

**FLOOD CONTROL ZONE 9 ADVISORY BOARD MEETING**  
**DECEMBER 9, 2019**  
**SAN ANSELMO TOWN HALL**  
**STAFF REPORT**

**Item 1. Closed Session**

Conference with Counsel – Anticipated Litigation

Initiation of litigation pursuant to California Government Code section 54956.9(d)(4). Number of potential case(s): One.

Reconvene in Open Session

Announcement from Closed Session.

**Item 2. Approval of Meeting Minutes for May 23, 2019**

***Recommended Action:*** Approve the minutes.

**Item 3. Open Time for Items Not on the Agenda**

Comments will be heard for items not on the agenda (limited to three minutes per speaker).

**Item 4. Design Update for San Anselmo Flood Risk Reduction Project**

**A. San Anselmo Flood Risk Reduction Project**

The District design team led by Stetson Engineers is working to produce design sheets at the 60% level which are being used to prepare permit applications to the State and Federal regulatory agencies. The San Anselmo Flood Risk Reduction (SAFRR) Project consists of three components: (1) design of the Sunnyside Nursery Flood Diversion and Storage Basin at 3000 Sir Francis Drake Blvd; (2) the removal of a building at 634 San Anselmo Avenue and creek bank stabilization in San Anselmo; and (3) flood mitigation measures on downstream private properties that may see impacts from the project. The first phase of design will produce an Engineering Design Basis Report and 60% design plans for the basin and the removal of the building bridge in San Anselmo. The design team continues to work closely with the regulatory agencies that are responsible for reviewing and permitting the Project. The permit approval process is on a critical timeline to complete final design and construction of the Project. For this reason, the District awarded ESA, who are also part of the design team, a separate stand-alone contract to prepare and submit permit applications. Once the 60% design basis report and plans have been completed, the District will proceed with the second Phase to produce 100% construction plans and specifications and revised cost estimates with a qualified design consultant. Following is an update of the progress of each of the project elements:

## **1. Sunnyside Nursery Flood Diversion and Storage Basin (FDS)**

The design team has conducted additional geotechnical investigation and detailed analysis needed to support final design of the diversion structure, overflow weir and refined grading plans for the basin and the embankment. The team has also drafted sediment management, woody debris management and operations plans and conducted a structural evaluation of the existing vehicular access bridge to the FDS. This work has been compiled into an Engineering Basis of Design Report that will be used to produce the final plans and specifications and support preparation of the permit applications. The design basis report and selected 60% design plans are currently in the review process and are expected to be completed and posted to the project page by the end of 2019.

A portion of the project includes design and construction of storm drain improvements along Sir Francis Drake adjacent to Fairfax Creek. These improvements are needed due to the interior drainage impacts of the project on the surface drainage outfall to Fairfax Creek from the hillside above Sir Francis Drake Boulevard. These drainage improvements were designed by the District's design team. The improvements included a new storm drain line and manholes under Sir Francis Drake Boulevard that were all constructed by Team Ghilotti this summer as part of a Marin County DPW roadway improvement project. The roadway construction contract was managed and funded by Marin County Public Works Engineering Division that repaved the roadway in 2019 and will add a non-skid surface on the travel roadway in 2020. The drainage materials and construction were paid for with Zone 9 funds and needed to be completed prior to construction of the FDS project to avoid the added cost of re-paving the roadway again in 2020.

## **2. 630-636 San Anselmo Avenue**

The County Real Estate group has continued negotiations with the businesses currently under lease at the property. At this time, the L'Appart restaurant has ended their lease with the District and vacated the property. The other businesses are still in operation, but the District expects to complete relocation activities by the end of January 2020. The District is currently assessing the existing buildings for demolition and expects to demolish the buildings after all the tenants have been relocated in early 2020. The engineering plans show that the Art Studio will remain at the site after construction of the Project. The concrete slab foundation that spans the creek will remain in place until final permit approval and the main construction contract is awarded which is expected in 2021.

