement and work in conjunction with the Sonoma County Community Wildfire Protection Plan, Local Hazard Mitigation Plan, and other local planning efforts.

Development of the DSF will be phased. The proposed agreement includes tasks included in Phase 1 of DSF development. Phase 1 will result in a beta version of the DSF. Phase 2 will include additional functionality and modifications based on input from users of the beta DSF. Phase 3 includes model input data updates, tool maintenance, and end-user support.

SELECTION PROCESSES

Conservation Biology Institute was the only firm contacted for this work and was selected based on its extensive expertise with the development of decision support tools and the strong project technical team Conservation Biology Institute developed that comprises statewide and local expertise regarding fire science, risk modeling and decision support tool development. As an example, Conservation Biology Institute led the development of a fire risk decision support tool for the Paradise, California area. Conservation Biology Institute and its subcontractors will work with Sonoma Water and others to engage a technical advisory

committee and participate in a stakeholder workgroup to help inform the development of models and decision support tools. Sonoma Water also intends to retain a facilitator to assist with the stakeholder effort.

SERVICES TO BE PERFORMED

Under the proposed agreement, Conservation Biology Institute will provide technical services for two important components of the DSF: (1) a landscape-level prioritization tool; and (2) an interface between the prioritization tool and the parcel-level decision support tool (under development by UCCE).

The agreement includes two key subcontractors as part of the subject agreement: Pepperwood Foundation and Tuckman Geospatial. These entities comprise the technical team that will develop the DSF. Conservation Biology Institute and its subcontractors will work with Sonoma Water and others to engage a technical advisory committee and participate in a stakeholder workgroup to help inform the development of models and decision support tools. Sonoma Water intends to retain a facilitator to help lead the stakeholder effort.

This project will be conducted in three phases to produce the needed decision support in a timely manner. In Phase 1 (months 1-12), the technical advisory and stakeholder groups will be convened to support the development of Version 1.0 of the prioritization model and decision support tool will be developed. In Phase 2, (months 13-24) additional functionality such as project tracking, model refinements, and data updates will be added to the model and tool. In Phase 3 (months 25-36), model input data updates, tool maintenance, and end-user support will be provided. The proposed agreement consists of implementing Phase 1 of the project and includes the following tasks:

- Development of conceptual design
- Support stakeholder engagement and training
- Prioritization Model
- Decision Support Web Application
- Project Management

As described above, it is anticipated that Phases 2 and 3 will be funded as part of a future amendment that will require Board approval. The detailed scope of work for Phases 2 and 3 will be informed by implementing Phase 1 of the project.

The cost of services for the proposed agreement will not exceed \$480,000; the term end date is June 30, 2022.

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

Prior Board Actions:

12/15/20: Allocation of Pacific Gas and Electric Settlement Funds for Transportation, Utilities Undergrounding, Communications, Safety, and Preparedness Infrastructure Investments.

FISCAL SUMMARY

Expenditures	FY 20-21 Adopted	FY21-22 Projected	FY 22-23 Projected
Budgeted Expenses	\$480,000		

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Additional Appropriation Requested			
Total Expenditures	\$480,000		
Funding Sources			
General Fund/WA GF			
State/Federal			
Fees/Other	\$480,000		
Use of Fund Balance			
Contingencies			
Total Sources	\$480,000		

Narrative Explanation of Fiscal Impacts:

Budgeted amount of \$480,000 is available from FY 2020/2021 appropriations for the Sonoma Water General Fund. Offsetting revenue in the amount of \$480,000 is from the December 15, 2020, Board-authorized funding from Sonoma County's PG&E settlement funds.

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