

Marin County Flood Control and Water Conservation District **Corte Madera Creek Flood Risk Management Project, Phase 1** Final Environmental Impact Report Volume 1: Comments and Responses to Comments State Clearinghouse No. 2020080353

July 2021



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Volume 1: Comments and Responses to Comments

State Clearinghouse No. 2020080353

July 2021

Prepared for: Marin County Flood Control and Water Conservation District 3501 Civic Center Drive, Suite 304 San Rafael, CA 94903

Prepared by: Panorama Environmental, Inc. 717 Market Street, Suite 400 San Francisco, CA 94103



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ACRONYMS AND ABBREVIATIONS

Acronyms and Abbreviations

ADA	Americans with Disabilities Act
CEQA	California Environmental Quality Act
CLOMR	Conditional Letter of Map Revision
CNRA	California Natural Resources Agency
District	Marin County Flood Control and Water Conservation District
DWR	California Department of Water Resources
EIR	Environmental Impact Report
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FIGR	Federated Indians of Graton Rancheria
GHG	Greenhouse Gas
КОР	Key Observation Point
MMWD	Marin Municipal Water District
MOU	maintenance memorandum of understanding
project	Corte Madera Creek Flood Risk Management Project, Phase 1
SAFRR	San Anselmo Flood Risk Reduction
TACs	toxic air contaminants
TMP	Traffic Management Plan
Town	Town of Ross (government)
USACE	U.S. Army Corps of Engineers
WSE	water surface elevation

ACRONYMS AND ABBREVIATIONS

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1 Introduction

1.1 Introduction to the Comments and Responses

The Marin County Flood Control and Water Conservation District (the District) is the Lead Agency under the California Environmental Quality Act (CEQA) for the Corte Madera Creek Flood Risk Management Project, Phase 1 (project). The District published a Draft Environmental Impact Report (EIR) for the project on February 1, 2021, and provided agencies, interested parties, and the general public with an opportunity to comment on the Draft EIR. The District circulated the Draft EIR for a 45-day public review period, which ended on March 17, 2021. During the comment period, the District Board held a public hearing on March 2, 2021, to obtain public comments on the adequacy of the Draft EIR. The District received 27 comment letters in addition to oral testimony at the public hearing during the 45-day Draft EIR public review period. Three additional comment letters were submitted on March 22, 23, and 24, 2021, after the public comment period closed.

This document is part of the Final EIR and presents all the comments received on the Draft EIR during the comment period and immediately following the close of the public comment period, as well as the responses to those comments. The Responses to Comments together with the revised Draft EIR constitute the Final EIR. A list of the agencies, organization, and individuals who commented on the Draft EIR is shown in Table 1.2-1.

1.2 Document Organization

The Final EIR is organized as follows:

- Volume 1: Comments and Responses to Comments:
 - Chapter 1: Introduction. This chapter discusses the purpose and organization of the Final EIR and includes a list of agencies, organizations, and individuals who submitted written comments or made oral comments on the Draft EIR.
 - Chapter 2: Comments and Responses. This chapter presents the Master Responses to common comments, reproductions of all comment letters and oral comments received on the Draft EIR, and written responses for each comment.
 - Chapter 3: Draft EIR Text Revisions. This chapter shows the text revisions to the Draft EIR, necessary to clarify any minor errors, omissions, or misinterpretations.
 - **Chapter 4: References.** This chapter lists references cited in the Final EIR.
- Volume 2: Final EIR, as modified in the Responses to Comments

Letter Designation	Letter Date	Date Received	Agency or Organization	Commenter's First Name	Commenter's Last Name	
State Agencies						
A1	3/16/2021	3/16/2021	California State Lands Commission	Nicole	Dobroski	
A2	3/17/2021	3/17/2021	San Francisco Bay Regional Water Quality Control Board	Nicole	Fairley	
		Region	al and Local Agencies		·	
A3	3/17/2021	3/17/2021	Marin County Parks	Tara	McIntire	
A4	2/3/2021	2/3/2021	Ross Valley Sanitary District	Steve	Moore	
A5	3/15/2021	3/15/2021	Town of Ross	Joe	Chinn	
A6	3/17/2021	3/17/2021	City of Larkspur	Julian	Skinner	
			Organizations			
B1	3/15/2021	3/15/2021	Friends of Corte Madera Creek Watershed	Sandra	Guldman	
B2	3/16/2021	3/16/2021	College of Marin	Klaus	Christiansen	
B3	3/17/2021	3/17/2021	Marin Audubon Society	Barbara	Salzman	
		- ·	Individuals			
C1	2/1/2021	2/1/2021	-	Alan	Lutsky	
C2	2/5/2021	2/5/2021	-	Mary	Leary	
C3	2/9/2021	2/9/2021	-	Gary	Scales	
C4	2/16/2021	2/16/2021	-	Sterling	Sam	
C5	2/26/2021	2/26/2021	-	Cherilyn	Gilboy	
C6	3/2/2021	3/2/2021	-	Suzanne	Mabardy	
C7	3/5/3021	3/5/2021	-	Andrew	Avins	
				Miriam	Kuppermann	
C8	3/12/2021	3/12/2021	-	Hugh D.	Barron	
C9	3/15/2021	3/15/2021	-	John	Crane	
C10	3/15/2021	3/16/2021	-	Suzanne	Mabardy	

