

Terrie Gillen

From: Larry Minikes <laurenceminikes@gmail.com>
Sent: Friday, June 28, 2024 7:27 PM
To: Board Comment; Ranjiv Khush; Ranjiv Khush
Subject: Regular Bi-Monthly Meeting July 2 Consent Calendar #8.b.

President Khush,

I am requesting the following July 2 Agenda Item #8b, FY 2025 Insurance Renewal be pulled from Consent during adoption of the agenda for separate discussion and action.

The reason for requesting this action is due to the fact that the public deserves to be made aware in open session overall Property and Liability insurance costs are increasing by 11% and 14%, respectively, with the largest single increase of 22% for privacy liability insurance.

When people care to complain about the increase in price of water, especially as we get into the hot, dry months, this represents a perfect example of how district costs are significantly outpacing the cost of inflation and the CPI.

Thank you for your consideration,

Larry Minikes

From: [Sandra Guldman](#)
To: [Board Comment](#)
Cc: [Sara Azat](#); [Darren Howe](#); [Xavier Fernandez](#); [Holly Garber](#); [Matthew McCarthy](#); [Alex Single](#); [Sarah Phillips](#); [Terri Thomas](#)
Subject: Re: Comments on Final IS/MND Phoenix Lake - BonTempe Connection
Date: Tuesday, July 2, 2024 1:56:47 PM
Attachments: [Proposal for Improvements to P-BT Connection20240702.pdf](#)

Marin Water Board,

Terri Thomas and I met with reps from ESA and Marin Water on Tuesday, July 2, 2024 to discuss the Phoenix-Bon Tempe Connection Project. At the meeting, we presented the attached proposal for measures that could be implemented to improve Ross Creek and benefit fish. If you have any questions, feel free to contact me or Terri.

Sandy

On Sun, Jun 16, 2024 at 1:34 PM Sandra Guldman <sandra.guldman@gmail.com> wrote:

The Marin Water Board proposes to approve the IS/MND at its meeting Tuesday, 6/18. See our comment letter attached.

Sandy



Proposed Additions to Phoenix-Bon Tempe Connection Project to Improve the Phoenix/Bon Tempe/Ross Creek System July 2, 2024

Ross Creek, in the Corte Madera Creek Watershed, is dependent on Phoenix Lake for its water supply. Ross Creek, a tributary to Corte Madera Creek, has been designated critical habitat for Central CA Coast *Oncorhynchus mykiss* (steelhead trout) and *O. kisutch* (coho salmon). The habitat quality of this creek needs to be taken into account when the Phoenix—Bon Tempe Connection Project is implemented. The system will be expanded to include Bon Tempe Reservoir, part of the Lagunitas Watershed. This proposed addition to the project makes recommendations for components to be implemented as part of its implementation. This will require input from hydrologists, biologists, and engineers whereas the benefits will be significant.

Recommendation 1: Additional hydrological data for fisheries work is recommended to help inform recommendations 2-5:

- a. The ESA study appended to the IS/MND only examined a few years of recent data (Jan 2017 – Sep 2022). It would be valuable to apply water budget modeling to a longer series of water years with a broad range of precipitation patterns. Given the potential for climate change to generate different conditions in the future, that could be considered as well.
- b. The analysis only addresses peak flows and not Ross Creek minimum flows to ensure habitat quality. What are the flow impacts when Phoenix Lake is refilling after a diversion period?
- c. Despite the assessment that the hydrologic impacts are less than significant, the impacts in drought years should be further considered. The single significant runoff event in the winter of 2021 (13 cfs) would be fully captured and diverted, resulting in no significant peak flow releases for that water year. Some smaller runoff events (<25 cfs) in 2020, 2021, and 2022 are also reduced or eliminated. This type of impact should be considered with regard to downstream fishery habitat impacts.

Recommendation 2: Improve water quality of Phoenix Lake to ensure a biologically healthy Ross Creek habitat and reduce degradation of water quality in Bon Tempe Lake.

Install equipment to mix and aerate Phoenix Lake water to prevent its stratification and substantially eliminate the static hypolimnion with its very low dissolved oxygen (DO) and high iron and manganese. Phoenix Lake has poor water quality compared to Bon Tempe Lake. In fact, one of the rationales for constructing the project is to dilute Phoenix Lake water before treatment so that it is less expensive to treat.

An added benefit for Ross Creek would be to reduce the temperature of water flowing over the spillway after the lake stratifies early in the spring. It is typically far too warm for the salmonids in upper Ross Creek until flow over the spillway stops, at which point the water becomes cool, but very depleted in DO and contaminated with iron and manganese. Friends can provide temperature and DO data gathered in Ross Creek since 2008. Friends' comments on the Draft IS/MND for the project reports iron and manganese levels from samples taken in 2011.

Aerating and mixing Phoenix Lake was one component of the joint Marin Water/Marin County Water Conservation and Flood Control District project to manage Phoenix Lake for both water supply and flood risk reduction. The project was abandoned after study of the Phoenix Lake dam showed that water levels could not be reduced in the lake quickly enough for efficient operation without risking the integrity of the dam.

