



State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Northern Region
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Redding, CA 96001
www.wildlife.ca.gov

GAVIN NEWSOM, Governor
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June 9, 2021

Bill Hardwick
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SUBJECT: Response Outline of Key Terms for Drought Year 2021 Actions on Mill Creek, Tehama County

Dear Bill Hardwick,

Thank you for the submission of the Outline of Key Terms for Drought Year 2021 Actions on Mill Creek (Outline) to the State Water Resource Control Board (SWRCB) on May 13, 2021. The California Department of Fish and Wildlife (Department) agrees with Los Molinos Mutual Water Company's (LMMWC) identified purpose of implementing short term actions on Mill Creek for water conservation and supply, as well as improved fisheries conditions. The Department is also committed to developing long term solutions for increased ecological benefits, improved fish passage conditions in conjunction with instream flow, and other actions on Mill Creek that may reduce the need for future regulatory actions on Mill Creek. The Outline included the following measures/actions to be taken:

- Forbearance/Flow measures for 2021
- Temperature Monitoring for Cessation Forbearance
- Multi-Benefit Channel Restoration Project
- Environmental Permits, Approvals, and Immunities
- Funding for the State of California

Forbearance/Flow measures for 2021

The Outline identifies that a base flow of not more than 25 cubic feet per second (cfs) measured at the Ward Dam from May 15 to June 15, and not more than 50 cfs from October 15 to November 30 will be provided by LMMWC. Department flow studies have identified that higher flow volumes than 25 cfs are required to support adult salmonid passage at critical riffles and maintain aquatic ecosystem function. Critical riffles are considered the shallowest areas in a stream channel and are particularly sensitive to low flows. Adult salmonid passage at critical riffles is maintained when species depth criterion is attained over a defined percent of the critical riffle. The Department's draft Instream Flow Criteria for Mill Creek, Tehama County (Flow Criteria) document identifies adult Chinook salmon (*Oncorhynchus tshawytscha*) passage flows of 260 cfs to achieve 0.9 ft. depth across 25% width of critical riffles and 140 CFS

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required for smallest incremental width of 0.9 ft. Adult steelhead passage flows require 190 cfs to achieve 0.7 ft. depth across 25% total portion of the maximum critical riffle transect length and 90 cfs is required for the smallest increment of 2 ft. width at 0.7 ft. depth. A summer ecological flow is needed to conserve and protect aquatic resources during the summer months when adult salmonid migrations have ended to preserve ecosystem structure and function in lower Mill Creek. Summer ecological flows are identified as 30 cfs. The 2014 California Endangered Species Act Memorandum of Understanding (CESA MOU) between the Department and LMMWC identified that for adult and juvenile Spring run Chinook salmon 50 cfs between April 1 and June 14 and 25 cfs between June 15 and June 30 would be required. For the fall period, 50 cfs was identified from October 15 or on October 1 through mutual agreement, in the event of early rain events. The October 15 flow request of 50 cfs has been completed since 2012 using the flow exchange agreement. The Department considers flows identified in the CESA MOU to be the absolute minimum in drought periods and used in conjunction with non-flow actions identified in the CESA MOU. The Department requests that LMMWC review the Departments Flow Criteria to determine if these flows are sustainable in the absence of a CESA MOU.

The Department appreciates the two pulse flows already provided by LMMWC and one planned this week for the benefit of Spring run Chinook salmon (*Oncorhynchus tshawytscha*) and Central Valley Steelhead (*O. mykiss*) as well as other native fish species.

Temperature Monitoring for Cessation Forbearance

The Outline identifies a temperature threshold of 68 degrees (20°C) upon which proposed forbearance measures would cease. The Environmental Protection Agency (EPA) maximum seven day average daily maximum (7DADM) thresholds are estimates of thermal conditions for salmonids and not rigid thresholds. For example, the EPA states that migration may be reduced at temperatures greater than 20°C but not prohibited. Real-time Spring run Chinook salmon migration monitoring at Ward Dam has documented fish passing through the system when water temperatures were above 20°C. In addition, temperatures below Ward Dam are greatly affected by water diversion actions at Upper Dam as well as Ward Dam, so forbearance measures are controlled by diversion activities and not natural temperature regimens that would occur in an unimpaired condition. Comparison of mean daily water temperature values at the Upper and Lower Mill Creek stream gauges show that water temperatures are lower for unimpaired flows versus impaired flows and that the difference between impaired and unimpaired water temperatures are exacerbated in dry years versus wet years. The Department currently collects water temperature in Mill Creek at multiple locations in addition to gauges and the Department supports more discussion on temperature issues on Mill Creek, both from an unimpaired perspective, as well as under current diversion practices to protect fish migration, spawning, and rearing.