Table 1.2-1 List of Commenters

Letter Designation	Letter Date	Date Received	Agency or Organization	Commenter's First Name	Commenter's Last Name
C11	3/16/2021	3/16/2021	-	Leslie	O'Connell
				James Bradley	O'Connell
C12	3/16/2021	3/16/2021	-	Garril	Page
C13	3/16/2021	3/16/2021	-	Kyle	Rosseau
C14	3/17/2021	3/17/2021	-	Hugh and Luanne	Cadden
				Ben and Kristen	Swann
C15	3/17/2021	3/17/2021	-	Tyler and Jon	Child
C16	3/17/2021	3/17/2021	-	Beth	Foster
				Paul	Furusho
C17	3/17/2021	3/17/2021	-	Arlene	Fox
				Stephen	Whitcomb
C18	3/15/2021	3/18/2021	-	Charles Goodman	
C19	3/22/2021	3/22/2021	- Dan		Little
C20	3/23/2021	3/23/2021	- Nick F		Romero
C21	3/24/2021	3/24/2021	- Nick		Romero
		F	Public Hearing		
PH (Oral	3/2/2021	3/2/2021	-	Michael	Wanger
Comments)			-	Garril	Page
			-	Laura	Conrow
			-	Charles	Goodman
			-	William	Conrow
			Town of Ross	Julie	McMillan
			-	Beth	Foster
			-	Pam	Grant

1.3 District Staff Recommends Alternative 1

District staff will be recommending that the District Board approve the Draft EIR Alternative 1. District staff recommends approval of Alternative 1 instead of the proposed project. Alternative 1 avoids modifications to Frederick Allen Park and would instead install four additional large fish pools in the concrete channel. Alternative 1 involves the same project activities and elements in areas upstream and downstream of Frederick Allen Park. The staff's decision to recommend adoption of Alternative 1 reflects public comments received during the Draft EIR public review period, public comments made during the Town of Ross (Town) public workshop on April 15, 2021, the results of the Town survey about the project, and the support and preference for Alternative 1 expressed by Town Council members.

Section 15088.5 in the State CEQA Guidelines requires recirculation of a Draft EIR when:

... significant new information is added to the EIR after public notice is given of the availability of the draft EIR for public review under Section 15087 but before certification. As used in this section, the term "information" can include changes in the project or environmental setting as well as additional data or other information. New information added to an EIR is not "significant" unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect (including a feasible project alternative) that the project's proponents have declined to implement. "Significant new information" requiring recirculation include, for example, a disclosure showing that:

(1) A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented.

(2) A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance.

(3) A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the environmental impacts of the project, but the project's proponents decline to adopt it.

(4) The draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.

The Draft EIR does not need to be recirculated to address Alternative 1, as Alternative 1 would not result in any new significant impacts or increases in the severity of any impacts that were described in the Draft EIR. Alternative 1 was described and analyzed in detail in the Draft EIR.

Alternative 1 includes the following elements of the proposed project, as described in Chapter 2 of the Draft EIR:

- Removal of the Denil fish ladder at the upstream limit of Unit 3
- Regrading and lowering the channel in Unit 4
- Installation of new grade control and slope protection in Unit 4
- New/modified short floodwalls (approximately 2 to 4 feet tall) in Unit 3 and Unit 2
- Stormwater pump station with backup power in Granton Park
- New and enlarged fish pools within the concrete channel in Unit 3 (with four additional fish pools in the concrete channel adjacent to Frederick Allen Park for Alternative 1, as described in Chapter 5 of the Draft EIR)
- Removal of a portion of the concrete channel walls and restoration of tidal wetland and transitional habitat in Unit 2.

Alternative 1 would avoid removal of the concrete channel in upper Unit 3 in Frederick Allen Park. Alternative 1 would not involve tree removal, grading, or landscaping in Frederick Allen Park. Figure 1-1 through Figure 1-3 show the Alternative 1 elements that are proposed for implementation.

The analysis of potential project impacts in the Draft EIR also addresses the potential impacts of Alternative 1, where the proposed project and Alternative 1 elements would be the same. The different potential impacts of Alternative 1 are described and evaluated in Chapter 5 of the Draft EIR. Chapter 5 of the Draft EIR includes separate analyses of potential Alternative 1 flood risk reduction and air quality impacts. All mitigation measures required to address the potential impacts of Alternative 1 were described in the Draft EIR and would be implemented by the District. For these reasons, Alternative 1 was sufficiently evaluated in the Draft EIR to recommend for project approval, and recirculation of the Draft EIR is not required because none of the circumstances requiring recirculation of a Draft EIR have occurred.