The design team has continued the geotechnical investigation of the site in order to refine the project design. The District is working closely with The Town of San Anselmo to incorporate certain elements of the Reimagine Creek Park vision into the SAFRR Project. The updated design includes leaving the right bank retaining wall in place to maximize room for a new pedestrian plaza along San Anselmo Avenue as part of the Reimagine Park concept design. RHAA has been

chosen by the Town Council to produce the new park design and the District has a small contract with RHAA to develop a stable design consistent with the approved Project EIR which includes a new pedestrian plaza, replacing the existing performance stage and new pedestrian bridge abutments into the District’s project permit applications.

To incorporate some of these new design changes to the Project, a separate contract with GEI was approved by the District Board of Supervisors in November 2019. The contract also includes developing a more detailed construction cost estimate for the San Anselmo and Fairfax project elements based on the 60% design. The updated cost estimates will be available for preparation of the draft 20-21 budget.

The Engineering Design Basis Report and select 60% design plans are expected in early 2020. Collaboration on the Re-Imagine Creek Park elements resulted in about a four-month delay to the Project design. This delay will move construction of the Project until 2021. The final bid package is not expected to be completed prior to the 2020 construction season which is not good timing to receive competitive bids. For this reason, Staff are expecting to put the construction project out to bid in late 2020 for construction in the Summer of 2021.

### 3. Private Property Structure Flood Risk Mitigation

The design team has developed a stable hydraulic design of the upstream elements of the project and assessed the impacts to the downstream structures adjacent to San Anselmo Creek downstream of 630-636 San Anselmo Avenue. The design team survey crew surveyed, measured and marked elevations next to structures at 13 properties in September 2019. To comply with the 2018 approved Project EIR, any new inundation with the project during the 4% annual exceedance probability flow event (known as the 25-year flow event) would need to be mitigated consistent with the mitigation outlined in the Project EIR. To assess where new inundation may occur on the properties, the surveyors marked an inundation band to help determine where there may be impacts to habitable structures. This data was presented in a memorandum that was sent to the homeowners in early December 2019 and will be incorporated into the Engineering Design Basis Report. The memorandum has identified three homeowners where mitigation is required consistent with the EIR, and the District is planning to work with these individual homeowners to determine suitable measures.

Milestone	Timeline
60% design plans	January 2020
Permit applications	February 2020
Permit approval	Fall 2020
100% design plans	Winter 2020
Construction bidding and award	Winter 2020/21
Construction start	Spring 2021
Construction ends	Fall 2021 or Summer 2022

## **Item 5. Other Project Updates**

### **A. Rainfall and Stream Flow Gauges**

The District, now augmented by additional County of Marin funding, has continued to maintain and operate the weather gauges for the start of the 2019/20 winter season. New weather gauges were added in San Anselmo, Fairfax, and Sleepy Hollow. These new gauges were installed over the last several years as part of the California Department of Water Resources Flood Emergency Response Planning grant. The data collected from the sites which include creek stage and rainfall accumulation are being used to provide real-time information on-line at the Marin OneRain site [Marin.onerain.com/dashboard/?dashboard=f83c9a52-90e1-4beb-a4b6-8f054838667a](http://Marin.onerain.com/dashboard/?dashboard=f83c9a52-90e1-4beb-a4b6-8f054838667a). Additionally, the County has developed a draft flood forecast model based on historic and forecast data from the National Weather Service (NWS) for the Kentfield rain gauge and Ross Valley creek gauge and will be testing the model over the next year or two. A more detailed presentation on this forecast model is being planned for the January 22, 2020, Zone 9 AB public meeting.

