



SUMMARY REPORT

Agenda Date: 6/4/2024

To: Board of Directors, Sonoma County Water Agency

Department or Agency Name(s): Sonoma County Water Agency

Staff Name and Phone Number: Jessica Martini Lamb, (707) 322-8177; Neil Lassetre (707) 291-2623

Vote Requirement: Majority

Supervisorial District(s): Third, Fourth, Fifth

Title:

Agreements Between Sonoma County Water Agency and the City of Santa Rosa and Town of Windsor for Water Quality Credits (Phosphorous)

Recommended Action:

- A) Authorize Sonoma County Water Agency's (Sonoma Water) General Manager to execute an agreement between Sonoma Water and City of Santa Rosa (City) in which Sonoma Water agrees to sell, and City agrees to purchase 16,049 pounds of nutrient offset credits for Phosphorous at a cost of \$60 per pound, less a credit of \$185,850 for Sonoma Water's share for disposal of sediment (calculated at \$10 per cubic yard, with 18,585 cubic yards), for a total amount cost to the City of \$777,090. (Third District)
- B) Authorize Sonoma Water's General Manager to execute an agreement between Sonoma Water and Town of Windsor (Town) in which Sonoma Water agrees to sell, and Town agrees to purchase 4,000 pounds of nutrient offset credits for Phosphorous at a cost of \$60 per pound, for a total cost to the Town of \$240,000. (Fourth District)

Executive Summary:

Under the Water Quality Trading Framework for the Laguna de Santa Rosa Watershed established by the North Coast Regional Water Quality Control Board (Regional Board), Sonoma Water may sell nutrient removal credits to the City of Santa Rosa (City) and the Town of Windsor (Town), and the City and Town may use these credits to comply with their discharge requirements. The credits proposed for sale in these two agreements were generated by excavation of legacy sediment and organic matter from the mainstem Colgan Creek between Todd Road and Llano Road. The project will benefit the environment and provide the City and Town with a mechanism to meet their respective permit requirements.

Discussion:

HISTORY OF THE ITEM/BACKGROUND

Sonoma Water manages this portion of Colgan Creek as part of its Stream Maintenance Program and has the ability to do work over and above what is required for maintenance to remove nutrients. In addition to removing nutrients, the project modified hydraulic conditions to reduce *Ludwigia hexapetala* (*Ludwigia* or water primrose) growth and mosquito proliferation, and favor establishment of native vegetation.

In July 2023, Sonoma Water submitted a proposal to the Regional Board to consider a sediment removal project at Maintenance Program reaches Colgan 1 and Colgan 2 (Project) under the Water Quality Trading Framework for the Laguna de Santa Rosa Watershed (Water Quality Trading Framework) (Regional Board

Resolution No. R1-2021-0041), which allows the City and Town to offset phosphorus by performing off-site nutrient reduction projects. Sonoma Water proposed to conduct and fund the voluntary project by selling nutrient credits to the City and Town as part of the Water Quality Trading Framework. The City would apply nutrient reductions generated from the Project as offsets toward its compliance with regulatory requirements on annual discharges from the Subregional Facility to the Laguna de Santa Rosa. The Town would similarly apply the credits to offset annual discharges. The proposal underwent a 21-day public comment period and a review by Regional Board staff, who found the Project consistent with the requirements of the Nutrient Offset Program and determined that the Project's credits were valid and transferable to the Water Quality Trading Framework.

PROJECT DESCRIPTION

In September and October 2023, Sonoma Water excavated approximately 18,585 cubic yards of legacy sediment and organic matter from Colgan Creek between Todd Road and Llano Road. As part of its Stream Maintenance Program, Sonoma Water manages urban stream channels for flood control and habitat restoration, including this portion of the Colgan Creek, designated by the program as reaches Colgan 1 and Colgan 2. The Project removed approximately 30,000 pounds of phosphorus from the system. The Project also modified hydraulic conditions to reduce *Ludwigia hexapetala* (*Ludwigia* or water primrose) growth and mosquito proliferation, and to favor establishment of native vegetation.

ADDITIONAL PROJECT BENEFITS

The Marin-Sonoma Mosquito and Vector Control District (District) is unable to adequately control mosquito production in the project area as *Ludwigia* is a physical barrier against the application of control products. The District has found mosquitos carrying West Nile Virus in nearby channels.