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Figure 1-1Alternative 1 Elements (Map 1)



Source: (Tele Atlas North America, Inc., 2019; GHD, 2020; USGS, 2012; GHD, 2020; Prunuske Chatham, Inc., 2020; Golden Gate National Parks Conservancy, 2018)

Figure 1-2Alternative 1 Elements (Map 2)



Source: (Tele Atlas North America, Inc., 2019; GHD, 2020; USGS, 2012; GHD, 2020; Prunuske Chatham, Inc., 2020; Golden Gate National Parks Conservancy, 2018)

Figure 1-3Alternative 1 Elements (Map 3)



Source: (Tele Atlas North America, Inc., 2019; GHD, 2020; USGS, 2012; GHD, 2020; Prunuske Chatham, Inc., 2020; Golden Gate National Parks Conservancy, 2018)

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2 Comments and Responses

2.1 Approach

This chapter presents the Master Responses to common comments, reproductions of all comment letters and oral comments received on the Draft EIR, and written responses to each comment. Each comment letter has been assigned an alphanumeric code, from A1 through C21, and each comment is numbered in the margin of the comment letter. Responses to the comments follow each letter, and responses are referenced using the same alphanumeric system. For example, the first comment from the first letter, from the California State Lands Commission, is designated A1-1, as is the response to it. Comments from the public hearing are assigned the code "PH" and follow the comment letters.

Several comments have prompted the District to revise the text of the Draft EIR. Revisions to the text of the Draft EIR are shown in this chapter as follows:

- Additions to the text in the Draft EIR are <u>underlined</u>; and,
- Deletions from the text in the Draft EIR are indicated by strikeout.

All revisions to the text of the Draft EIR also are shown in Chapter 3, Volume 1 of the Final EIR.

2.2 Master Responses

This section presents Master Responses on topics where similar or the same comments were made by multiple commenters. The Master Responses address the following topics:

- Master Response 1: Preference for Alternative 1 and Comparison of Proposed Project and Alternative 1 Flood Risk Reduction
- Master Response 2: Alternative 3 Impacts and Feasibility
- Master Response 3: Project Design Process Flood Modeling
- Master Response 4: Impacts on Privacy and Private Views
- Master Response 5: Economic Impacts and Project Cost
- Master Response 6: Frederick Allen Park Habitat and Impacts

2.2.1 Master Response 1: Preference for Alternative 1 and Comparison of Proposed Project and Alternative 1 Flood Risk Reduction

Preference for Alternative 1

Comments in Support of Alternative 1

Four comment letters stated support for Alternative 1: No Frederick Allen Park Alternative in lieu of the proposed project. Fourteen additional comment letters discussed concerns about the impacts of the proposed project construction in Frederick Allen Park. This Master Response summarizes the local support expressed for Alternative 1 and the environmental concerns about the proposed project that were raised by the local community in comment letters and in a survey conducted by the Town after publication of the Draft EIR. This Master Response also provides additional detail on the difference in flood risk reduction benefits between the proposed project and Alternative 1. This Master Response further clarifies that District staff will not be recommending the proposed project. Rather, District staff will be recommending approval of Alternative 1 to the District Board of Supervisors.

Additional Local Support for Alternative 1

The Town held a public workshop on April 15, 2021, to discuss the proposed project and obtain community input on a preference for the proposed project or Alternative 1. During the workshop, the majority of community members who commented indicated they did not support the Frederick Allen Park portion of the proposed project but did support Alternative 1. Local students gave a presentation in support of the proposed project, explaining why they wanted to remove the fence and open access to the creek, and how opening creek access would support educational opportunities. Following the workshop, the Town distributed an e-mail questionnaire via the town-wide e-mail system to gather feedback from residents on their preferences for the proposed project or Alternative 1, and to inform them about the Town Council's preference. A total of 363 residents and stakeholders completed the Town's questionnaire. 62 percent of the respondents preferred Alternative 1, compared to 29 percent who preferred the proposed project. The more than 300 responses to the survey provide a broader base to evaluate community preference than the 21 comment letters on the Draft EIR. The responses to the questionnaire indicate a strong community preference for Alternative 1. The most frequent reason (70.7 percent) for supporting Alternative 1 over the proposed project was that the trees could take up to 20 years to grow to the same height as the existing condition. The second most frequent (50.18 percent) reason for supporting Alternative 1 over the proposed project was the substantially similar flood benefits of Alternative 1 to the proposed project.

A Town Council meeting was held on May 13, 2021, to discuss the members' project preference and provide a recommendation to the District. The Town Council voted unanimously to recommend Alternative 1 to the District. The Town Manager submitted a letter to the District on May 14, 2021, formalizing the Town's recommendation for Alternative 1.

Key Community Concerns about Potential Project Impacts

Various community concerns were raised about the project during public outreach and the May 13, 2021, Town Council meeting.