Recommendation 3: Maintain continuous flow in upper Ross Creek,

The leaky low-level release valve to Ross Creek needs modification to allow variable releases, depending on the flow in the creek. Between the dam and the entrance to Natalie Coffin Greene Park, Ross Creek typically has continuous flow throughout the year. The exception was in the upper section when Phoenix Lake was pumped almost dry in 2021 and the upper section became a series of disconnected pools. Moving downstream, groundwater entered the creek and the flow became continuous even in 2021.

It's worth noting that when water stops flowing over the spillway, the upper section of the creek is fed by the leaky low-level release valve; that water input should not be cut off.

A habitat needs assessment to provide dry season flows adequate to support juvenile rearing of coho and steelhead should be provided. The hydrology information in recommendation #1, combined with actual creek flow measurements, will provide the information needed in the creek to maintain connection between pools while fish are present; i.e, it will establish the minimum instream flow. Once the low-level release valve is replaced and upgraded, it can be adjusted and set to maintain the minimum flow in Ross Creek. It is recommended that a specific formal or informal water right for instream flow be determined by Marin Water for Ross Creek. This is a similar approach that is being used for the Green Gulch tributary to Redwood Creek.

In meetings held during preparation of the assessment of fishery resource conditions of the Corte Madera Creek Watershed (AA Rich 2000), the author recommended a few pulsed releases of water into Ross Creek as necessary to promote emigration by smolts in April or May. Unfortunately, she did not include that recommendation in the report. We recommend that it be evaluated by a qualified fisheries biologist.

Recommendation 4: Remove barriers to fish passage in Natalie Coffin Greene Park.

Ross Taylor and Associates (2000) prepared an assessment of barriers to fish passage in the Corte Madera Creek Watershed. Two barriers were identified in Natalie Coffin Greene Park: one is an apron at the bridge near the picnic structure and the second is a pipeline in the bed of the creek a short distance downstream of the first. The bridge is currently closed. If the Town of Ross is planning to replace it, this would be an excellent time to redo the crossing and remove the barrier.

Recommendation 5: Complete a survey of Ross Creek and identify habitat restoration opportunities.

Complete a Habitat Enhancement Plan to be implemented over time. In Eric Ettlinger's 2005 fish survey, he reported that 80% of the catch was comprised of native species including 185 Steelhead (62%). This is a valuable reach of stream for maintaining rare habitat and biodiversity in the region. It is also used for education, recreation, and solitude.

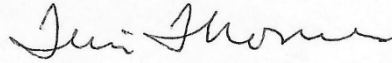
Conclusion

Through these actions, and others suggested by hydrologists and fisheries experts, the District will be implementing its stated policies on biodiversity in Policy 7. Taking this opportunity to improve conditions for aquatic life in the Phoenix/Bon Tempe/Ross Creek system, consistent with these policies, is a balanced approach to the agency objectives and some components could possibly be funded by grants.

Submitted by:



Sandra Goldman, President
Friends of Corte Madera Creek Watershed



Terri Thomas
Director, Marin Conservation League
Chair, Parks and Open Space Committee

References Cited:

A.A. Rich & Associates. 2000. Fishery Resources Conditions of the Corte Madera Creek Watershed, Marin County, California. Prepared for Friends of Corte Madera Creek Watershed by A.A. Rich and Associates, San Anselmo, California, November 10, 2000

Ross Taylor and Associates. 2006. Corte Madera Creek Stream Crossing Inventory and Fish Passage Evaluation. Prepared for Friends of Corte Madera Creek Watershed, with funding from the National Fish and Wildlife Foundation. 54 p and appendices.

c: Marin Water Board of Directors
NOAA Fisheries (*Sara Azat, Dan Logan, Darren Howe, Bob Coey, Dan Wilson*)
SFRWQB (*Xavier Fernandez, Holly Garber*)

SWRCB (*Matthew McCarthy*)
CDFW (*Alex Single*)
Marin RCD (*Sarah Phillips*)

From: [Sara Azat - NOAA Federal](#)
To: [Sandra Guldman](#)
Cc: [Board Comment](#); [Darren Howe](#); [Xavier Fernandez](#); [Holly Garber](#); [Matthew McCarthy](#); [Alex Single](#); [Sarah Phillips](#); [Terri Thomas](#)
Subject: Re: Comments on Final IS/MND Phoenix Lake - BonTempe Connection
Date: Tuesday, July 2, 2024 2:29:24 PM

Hi Sandy,

Thank you for your very productive email with recommendations to the Phoenix-Bon Tempe Connection Project to improve outcomes for CCC steelhead and CCC coho critical habitat in the project area.

I wanted to let you know that Marin Water has requested a meeting with NOAA Fisheries (I just sent a response email). I will follow up with this group following that meeting.

Thank you for your continued support of the Corte Madera Creek Watershed.

Sincerely,

Sara

On Tue, Jul 2, 2024 at 1:57 PM Sandra Guldman <sandra.guldman@gmail.com> wrote:

Marin Water Board,

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The Marin Water Board proposes to approve the IS/MND at its meeting Tuesday, 6/18. See our comment letter attached.

Sandy

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Sara Azat ([she/her](#))

Fish Biologist

NOAA Fisheries - West Coast Region

U.S. Department of Commerce

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