



## State Water Resources Control Board

December 21, 2023

Mr. Wayne Allen Southern California Edison Company 1515 Walnut Grove Avenue Rosemead, CA 91770 Sent via email: Wayne.Allen@sce.com

Kimberly D. Bose, Secretary Federal Energy Regulatory Commission 888 First Street, NE Washington, D.C. 20426 **Via e-filing to FERC Docket P-1389** 

Rush Creek Hydroelectric Project Federal Energy Regulatory Commission Project No. 1389 Mono County Rush Creek, Waugh Lake, Gem Lake, and Agnew Lake

## COMMENTS ON THE INITIAL STUDY RESULTS FOR THE RUSH CREEK HYDROELECTRIC PROJECT

Dear Mr. Allen and Secretary Bose:

Southern California Edison (SCE) owns and operates the Rush Creek Hydroelectric Project (Project), also referred to as Federal Energy Regulatory Commission (FERC) Project No. 1389. On October 26, 2023, SCE filed the 2023 Initial Study Report for the Rush Creek Project (ISR) with FERC. An Initial Study Report Meeting was held on November 9, 2023, and an Initial Study Report Meeting Summary was filed on November 21, 2023. State Water Board staff have reviewed the ISR and are submitting the enclosed comments in Attachment A: *Comments on the Initial Study Report for the Rush Creek Hydroelectric Project*.

E. JOAQUIN ESQUIVEL, CHAIR | EILEEN SOBECK, EXECUTIVE DIRECTOR

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If you have questions regarding this letter, please contact Adam Cohen by email at <u>Adam.Cohen@waterboards.ca.gov</u>. Written correspondence should be directed to:

State Water Resources Control Board Division of Water Rights Water Quality Certification Program Attn: Adam Cohen P.O. Box 2000 Sacramento, CA 95812

Sincerely,

Adam Cohen, Ph.D. Senior Environmental Scientist, Specialist Water Quality Certification Program Division of Water Rights

Attachment: Attachment A: Comments on Initial Study Report for the Rush Creek Hydroelectric Project ec: Matthew Woodhall Southern California Edison Company Matthew.woodhall@sce.com

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## ATTACHMENT A: COMMENTS ON INITIAL STUDY REPORT FOR RUSH CREEK HYDROELECTRIC PROJECT

State Water Resources Control Board (State Water Board) staff are providing the following comments on Southern California Edison Company's (SCE) 2023 Initial Study Report for the Rush Creek Project.

 An additional year of data collection should be included for studies AQ-3 and AQ-4 because of anomalous environmental conditions that occurred during water year 2023 (October 1, 2022 through September 30, 2023). Title 18 Code of Federal Regulations, section 5.15(d) specifies that:

"Any proposal to modify an ongoing study pursuant to paragraphs (c)(1)-(4) of this section must be accompanied by a showing of good cause why the proposal should be approved, and must include, as appropriate to the facts of the case, a demonstration that:

(1) Approved studies were not conducted as provided for in the approved study plan; or

(2) the study was conducted under anomalous environmental conditions or that environmental conditions have changed in a material way."

Water year 2023 was an anomalously wet water year throughout the Sierra Nevada, including at the Rush Creek Hydroelectric Project (Project). At the California Department of Water Resources Dana Meadows weather station (Station ID DAN), approximately 12 miles northwest of the Project, the annual maximum snow depth in 2023 was tied (with late March 1983) for the highest on record (Figure 1).

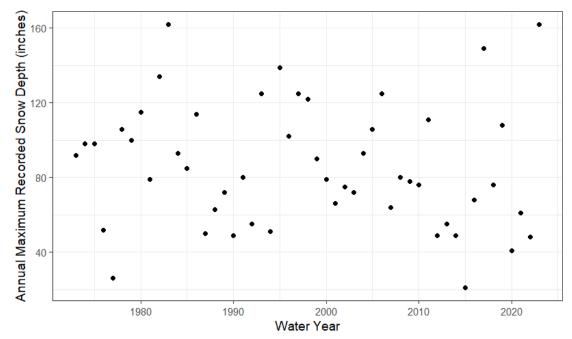


Figure 1: Annual maximum snow depth recorded at Dana Meadows snow course, 1973 - 2023. California Data Exchange Center station "DAN", operated by the California Department of Water Resources.

