

FLOOD CONTROL ZONE 9 ADVISORY BOARD MEETING

MAY 23, 2019

LARKSPUR CITY HALL

STAFF REPORT

Item 1. Closed Session

Conference with Counsel – Anticipated Litigation

Significant exposure to litigation pursuant to California Government Code section 54956.9(d)(2). Number of potential case(s): One.

Reconvene in Open Session

Announcement from Closed Session.

Item 2. Approval of Meeting Minutes for January 15 and March 19, 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. Ross Valley Flood Protection & Watershed Update

A. Work Plan Update

At the January 15, 2019 Flood Zone 9 Advisory Board (AB) meeting, staff reported on the Ross Valley Flood Protection and Watershed Program (Program) Fiscal Year (FY) 2018-2019 budget and [presented the proposed FY 2019-2020 budget](#). The AB recommended the 2019-2020 budget be approved by the Board of Supervisors of the Marin County Flood Control & Water Conservation District as presented by staff. A formal hearing at the Flood District Board of Supervisors is scheduled for June 18, 2019 to adopt the final budget.

Since the January report to the AB, staff continue to implement the [2018-2019 Program Work Plan](#) and are on track to meet most of the planned milestones with a few adjustments based on changes in projects. More project-specific details are included in the staff report and are planned for presentation at the current May 23rd AB meeting.

- Changes in the status and scope of the Corte Madera Creek Flood Risk Management (CMC FRM) Project will result in a lower actual cost for the Phase 2 project as outlined in the FY 2018-2019 and FY 2019-20 Budgets (an approximate \$350,000 reduction) since this phase will no longer require additional matching cash contributions to the U.S. Army Corps of Engineers (USACE). The previous budgets and workplans reflect two phases of the project. Moving forward into planning for the 2020-21 Budget, staff will track the locally managed project as one consolidated project, named without reference to a phase as the “Corte Madera Creek Flood Risk Management (CMC FRM) Project”.
- The San Anselmo Flood Risk Reduction (SAFRR) Project milestone and budget are on-

Marin County Flood Control and Water Conservation District

track including positive progress on final design (60% plan set expected in mid-summer), close coordination with tenants of 630-636 San Anselmo Avenue on relocation, coordination with Sunnyside neighboring landowners, coordination with potentially impacted downstream residents near the Winship Bridge in Ross, and ongoing support of the redesign of Creek Park.

- The various Bridge projects managed by the Towns of Fairfax, Ross and San Anselmo continue as scheduled. The budget for Flood Zone 9 contributed funds to those projects are currently on track for expenditure as planned.
- The Lower Corte Madera Creek Improvement, Geomorphic Dredge, and Sleepy Hollow Creek/Morningside Feasibility Studies are all planned to be completed in FY 2019-2020 and within budget.
- Staff continue to plan for a modified use-case and transition of the Programmatic Environmental Impact Report (PEIR) or related watershed-wide guidance document. No significant expenditure of Program funds is planned through FY 2019-2020.
- Other Program Management and implementation activities continue as planned and remain within budget. These activities are outlined in the Program Work Plan.

Program staff plan to provide a more-informed Program forecast and funding strategy at a subsequent AB meeting, when more detailed project cost information is available. As projects move toward more advanced phases of design, additional informed cost estimates become available to support accurate project cost estimates. For example, the SAFRR Project is currently in the final design and permitting phase which will result in more accurate cost estimates that will be incorporated into future budget planning. Another example includes the transition that is underway with the CMC FRM Project which will likely result in a re-evaluation of original project elements and adjustment of the cost estimates. As reported to the AB previously, staff anticipate the need for a bridge loan from the Marin County Treasury to cover short-term costs for major construction projects that will be paid back with grant reimbursements and storm drainage fees that will be collected through 2027.

