

FLOOD ZONE 3 ADVISORY BOARD STATUS UPDATE

April 8, 2025

Staff Report

This is a written update in lieu of meeting. Questions and comments can be sent to floodinquiry@marincounty.gov.

Item 1. Review Summary of Action Minutes: January 7, 2025

Review and send comments on the January 7, 2025 minutes at this link:

<https://flooddistrict.marincounty.gov/meetings/zone-3-advisory-board-meeting-january-7-2025/#/tab-minutes>

Approval of the minutes would occur at the next advisory board meeting, regularly scheduled for July 8th, 2025.

Item 2. Annual and Preventive Maintenance Work Program

For the latest information on anticipated preventive maintenance work program for this summer/fall, see the [January 7, 2025 Staff Report](#).

Item 3. Engineer's Report for Zone 3 Marin City Projects

A. Marin City Stormwater Plan

Background: The Marin City Stormwater Plan is aimed at reducing flood risk in Marin City, an unincorporated neighborhood near Richardson Bay. The goal of the Plan is to understand existing flooding conditions and identify potential solutions that will enhance flood resilience in Marin City while accounting for community priorities. The Plan will pinpoint areas for flood risk reduction, drainage improvement, and preservation for public access. It will provide detailed recommendations for potential projects that local, regional, state, or federal agencies may implement in the future. Additionally, the plan will support grant funding applications necessary for project implementation. For more information on the Marin City Stormwater Plan, including a summary of completed Marin City Stormwater Task Force and Community meetings and those planned for the future, please see the project [website](#).

Update: The District hosted the third and final community meeting for the Marin City Stormwater Plan on Tuesday, March 25, 2025. This event was an open house format, providing the public an opportunity to review the Executive Summary of the Stormwater Plan and learn more about the recommendations developed. The final study report is planned for completion by the end of June 2025. Based on the work of this plan, some other agencies have already begun planning projects.

B. Marin City Stormwater Pond Infrastructure Improvements

Background: The scope of work for this FEMA grant-funded project has expanded significantly since 2020 and currently consists of an estimated \$15 million construction project to install a permanent 50 cubic feet per second (cfs) stormwater pump station and a floodwall at the Pond along with drainage pipe upgrades in the

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shopping center. Though twice as expensive as the original proposed project (which did not include a pump station), the benefits of the upgraded project as currently scoped are much better for Marin City flood reduction than the original 2017 grant proposal under both current and especially future sea level rise conditions. In June 2023, FEMA approved the revised scope for Phase I final design and permitting and a new \$883,636 contract with consultant BKF was approved by the District Board of Supervisors on September 19, 2023 for the pump station design (to 65% level) and environmental compliance. Up to 75% of the design cost is reimbursable by FEMA through a design grant, with the rest from Zone 3 funds.

Following design and CEQA, FEMA will complete a NEPA review prior to consideration of award for Phase II of the funding for final plans and specifications (from 65% to 100%) and construction. Note: While the Marin City Stormwater Plan (Item 5.A. above) includes this project in the models that were created, the Stormwater Plan does not change the scope of this project or design.

District staff received approval from the property owner to conduct site investigations and survey around the pond which was completed in September 2023. The design team is continuing work on the pump station and floodwall design. CEQA/NEPA for this project began mid-2024 and the current schedule for the 30-day public comment period is to begin in Spring 2025. The entire Phase I is scheduled to be completed in summer 2025.

Update: The project continued design work on the Marin City pond pump station. The District has reviewed the 65% design package. Permit applications were submitted in Fall 2024. The remaining work under the current grant scope are the completion of studies required for CEQA and then the public outreach and finalizing of CEQA. The formal public review process for CEQA is anticipated to begin in Spring 2025.

The grant pool that funded Phase I (preliminary design and CEQA) has since run out of money to fund Phase II. The District is exploring additional grants for construction and submitted an application for Building Resilient Infrastructure and Communities (BRIC) grant through FEMA in March 2025.

Public meetings are being held to seek input on pump station aesthetics early in 2025. We are working with Marin City Arts & Culture to facilitate public input and develop recommendations to be used by the project design engineer in the final pump station construction plans.

C. Marin City Pond Environmental Dredge

Background: A prior study of contaminants in the privately owned pond in the shopping center (Northgate July 2021) was conducted as part of the Audubon California lead restoration project for the Pond. The Northgate study identified that a few chemical constituents, notably lead and arsenic, were above regulatory standards for residential health contact (which is not happening at the Pond). The Northgate report identified that the arsenic is naturally occurring within the site geology and the location of the lead (and also zinc) to be primarily associated with stormwater discharge from the outfall pipe from the 101 freeway. In 2023, Senator

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McGuire provided funding to the District that included dredging of the pond among several projects in the vicinity, such as the Donahue Temporary Pump Station. To-date, District staff have been focused on the Temporary Pump Station, the proposed permanent pump station in the pond funded by FEMA, and the stormwater master plan and have not been able to conduct dredging studies due to both staff limitations and also due to the lack of permission to access the Pond by the Owner.