In the meantime, the creek stage flood threshold levels in Ross Valley were updated with assistance from Stetson Engineers in early 2019 and are reflected from the 'threshold' icons available from individual Station 18 (Ross), Station 19 (San Anselmo), Station 20 (Sleepy Hollow), and Station 21 (Fairfax) gauge online displays. This real-time and historic stage information can be accessed from *Marin.OneRain.Com*, and new ALERT 2 creek stage levels for Ross Valley sites are available from a direct link below:  
[Marin.onerain.com/dashboard/?dashboard=f83c9a52-90e1-4beb-a4b6-8f054838667a](http://Marin.onerain.com/dashboard/?dashboard=f83c9a52-90e1-4beb-a4b6-8f054838667a).

### **B. Creek, Precipitation and Stream Gauge Maintenance and Storm Response**

Regardless of predictions, the District prepares for every year as though it is an "El Niño year." Although two major flooding years in Marin's history occurred during years with El Niño episodes (1997/98 and 1982/83), it is not unusual to experience major flooding in the absence of El Niño, such as in 2005/06. Flooding can even occur during a drought year.

It is for these reasons that the District follows a consistent system of facility and creek maintenance each year which mitigates the risk of flooding. We conduct regular inspections of the creeks, floodwalls, and levees within our jurisdiction, and frequently test our pumps, motors, and generators. Creeks, drainage ditches, pipes, trash racks, and pump wet wells are cleared of vegetation, sediment, and trash in the fall and throughout the winter as needed.

### **C. Pump Station Maintenance**

There are currently no District-operated pump stations in Flood Control Zone 9 Ross Valley.

### **D. Vegetation Maintenance**

Vegetation maintenance is performed as part of the annual stream maintenance program. The creek maintenance program provides a framework to integrate creek maintenance and stewardship across the watershed and to monitor potential problems from year to year. It is a

partnership between the District and Fairfax, San Anselmo, Ross, and Larkspur that conducts annual creek inspections and coordinates removal of vegetation and other debris that could block flows and contribute to flooding. Homeowners are still responsible to keep the creek unobstructed on private property and this program does not acknowledge that removing trees will solve the regional flooding problem.

Every summer District and City/Town staff walk the critical reaches of the creek looking for vegetation or debris that is constricting the channel capacity that could obstruct flow. Where isolated issues are identified on private property, District/City/Town staff typically work directly with homeowners. In late summer/early fall, the Conservation Corps is hired to remove potentially obstructive vegetation along longer stretches of creek. In certain areas, such as unincorporated Sleepy Hollow, Murphy Creek in Kentfield, and Town of Ross, a community creek-cleanup model is used to engage creekside homeowners to work together on managing the creeks.

The District has been coordinating the environmental permitting for the program through a District-wide programmatic routine maintenance permit from the CA Dept of Fish & Wildlife. In 2017, the Regional Water Quality Control Board also provided a programmatic permit for the District's maintenance for the first time that has resulted in significant changes that the District is ramping up to. Examples of the changes include a 5000 linear foot cap on annual vegetation maintenance Countywide and a requirement by the end of 5 years to use reach-based quantitative triggers to justify the need for maintenance of both sediment and vegetation. Because 5000 feet is a small percentage of the creeks the District maintains, staff must prioritize maintenance work on a District-wide scale. The priorities are sediment removal, and District-owned sites plus sites for which the District has maintenance easements. The District's programmatic permit covers sediment removal for the city and town partners. Under our new creek maintenance funding agreements with the municipalities, cities and towns with a need for in-stream native vegetation removal, will now be able to get reimbursed for staff costs to get permits, fulfill reporting requirements, and permit fees.

#### **E. Sediment Removal**

Localized sediment removal is performed by the cities and towns in Ross Valley where they have right-of-way and on an as-needed basis. Sediment removal is also performed by the District within the fish resting pools located along the bottom of the Corte Madera Creek concrete channel. A feasibility study is currently underway to evaluate sediment management within the lower reach of Corte Madera Creek partially located within the City of Larkspur.

#### **F. Levee/Floodwall Maintenance & Rodent Control**

The Corte Madera Creek channel is inspected every other summer by the U.S. Army Corps of Engineers and District staff, including the summer of 2019. Patching of the concrete channel is conducted by county staff and/or contractors as needed. Each year, staff or contractors inspect, clean, grease, and repair as necessary the tide gates on the pipes that penetrate the channel wall.