B. Lower Corte Madera Creek Program Activities

Several projects and studies are currently underway to evaluate existing flood capacity, identify potential flood mitigation improvements, assess the feasibility/benefit of dredging and improve drainage affected by tidal flooding in portions of Lower Corte Madera Creek. These efforts include the Lower Corte Madera Creek Improvement Study (Item B.1.), an analysis of dredging feasibility and alternatives including a Geomorphic Dredge Study (Items B.2 and B.3, below) and the City of Larkspur-led Hillview Pump Station and Stormdrainage Improvement Project (Item B.4.).

1. Lower Corte Madera Creek Improvement Study Update

District staff, along with consultant A3GEO, continued to make progress through completion of the draft Geotechnical Data Report which provided laboratory results

Marin County Flood Control and Water Conservation District

from the soil sampling collected in late 2018. The data collected is being used to analyze and evaluate alternatives to reduce flood risk along Lower Corte Madera Creek which include raising existing creek banks and evaluating dredging and sediment removal. Alternatives were identified that could receive future funding under the Local Levee Evaluation Program and other grant sources to design and construct.

A comprehensive presentation will be made to the AB and community by District staff to present the study findings in summer/fall 2019. Once completed, the study results will be made available on the project webpage at:

<http://www.marinwatersheds.org/resources/projects/lower-corte-madera-creek-levee-evaluation>

2. Lower Corte Madera Creek Dredging Analysis and Channel Capacity Update

A presentation will be provided by James Reilly, Stetson Engineers, that will include a narrative about how the hydraulics of Corte Madera Creek function in the lower channel and the interplay between riverine and tidal flooding dynamics. Stetson will also present findings associated with a hydraulic analysis of dredging scenarios of the lower channel confined to the original width of the channel constructed by the USACE.

Stetson Engineers performed analysis on the existing capacity of the Lower Corte Madera Creek earthen channel and evaluated potential dredging scenarios. The presentation will include the findings that dredging is costly and provides short-term and limited flood benefit.

3. Geomorphic Dredge Study

District staff, supported by Watershed Sciences completed a first draft concept layout for the “geomorphic dredge” approach along Lower Corte Madera Creek. The “geomorphic dredge” design approach developed by staff consists of a channel dredge geometry designed to be in equilibrium with the available daily tidal prism (i.e. volume of water that comes in and out on the daily tides). This daily tidal prism is considered the dominant natural process that maintains and shapes the tidal channels. As such, this is a “design with nature” approach to dredge design and is favored by the permitting and granting agencies as well as the larger environmental community. The goal of the geomorphic dredge design versus a traditional dredge design constrained to the original channel width constructed by the USACE, is to design a more sustainable creek cross section by requiring less dredging for maintenance resulting in fewer impacts, less cost, and facilitating environmental review while also attracting potential grant funding.

At this meeting and as a part of a comprehensive view of all potential dredge scenarios for Lower Corte Madera Creek, District staff will present on the principles of geomorphic dredging including the pros and cons to this approach, the plan layout, and the conceptual estimates of dredge cut volumes and costs.

4. Hillview Pump Station and Stormdrainage Improvement Project

District and City staff have continued the review of conceptual alternatives proposed by

Marin County Flood Control and Water Conservation District

the City's consultant, CSW Stuber Stroeh, to eliminate existing storm drainage gravity outfalls from the Hillview neighborhood by routing new storm drainage lines to the pump station under construction for the Bon Air Road Bridge Replacement project. The project goal is to reduce the impacts of tidal flooding to this neighborhood.

A presentation will be provided at the AB meeting with more details. Funding up to \$910,000 is currently allotted in the FY 19/20 Budget to support the City of Larkspur that could be applied to costs associated with the development of project plans, specs, estimates, environmental permitting, construction and construction management. The existing agreement with the City of Larkspur would need to be renegotiated and amended to support additional funding as the current Memorandum of Agreement is currently set at \$42,000. Design phase is expected to start in mid-summer of 2019 with start of construction in fiscal year 2020/21.