Trees, Shade, and Canopy Restoration

One primary concern is the significant impact on visual quality in Frederick Allen Park after project construction and for the 10-year period following, until planted trees and vegetation mature. An additional concern is that U.S. Army Corps of Engineers (USACE) could enforce a 15-foot "no tree" setback from the new and existing floodwalls.

Impacts to Tributary Drainage into Corte Madera Creek

According to the hydraulic model, the water surface elevation (WSE) would increase within the creek/channel downstream from the fish ladder under the proposed project and Alternatives 1, 2, and 3. The Town noted that compared with the proposed project, Alternative 1 would improve tributary drainage upstream from 15 Sir Francis Drake (approximately 250 feet south of the Denil fish ladder) but would hinder tributary drainage downstream from 11 Sir Francis Drake to Kentfield Hospital. The Town noted that Federal Emergency Management Agency (FEMA) requires any project that causes any increase in the 100-year WSE within a creek channel to demonstrate that no residential or commercial structures will be affected by the rise.

Flood Risk Reduction

The Town noted that Alternative 1 would have similar WSE reductions as the proposed project outside the creek/channel in 10-year and 25-year storm events. However, during a 100-year storm event, the WSE under Alternative 1 could be between 0.2 and 1 foot higher than the proposed project in areas adjacent to Frederick Allen Park and downstream in Kentfield. The difference between the proposed project and Alternative 1 flood risk reduction is discussed below in further detail.

Construction Impacts and Costs

Construction impacts of Alternative 1 would be confined to the fish ladder, creek bottom, and channels in Unit 4, while the construction impacts of the proposed project would require temporary closure of Bike Route 20 and a longer period of construction for the work in Frederick Allen Park. In addition, the construction cost for the proposed project would be greater than for Alternative 1. Master Response 5: Economic Impacts and Project Cost explains that cost is not an environmental consideration under CEQA.

Comparison of Proposed Project and Alternative 1 Flood Risk Reduction Benefits

Both the proposed project and Alternative 1 would result in flood reduction benefits, as presented in Section 3.9 and Chapter 5 of the Draft EIR. The proposed project would result in more flood reduction benefits than Alternative 1, as shown in Figure 5.3-8 in the Draft EIR (GHD, 2020). Table 2.2-1 shows the number of additional structures that would experience reduced flooding if the proposed project were implemented instead of Alternative 1. The proposed project would result in flood reduction at an additional 48 structures compared to Alternative 1. Alternative 1, although resulting in fewer flood reduction benefits than the proposed project, would reduce flooding at approximately 161 structures (see Master Response 3 for further details on Alternative 1 flood risk reduction benefits). Both the proposed project and Alternative 1 would result in substantial flood risk reduction benefits, compared to existing conditions.

Number of Additional Structures with Reduced Flooding under the Proposed Project, Compared to Alternative 1					
Jurisdictional Land Use	Area No Longer Inundated	Greater than 1-foot Reduction in Flood Depth	0.5 to 1-foot Reduction in Flood Depth	0.2 to 0.5-foot od Reduction in Flood Depth	
Commercial.	0	0	0	0	
Institutional	0	0	0	0	
Residential	6	3	8	29	
Tax Exempt	0	0	0	2	
Total	6	3	8	31	

 Table 2.2-1
 Summary of Benefits of Proposed Project Compared to Alternative 1 during the 25-Year Event

Source: (Town of Ross, 2021)

Town of Ross and Regulatory Approvals Required for Proposed Project

As described above, the Town Council voted unanimously to recommend Alternative 1 to the District. In addition, community members expressed a clear preference for Alternative 1 through a community-wide survey.

Project construction must be completed by the end of 2022 to comply with the stipulations of the California Department of Water Resources (DWR) grant funding for the project. The DWR grant would be used to fund 50 percent of the project. As described on page 1-5 in the Draft EIR, the Town owns Frederick Allen Park. The District would need to obtain the Town's approval of an easement for construction and maintenance of project elements on the Town's property, including Frederick Allen Park. The Town also would have permitting authority over project design review and tree removal within its jurisdiction. This discretionary review would make the Town a Responsible Agency under CEQA in the review of project elements under the Town's jurisdiction and could result in significant delays in project implementation.

During a meeting between the District and the USACE regarding Section 408 authorization for the project, USACE indicated that it would not initiate review of the Section 408 application until receipt of the 60 percent design plans for the project. Because of the complexity of the project's Frederick Allen Park component, the 60 percent design of Frederick Allen Park would take approximately 4 months to complete. In contrast, information on Alternative 1 sufficient to prepare 60 percent design currently is available (see Master Response 3). Given the amount of time that would be required to complete the permitting process with the Town and USACE, and to obtain an easement from the Town, it is unlikely that the District would be able to obtain all permits in time to start project construction in spring 2022 for the proposed project.

