# FLOOD CONTROL ZONE 9 ADVISORY BOARD MEETING JANUARY 15, 2019 LARKSPUR CITY HALL STAFF REPORT

# Item 1. Approval of Meeting Minutes for August 28, 2018

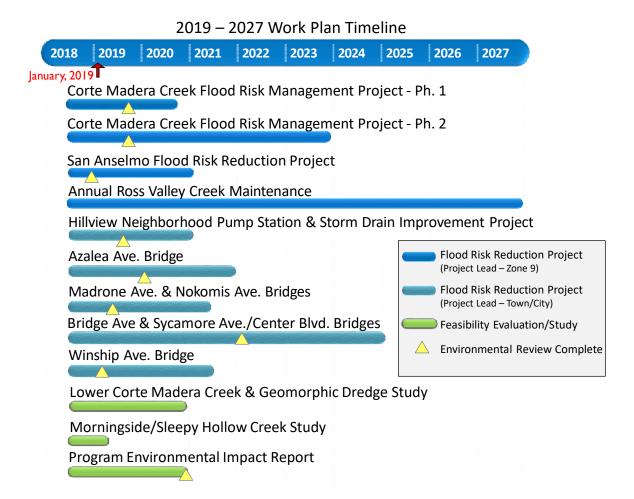
**Recommended Action**: Approve the minutes.

# Item 2. Open Time for Items Not on the Agenda

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

# <u>Item 3. Ross Valley Flood Protection & Watershed Program 2019/20 Budget, Workplan and Project Status Update</u>

The Work Plan Timeline represents projects and feasibility studies in support of projects that are underway, have designated funding and are a part of the Ross Valley Flood Protection & Watershed Program (Program) Proposed Fiscal Year (FY) 2019-2020 Budget and Work Plan.



#### A. Fiscal Year 2019 – 2020 Budget and Work Plan Report

District staff worked with the AB Ad-Hoc Budget Subcommittee to develop the content of the Program Budget and Work Plan, attached to this staff report. There are five main components of the report including;

- 1) Program Revenue & Budget Summary
- 2) Program Budget Detail Report
- 3) Appendix A Budget Category Definitions and Footnotes
- 4) Appendix B Fiscal Year Work Plan
- 5) Appendix C Budget Synopsis

District staff will present the status of the FY 17/18 actual expenditures and highlight the projected actual FY 18/19 expenses (actuals not yet available) as compared to planned work in FY 19/20. As requested by the Budget Subcommittee, staff will walk through each project listed below to briefly provide a status report on project activity financials, schedule and other developments.

# B. Corte Madera Creek Flood Risk Management Project

The US Army Corps of Engineers (USACE) is currently leading the feasibility and environmental review phases of the Corte Madera Creek Flood Risk Management (CMC FRM) Project.

As of the last AB meeting in August 2018, the USACE team completed the analysis of the alternatives that were developed in the initial phase of the feasibility study and performed a benefit-cost analysis of each of the alternatives. One alternative yielded a benefit-cost ratio above one and is the only plan that would be eligible to receive federal funding. This plan was recommended as the "Tentatively Selected Plan" and consists of a bypass culvert under Sir Francis Drake Boulevard in Ross, removal of the existing wooden fish ladder and a portion of the concrete channel within Allen Park, restoration of the channel and riparian habitat within Allen Park and flood barriers to protect the Granton Park neighborhood and at select areas on the left bank (looking downstream) both upstream and downstream of College Avenue bridge.

Separate from the USACE plan, the CMC FRM- Phase 1 has been identified by the District to be constructed before any federally funded project and consists of a subset of the selected plan consisting of only the fish ladder removal, Allen Park Riparian Corridor restoration and the Granton Park flood barrier. Phase 1 will use funding from a Department of Water Resources grant and Zone 9 fees. The project would be covered under the environmental review for the broader USACE project.

Following development of the selected plan, the USACE team performed impact analyses, developed the Draft Environmental Impact Report/Environmental Impact Statement (EIR/EIS) and released the document for public review and comment on October 12, 2018. The report included the project description and evaluation of all the alternatives that were

studied and includes a chapter on the Tentatively Selected Plan. To support the public's review of the plan, the District along with USACE team held multiple public meetings in Ross, Kentfield and the broader Ross Valley community, including a meeting hosted by Congressman Huffman. A public hearing on the Draft EIS/EIR was conducted at a District Board of Supervisors meeting on November 13. USACE and the District presented the alternatives and recommended plan and took public testimony that was recorded.

