



SUMMARY REPORT

Agenda Date: 2/4/2025

To: Sonoma County Board of Supervisors; Sonoma County Water Agency Board of Directors; Sonoma County Agricultural Preservation and Open Space District Board of Directors

Department or Agency Name(s): Ag + Open Space, Permit Sonoma, Sonoma Water

Staff Name and Phone Number: Tennis Wick and John Mack, Permit Sonoma, (707)565-1925, , Misti Arias, Ag + Open Space, (707) 565-7264, Dale Roberts, Sonoma Water, (707) 547-1979

Vote Requirement: Majority

Supervisorial District(s): Countywide

Title:

Next Generation Hydrography Dataset for Sonoma County

Recommended Action:

Adopt resolutions to:

- A) Authorize the General Manager of Sonoma County Water Agency (Sonoma Water) to participate in a regional next generation “blue-line stream” mapping consortium as part of the North Bay Regional Hydrology Program, to enter into an agreement with the County of Solano and other necessary agreements, subject to approval by County Counsel, and to contribute \$80,345.09 in matching funds to the mapping project.
- B) Authorize the General Manager of Sonoma County Agricultural Preservation and Open Space District (Ag + Open Space) to participate in a regional next generation “blue-line stream” mapping consortium as part of the North Bay Regional Hydrology Program, to enter into an agreement with the County of Solano and other necessary agreements, subject to approval by County Counsel, and to contribute \$80,345.09 in matching funds to the mapping project.
- C) Authorize the Director of Permit Sonoma to participate in a regional next generation “blue-line stream” mapping consortium as part of the North Bay Regional Hydrology Program, to enter into an agreement with the County of Solano and other necessary agreements, subject to approval by County Counsel, and to contribute \$80,345.09 in matching funds to the mapping project.

Executive Summary:

What is colloquially known as the United States Geological Survey (USGS) “blue line stream” map is the foundational mapping and data resource for natural resource, stream, FEMA flood mapping, fisheries, planning, climate resiliency, restoration and management (among other things). The USGS has developed the next generation mapping and data protocol effort to replace the current blue line stream map and metadata set. The USGS is providing funding to efforts to implement the new protocol and produce next generation blue line stream maps and datasets, especially on a regional scale. Ag + Open Space, Sonoma Water, and Permit Sonoma are requesting to be authorized to participate in the North Bay Regional Hydrography Program with Marin County, and Solano County as the fiscal agent, for a USGS 3D National Topography Model Data Collaborative grant to produce a next generation 3D Hydrography map and dataset for with USGS funding 36%

of project costs and project partners funding 66%. Ag + OS, Sonoma Water, and Permit Sonoma will each contribute \$75,797.25 plus a 6% project management fee, for a contribution of \$80,345.09, respectively, which will be programmed into their future budgets (FY25-26) (total cost \$241,035.27). The funding source for each of the entities will be from the Ag + OS Measure F Funds, Sonoma Water General Fund, and Permit Sonoma General Fund, respectively.

Discussion:

The North Bay Regional Hydrography Program is a multi-county initiative designed to extend the 3D Hydrography Program (3DHP) across approximately 3,981 square miles, including parts of Sacramento, Yolo, Mendocino, and Napa counties, and all of Solano, Sonoma, and Marin counties (see Attachment 4).

This project builds upon the foundational work of the USGS's 3D Elevation Program (3DEP) and leverages Marin County's participation as a pilot for 3DHP. Using the high-accuracy LiDAR data from the USGS 3D Elevation Program (3DEP), which Ag + Open Space and Sonoma Water has previously funded and North Coast Resource Partnership (NCRP) helped to obtain, the North Bay Hydrography Program will produce detailed watershed maps to improve water resource management, environmental and climate protection, and flood and wildfire risk mitigation (among other benefits derived from this mapping effort).

The data will enable local governments, planners, and emergency response agencies to make informed decisions, enhancing regional resilience. By integrating efforts across counties, the program fosters collaboration and supports national hydrography priorities, including the critical Russian River watershed. Solano County is the fiscal agent for a USGS 3D National Topography Model Data Collaboration.

Ag + Open Space, Sonoma Water, and Permit Sonoma are participating in multiple efforts within and across their organizational boundaries which rely on using the most up to date hydrography maps and datasets available. At a relatively modest cost, participation in this regional collaborative will enable Sonoma County to quickly obtain the best available hydrography data for planning, restoration, protection, management, resiliency and mitigation efforts in the 21st century.

. . The total project is timeframe is expected to take 18-24 months from approval by USGS which is expected in early 2025. The project award and budget is found in Attachment 4, p. 10. Total cost of the project is \$634,105.00 with USGS funding 36% (\$228,045.45) and the project partners funding 66% (\$406,059.55). Of this the portion allocated to mapping for Sonoma County is \$227,391.75. There is a 6% project management fee added to the project costs to fund project and grant management by the project contractor. Divided equally between Ag + OS, Sonoma Water, and Permit Sonoma, each agency will contribute \$75,797.25 plus the 6% fee for a contribution of \$80,345.09, respectively (total \$241,345.27).

Strategic Plan:

N/A

Racial Equity:

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

No

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Prior Board Actions:

None

FISCAL SUMMARY

Fiscal Summary: Expenditures	FY 24-25 Adopted	FY 25-26 Projected	FY 26-27 Projected
Budgeted Expenses		241,035.27	
Additional Appropriation Requested			
Total Expenditures		241,035.27	
Funding Sources			
General Fund/WA GF		80,345.09	
State/Federal			
Fees/Other		160,690.18	
Use of Fund Balance			
Contingencies			
Total Sources		241,035. 27	

Narrative Explanation of Fiscal Impacts:

.Sonoma Water: Appropriations of \$80,345.09 will be budgeted in FY 2025/2026 in the Sonoma Water General Fund.

Ag + Open Space: Appropriations of \$80,345.09 will be included in the FY 25-26 Ag + Open Space budget, funded by Measure F sales tax revenue. tax.

Permit Sonoma: Appropriations of \$80,345.09 will be included in the FY 25-26 Permit Sonoma Natural Resources Division General Fund

Narrative Explanation of Staffing Impacts (If Required):

None

Attachments:

1. Attachment 1: Sonoma Water Resolution authorizing participation in a regional next generation “blue-line stream” mapping consortium and contributing \$80,345.09 to the mapping project.
2. Attachment 2: Ag + Open Space Resolution authorizing participation in a regional next generation “blue-line stream” mapping consortium and contributing \$80,345.09 to the mapping project.
3. Attachment 3: Permit Sonoma Resolution authorizing participation in a regional next generation “blue-

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3. Attachment 3: Permit Sonoma Resolution authorizing participation in a regional next generation “blue-line stream” mapping consortium and contributing \$80,345.09 to the mapping project.
4. Attachment 4: 3DHD Project Summary Form

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

N/A