



Agenda Item No. 8f.

Staff Report

Date: June 13, 2024
To: Mayor Kircher and Council Members
From: Richard Simonitch, Public Works Director
Subject: Update on Marin County Flood Control Zone 9 Projects.

Recommendation

It is recommended that the Town Council receive this update on Marin County Flood Control District activities within the Flood Control Zone 9.

Background

This item was placed on the agenda at the request of Mayor Pro Tem McMillan and Councilmember Robbins.

The boundary of Flood Control Zone 9 (FZ9) is defined by the 28-square mile “Ross Valley Watershed”. It extends from Mt. Tamalpais and White’s Hill through the communities of Fairfax, Sleepy Hollow, San Anselmo, Ross, Kentfield, Greenbrae, Larkspur, and Corte Madera to the San Francisco Bay. The Corte Madera Creek receives nearly all of the storm water runoff from this watershed and is the primary source of flooding within Ross. On February 26, 2024 the FZ9 Advisory Board convened, together with Marin County Flood Control District staff and members of the public, on matters pertaining to the FZ9 fiscal year operating budget and to receive an update on flood control projects within the Flood Zone.

Attached is the staff report prepared by Marin County staff for the February 26, 2024 FZ9 Advisory Board meeting. It contains the latest information available to the public regarding the status of current projects that could have an impact on the Town of Ross.

More information on projects within the Ross Valley Watershed can be found at <https://marinflooddistrict.org/ross-valley/>

Fiscal Impact

There is no fiscal impact associated with this update.

Attachments

Flood Zone 9 staff report from February 26, 2024.

Item 5. Project Updates

San Anselmo Flood Risk Reduction (SAFRR) Project

BACKGROUND

The primary purpose of the Project is to reduce flood risk by (1) reducing peak discharge by attenuating flows through use of a flood diversion and storage basin, and (2) increasing creek capacity by removing existing obstructions to creek flow and then regrading and improving the creek channel. The project will reduce flooding on over 500 properties. The creek improvements in San Anselmo will also set the stage for the Town's Creekside Park Project. The scope of the SAFRR Project consists of three distinct components: (1) the Sunnyside Flood Diversion and Storage (FDS) Basin at 3000 Sir Francis Drake Blvd; (2) the removal of a building at 634-636 San Anselmo Avenue, referred to as Building Bridge 2 (BB2), in San Anselmo, a structure that partially obstructs the flow of San Anselmo Creek; and (3) structural mitigation measures downstream. Construction of the FDS Basin is complete except for some landscaping required for environmental mitigation.

Removal of the building at 634-636 San Anselmo Avenue (BB2) in San Anselmo is an important component of the SAFRR project. It spans San Anselmo Creek and its foundations are in the channel and are a major obstruction to flow. The buildings on top of the deck of the supporting concrete BB2 bridge were demolished in the summer of 2020. However, the remainder of the BB2 project was delayed primarily due to the building bridge being located within a FEMA regulatory floodway and potential downstream impacts. Removing BB2 removes a hydraulic constriction in San Anselmo Creek. While this removal greatly reduces flood risk, hydraulic models indicate a limited and localized increase in Base Flood Elevation (BFE) just downstream of the BB2 site, for the 100-year return period flow event. In order to accurately quantify the extents and level of BFE additional hydraulic modeling and surveying was performed. Some mitigation measures are required to address impacts to affected structures and need to be implemented prior to removing BB2. A Community Informational Open House about the project was held on January 11, 2024, at the San Anselmo Town Hall to provide an overview of project status and timeline, and an opportunity for residents to learn more about specific project aspects, ask questions and share concerns.

UPDATES

Additional Data Collection and Modeling

To evaluate the potential localized and limited increases in flooding at some properties downstream of Bridge Building #2, the Marin County Flood Control District compared modeled increases of flood water surface elevations (for the 25- and 100-year return period flow events) to surveyed finished floor elevations and bottom of building structures. Of the 50 building structures evaluated along San Anselmo Creek, the modeled increases in water surface results in no new inundation of structures in the floodway or floodplain. Based on this finding: no elevations of buildings are required however there are 5 structures that see a rise in water surface elevation in the crawlspaces that need additional evaluation to determine if flood proofing or utility relocation is considered necessary; and the previously proposed temporary baffle structure at the BB2 site is no longer considered necessary either. The cost estimate for the project has now been updated based on this information (see following page).