The Draft EIR/EIS public comment period was open for 45 days and closed on November 27, 2018. The USACE is currently preparing to respond to public comments and are now working towards the next milestone called the "Agency Decision Milestone". This milestone is currently scheduled during February 2019 and will potentially result in the endorsement of the recommended plan by USACE Headquarters and provide a timeline and next steps to complete the feasibility-level design.

# C. Hillview Neighborhood Pump Station & Stormdrain Improvement Project

The development of the feasibility study associated with this project continues and the City of Larkspur plans to have their consultant update the City storm drainage master plan and review the initial conceptual measures evaluated to date. Due to the influence of the ongoing Bon Air Bridge Project, the Hillview project schedule and scope may change. Funding is allotted in the FY 19/20 Budget to continue work with Larkspur staff to support on-going project planning and development. More information will be provided at a future AB meeting.

# D. San Anselmo Flood Risk Reduction Project

On September 18, 2018, the District Board of Supervisors held a public hearing to consider and certify the Final Environmental Impact Report (EIR). Following the certification of the EIR, the District Board held a separate project merits hearing and approved the Project. Following the Board's recommendation to proceed with project design, staff prepared a Request for Proposals to develop final designs and plans.

A Request for Proposals for the Project was posted on the Marin County Contracting website on September 28, 2018, and several qualified engineering firms were contacted directly. Ten firms attended the pre-proposal meeting on October 11, 2018. The District received one proposal on October 26, 2018, from a team comprised of Stetson Engineers, GEI Consultants and ESA, Inc. Staff spoke to several firms who indicated they felt the firms who had worked on the EIR had an advantage over those firms that were not part of that process. Several larger civil engineering firms were precluded from submitting proposals because they do not comply with Section 20 of the contract, which requires compliance with the County of Marin Nuclear Free Zone.

After a thorough review of the proposal and negotiations resulting in a reduction of the proposed fees and scope of services by almost 20%, a contract agreement for \$1,245,157 was awarded to a team led by Stetson Engineers at the January 8, 2019 Board hearing. Stetson teamed with GEI Consultants and ESA, Inc., the team also includes services to be provided by Oberkamper and Associates, Inc., Abey and Arnold Associates and walls

land+water, LLC.

The scope of the Project design consists of three distinct 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 in San Anselmo, a structure that partially obstructs the flow of San Anselmo Creek; and (3) flood mitigation measures on downstream private properties that may see a rise in water surface due to the removal of the building in San Anselmo and one private parcel upstream of the Sunnyside basin.

The San Anselmo project would result in a net reduction in flooding for about 530 parcels during chronic flood events that have a 10 percent chance of occurring any given year.

Flood Risk Change by Number of Parcels	10-year flood event	25-year flood event	100-year flood event
Removed from Inundated Area	300	20	10
Decreased Inundation Depth	230	615	470
Total with Reduced Flood Risk	530	635	480
Parcels with New Inundated Area or Increase in Depth	0	20	20
Total with Increased Flood Risk	0	20	20

SOURCE: Stetson Engineers, San Anselmo Flood Risk Reduction Project CEQA Support Conceptual Designs and Supplemental Modeling of Option 2A for Different Layouts of Sunnyside Detention Basin, January 31, 2018; Stetson Engineers, Water Depth Change point GIS data for D30, D31, D33, December 12, 2017

The EIR identified 11-12 parcels that may be impacted downstream of Winship Bridge and a flood barrier is proposed at 16 Deer Creek Court upstream of the Nursery Basin. The EIR describes mitigation measures to offset this impact, including installation of flood barriers. The final design scope includes work to evaluate possible future flood mitigation measures if needed for these parcels. The scope, extent and need for the potential measures downstream of the Winship Bridge will not be fully determined until Summer 2019. This first phase of design includes scope to assess and survey up to 11 homes in Ross that may experience an increase in water surface elevation related to the removal of the building in downtown San Anselmo. The initial design would include reviewing the existing survey data and sending licensed surveyors to delineate the inundation area for the 25 and 100-year flood events along these properties to determine if the Project would cause any rise in water surface that could impact a habitable structure. This survey data and elevation information would be used to design flood risk mitigation measures tailored to the property' site conditions but design work would only proceed with the agreement of the property owners. The degree of flood protection provided to an individual property will vary depending on the specifics of the flood barrier recommended. Final design of any residential measures will not proceed without the agreement of the landowners. The table below summarizes Project funding and implementation responsibilities for the District and potentially impacted landowners.