Conclusion and Staff Recommendation to Adopt Alternative 1

For these reasons, District staff will recommend the District Board of Supervisors approve Alternative 1. The recommendation to approve Alternative 1 reflects public preference for Alternative 1, the Town Council preference for Alternative 1, and the improved ability to meet the grant funding construction deadline under Alternative 1 because of the reduced complexity in the design and permit approval process compared to the proposed project.

2.2.2 Master Response 2: Alternative 3 Impacts

Several comments suggested that the new floodwalls should be constructed out of natural materials instead of concrete.

Alternative 3 in Chapter 5 of the Draft EIR considers the environmental benefits and potential impacts of using natural materials instead of concrete. As discussed in the Draft EIR, construction of a natural material floodwall would involve a larger footprint and require additional tree removal because it would not be feasible to construct with natural materials on top of the existing concrete floodwall. A new natural materials floodwall would have to be set back from the existing floodwall. Construction of a natural material floodwall in Unit 2 would require the removal of 66 trees, compared to the removal of only two trees for construction of the proposed concrete floodwall attached to the existing floodwall in Unit 2.

Furthermore, although Alternative 3 was evaluated in the Draft EIR as including a non-concrete floodwall in Unit 2, on further consideration and an engineering evaluation, District staff determined that a non-concrete rock and earthen floodwall would be treated as a levee by USACE and would be subject to USACE review under Section 408. A levee designed to meet USACE standards would have an even larger impact area than that evaluated in the Draft EIR, and would result in a much greater setback for vegetation when compared with a concrete floodwall attached to the existing floodwall. The levee would result in removal of a substantial number of trees to construct and maintain the levee in compliance with USACE requirements and would not be compatible with the existing informal recreational uses on the left bank or any future recreational use of the area. Use of non-concrete materials for construction of the floodwall in Unit 2 would result in greater environmental impacts than a concrete floodwall attached to the existing floodwall.

The District has integrated non-concrete materials into the 60 percent design for Alternative 1 where feasible, and this would reduce environmental impacts. Specifically, the District is proposing to construct the transition structure at the connection between Units 3 and 4 using engineered streambed material instead of concrete to protect the existing sanitary sewer line and stabilize the channel grade.

2.2.3 Master Response 3: Future Design and Flood Modeling

Project Design Process

Several comment letters included questions about the process to be used by District staff in finalizing the project design, updating the hydraulic modeling, and sharing the model results with the community. The Draft EIR was prepared when District staff had developed a 35 percent concept level of design/engineering. The 35 percent design level is typical and sufficient for project evaluation in a CEQA document. Project proponents typically do not

prepare final (100 percent) engineering and design before the CEQA process because a project may be modified during and as a result of the CEQA process.

District staff will recommend approval of an alternative, specifically Alternative 1, in lieu of the proposed project. After publication of the Draft EIR and in response to public comments on the Draft EIR, District staff completed 60 percent design and engineering of Alternative 1. Additional engineering and design was not completed for the proposed project because the District staff are no longer recommending approval for the proposed project. After District staff completes the permitting process with the regulatory agencies, the final engineering and design documents will be prepared to comply with the requirements of the regulatory agencies. The requirements of the regulatory agencies are not known before completing the permitting process, and therefore the current design reflects this best available information at this time. Additional details on the Alternative 1 design and hydraulic modeling results for the 60 percent engineering are presented in this Master Response, in response to public comments. A significant adverse flood impact was defined in the Draft EIR as an increase in WSE at any structure of 0.2 foot or more. As discussed in this Master Response, the flood impacts of Alternative 1's 60 percent design are consistent with the impacts for this alternative described in the Draft EIR. None of the criteria required under CEQA for recirculation of a Draft EIR have occurred.

60 Percent Design and Updated Modeling

60 Percent Design for Alternative 1

After publication of the Draft EIR, 60 percent design was completed for Alternative 1. This 60 percent design includes additional details on the transition between the concrete channel and the natural channel in Unit 4. The fish ladder removal and transition between the concrete channel and natural channel after removal of the fish ladder would be substantially similar to the description of the proposed project Unit 4 activities described in Chapter 2 in the Draft EIR; however, the 60 percent design includes the following additional details about the Unit 4 transition:

- A planted rock slope would be installed for 510 feet along the left bank upstream from Lagunitas Road Bridge and within the District's easement.
- A sheet pile retaining wall would be installed for 122 feet along the right bank to protect the slope at 23, 25, and 27 Sir Francis Drake Boulevard.
- Engineered streambed material (large rock and fines) would be used to protect the buried sewer line instead of concrete.
- A fish resting pool would be created within the engineered streambed material, just upstream from the concrete channel.