CEQA

On September 18, 2018, the Board of Supervisors certified the Final Environmental Impact Report for the San Anselmo Flood Risk Reduction (SAFRR) Project and adopted a resolution approving the SAFRR project. Subsequently, on August 15, 2023, the Board adopted an addendum to the Final Environmental Impact Report for the San Anselmo Flood Risk Reduction (SAFRR). This first addendum focused on the mitigation

plantings required to comply with State environmental permit requirements for the SAFRR project. Final design for the BB2 project has resulted in modifications to the approved project at the Building Bridge #2 (BB2) site to include a retaining wall instead of sloped bank along San Anselmo Avenue, pedestrian bridge abutments at the upstream end of the site, additional storm drain replacement, and additional bioengineered creek bank and channel protection. Final modifications such as these routinely occur during the final design phase of a project and have been included in Second Addendum (BB2) to the SAFRR EIR.

The second addendum also included and analyzed a baffle as a project variant. The baffle would be a temporary structure placed at BB2 to keep the channel in its current, constrained condition until measures could be implemented to reduce that downstream flood risk caused by the project. The District has continued to collect survey data since the addendum was drafted and concluded that no new inundation of finished structures results from the project. Consequently, the baffle is not necessary as part of the project and is no longer under the Districts consideration. The second addendum evaluated the potential environmental effects of the proposed Final Design Modifications.

The Draft Second Addendum was posted for public review on November 3, 2023 and closed for comments on December 11, 2023. The District received letters from 11 commenters and is in process of writing responses to the comments. We will return to the Board, at a future date yet to be determined, to approve a Resolution adopting the Second Addendum and the Project Modifications.

Federal Emergency Management Agency (FEMA)

In light of a clarification received in early January 2024 from FEMA, the District has shifted its approach to FEMA compliance and this new approach will require that we postpone removal of BB2. As recently as last month, the District felt the bridge removal could proceed later this year. However, following meetings with FEMA officials, as well as representatives from the towns of Ross and San Anselmo, it was determined the District is required to move forward with a two-part process. Part one entails FEMA formally assessing the hydrology model developed by the District and relaying any issues identified. If approved, the model would become the new definitive model for the area and would be used by FEMA to revise the current respective National Flood Insurance Plan (NFIP) map. The second part of the process will be when FEMA considers how the removal of BB2 would impact the NFIP map, determining whether the project would meet their NFIP standards.

Permits, Design and Construction

Regardless of this schedule delay, the final Plans, Specifications and Estimate are being prepared for when the BB2 project is ready to be released for bid. In addition, the District is pursuing real estate easements and an agreement with San Anselmo to differentiate responsibilities between the Districts and Towns improvements that will be part of the final project

PROJECT BUDGET

The following table is a summary of SAFRR project costs (WITHOUT BAFFLE) to date and anticipated future costs and funding needs.

Task Description	Updated Cost Estimate	Encumbered + Spent	Remaining Cost
FDS Construction Cost	\$6.1M	\$6.1M	\$0
FDS Construction Management	\$300k	\$300k	\$0
FDS Design Costs	\$2.7M	\$2.7M	\$0
BB2 Construction Cost	\$3.65M	\$100k	\$3.55M
BB2 Design Costs	\$1.46M	\$1.46M	\$0
BB2 Construction Management	\$200k	\$0	\$200k
SAFRR Real Estate Cost	\$6M	\$5.6M	\$400k
SAFRR Staff Labor Costs	\$2M	\$1.4M	\$600k
SAFRR Environmental Costs	\$1.73M	\$1.73M	\$0
SAFRR Offsite Environmental Mitigation Planting Costs	\$200k	\$0	\$200k
SAFRR Geomorphic, Erosion, Hydraulic, Large Woody Debris, and Aquatic species monitoring	\$125k	\$0	\$125k
Other* Costs	\$100k	\$100k	\$0
SAFRR Structural Mitigation	\$400k	\$0	\$400k
<i>Total:</i>	<i>\$25M</i>	<i>\$19.5M</i>	<i>\$5.5M</i>