Flood Mitigation Method	Flood District Responsibility	Landowner Responsibility
Home Elevation above the 100-year flood event	Fund survey, design, and provide funding proportional to the change in flood risk. If the increase in flood depth from the project would cause new flooding to a home the District would fund the entire cost of home elevation	Reviews and accepts design. Town works with landowner to secure building permits.
Flood walls or berm at top of creek bank	Fund survey, design, build and maintain wall	Review design and provide easement to District for construction and maintenance.
Flood Wall around home	Fund survey, design, and provide funding proportional to change in flood risk	Reviews and accepts design. Town works with landowner to secure building permits.
Wet flood proofing	Fund survey, design, and provide funding proportional to the change in flood risk	Reviews and accepts design. Town works with landowner to secure building permits.
Relocate basement and utilities above 100-year flood event	Fund survey, design, and provide funding proportional to the change in flood risk	Reviews and accepts design. Town works with landowner to secure building permits.

The replacement of the Winship Bridge in Ross, while not a component of the San Anselmo Project, would help reduce the impacts to parcels upstream of the bridge. The Winship Bridge, led by the Town of Ross, is scheduled for replacement in 2020. The District would coordinate removal of the concrete bridge structure at 634 San Anselmo Avenue with completion of the new Winship Bridge.

The District Board of Supervisors authorized an Option to Purchase Agreement for the building at 634 San Anselmo Avenue (Building) at a price of \$1,800,000 plus estimated fees of \$20,000. District staff completed all due diligence investigations related to the Option to Purchase the Building which included relocation planning, data gathering and other property investigations. District Real Estate staff are providing relocation services to the affected business tenants.

The preliminary cost estimate for this Project is \$19.3 Million and it is partially funded by an \$8,720,500 California Department of Water Resources (DWR) grant. The remainder of the funding would be provided by Flood Zone 9 funds.

The proposed FY 19-20 budget includes costs for the next phases of work including project design and permitting. Staff plan to return to your Board with a scope and fee for Phase II of the design in summer 2019. Construction of the Nursery site would be started first in summer 2020, and construction work could progress to downtown San Anselmo in 2020 provided the Winship bridge construction begins in 2020 as well.

# E. Bridges

# 1) Azalea Avenue Bridge Replacement (Town of Fairfax)

The Town of Fairfax made significant progress in developing the concept design for the new Azalea Ave Bridge. As reported by the Town of Fairfax and based on recent design planning, the bridge is planned to clear an estimated 50-year flood flow event (with two feet of freeboard below the bridge soffit) and the 100-year flood (without freeboard), with the former controlling the design elevations. The bridge would be connected to retaining walls at its four corners. Abutments, retaining walls and their foundations will be protected with rock riprap buried 3 feet or so below the creek bed and bank grades. The downstream left wall will be nearly 100 feet long to replace the crumbling and ineffective existing wall there. The walls provide a creek opening equal to the creek width through the bridge, but the openings will neck down to the existing creek widths on both sides of the bridge approximately 30' away from the bridge.

The Town will continue to assess and develop plans around potential impacts to trees, adjacent resident's driveways, sidewalks and traffic flow. The Town will meet with residents immediately adjacent to the project early in January and will subsequently hold public outreach workshops. After meetings with the public, the conceptual project will be placed on the Fairfax Council Agenda for approval. The current schedule includes NEPA/CEQA completion by the end of 2019 and construction in 2020.

# 2) Madrone Avenue, Nokomis Avenue, and Bridge Avenue & Sycamore Avenue/Center Boulevard Bridge Replacements (Town of San Anselmo)

The Town held a public meeting on September 28, 2018 to present design concepts for the Madrone and Nokomis bridges to the public, including recently completed hydraulic modeling for several bridge soffit height options. Following community input at this meeting, the project team is proceeding with right-of-way engineering, environmental review compliance and development of plans, specifications and estimates. The project design (30%) milestone report is anticipated in 2019 before environmental review followed by construction in 2020.

The Town is in the process of gaining approval from Caltrans on the next phase of the Bridge Avenue & Sycamore Avenue/Center Boulevard Bridge project and the inclusion of the Bridge Avenue Bridge, which Caltrans has been viewing as a separate stand-alone project. Once Caltrans has approved the current phase of the project, environmental approval could be issued by 2021/22 followed by commencement of construction in 2023.

District staff is coordinating with Town on this bridge design in consideration of upstream and downstream impacts.