## **G. Storm Response**

Before, during, and after storms, the Conservation Corps North Bay inspects and clears Flood District facilities as needed. They are also available for sandbagging and/or tarping levees and creek banks as needed.

## **H. Corte Madera Creek Local Levee Evaluation**

The District is continuing to finalize the results from the Local Levee Evaluation started in 2018. The consultant has responded to the majority of District comments to the draft LOLE reports and have submitted several final versions of the reports and have one more deliverable to complete involving the alternatives. The District is considering securing a third-party consultant to provide a review of the final LOLE report and to provide recommendations to assist in prioritizing individual measures identified in the LOLE report. No funding is currently available to design, permit and construct improvements identified through the LOLE alternatives, therefore securing outside funding would be needed in order to proceed with any of the recommend alternatives. As soon as the final LOLE reports are completed they will be available online from the project webpage:

[MarinWatersheds.org/resources/projects/lower-corte-madera-creek-improvement-study](http://MarinWatersheds.org/resources/projects/lower-corte-madera-creek-improvement-study)

## **I. Hillview Pump Station & Stormdrain Improvements**

The City of Larkspur at the [December 4 Council Meeting](#), approved a new consultant services agreement with CSW/ST2 for engineering design services for the Hillview Storm Drain Improvement Project. This proposed agreement was reviewed by District and City staff. The work under the new agreement is anticipated to take six months and will build from the earlier conceptual engineering completed by CSW/ST2 and includes public outreach and construction support.

Construction is tentatively scheduled for late summer 2020.

The preliminary concept envisioned installation of all or a portion of proposed new storm drains in Harvard Drive, Tulane Drive, and Cornell Avenue. These new drainage pipes would connect to existing drainage inlets and pipes and combine most of the water flow west of Dartmouth Drive into the new pipe on Harvard Drive, which would connect to the Bon Air Road pump station currently under construction through the City Bon Air Road Bridge Replacement project.

The current project is partially funded through to construction by up to \$910,000 in Zone 9 funds which were approved for Fiscal Year 2019-20 with other funding provided by the City and the Federal Highway Administration Bridge Program. More details will be available from the project webpage:

[Marinwatersheds.org/resources/projects/hillview-pump-station-stormdrain-improvements](http://Marinwatersheds.org/resources/projects/hillview-pump-station-stormdrain-improvements)

**J. Corte Madera Creek Flood Risk Management Project**

District staff are working with the Town of Ross and other stakeholders to update the project description for the Project EIR. The revised project concept, draft schedule and project development process would be presented to the Zone 9 AB in early 2020. Information will be shared with the community via the Program Website *RossValleyWatershed.org* and through a series of community meetings that will be scheduled in early 2020 to share findings and receive feedback from the public and potentially impacted stakeholders.

A **tentative schedule** (subject to change) has been developed, as outlined below.

Jan 2020 – Mar 2020	Flood Zone 9 Advisory Board Meeting & Community Meeting Series: Present Draft Project Concepts and Receive Input to Formulate Final Project Description
Feb 2020 – Mar 2020	Coordination Agreements Executed with the Town of Ross and Other Agencies
Apr 2020 – May 2021	Project EIR Process & Project Approval
May 2021- Oct 2021	Final Project Design and Permitting
Spring 2022 – Fall 2022	Project Construction
<b>Public Engagement and Stakeholder Coordination Occurs throughout Process</b>	

**Item 6. Ad-Hoc Fiscal Year 20/21 Budget Subcommittee**

AB members will discuss forming an Ad-hoc subcommittee for planning of the Fiscal Year (FY) 20/21 Budget.

**Recommended Action:** Form Ad-hoc FY 20/21 Budget Subcommittee

**Item 7. Schedule Next Meeting and Adjourn**

Advisory Board to set the next meeting date and adjourn.