*e.g. permits, utilities

Existing Revenue:

\$8,720,500	State Department of Water Resources (DWR) Grant
\$8,720,500	Flood Zone 9 Fee (Required DWR Grant Match)
\$6M	Additional Zone 9 contribution (portion of fee revenue FY 2023-2027, the rest needed for Corte Madera Creek Flood Risk Management Project contribution, unless that project is successful in obtaining additional grants)
<i>\$23,441,000</i>	<i>Total</i>

Anticipated Additional Revenue Needs: \$1.5M

District staff submitted a grant application for the FEMA Hazard Mitigation Grant Program to close the funding gap. The grant application was thoroughly reviewed by Cal OES but was unfortunately determined to be ineligible.

Corte Madera Creek Flood Risk Management Project

BACKGROUND

The goal of this project is to reduce the frequency and severity of flooding and to protect human life and property in the communities of Ross and Kentfield by enhancing and improving Corte Madera Creek. The project will make improvements to the concrete channel that the U.S. Army Corps of Engineers (USACE) built in the 1960-70s. The project area starts upstream at Lagunitas Road in the Town of Ross and ends downstream at the earthen channel in Kentfield. The proposed channel improvements provide increased 25-year flood protection to residents and businesses within the Town of Ross and Kentfield. The project includes elements that would increase flow conveyance capacity, provide flood protection, and enhance habitat within Corte Madera Creek.

The project includes these elements:

- *Natural Channel Transition and Raised Floodwalls:* Remove a fish ladder and lower the channel within Unit 4 to remove an impediment to flood flow and install taller floodwalls in Units 2 and 3 to control flood flows
- *Fish Resting Pool Improvements:* Create larger fish resting pools within the concrete channel in Unit 3 to improve fish passage
- *Granton Park Pump Station:* Install a stormwater pump station to control flooding in the Granton Park neighborhood and a maintenance access ramp
- *Lower College of Marin Restoration:* Remove portions of the concrete channel from Stadium Way downstream to the natural earthen channel to improve fish and wildlife habitat

The Environmental Impact Report (EIR) was certified by the District Board of Supervisors on August 17, 2021. Regulatory permits have been obtained. The funding from CA Department of Water Resources Grant was extended to March 31, 2026. The project is being bid as multiple contracts spanning several years.

UPDATES

Granton Park Pump Station

Construction of the maintenance access ramp in the Granton Park neighborhood was completed in 2022. It is anticipated that the new Granton Park stormwater pump station will be placed into service sometime this spring, once a new power service is installed by PG&E.

FEMA

We are in discussions with FEMA to make sure that our process for navigating their requirements is sound. Construction of these project elements will not be scheduled prior to the 2025 construction season.

Grants

We were recently notified that the Lower College of Marin Restoration element of the project was awarded a \$555,000 grant from US Fish & Wildlife Service – National Coastal Wetlands Conservation Grant Program, through the CA Coastal Conservancy. The Friends of Corte Madera Creek Watershed is helping oversee grants from the Coastal Conservancy for this effort and were instrumental in acquisition of this grant.

PROJECT BUDGET

The following table is a summary of Corte Madera Creek Flood Risk Management Project costs to date and anticipate future costs and funding needs.

Task Description	Total Cost Estimate	Encumbered + Spent	Remaining Cost
Maintenance Access Ramp & Granton Park Pump Station Construction Cost	\$4.1M	\$4.1M	\$0
Natural Channel Transition and Raised Floodwalls Construction Cost	\$3.8M	\$0	\$3.8M
Fish Resting Pool Improvements Construction Cost	\$1.7M	\$0	\$1.7M
Lower College of Marin (COM) Restoration Construction Cost	\$3.5M	\$0	\$3.5M
Design Costs	\$2.3M	\$2.2M	\$100k
Environmental* Costs	\$1.3M	\$940k	\$360k
Real Estate Costs	\$180k	\$180k	\$0
Staff Labor Costs	\$1.2M	\$415k	\$800k
Total:	\$18.1M	\$7.9M	\$10.2M

*Includes CEQA, permitting, and Lower COM Restoration design

Existing Revenue:

\$7,030,377	State Department of Water Resources (DWR) Grant
\$7,030,377	Flood Zone 9 Fee (Required DWR Grant Match)
\$1,410,600	Coastal Conservancy Grant
\$750,000	County Sea Level Rise Funds (for Lower COM Restoration construction)
\$555,000	US Fish & Wildlife Service National Coastal Wetlands Conservation Grant
\$16,776,354	Total

Anticipated Additional Revenue Needs: \$1.5 million

District staff have submitted grant applications for the FEMA Hazard Mitigation Grant Program (HMGP) and National Marine Fisheries (NMFS) grants to close the funding gap. For one of these grants we heard the project is highly ranked and are optimistic that more funding will come through in the next year. This could in turn free up funding for the SAFRR project. We anticipate hearing from NMFS in summer 2024 regarding potential grant award and are currently working with Cal OES on finalizing the grant application for the HMGP.

Item 6. Annual and Preventive Maintenance Work Program

A. Pump Stations

Starting next fiscal year, the Zone will need to implement a maintenance program for its new pump station in Granton Park. Though the District already maintains 17 pump stations, this is the first one in Zone 9. Preventive maintenance for all pump stations is completed every summer and includes the inspection, testing, and as needed replacement of electrical and mechanical components. Pump station back-up generators are annually run-tested, and the fuel checked and maintained as needed. Regular maintenance and monitoring of pump operations is expected to be carried out by a contractor specializing in pump stations. An annual contract budget of \$40,000 per year is recommended, as well as a contribution of \$10,000 annually to a sinking fund for major preventive maintenance and repairs.

Individual pumps are typically scheduled for major preventive maintenance on a six-year interval at each of the Districts pump stations. This major preventive maintenance involves removing one of the pumps in the summer and conducting a thorough inspection and refurbishment (including sand blasting, epoxy coating, re-balance propeller, replace shaft tubes, etc.) before returning it to the station. Unless an issue is identified earlier, staff recommend planning for this major maintenance to occur in 2029 and 2030, then every 6 years after.

For remote monitoring of the pump station staff also recommend installing a Trimble Unity system. There will be a one-time installation cost of about \$10,000, but ongoing annual subscription is only \$240.

B. Creek Maintenance

Vegetation overhanging the concrete channel of Corte Madera Creek is removed as needed to facilitate inspection and maintenance of the concrete walls and tide gates. Sediment removal requirements in the Concrete Channel Fish Resting pools will be evaluated in April. Existing funding agreements with City and Town partners in the watershed will soon be expiring.

C. Mowing for Fire Fuel Reduction

Mowing for fire fuel reduction occurs every spring on two sites:

- The Corte Madera Creek right bank between Bon Air Bridge and the College of Marin Ball Fields. This property is leased from the State Lands Commission.
- A District-owned parcel at 49 Sir Francis Drake Blvd.

D. Flood Detention and Storage (FDS) Basin Maintenance

Routine preparedness and inspection activities that will be carried out each dry season at this new facility at 3000 Sir Francis Drake Blvd:

- Remove debris from the creek if/as required by the Debris Management Plan
- Perform routine inspection and maintenance of the FDS diversion structure and basin and, in particular, inspect and verify proper working condition of the diversion radial gate and the basin low-level outlet gate
- Remove deposited sediment and prepare for gravel augmentation, if/as required by the Sediment Management Plan. Sediment removal is scheduled for the Summer of 2024 on Fairfax Creek at the FDS site as part of the adaptive management.

E. SAFRR Post-Project Environmental Mitigation Maintenance and Monitoring

To comply with the environmental permit requirements associated with the San Anselmo Flood Risk Reduction Project, Zone 9 must maintain and monitor the mitigation plantings for at least 5 years and ensure minimum survival of plants at the end of that time. Anticipated cost for annual maintenance is about \$100,000, and includes frequent weeding, fire fuel reduction, inspecting irrigation, replacing browse protection and replacing plants that died as needed. Costs for irrigation water could be as much as \$10,000 per year. Anticipated costs for monitoring and reporting on the progress to permitting agencies is approximately \$75,000 annually.