# 3) Winship Avenue Bridge Replacement (Town of Ross)

The Town of Ross continued to work with their contractor to develop the design of the replacement Winship Bridge. There are currently no significant changes in the status of

the project since the last August 2018 AB Meeting staff report. Funding is allotted in the FY 19/20 Budget to support continued to work with Ross staff to support on-going project planning and development. More information will be provided at a future AB meeting.

# F. Lower Corte Madera Creek Improvement & Geomorphic Dredge Study

The Lower Corte Madera Creek Improvement & Geomorphic Dredge Study (Study) includes a comprehensive assessment of the current condition of the levee and creek system downstream of the concrete channel. The Study objectives are to identify and provide recommendations for improvements including determining an equilibrium channel dimension for Corte Madera Creek. The studies include the following key components: geotechnical evaluation, hydrology and hydraulics evaluation using latest available bathymetric survey results for the lower reaches of the creek and development of potential project concepts to improve drainage to the creek and potentially increase the height of the levees. Part of the Study also includes evaluation of the levees in lower Corte Madera Creek and is intended to assess the need for future project concepts.

On December 18, 2018 the District consultant for the Lower Corte Madera Creek Levee Evaluation component completed subsurface soil explorations along the right top of creek bank looking downstream, located adjacent to the Hillview neighborhood and downstream of Bon Air Road Bridge. This work will provide data on the subsurface conditions necessary to determine and evaluate current conditions and potential alternatives to modify the top of creek banks.

In 2019, it is expected the geotechnical data report will be completed, and hydrologic and hydraulic analysis including the evaluation of sea level rise impacts, and results of the conceptual geomorphic dredge sections will be available. Geotechnical evaluation can then be completed for stability, seepage and settlement of creek embankments in the Lower Corte Madera Creek as well. A report that includes conceptual alternatives to address deficiencies will be described in a final study scheduled to be released in 2020.

# G. Sleepy Hollow Creek/Morningside Feasibility Study

District staff are integrating information compiled through the San Anselmo Flood Risk Management Project EIR into the existing feasibility analysis that is assessing flood risk reduction options for the Sleepy Hollow Creek/Morningside Neighborhoods. Staff anticipate completing this study in FY 18/19 and will meet with the Town of San Anselmo and neighborhood representative to present the findings.

# H. Program Environmental Impact Report

The Program Environmental Impact Report (PEIR) has been on hold since the last AB meeting in August while staff dedicated resources to the development and release of the draft and final environmental review documents for the San Anselmo Flood Risk Management Project and the Corte Madera Creek Flood Risk Management Project. The

complexity and schedule of these projects required a more-detailed analysis than what could be offered by the PEIR at this time. District consultants have made great progress in the development of the PEIR and staff will be working with the AB, Zone 9 Technical Advisory Board and District environmental staff to determine the most efficient path forward that will maximize the utility of the document and alternatives analysis. District staff will present an update on the PEIR at a subsequent meeting.

### I. Program Activities

#### 1) Program Management & Implementation

Program Staff completed all operational and maintenance objectives outlined in the FY 18-19 Program Workplan.

# 2) Flood Preparedness Program

District has provided new website access to view the recently installed real-time data at three new Ross Valley creek gages and is also updating flood thresholds through a task order with Stetson Engineers. District staff has also been developing forecasting tools to assist in determining when flood conditions are most likely due to saturated watershed soil conditions. Please visit <a href="Marin.OneRain.Com">Marin.OneRain.Com</a> to view real-time weather station data.

# 3) Creek Program

District staff has continued working with City and Towns of the Ross Valley Program to undertake creek walk assessments, in addition to continuing to maintain District fee title creek areas and maintenance responsibilities. District staff will be updating the 5-year creek maintenance agreements for each of the Ross Valley municipalities, and these will include new reporting requirements if the municipalities seek to use the District's comprehensive Stream Maintenance Program permits.

#### J. Program Work Plan Loan Options

The Program continues to make positive progress with the implementation of the projects outlined in the Program Workplan and, as planned, has experienced an increase in spending that will deplete existing funding reserves accrued from the collection of Flood Zone 9 storm drainage fees over time. The Program's existing grants will provide additional revenue to support project implementation, however the funds are received on a reimbursement basis that require the District to expend funds in advance. Moving into the design and construction phase of projects may require short term loans for the purposes of bridging the grant reimbursement cash flow (e.g. a bridge loan) and collection of annual Zone 9 Stormdrainage Fees. It is anticipated that the financing will be representative of the total funding revenue planned and secured, including storm drainage fees through 2027 and grants funds.