Update: Starting in May or June 2025, the District will begin preparation of an RFP to qualified consultants for additional studies to quantify the location and extent of the contamination (known as a Phase II sampling and analysis study). As well as risk assessments to determine the required extent and depth of any dredging required to be protective of human and ecological health.

We anticipate awarding the contract in Fall 2025, with construction expected to take place in late 2025 and into 2026. Please note that this timeline is contingent on obtaining approval from the Pond Owner. Would dredging take place in the winter with rain and the need for the pond?

D. Marin City Donahue Portable Pump Station

Background: The purpose of this project is to reduce flooding duration at the intersection of Donahue and Drake by installing and operating two temporary trailer mounted pumps and associated piping systems for up to three years, after which time it is anticipated that the permanent project described in Item 5.B above can be constructed. Flood District staff manage the work, including the \$236k design contract, \$1.16M construction contract, \$89k construction inspection contract, \$267k pump purchase order, \$5k water level gauge purchase order, and \$300k pump and tide gate operations contract. However, Flood Zone 3 will receive full reimbursement for the cost of the project through a TAM Agreement funded by Senator McGuire.

Update: The pump station is now operational, starting in the 2024/25 winter season. GSW Construction, Inc. has finished constructing the necessary storm drain modifications at the intersection to accommodate the temporary pumps. Flood District staff have been operating the tide gate, and during periods when heavy rain is anticipated to coincide with high tides, an operations contractor deploys the portable pumps to bypass the tide gate. The contractor deployed the pumps on three occasions this year, for a total contract cost of \$115k.

E. State and Federal Projects Affecting Marin City

Because of the stormwater planning work to identify potential solutions to flooding issues, state and federal agencies have already begun moving forward with projects. Staff have worked tirelessly to coordinate efforts and expedite this work because funding has limited time frames. We anticipate additional staffing and resource needs to support these projects and we will update the advisory board when we better understand those needs.

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i. Caltrans 2nd Culvert Under Hwy 101:

Currently, runoff from the 340-acre Marin City watershed drains to Richardson Bay through one culvert under Hwy 101. Caltrans proposes to build a second culvert under Hwy 101, which would split runoff to two Bay outfalls and help reduce flood risk in Marin City. This improvement concept ranks high in the Marin City Stormwater Plan. Information on this proposed project can be found here: <https://dot.ca.gov/caltrans-near-me/district-4/d4-projects/d4-second-culvert-project-us101-marin-city>

ii. U.S. Army Corps of Engineers Continuing Authorities Project (CAP):

Up to \$14.7 million of federal funds, without local match, can be used for planning, design, and construction of project(s) that will reduce flood risk in Marin City. This funding is not tied to any one project and a feasibility study is underway to evaluate how to best utilize the resources. The Marin City Community Services District (CSD) successfully applied for this CAP grant. The funds will be spent by USACE. Find information on the project at this site: <https://www.spn.usace.army.mil/Media/News-Stories/Article/3956905/usace-partners-kick-off-marin-city-flood-resilience-project-with-nov-7-communit/>

iii. U.S. Army Corps of Engineers Emergency Action Plan (EAP):

This multi-jurisdictional project began a few years ago, led by USACE, with the intent of coordinating the various agencies involved in Marin City for better emergency resilience. This Emergency Action Plan (EAP) - Traffic and Roads component identifies high-priority actions to: (1) prepare and respond to flooding on Marin City access roads; (2) inform Marin City community members of flood risk along Marin City access roads; and (3) reduce flood risk to people trying to enter or leave Marin City. This plan includes emergency actions specific to the interagency coordination, deployment of traffic management resources and public notification that would occur in the face of a potential flood. Visit the project webpage here:

<https://www.spn.usace.army.mil/Missions/Projects-and-Programs/Current-Projects/Marin-City-Emergency-Action-and-Resilience-Planning/>

Item 4. Engineer's Report for Tam Valley Project Updates

A. Proposed Cardinal Levee Seepage Mitigation

Background: The purpose of the Proposed Cardinal Road Levee Seepage Project ("proposed project") is to design a flood barrier to resolve seepage issues which are partly due to rodent burrows. The proposed project would upgrade a 1,100+ linear foot portion of the Coyote Creek Levee along Cardinal Road located in the unincorporated community of Tamalpais Valley. See Figure 1 for proposed extents.