C. Corte Madera Creek Flood Risk Management Project Update

1. Next Steps with the Locally Managed Project

At the March 19, 2019 special Advisory Board meeting, the Advisory Board recommended a suspension of the current feasibility cost-share agreement between the District and the U.S. Army Corps of Engineers. The previous project description within the Draft Environmental Impact Report/Environmental Impact Statement (Draft EIR/EIS) released for public comment last October 2018 will need to be modified and scaled to a project that will be locally managed and funded. Staff are currently working with a range of stakeholders to refine a project description for the development of a Project EIR that is aligned with local priorities and supported by environmental resource agencies. This effort requires additional technical studies informed by the USACE Draft EIR/EIS public comments and coordination with regulatory agencies.

GHD, a District consultant, is currently performing a structural evaluation of the portions of the Corte Madera Creek concrete channel that may be affected by the Project. This includes site inspection at four locations at the bottom section of the channel between the main College of Marin campus, through Granton Park, and ending just downstream of the Kentfield Rehabilitation Hospital. The evaluation to date has included a visual evaluation, collection of concrete samples, and completion of other non-invasive structural tests. The collected information will be used to evaluate a section of the existing concrete channel's structural properties. The results will assist in determining any refined conceptual flood wall alignments with respect to the existing concrete channel as well as to evaluate the feasibility of modifying the existing fish resting pools in the bottom of the concrete channel.

GHD will also perform boundary surveys in the vicinity of and alongside the Corte Madera Creek from the Ross Fire Department downstream to Laurel Avenue in Kentfield to refine the project description by incorporating public right-of-way opportunities and constraints. Other potential studies to support development of a project description may include tree surveys, a geomorphic creek assessment, pump station conceptual design and hydraulic analysis of proposed alternatives.

Item 5. Other Project Updates

A. San Anselmo Flood Risk Reduction Project

The District design team led by Stetson Engineers was awarded the contract for San Anselmo Flood Risk Reduction (SAFRR) Project design shortly before the last Advisory Board meeting. The 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 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 impacts from the project. Following is an update of the progress of each of the project elements:

1. Sunnyside Nursery Flood Diversion and Storage Basin

The design team performed additional boundary and topographic land surveying and geomorphic creek assessments needed for final design. Further geotechnical exploration was completed including borings drilled within the basin and along the creek. This work led to updated diversion gate alignments and configurations. On March 7, 2019, the design team presented preliminary designs of the gate and upstream diversion weir to the regulatory agencies to get their initial feedback. Hydraulic and sediment analysis of the proposed project based on the revised gate alignments and configurations is now being performed in order to fine tune the design and assess any impacts. The team continue to work closely with the agencies that will review the design and issue permits for construction. The existing bridge that provides access to the site from Sir Francis Drake Boulevard is currently undergoing structural evaluation. The District has been keeping our neighbors informed on work that is occurring at the site and has worked with the Marin County Sheriff's department to monitor any unauthorized access to the property.

2. 630-636 San Anselmo Avenue

Initial engineering work has included boundary land surveys, a geotechnical site investigation, including drilling borings, preliminary environmental assessment of the existing buildings and geomorphic creek assessment. Staff are working collaboratively with the Town of San Anselmo on their planned efforts to improve Creekside Commons (previously known as Creek Park) adjacent to the District property. Hydraulic analysis is underway to come up with a design configuration that optimizes flood performance while minimizing downstream impacts.

The District's relocation consultant is currently working with all the tenants of 630-636 San Anselmo Avenue property in downtown San Anselmo to assess their needs and locate suitable spaces for them to move to before construction of the project begins. Currently all tenants are operating their businesses as usual and will continue to do so, at their discretion, until they move or make other arrangements.

a) Residential Structure Flood Risk Mitigation:

The locations where mitigation will be required depends on the design details of the

Marin County Flood Control and Water Conservation District

other project elements upstream. Once a stable design is determined through the engineering process, surveying of properties potentially impacted will be performed and this is expected in early summer 2019.