PHOSPHORUS REMOVAL MECHANISMS

Direct removal of phosphorus-laden sediment eliminates phosphorus from the system through two mechanisms. The first is the removal of phosphorus within the excavated sediments. The second comes from reducing phosphorus flux from the sediment into the water column. Phosphorus flux occurs during low flow, anoxic conditions and is exacerbated by the presence of *Ludwigia*. After sediment excavation and *Ludwigia* removal, a reduced area of the stream bed will be inundated, thereby reducing flux of phosphorus into the water column. The narrower, deeper channel will prevent water from spreading across the full width of the stream, allowing water to flow more quickly over a smaller area. This will limit phosphorus dissolution from sediment into the water column, minimize *Ludwigia* and mosquito habitat, reduce the potential for sediment deposition, and create better habitat for native aquatic and riparian species. The Project also contains a revegetation and vegetation management component to generate a canopy of native tree and shrub species that provide riparian habitat and shade, and reducing water temperatures.

PROJECT IMPLEMENTATION AND VERIFICATION

Sonoma Water implemented the Project according to its Stream Maintenance Program Manual. The Stream Maintenance Program follows an approach that informs activities by detailing broad principles for the entire program and for primary activities by describing ecological goals for each activity. The Stream Maintenance Program greatly reduces impacts through avoidance and minimization measures implemented within its overall approach with Best Management Practices (BMPs) for each activity, including sediment disposal.

The area and depth of sediment removal estimated was verified by truck load count per location of materials

removed and the soil was tested to verify the amount of phosphorus removed. A third-party credit verifier (Sonoma Resource Conservation District) verified the volume of sediment removed, pounds of phosphorus removed, and credits of phosphorus generated by the Project, and reviewed the list of BMPs for each project activity and verified BMP application.

SUMMARY OF AGREEMENTS

Sonoma Water’s phosphorus credits have been approved by the Regional Board for work that was already completed. The proposed agreement with the City of Santa Rosa allows the City to purchase 16,049 pounds of nutrient offset credits for phosphorous removal at a cost of \$60 per pound, less a credit of one hundred eighty-five thousand and fifty dollars (\$185,850) for Sonoma Water’s share for disposal of sediment (calculated at \$10 per cubic yard, with 18,585 cubic yards). The total proposed cost to the City is \$777,090. The proposed agreement with the Town of Windsor allows the town to purchase 4,000 pounds of nutrient offset credits for phosphorous removal at a cost of \$60 per pound, for a total cost to the Town of \$240,000. The price per credit was negotiated with the City and Town. The two proposed agreements sell all of the approved credits to the City and Town.

ENVIRONMENTAL REVIEW

The project was completed as part of the Stream Maintenance Program. No additional review is required under the California Environmental Quality Act.

Strategic Plan:

This item directly supports the County’s Five-year Strategic Plan and is aligned with the following pillar, goal, and objective.

Pillar: Climate Action and Resiliency

Goal: Goal 5: Maximize opportunities for mitigation of climate change and adaptation through land conservation work and land use policies

Objective: Objective 2: Develop policies to maximize carbon sequestration and minimize loss of natural carbon sinks including old growth forests, the Laguna de Santa Rosa, and rangelands. Encourage agricultural and open space land management to maximize sequestration

Sonoma Water Strategic Plan Alignment

This item directly supports Sonoma Water’s Strategic Plan and is aligned with the following goal, strategy, and action item.

Goal: 3. Environmental Stewardship - Protect and sustain our watersheds to maintain water resources, ecosystems, and communities.

Strategy: 3.2 Protect, enhance, and monitor natural resources, watershed conditions, and ecosystem health that are vital to the Russian River, Petaluma River, and Sonoma Creek watersheds.

Action Item: 3.2.1 Support collaborative efforts to improve habitat and pursue restoration opportunities that provide integrated regional benefit.

Racial Equity:

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

No

Prior Board Actions:

None

FISCAL SUMMARY

Expenditures	FY23-24 Adopted	FY24-25 Projected	FY25-26 Projected
Budgeted Expenses	\$1,017,090		
Additional Appropriation Requested			
Total Expenditures	\$1,017,090		
Funding Sources			
General Fund/WA GF			
State/Federal			
Fees/Other	\$1,017,090		
Use of Fund Balance			
General Fund Contingencies			
Total Sources	\$1,017,090		

Narrative Explanation of Fiscal Impacts:

Budgeted expenses of \$1,017,090 in Fiscal Year 2023/2024 were incurred for the excavation of legacy sediments and organic matter from the Colgan Creek channel, for reports needed to gain regulatory approval for generation of nutrient credits, and for development of sales agreements. Costs will be offset by selling nutrient credits estimated at \$1,018,000 to the City of Santa Rosa and Town of Windsor. No additional field costs over and above routine stream maintenance costs are anticipated in the future for this Project and no additional appropriation is required.

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:

- Attachment 1: Agreement Between Sonoma County Water Agency and the City of Santa Rosa
- Attachment 2: Agreement Between Sonoma County Water Agency and the Town of Windsor

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

None