One financing option is the Marin County Investment Pool (Treasury) Loan. This option provides funds that are pooled from County, School Districts and Special Districts which are not part of the General Fund. This is a 5-year loan (maximum of \$5-10 million) with low

interest rates that escalate over the 5-year term as follows – Years 1-3, 3.5%; Year 4, 3.75%; and Year 5, 4%.

Another potential option is the Marin County Long Term Investment Pool Loan that is a subset of the pooled funds from the Treasury Department and is only available to the County, including the Flood Control District, through an Investment Policy set by the Department of Finance. The available loan terms could range from 5 to 10-years with an option to split the loan into a series of shorter term loans. The loan amount can vary but is tied to the requesting department's ability to repay, such as the total anticipated Zone 9 revenue. This option offers an adjustable interest rate based on the +2% of the US Treasury 10-year Note, which typically ranges between 5-6%.

District staff will continue to research viable short-term loan options to support future costs for project design and construction. District staff will present this information at a subsequent AB meeting including a projection of anticipated future costs for the period of Fiscal Year 2020/21 - 2024/25.

# K. Recently Held and Upcoming Meetings and Events

District staff conducted more than 75 meetings since the March AB meeting with various members of the community, project stakeholders, local public agency partners and state and federal agencies around project coordination including the release and approval of the SAFRR Project EIR and this fall's release of the Draft CMC FRM Project EIR/EIS. Following are a list of public meetings that were held:

**September 18, 2018** - The Final Environmental Impact Report for the San Anselmo Flood Risk Reduction Project was presented to the Board of Supervisors on September 18.

**September 27, 2018** – The Town of San Anselmo held a community meeting for the Nokomis and Madrone Avenue bridge projects on September 27, 2018 to discuss the bridge design including soffit height, change maps from recent hydraulic modeling completed by the project consultants Quincy and Stetson Engineers, and other project details.

**September/October, 2018** – The District and Town of Ross held a series of community meeting to provide more information on the release of the Draft EIR/EIS for the Corte Madera Creek Flood Risk Management Project. Go to www.RossValleyWatershed.org for project information and to sign up for automatic email notifications about upcoming meetings.

**November 1, 2018** – Congressman Huffman hosted a community discussion forum to provide information on the release of the Draft EIR/EIS for the Corte Madera Flood Risk Management Project.

**November 13, 2018** - The Draft EIR/EIS for the Corte Madera Flood Risk Management Project went before the Board of Supervisors on November 13, 2018.

Last December, the District launched a revamped website for www.marinwatersheds.org.

The Ross Valley Flood Protection and Watershed Program's website, www.RossValleyWatershed.org, is an integral part of the District's new website. Staff continue to add documents, public meeting information, and timely information for members of the public. A new calendar layout was launched earlier this summer to graphically show Ross Valley's upcoming and past meetings and events information.

**December 12, 2018** – District staff met with the AB Ad-Hoc Budget Advisory Subcommittee to develop the format for the FY 19/20 Budget and Work Plan packet. The group supported the format of the FY 19/20 budget and made suggestions for ways to improve the packet to ensure the right level of information is presented to the public. The committee discussed the need to pursue loan options as the existing fund balance is depleted.

#### **Recommended Actions:**

- 1) Recommend the District Board of Supervisors approve the Fiscal Year 2019-20 Budget and Work Plan.
- 2) Dissolve the Flood Zone 9 Ad-Hoc Budget Subcommittee.

# <u>Item 4. Updated Flood Control Zone Bylaws</u>

An update of the Flood Control Zone Bylaws was undertaken by an ad hoc committee of the District Board of Supervisors consisting of Supervisors Rice and Sears, an ad hoc committee of a selected Flood Control Zone Advisory Board (AB), District staff, and County Counsel (acting on behalf of the District). The goals were to improve consistency between the Flood Zone bylaws and the State Water Code, which governs the District, and to provide clarity on the types of matters referred to the Advisory Board for consultation. The new Flood Control Zone 9 Bylaws are attached to this staff report for the AB to review and consider recommending to the District Board of Supervisors for approval. This same effort is taking place with all other Flood Control Zones. The final step will be to present all the zones' updated bylaws to the District Board of Supervisors for approval.

#### **Recommended Action:**

Recommend that the Board of Supervisors approve the Updated Flood Zone 9 Bylaws.

#### Item 5. Schedule Next Meeting and Adjourn

Advisory Board to set the next meeting date and adjourn.