Legislation Details (With Text)

File #:	2020-1042		
Type:	Consent Calendar Item	**Status:**	Agenda Ready
File created:	10/6/2020	**In control:**	Sonoma County Water Agency
On agenda:	11/17/2020	**Final action:**	
Title:	Vortex Tube Rehabilitation Project		
Sponsors:	Sonoma County Water Agency		
Indexes:			
Attachments:	1. Summary Report, 2. Resolution and Exhibit A, 3. Attachment 1 Response to Comments		

Date	Ver.	Action By	Action	Result

To: Board of Directors, Sonoma County Water Agency
Department or Agency Name(s): Sonoma County Water Agency
Staff Name and Phone Number: David Cook (707) 322-8176
Vote Requirement: Majority
Supervisorial District(s): First

Title:
Vortex Tube Rehabilitation Project

Recommended Action:
Adopt a resolution determining that the Vortex Tube Rehabilitation Project will not have a significant adverse effect on the environment, adopting the Initial Study and Mitigated Negative Declaration for the Project, adopting mitigation measures and the mitigation monitoring reporting program, making certain related findings, and approving the Project. (First District)

Executive Summary:
The Sonoma County Water Agency (Sonoma Water) is proposing the Vortex Tube Rehabilitation Project (Project). The purpose of the Project is to repair the existing Vortex Tube to provide reliable flood protection to the Santa Rosa area. The Vortex Tube is part of the Santa Rosa Creek Diversion Structure flood control facility, located beneath Montgomery Drive, near Spring Lake and the City of Santa Rosa. This concrete flood control facility was constructed in 1963 as part of the Central Sonoma Watershed Project to reduce flooding in the Santa Rosa area. The Vortex Tube has deteriorated from over a half-century of scour. The Project would restore the structural integrity of the Vortex Tube and facilitate future inspections and maintenance. An Initial Study and Mitigated Negative Declaration (Initial Study) was prepared to evaluate and disclose the potential environmental impacts of the Project, which determined that all potential impacts would be less than significant with mitigation incorporated. Approval of this item would adopt a resolution determining that the Project will not have a significant adverse effect on the environment, adopt the Initial Study and the mitigation monitoring reporting program for the Project, make certain related findings, and approve the Project.

Discussion:
The Central Sonoma Watershed Project involved a multi-year plan to improve flood protection in Sonoma

County. The Santa Rosa Creek Diversion Structure (Diversion Structure) flood control facility was constructed in 1963 and is a critical flood protection element of the overall Central Sonoma Watershed Project. The Diversion Structure reduces flooding in central Santa Rosa by directing peak flows into Spring Lake reservoir, located in eastern Santa Rosa. The Vortex Tube is part of the Diversion Structure, located beneath Montgomery Drive, near Spring Lake and the City of Santa Rosa. The Vortex Tube is a concrete culvert that conveys low flows downstream to the natural channel of Santa Rosa Creek and diverts high flows into Spring Lake via a bypass channel where it is temporarily stored during peak flood events. Sonoma Water was tasked with the operation and maintenance of all structural facilities included in the Central Sonoma Watershed Project.

In 2017, underwater inspections identified structural deterioration of the reinforced concrete within the Vortex Tube. While the original design included a 3-inch wearing surface of grout placed on the inside of the tube, the continued bedload transport of sand, gravels, and cobbles for decades within the Vortex Tube has eroded this protective layer in sections of the tube and entrance. In some locations, steel is exposed in the reinforced concrete. The continued erosion of the Vortex Tube and adjacent structures from abrasion during high stream velocities will compromise the integrity of the Diversion Structure and its flood control function.

The proposed Project is located within an area that was under mandatory evacuation order during the 2020 Glass Fire and the site was not damaged during the fire.

Vortex Tube Rehabilitation Project
Sonoma Water is proposing the Vortex Tube Rehabilitation Project (Project) to extend the useful life of the Vortex Tube and facilitate future inspections and maintenance. The Project is required to rehabilitate this critical infrastructure. The Project would repair the existing flood control structure and not change its function or hydraulic capacity needed to control downstream flows and regulate flooding.