Costs for the project are being partially reimbursed by DWR under the California Department of Water Resources (DWR) grant. Staff met with the grant manager to discuss this project (and the Corte Madera Creek project) and led a tour of the projects in February 2019.

The project design is currently about one month behind schedule mostly due to geotechnical drilling contractors' availability. This phase of design will result in 60% design plans and is expected to be complete by July 2019. Another contract will be awarded by fall 2019 to get to 100% design, submit permit applications and produce the construction bid package.

B. San Anselmo Bridge Replacement Projects Update

There are currently no significant changes in the status of the project since the last January 2019 AB Meeting staff report. Funding is allotted in the FY 2019-2020 Budget to support continued work with San Anselmo staff for on-going project planning and development; however, a time extension of the existing MOA between the District and the Town is needed to continue reimbursements to the Town. An addendum to the MOA is currently under development that would extend the time period only. It is anticipated that a second addendum may be developed to incorporate minor funding level changes related to modeling that are included in FY 19/20 budget. The current schedule forecast for Nokomis and Madrone bridges includes environmental review completion by the end of 2019 and construction in 2020. The schedule forecast for Center/Sycamore bridge replacement includes environmental review completion of 2021/22 and start of construction by 2023.

Recommended Action: Recommend that the Board of Supervisors approve an amendment to extend the existing Memorandum of Agreement between the Town of San Anselmo and the Flood Control District (for the Center Blvd/Sycamore Ave Bridge, Madrone Ave Bridge and Nokomis Ave Bridge Replacement Projects) by extending the termination date to December 31, 2024.

C. Ross Bridge Replacement Project Update

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 January 2019 AB Meeting staff report. Funding is allotted in the FY 2019-2020 Budget to support continued work with Ross staff to support on-going project planning and development. More information will be provided at a future AB meeting.

Recommended Action: Recommend that the Board of Supervisors approve an amendment to extend the existing Memorandum of Agreement between the Town of Ross and the Flood Control District (for the Winship Ave Bridge Project) by extending the termination

Marin County Flood Control and Water Conservation District

date to December 31, 2024.

D. Fairfax Bridge Replacement Project Update

There are currently no significant changes in the status of the project since the last January 2019 AB Meeting staff report. Funding is allotted in the FY 2019-2020 Budget to support continued to work with Fairfax staff to support on-going project planning and development. The Memorandum of Agreement between the District and the Town expires in 2020. The current schedule includes NEPA/CEQA completion by the end of 2019 and construction in 2020.

E. Town and District Creek Conveyance and Habitat Maintenance Update

The District will arrange creek walks with City of Larkspur and Towns of Ross, San Anselmo, and Fairfax this summer to identify creek maintenance priorities within each municipality. At the January 15, 2019 meeting the Advisory Board recommended the District FY 2019-2020 Budget include \$60,000 to be split between each municipality for reimbursements following completion of creek maintenance activities.

Flaps and tide gate maintenance, fire fuel reduction on District easements and rights-of-way, and sediment removal within the concrete channel fish resting pools will also be completed before October 15, 2019.

Evaluation of the Corte Madera Creek concrete channel discussed as part of the earlier Corte Madera Creek Flood Risk Management agenda item update may also serve to guide future maintenance planning for the concrete channel.

Item 6. Recently Held and Upcoming Meetings and Events

January 15, 2019 – Advisory Board meeting was held at Larkspur City Hall, see draft meeting minutes included in earlier Agenda Item.

March 19, 2019 – Special Advisory Board was held at Ross Town Hall, see draft meeting minutes included in earlier Agenda Item.

April 12, 2019 – A meeting was held with Regulatory Agencies including National Marine Fisheries, Department of Fish and Wildlife, Regional Water Quality Control Board and Town of Ross regarding the refinement of the Corte Madera Creek Flood Risk Management project description.

July 11, 2019 (tentative) – Town of Ross council meeting regarding the Corte Madera Creek Flood Risk Management agreement.

Item 7. Schedule Next Meeting and Adjourn

Advisory Board to set the next meeting date and adjourn.