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The proposed project would also re-route a ditch that runs behind some properties on Cardinal Road and drains through a tide gate in the levee. The flows would be directed to Shoreline Pump Station, located on the opposite side of the shopping center employee parking area. The proposed levee upgrade will be extended approximately an additional 150 feet to cut off potential for seepage through the gated pipeline in the levee that we are considering abandoning. Doing this would eliminate the need to stage a portable pump there.

Preliminary estimated costs to construct this proposed project are \$3-5M. The Advisory Board previously recommended a budget of \$600,000 for a consulting contract that will cover the design, right-of-way planning, environmental compliance and re-routing the Cardinal ditch to Shoreline Pump Station. Construction of the proposed project would likely occur in 2027.

This proposed project is being coordinated with the County's Stormwater Division which is overseeing a project to add a Trash Capture Device to the Shoreline Pump Station in 2026 to meet changing environmental regulatory requirements. The Trash Capture Device is not funded by Zone 3.

More information on this project can be found on the project website:

<https://marinflooddistrict.org/cardinal-road-levee-project/>

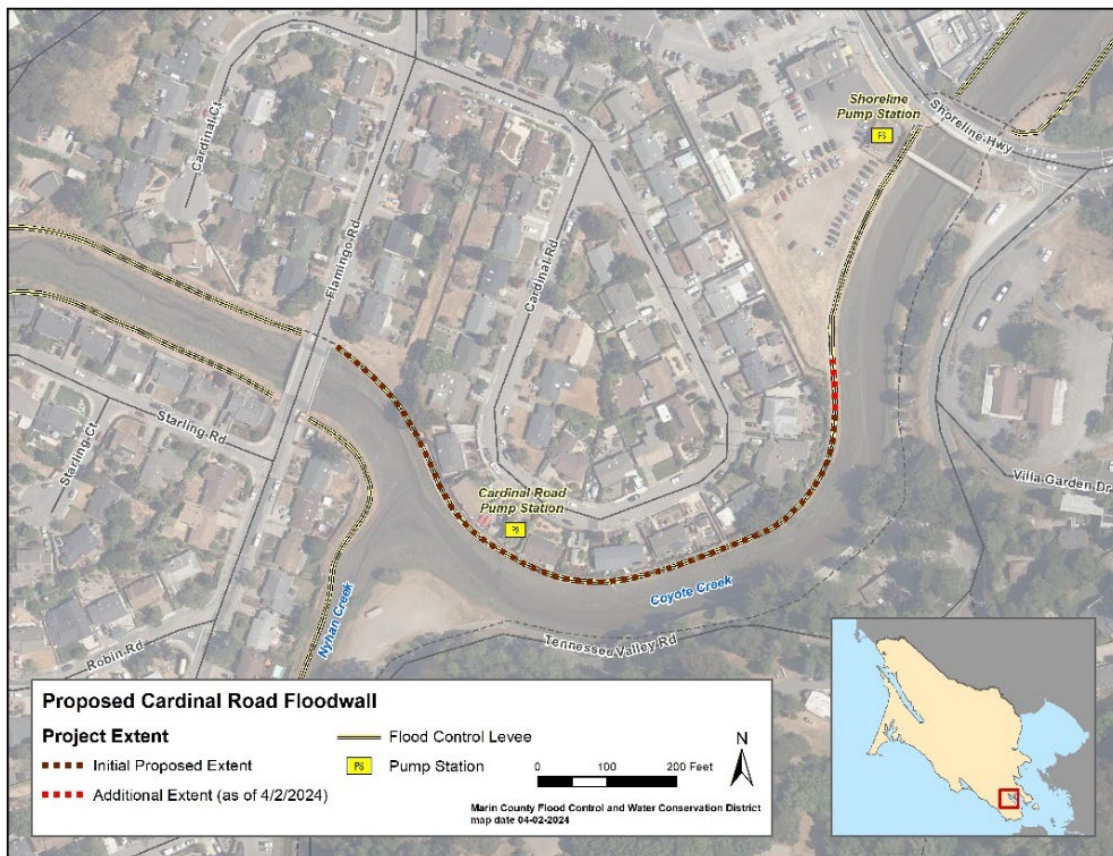


Figure 1. Proposed Extent of the Cardinal Road Levee Flood Barrier

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Update: The District selected the most highly qualified consultant, CSW/Stuber-Stroeh Engineering Group, Inc., to move forward with design for the proposed project and the firm was approved by District Board of Supervisors on September 24, 2024. The design process started in early October 2024 and is in the data gathering and analysis stage.

