



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: Sasha Ponomareva 512-226-3351; Dale Roberts 707-326-7705
Vote Requirement: Majority
Supervisory District(s): Countywide

Title:

Support for Town of Windsor’s EPA Grant Application: Biosolids Treatment Facility

Recommended Action:

Authorize Sonoma County Water Agency’s General Manager to sign, in a form approved by County Counsel, the Memorandum of Agreement (MOA) in support of the Town of Windsor’s grant submittal to the US Environmental Protection Agency (EPA) for the construction of a regional biosolids handling facility.

Executive Summary:

The Town of Windsor is submitting a grant application for the US Environmental Protection Agency’s (EPA) Climate Pollution Reduction Grants Program to fund the “Windsor Water Reclamation Facility Biosolids Handling Project.” If awarded, this grant will fund the construction of a new biosolids treatment facility that will provide regional capacity to produce approximately 1,250 dry tons of Class A exceptional quality (EQ) biosolids per year for beneficial reuse within Sonoma County.

The Town of Windsor is applying for the US Environmental Protection Agency’s (EPA) Climate Pollution Reduction Grants as the lead applicant of a coalition, which includes the Lytton Rancheria, City of Cloverdale, City of Santa Rosa, City of Petaluma, City of Healdsburg, and Sonoma County Water Agency (Sonoma Water), collectively known as the “Collaborative”.

A Memorandum of Agreement (MOA) signed by all coalition members is required for the grant to be awarded. The project facilitated by the MOA would provide significant benefits to Sonoma Water.

Discussion:

BACKGROUND:

The Town of Windsor is submitting a grant application for the US Environmental Protection Agency’s (EPA) Climate Pollution Reduction Grants Program to fund the “Windsor Water Reclamation Facility Biosolids Handling Project.” If awarded, this grant will fund the construction of a new biosolids treatment facility that will provide regional capacity to produce approximately 1,250 dry tons of Class A EQ biosolids per year for beneficial reuse in Sonoma County. This facility will protect long-term climate resilience and adaptive capacity in Sonoma County by aligning multiple communities across the county in a regionally collaborative approach to climate risk reduction.

Currently, the Windsor Water District (District) owns and operates the Windsor Water Reclamation Facility (WWRF or Facility) located in Windsor, California. The WWRF currently receives and treats wastewater in and around the Town of Windsor. Wastewater treatment can produce biosolids that require disposal. The Town's current disposal method is not sustainable from a cost and land application perspective and results in significant release of methane gas. The Town recently embarked on a feasibility study related to a Biosolids Handling Facility to address these issues. The study determined that the Greenhouse Gas (GHG) Measure that will have the highest impact to Sonoma County is the proposed Regional Biosolids Handling Facility. This new facility will not only be able to manage the biosolids for the Town of Windsor, but it will also be a resource for the unincorporated part of Sonoma County and its incorporated cities.

Some Sonoma Water operated facilities similarly produce biosolids that are currently being landfilled. Although a clear mandate has not yet been established to stop landfilling biosolids under State law, near term changes are required. State landfill diversion targets under SB 1383 (2016) will require the diversion of biosolids from landfills, and recent CalRecycle regulations have already clarified that biosolids cannot be exempted from diversion targets as alternative daily cover. State law requires a 75 percent reduction in the landfilling of organic wastes by 2025. The goal of SB 1383 is to reduce methane emissions from landfills. Methane is a powerful greenhouse gas, which in the short term produces much more warming than carbon dioxide.

The biosolids project will utilize biodryers and pyrolysis, which has some advantages over another alternative, which is land application. Pyrolysis is the thermal degradation of material without the addition of any air or oxygen. The combustible gases and oils released in the thermal degradation process are used as a heat source of the system and no external heat source is required to power the process once it has been started. A solid char, such as Biochar, is the only product produced from the process.

Pyrolysis has been demonstrated to reduce per-and polyfluoroalkyl substances (PFAS) and Contaminants of Emerging Concern (CEC). This self-sustaining technology will result in an approximately 90% reduction in GHG emissions from the WRF current process. The regional component of this project means the benefits will extend well beyond the Collaborative's relative jurisdictions.

The project will reduce landfill emissions, and also has the potential to reduce truck trips from outhaul of biosolids. The Program will play a transformative role in changing how water and water-related climate change risk are managed in Sonoma County, and the Collaborative represents a long-term and intentionally cross-sector collaborative of agencies, community organizations and stakeholders seeking a more integrated and community-driven approach to addressing climate change impacts that are already taking a serious toll on communities throughout Northern California.

AGREEMENT BENEFITS:

Sonoma Water staff are enthusiastic about the proposal to be a partner and member of the Collaborative for this effort. If awarded, the successful completion of the grant objectives will add a critical new infrastructure asset to Sonoma County. The proposed Regional Biosolids Handling Facility provides a needed solution to an existing problem.

Should the grant be awarded, and the new facility constructed, Sonoma Water also sees the following co-benefits for its operations in addition to the benefits highlighted in the Town of Windsor's concept: avoided

landfilling of dewatered solids, improved beneficial reuse of solids, potential cost saving from current disposal methods, and reduced vulnerability to limited disposal options. In addition, Sonoma Water would be able to participate in a regional Collaborative that will help advise the Town of Windsor as the grant applicant/recipient.

The grant application seeks funding totaling \$94,897,335 to support the development of a regional facility. Given that the project is currently at the 30% design phase, there is some uncertainty regarding whether this amount will fully cover all anticipated expenses. However, based on preliminary assessments, it is anticipated the grant amount will be sufficient or nearly sufficient to fund the project. Initial estimates indicate that the total buildout cost for the regional facility is projected to be \$105 million.

No cost sharing/matching funds or leveraged resources are required as a condition of eligibility under this competition for the lead applicant or any coalition members. The Town of Windsor, as lead applicant, would provide the resources necessary to manage the grant, implement the grant, including all phases of engineering, environmental compliance, construction, and monitoring. By executing the proposed agreement, Sonoma Water, along with the other members, would agree to attend coordination meetings, provide Greenhouse Gas Emissions data requested by the Town of Windsor, solely related to Windsor Water Reclamation Regional Biosolids Resource Recovery Facility, and participate in the Regional Operations Study.

County of Sonoma Strategic Plan:

N/A

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: 5. Climate Change - Assess risk and uncertainty of climate change, and develop and take actions that improve resiliency and sustainability.

Strategy: 5.1 Develop and implement practices to understand and minimize vulnerability to climate change impacts.

Action Item: 5.1.2 Support interagency partnership efforts addressing regional climate-resiliency planning and projects.

This effort will support collaboration and partnership with government entities in the County and will add valuable regional resilient infrastructure to Sonoma County which will allow for emissions reductions benefits in biosolids handling across the County. This effort also supports Sonoma Water’s Infrastructure Planning and Environmental Stewardship goals.

Racial Equity:

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

No

Prior Board Actions:

N/A

FISCAL SUMMARY

Agenda Date: 6/4/2024

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

Narrative Explanation of Fiscal Impacts:

No appropriations are 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:

Memorandum of Agreement
EPA Grant Application

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

None