Hydraulic Model Updates

GHD has updated the hydraulic modeling for Alternative 1, to reflect the 60 percent design and incorporate additional details on the channel design that were not available before publication of the Draft EIR. A summary of the key updates to the hydraulic model is as follows:

- The model platform has been updated from HEC-RAS Version 5 to HEC-RAS Version 6.
- The hydraulic model upstream from the Ross Creek confluence has been updated based on the hydraulic model developed for the San Anselmo Flood Risk Reduction (SAFRR) project, which included project elements at the flood detention basin at the Sunnyside Nursery Site, the Bridge Building #2 site (634-636 San Anselmo Ave.) in downtown San Anselmo, and other foreseeable future projects in the reach.
- The earthen channel geometry downstream from the concrete channel has been updated based on the bathymetric data surveyed in 2018, as a part of the Corte Madera Creek Levee Evaluation project.
- A verification analysis has been prepared, using the December 15, 2016, January 10, 2017, and February 7, 2017 flood events to check and compare the model output with the high-water mark data at Bon Air Bridge. The n factor for the earthen channel in Unit 2 and Unit 1 was set at 0.02 foot, based on the observed high-water marks and model results.
- The existing Bon Air Bridge has been replaced in the hydraulic model with the new Bon Air Bridge geometry for the future condition scenarios.
- The hydraulic model geometries have been updated along the concrete channel and Unit 4 for the existing condition scenarios, based on survey data collected by GHD in 2020 and 2021.
- The hydraulic model geometries have been updated with the revised Corte Madera Creek Flood Risk Management Project design for Alternative 1 along the concrete channel and Unit 4 for the future condition scenarios.

Hydraulic Model Scenarios

The hydraulic modeling includes the following six scenarios:

- 1. Existing Condition Without Project
- 2. Existing Condition With Alternative 1
- 3. Future Condition Without Project
- 4. Future Condition With Alternative 1
- 5. Year 2100 Future Condition Without Project
- 6. Year 2100 Future Condition With Alternative 1

The existing condition without project reflects the current hydraulic conditions of Corte Madera Creek without construction of any planned or approved flood control projects. The existing condition with project reflects the existing condition model with all proposed Alternative 1 elements incorporated. The future condition without project reflects the hydraulic conditions of Corte Madera Creek with implementation of planned and/or approved projects listed in Table

3.9-5 of the Draft EIR. The future condition without project scenario also includes an intermediate level of sea level rise for 2067, as described in the Draft EIR. The future condition with project reflects the future condition model with Alternative 1 elements incorporated into the model. The Year 2100 future condition without project scenario includes all projects included in the future condition without project scenario and incorporates the California Natural Resources Agency (CNRA) predicted long-term sea level rise for year 2100. The future Year 2100 future condition with Alternative 1 scenario adds the proposed project elements to the Year 2100 future condition without project scenario.

Figure 2-1 through Figure 2-6 show the Alternative 1 changes to the WSE and reflect the difference in WSE between the Existing Condition Without Project and Existing Condition With Alternative 1 scenarios under a 10-, 25-, and 100-year flood, using the updated modeling for the 60 percent design. Figure 2-7 through Figure 2-12 show the Alternative 1 changes to the WSE under for the future condition scenario, and reflect the difference in WSE between the Future Condition Without Project and Future Condition With Alternative 1 under the 10-, 25-, and 100-year flood conditions. The assumptions used in the future condition modeling are described on pages 3.9-35 through 3.9-37 in Section 3.9 in the Draft EIR and are supplemented by the model updates described above. Figure 2-13 through Figure 2-18 show the Alternative 1 changes to the WSE under a "high-emissions likely" sea-level rise scenario, to reflect 2100 projected sea-level rise based on the 2018 Update of the State of California Sea-Level Rise Guidance (California Ocean Protection Council, 2018). Figures 2-13 through 2-18 reflect the difference in WSE between the Year 2100 Future Condition Without Project and Year 2100 Future Cond

Areas shown in the figures as "Flows Confined to Channel" are areas that are currently flooded by Corte Madera Creek, which are predicted to no longer have flood inundation from Corte Madera Creek overtopping after Alternative 1 is implemented. Areas shown in the figures with "Flooding Reduced" are areas with reduced flood inundation (greater than 0.2 foot) from creek overtopping after Alternative 1 is implemented. The change in WSE shown on the maps reflects a comparison between WSE without implementation of Alternative 1 and the WSE after implementation of Alternative 1 for each modeled scenario.

The geographic extent of the figures showing the changes in WSE differs from the figures included in the Draft EIR. The geographic extent of the figures was expanded to show areas downstream from Unit 2 in response to comments from the City of Larkspur. As discussed on page 3.9-39 in the Draft EIR, a threshold of 0.2 foot (2.4 inches) was used for determining whether a potentially significant increase or decrease in WSE would occur at any structure. The 0.2-foot threshold is a reasonable level of precision for evaluating flooding impacts, considering the standards for accuracy and precision associated with hydraulic modeling.