On December 7, 2024, the design team held a Meet & Greet with the Cardinal Road neighborhood to get early input from residents during the data gathering stage. The turnout was excellent and the information we got from the neighborhood was invaluable. **On April 6, 2025, from 9:00am to 11:00 am, the design team held the 2nd community meeting where they shared the latest updates on the project.**



Figure 2. Photo from Jen Imbimbo during the Cardinal Road neighborhood Meet & Greet on December 7, 2024

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B. Crest Marin Pump Station Rehabilitation Design

Background: The Crest Marin Pump Station is a stormwater pump station that discharges to Nyhan Creek and is located at 297 Flamingo Road (near the intersections of Tennessee Valley Road/Flamingo Road and Marin Ave). The Crest Marin Pump Station was constructed in 1978 and is reaching the end of its expected useful life. Staff have been reporting to the Advisory Board about increasing maintenance needs and costs at this station. Schaaf & Wheeler was awarded a consulting contract by the District Board of Supervisors in January 2023 to conduct a condition assessment of the Crest Marin Pump Station. They summarized the assessment for the Advisory Board in October 2023 and provided recommendations for short term and long-term improvements to address condition and reliability issues. Based on the assessments, age of equipment, and reliability of the pump station it is recommended to complete a full pump station rehabilitation. On October 10, 2023, the Advisory Board recommended the District Board of Supervisors award a design and environmental compliance contract for the pump station and associated drainage improvements with a budget of no more than \$500,000.

The construction cost estimate for a full pump station upgrade amounts to \$3.24 million which includes a 20% construction contingency. Design, construction management, permitting, and administration could add another 50% or \$1,350,000 for a total budget estimate of \$4,600,000.

This work is being coordinated with PG&E, which needs to relocate a leaning transmission tower away from the Nyhan Creek levee. Though the transmission tower has been removed, a permanent location still needs to be identified.

Update: The District is now working with Schaaf & Wheeler on pump station design which is expected to continue through this year. Updates will be provided through the Advisory Board throughout the process.

The relocation of a permanent PG&E transmission tower is being considered to replace the one that used to be on the levee near Crest Marin Pump Station until it started leaning in 2023. Tam Valley Community Services District is urging the Flood District to accommodate the permanent tower on our pump station site. They asked the District to prepare a summary of engineering constraints and costs to overcome any constraints that are feasible to overcome. The consultant has provided a scope of analysis to do this evaluation which will increase the project budget of \$540,924 by another \$19,975.

Item 5. Flood Zone 3 Projects in Mill Valley

Background: In August 2024, at the recommendation of the Zone 3 Advisory Board, the District Board of Supervisors approved a \$3,015,000 funding agreement that would reimburse the City of Mill Valley for projects that they manage that benefit Flood Zone 3. Below is a list of projects under that agreement:

- Sycamore Pump Station Replacement Design, \$430,000 [underway]
- Sycamore Pump Station Replacement Construction, \$1,500,000

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- Flap gates/check valves throughout the drain systems, \$45,000
- Develop Drainage Database, \$215,000
- Study effectiveness of improvements to drainage channels, \$50,000
- Arroyo Corte Madera del Presidio Drainage Improvements, \$775,000

Update: Since the agreement was executed, the City of Mill Valley has made significant progress advancing one of the largest projects in the funding agreement, Replacement of the Sycamore Pump Station, which was last reconstructed in 1962. The project is currently in the design phase and a Basis of Design Report was completed by consultant, Schaaf & Wheeler, and submitted for review by the City, District, and the local sanitary district which currently is contracted to operate and maintain the station.

The Basis of Design Report states that the City would like Flood Zone 3 to take over operation and maintenance of the station after it is rehabilitated and brought up to the same standards as other District-operated stations. The District currently operates and maintains 18 stormwater pump stations across the County, including another one in Mill Valley (Ryan Creek Pump Station), three in Tam Valley (Shoreline, Cardinal and Crest Marin Pump Stations), and one near De Silva Island (Seminary Drive Pump Station). In the 1960s when the Sycamore Pump Station was previously rebuilt, Flood Zone 3 didn't have any pump stations.

Item 6. Next Meeting

Advisory Board adopted a schedule of meetings on the second Tuesday of the months of January, April, July, and October. So, the next meeting is tentatively July 8, 2025, pending confirmation of a quorum of board members available. Special meetings can be called if needed, and regular meetings may be canceled if there is no business need.

The schedule of regular meetings adopted by the Advisory Board differs from what is in the Zone bylaws. Later this year, we will return to the Advisory Board with recommendations for edits to the bylaws that are consistent with the preferred meeting schedule.