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Multi-Benefit Channel Restoration Project

The Outline identifies multi benefit channel restoration projects on Mill Creek. The Department has responded to both the April 2, and May 5, 2021 joint letters from Mill and Deer Creek water diversion operators regarding this subject and on April 19, 2021 met with both LMMWC and Stanford Vina Ranch Irrigation Company at the mouth of Mill Creek to discuss how to move forward on this topic. As stated in our May 18, 2021 letter, the Department supports the development of a comprehensive flow and passage strategy for both Deer and Mill Creeks that includes temperature and flow requirements, short term fish passage actions, channel restoration, and all other relevant conditions and issues including permitting pathways.

Environmental Permits, Approvals, and Immunities

Section 6 of the Outline requests that the State Water Resources Control Board (SWRCB) not pursue emergency regulations or take other actions if LMMWC is acting in good faith to pursue multi-benefit channel restoration projects. The Department's understanding of section b. and c. is that LMMWC would like State and Federal Endangered Species Act (ESA) Coverage in the form of Safe Harbor Agreements for threatened Spring run Chinook salmon and federal ESA coverage for Central Valley Steelhead. If LMMWC would like to begin the development of a Safe Harbor Agreement with the Department we must be formally notified of this. As this section identifies immunities for LMMWC, it is important to discuss Department regulatory requirements for flow in addition to CESA and the Lake or Streambed Alteration Agreement process for which LMMWC is currently reviewing a draft sent on April 7, 2021.

Fish and Game Code Section 5937 requires the owner of a dam to allow sufficient water at all times to pass through a fishway, or in the absence of a fishway, allow sufficient water to pass over, around or through the dam, to keep in good condition any fish that may be planted or exist below the dam. It is important to note that this statute is not specific to salmonids and is protective of all fish species present in a given system. As the water available in Mill Creek diminishes in the summer months, the Department recommends you contact us prior to diversion operations that may impact flows and the potential for Mill Creek to no longer have suitable water quality conditions to keep fish in good condition. In addition, as Fall run Chinook salmon enter the system following flow restoration on October 15, additional water may be needed to ensure passage and migration as well support water temperatures for spawning.

Funding from the State of California

Funding to LMMWC in the amount of 2.1 million dollars is identified for the "purpose of implementing, in Water Users' discretion, water conservation, water efficiency, system improvement, or other water related improvements within their respective service areas". The Department has supported numerous restoration projects and studies in Mill Creek and will continue to do so in future. One concern the Department has is that

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during the recent April 23, 2021 watershed call with LMMWC and multiple State and federal agencies, a statement was made regarding funds spent on water efficiency projects solely for the purpose of getting customers their water and not conservation for the purpose of providing water towards needed instream flows. The Department will not support water efficiency conservation projects funded with fisheries restoration funds that do not have a direct measurable and sustainable value to the flows in Mill Creek. The Department recommends evaluating the Water Use Efficiency Plans for LMMWC developed in March 2018 by Davids Engineering, and paid for by the Department, to determine what actions should be completed to increase water efficiency for conservation benefit.

The Department thanks LMMWC for the development of the Outline as a start in identifying ways to reduce water diversion impacts to listed salmonids, native fish and other fish and wildlife resources impacted by low flow conditions. The Department recommends evaluating the Flow Criteria to determine what additional flows can be provided to ensure suitable conditions for salmonids are present during critical time periods. The Department looks forward to reviewing a revised LMMWC Outline based on our comments.

Without an acceptable local agreement, the Department will work with the SWRCB to ensure suitable flows and conditions are available on Mill Creek for salmonids and other fish and wildlife resources during the current drought conditions.

If LMMWC would like to develop CESA MOUs like those utilized in 2014 and 2015 or engage in discussions regarding Safe Harbor, or have additional questions regarding this letter, please contact Senior Environmental Scientist Michael Harris at (530) 410-5334 or at Michael.R.Harris@Wildlife.ca.gov.

Sincerely,

DocuSigned by:

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