Table 2.2-2 shows the significant (greater than 0.2-foot) flood risk reduction benefits at parcels in Ross Valley that are predicted to result from implementation of Alternative 1. Table 3.9-7 of the Draft EIR provides the flood reduction benefits for the proposed project and shows the maximum flood depth reduction at each parcel within the study boundary. Table 2.2-2 below

shows the average flood depth reduction at each parcel for Alternative 1. The average flood depth reduction at each parcel was obtained by averaging the change in water surface elevation geographically across the parcel in GIS. The average flood depth reduction differs from the maximum flood depth reduction provided in Table 3.9-7 in the Draft EIR for the proposed project. The methodology for calculating the flood depth reduction at parcels for was updated Alternative 1 to use the average instead of the maximum reduction to better represent the full range of flood depth reduction across the entire parcel.

Jurisdiction/Land	Number of Structures with Reduced Flooding				
Use	Area No Longer Inundated After Project	1 to 4.5 feet reduction in water surface	0.5 to 1 foot reduction in water surface	0.2 to 0.5 foot reduction in water surface	Total
		Kentfield			
Commercial	3	3			6
Institutional	17				17
Residential	36		10	22	68
Kentfield Total	56	3	10	22	91
		Larkspur			
Commercial					0
Institutional					0
Residential					0
Larkspur Total	0	0	0	0	0
		Town of Ross	5		
Commercial	1		1	8	10
Institutional	1	1	1	2	5
Residential	4		16	35	55
Ross Subtotal	6	1	18	45	70
Total All Areas	62	4	28	67	161

Table 2.2-2	Summary of Alternative 1 Flood Reduction Benefits, Existing Condition Scenario, 25-Year
	Event

^a The reduction in flooding reflects changes in WSE based on model predictions for the existing hydrologic conditions. Reduction in flooding of less than 0.2 foot is below the model precision and is interpreted as no change in flood elevation.

Consistency with Draft EIR Conclusions

The Draft EIR states Alternative 1 would have no significant impacts on flooding. No mitigation measures are therefore required to address downstream flooding. As described in the Draft EIR and above, a threshold of 0.2 foot (2.4 inches) was used for determining whether a potentially significant increase or decrease in WSE would occur. Similar to the proposed project, Alternative 1 would result in an increase in WSE of 2 to 6 inches in the parking lot at the College of Marin near College Avenue. These impacts would be limited to the parking lot and elevated trailers at the College of Marin, and, as such, are not considered new or significant impacts.

Similar to the proposed project, Alternative 1 would result in a WSE increase of approximately 1 inch or less (less than 0.2 foot) in residential areas. The modeled increase in WSE at all structures would be less than the threshold of significance. Therefore, Alternative 1 would result in a net reduction in flooding, as shown in Table 2.2-2, and would not result in any new significant flood risk impacts. The results of the updated hydraulic modeling based on the 60 percent design are consistent with the conclusions in the Draft EIR. As discussed in Section 1.3 above, none of the criteria for recirculation of a Draft EIR (Section 15088.5 of CEQA Guidelines) have occurred.

If the project is approved, the modeling will be updated after the final engineering and design are completed. If, following the District's certification of this EIR and project approval, the results of final design and modeling are inconsistent with the EIR conclusions and determine that the project would result in a new significant impact from flooding and no mitigation measures are available to address the impact, a responsible agency would be required under CEQA to prepare and circulate a subsequent or supplemental EIR to address the new significant impact before project implementation, consistent with the requirements of CEQA Guidelines Sections 15162(c) and 15163.

2.2.4 Master Response 4: Impacts on Privacy and Private Views

Several comment letters included comments about the impacts from private views (e.g., residences along Corte Madera Creek) from project implementation and impacts on privacy for the residences along Corte Madera Creek in the vicinity of Frederick Allen Park.

The visual and aesthetic conditions in the project area are discussed in Section 3.1, Aesthetic and Visual Resources, in the Draft EIR. On December 28, 2018, the California Natural Resources Agency published an update to the State CEQA Guidelines, clarifying that public views are the focus for environmental impacts under CEQA. The change to Appendix G in the State CEQA Guidelines specifically clarified that "public views are those that are experienced from a publicly accessible vantage point." A number of legal cases have addressed this issue, including: Preserve Poway v. City of Poway (2016) 245 Cal.App.4th 560; Porterville Citizens for Responsible Hillside Development v. City of Porterville (2007) 157 Cal.App.4th 885, 889, 901; Bowman v. City of Berkeley (2005) 122 Cal.App.4th 572; and Mira Mar Mobile Community v. City of Oceanside (2004) 119 Cal.App.4th 477, 485, 492.

Public views under CEQA include those views that are experienced by the collective public. These include views available from publicly accessible viewing spaces, as opposed to views from privately owned properties. Under CEQA, the question is whether a project would affect the environment of people in general, not whether a project would affect particular individuals (e.g., Mira Mar Mobile Community v. City of Oceanside [2004] 119 Cal.App.4th 477, 492 [14 Cal.Rptr.3d 308 Mira Mar]). Private views are views seen from privately owned land and typically are viewed by individual viewers, including views from private residences. The analysis in the Draft EIR focuses on public views as experienced from public vantage points (e.g., Bike Route 20 or local roadways), consistent with the State CEQA Guidelines and case law. Although the Draft EIR does not address private views, the visual simulation and analysis presented in it provide an approximation of the impact on private views, where the private views would be similarly situated to the public views evaluated in the Draft EIR.