Item 7. Review Proposed Budget for FYs 2024-25 and 2025-26

Every two years the advisory board is asked to recommend a baseline budget for Zone 9. The proposed budget attached would cover the two fiscal years from July 1, 2024 through June 30, 2026. The request at this time is to recommend a baseline budget, which does not include major project expenses, and is intended to be relatively consistent from year to year. Major project expenses, like design contracts and construction contracts, will have to be accompanied by additional recommendations for budget amendments. The items shaded green represent the baseline budget items for your board to focus a recommendation on at this time. All other items - shaded gray and white - are not part of the action to approve the baseline budget but are being provided for general context. The advisory board can ask questions and comment on the proposed budget. Following is a budget summary and details are attached.

Description	2024 Baseline	2024 Revised ¹	2025 Proposed	2026 Proposed	2023 Actual
Revenue Total	\$4,200,313	\$5,132,533	\$3,016,222	\$3,016,222	\$5,701,838
Maintenance	\$169,500	\$208,774	\$229,500	\$229,500	\$82,560
Misc. Expense	\$50,000	\$215,516	\$50,000	\$50,000	\$86,547
Professional Services ²	\$100,000	\$1,447,984	\$100,000	\$100,000	\$792,516
Construction/ Trade Services ³	\$100,000	\$2,821,827	\$100,000	\$100,000	\$3,968,845
Utilities	\$16,500	\$38,500	\$38,500	\$38,500	\$33,880
Right of Way	\$0	\$0	\$0	\$0	\$116,978
Service & Supplies Total	\$436,000	\$4,732,601	\$518,000	\$518,000	\$5,082,119
Staff Labor	\$1,308,919	\$630,495	\$692,440	\$713,214	\$484,594
Indirect Cost Allocation ⁴	\$218,334	\$218,334	\$220,000	\$226,600	\$74,751
Loan Payments		\$2,669,988			\$2,669,988
Expenditures Total	\$1,963,253	\$8,251,418	\$1,430,440	\$1,457,814	\$8,311,452
Projected/ Actual Fund End Balance		\$4,512,480	\$6,098,261	\$7,656,669	\$7,631,365

¹ 2024 Revised includes baseline budget plus encumbrances carried forward from prior fiscal years plus approved adjustments for major project contracts.

² Professional Services include design, environmental and FEMA consulting services.

³ Construction/ Trade Services includes prior year encumbrances for Granton pump station and maintenance of off-site mitigation plantings.

⁴ Indirect Cost Allocation - The Marin County Flood Control & Water Conservation District is a separate and distinct political subdivision of the State of California and receives no revenue from the County. However, the County provides the staffing, financial and administrative support and other services to the District to allow it to function. In addition, the County provides the Civic Center and other facilities for administration and support services for the District operations, including the District Board of Supervisors. Because of this, each Flood Control Zone is charged an overhead cost in accordance with the County's Fiscal Policy and as allowed by the federal Office of Management and Budget (OMB) Circular 2 CFR Part 200.

At the request of the advisory board, here is a breakdown of anticipated maintenance contract expenditures (record no. 29 in attached proposed budget):

Item Description	Estimated Cost FY 2025	Estimated Cost FY 2026
Trimble Unity for Remote Monitoring of Granton Park Pump Station	\$10,000	\$240
Pump Station Repair Fund	warrantied	\$10,000
Pump Station O&M Contract	\$40,000	\$40,000
Conservation Corps North Bay Creek Maintenance Contract	\$40,000	\$40,000
Adaptive Management of Creek at Flood Detention and Storage Basin	\$75,000	\$75,000
Sediment Removal at Fish Resting Pools (if needed)	\$30,000	\$0
General Fire Fuel Reduction	\$30,000	\$30,000
Other unanticipated needs that may come up*	\$4,500	\$34,260
Total	\$229,500	\$229,500

*Examples of such needs may include repairs of pipes penetrating the levee or concrete channel, patching of sections of concrete channel, replacement of tide gates that are no longer sealing properly, removal/modification of large, downed trees from the creek channel where the District has easements or property ownership, or removal of hazardous trees where the District owns property.

Item 8. Next Meeting

Per the Zone bylaws, regular meetings are held on the first Tuesday in January. Additionally, the advisory board should pick an additional regular meeting date that works for their schedule. Special meetings may be called if there is a project need or other urgent need that comes up between now and the regular meetings.