The Project is located along Santa Rosa Creek at Montgomery Drive approximately 4 miles east of downtown Santa Rosa and ¾ mile east of Spring Lake Regional Park. The Project would occur within the Santa Rosa Creek Diversion Structure, and within the natural creek channel immediately upstream and downstream of the Diversion Structure on both sides of Montgomery Drive. The Project is located on Sonoma Water-owned and managed land.

The Project's repair of the Vortex Tube would be implemented in two phases. The first phase consists of constructing a permanent bypass pipe to temporarily direct creek flows around the Vortex Tube. The second phase consists of repairing the damaged Vortex Tube. Under normal operating conditions, the bypass pipe ends would be closed. The bypass pipe would only be used during Vortex Tube repair work and to allow future inspections of the Vortex Tube and maintenance, if needed. Project construction would take up to four months and occur approximately June 15 to October 31, 2021. The Project was designed to minimize disturbance to wetland and aquatic habitats. The Project includes mitigation measures to minimize the potential for the Project to adversely affect air quality, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, noise, transportation, and tribal cultural resources.

California Environmental Quality Act Documentation
Sonoma Water, as a lead agency under California Environmental Quality Act (CEQA), prepared an Initial Study and Mitigated Negative Declaration of Environmental Impact (Initial Study) for the Project pursuant to the requirements of the CEQA (California Public Resources Code sections 21000 et seq.), the State CEQA

Guidelines (Code of Regulations, Title 14, Division 6, Chapter 3), and Sonoma Water's Compliance Procedures for CEQA. The Initial Study discloses potential environmental impacts of implementing the Project; identifies the means to avoid or reduce potential significant adverse impacts on the environment; and concludes the construction, operation, and maintenance of the Project would not have a significant adverse effect on the environment.

The Notice of Completion, and Notice of Availability and Notice of Intent to Adopt the Initial Study were filed with the California Governor's Office of Planning and Research's State Clearinghouse. The Initial Study was available on August 28, 2020 for a 30-day public review period. The Notice of Availability for the Initial Study for public review was distributed to the jurisdictional and permitting agencies and sent to stakeholders, interested persons, and property owners adjacent to the Proposed Project area on August 28, 2020. Copies of the Initial Study and Notice of Availability were also made available at Sonoma Water's administrative office and an electronic version of the document was made available on Sonoma Water's website. A legal notice was also published in the Press Democrat on August 30, 2020. During the review period, Sonoma Water received a single comment letter from the California Department of Fish and Wildlife. A summary of the comment letter and Sonoma Water's response is provided in Attachment 1.

Sonoma Water staff recommends that the Board adopt a resolution determining that the Project will not have a significant adverse effect on the environment, adopting the Initial Study and Mitigated Negative Declaration for the Project, adopting mitigation measures and the mitigation monitoring reporting program, making certain related findings, approving the Project, and acknowledging the filing of a Notice of Determination.

Prior Board Actions:
None

FISCAL SUMMARY

Expenditures	**FY 20-21 Adopted**	**FY21-22 Projected**	**FY 22-23 Projected**
Budgeted Expenses	$2,000,000		
Additional Appropriation Requested			
Total Expenditures	**$2,000,000**		
Funding Sources			
General Fund/WA GF			
State/Federal			
Fees/Other	$2,000,000		
Use of Fund Balance			
Contingencies			
Total Sources	**$2,000,000**		

Narrative Explanation of Fiscal Impacts:
Budgeted amount of $2,000,000 is available from FY 2020/2021 appropriations for the Flood Control Zone 1A-Laguna Mark West. 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):
None

Attachments:
Resolution and Exhibit A, Mitigation Monitoring and Reporting Program
Summary and Response to Comments (Attachment 1)

Related Items "On File" with the Clerk of the Board:
Initial Study and Mitigated Negative Declaration of Environmental Impact
Draft Notice of Determination