2.2.5 Master Response 5: Economics and Project Cost

Several comment letters included questions about the project's cost or its benefits-to-cost ratio. In accordance with CEQA, the Draft EIR evaluated the potentially significant environmental effects of the project. Economic (e.g., financial liability, property values) and social or quality-of-life effects of a project are generally not considered to be environmental impacts under CEQA. Section 15131 in the State CEQA Guidelines limits the analysis of economic impacts to the environmental change that would have an anticipated economic impact. Specifically:

(a) Economic or social effects of a project shall not be treated as significant effects on the environment. An EIR may trace a chain of cause and effect from a proposed decision on a project through anticipated economic or social changes resulting from the project to physical changes caused in turn by the economic or social changes. The intermediate economic or social changes need not be analyzed in any detail greater than necessary to trace the chain of cause and effect. The focus of the analysis shall be on the physical changes.

The Draft EIR included a thorough evaluation of the project's physical changes on the environment. The project's cost of implementation and the ratio of its economic benefits to its costs are not environmental impacts subject to CEQA analysis. Economic feasibility is factored into alternative feasibility, as discussed in Chapter 5 in the Draft EIR. As discussed in Chapters 1 and 2 in the Draft EIR, a project objective would be fiscal responsibility, which would include the ability to implement the project with existing and reasonably foreseeable funding.

2.2.6 Master Response 6: Frederick Allen Park Habitat

Several comment letters expressed concerns regarding removal of mature habitat in Frederick Allen Park.

As shown in Figure 3.3-1 on page 3.3-8 in the Draft EIR, Frederick Allen Park is mapped as an urban/developed habitat type because it is a landscaped park with ornamental plantings. As

discussed in Section 3.3, Biological Resources, in the Draft EIR, the existing concrete channel adjacent to Frederick Allen Park has restricted the establishment of riparian vegetation. Although mature trees are found in Frederick Allen Park outside the concrete walls, they are ornamental trees that were introduced to the area as part of residential development. These trees are not considered to be riparian habitat because they are not hydrologically connected to the creek. The vegetation in Frederick Allen Park includes numerous non-native trees and lacks an understory vegetation community because of the dense canopy cover and intensity of human disturbance throughout the area.

The project as proposed in the Draft EIR would create a natural riparian habitat in Frederick Allen Park by removing the concrete channel and planting with native riparian vegetation, which would include willows, grasses, forbs, and bushes as well as trees. Removal of the concrete channel would allow a connection between the creek and the riparian vegetation, to be planted as a part of the project. A riparian habitat in Frederick Allen Park would attract a larger diversity and abundance of birds and wildlife species than currently are present in the area, because the riparian vegetation and natural stream channels would provide suitable habitat for a greater number of species than the existing landscaped vegetation and concrete channel. While the riparian habitat creation was included in the proposed project, it would not be implemented with Alternative 1 and none of the existing trees or concrete channel in Frederick Allen Park would be removed with implementation of Alternative 1.



Figure 2-1 Alternative 1 Change in Water Surface Elevation from Existing Conditions, 10-Year Flood Event (Upper Corte Madera Creek)





Figure 2-2 Alternative 1 Change in Water Surface Elevation from Existing Conditions, 10-Year Flood Event (Lower Corte Madera Creek)





Figure 2-3 Alternative 1 Change in Water Surface Elevation from Existing Conditions, 25-Year Flood Event (Upper Corte Madera Creek)





Figure 2-4 Alternative 1 Change in Water Surface Elevation from Existing Conditions, 25-Year Flood Event (Lower Corte Madera Creek)





Figure 2-5 Alternative 1 Change in Water Surface Elevaton from Existing Conditions , 100-Year Flood Event (Upper Corte Madera Creek)



Figure 2-6 Alternative 1 Change in Water Surface Elevation from Existing Conditions, 100-Year Flood Event (Lower Corte Madera Creek)























Figure 2-10 Alternative 1 Changes in Water Surface Elevation from Future Conditions, 25-Year Flood Event (Lower Corte Madera Creek)











Figure 2-12 Alternative 1 Changes in Water Surface Elevation from Future Conditions, 100-Year Flood Event (Lower Corte Madera Creek)

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Figure 2-13 Alternative 1 Changes in Water Surface Elevation Year 2100, 10-Year Flood Event (Upper Corte Madera Creek)





Figure 2-14 Alternative 1 Changes in Water Surface Elevation Year 2100, 10-Year Flood Event (Lower Corte Madera Creek)

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Figure 2-15 Alternative 1 Changes in Water Surface Elevation Year 2100, 25-Year Flood Event (Upper Corte Madera Creek)







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Figure 2-18 Alternative 1 Changes in Water Surface Elevation Year 2100, 100-Year Flood Event (Lower Corte Madera Creek)

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