The United States Geologic Survey (USGS) West Walker River near Coleville gage (USGS gage no. 10296000) in the eastern Sierra, which is largely unimpaired by diversions or dams, had the second highest mean daily flow since 1939 (Figure 2).

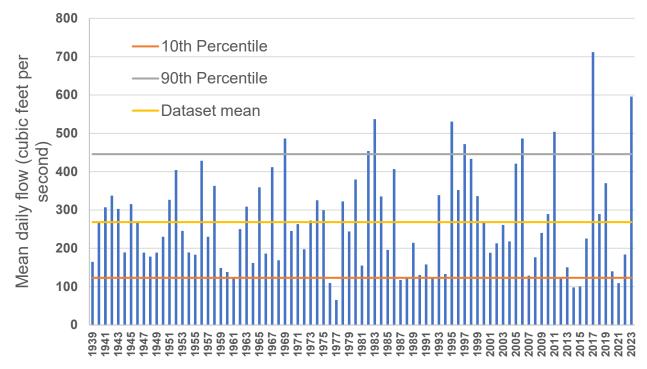


Figure 2: Mean daily flow at West Walker River near Coleville (USGS Gage 10296000), 1939 - 2023.

In the Sierra Nevada, as in other snow-dominated watersheds, accumulated winter snow and resultant snowmelt are the primary controls on several aspects of lake chemistry, including water temperature, some nutrient concentrations, and phytoplankton biomass (Sadro et al., 2018). As 2023 was an exceptionally high snow year, water quality data collected as part of AQ-3 Water Temperature and AQ-4 Water Quality are not representative of conditions that typically occur. Additionally, Project operations and maintenance have the potential to impact water temperature and quality, but analyzing potential Project effects using data from an exceptionally high snow year may diminish any potential Project effects or make them difficult to discern. The Initial Study Report (ISR) acknowledges that 2023 was an abnormally high snow year. For example, no reservoir profiles could be recorded at Gem Lake "due to the presence of snow and associated limited access". Similarly, because winter snowpack in the western United States is declining over the long-term (Barnett et al. 2008), water temperature and chemistry data collected during drier conditions are necessary to understand potential Project effects, and to inform potential protection, mitigation, and enhancement measures throughout the duration of a multi-decade license. Pursuant to 18 Code of Federal Regulations section 5.15(c), State Water Board staff request an additional year of data collection for studies AQ-3 and AQ-4

because of the anomalous environmental conditions that occurred in water year 2023; if snowpack in spring 2024 is again above-average, the second year of collection should be delayed until a below-average year occurs.

- 2. In addition to the reasoning specified in Comment 1, additional data collection may be necessary to determine compliance with the Water Quality Control Plan for the Lahontan Region (Basin Plan). Several Basin Plan objectives define an exceedance as relative to "natural" or "normal" conditions (e.g., turbidity, pH), which cannot be determined from anomalous conditions. AQ-4 states that additional data collection will only be conducted if data collected in the first year of sample collection indicate an exceedance for a particular water quality parameter; however, no data have been provided to State Water Board staff to determine whether any exceedances have occurred, and given the anomalously high snow year during which the data were collected, State Water Board staff believe it would be difficult to determine whether an exceedance occurred.
- 3. As described in Comment 1, snowpack and associated streamflow was anomalously high in 2023. Surveys conducted for AQ-7 Special-Status Amphibians and Aquatic Reptiles may suffer from similar issues to AQ-3 and AQ-4, in that abnormal conditions may have prevented collection of data representative of typical conditions in the Project area. An additional year of surveys in a drier water year is needed to accurately determine presence of special-status aquatic species within Project-affected waters.
- 4. As the eventual lead agency for the California Environmental Quality Act process for Project relicensing, State Water Board staff look forward to obtaining additional information and data from the decommissioning study required by the Federal Energy Regulatory Committee (FERC) in the October 26, 2022 Study Plan Determination. The Phase II Study as described in the ISR Meeting Summary indicates a need for understanding potential toxicity in sediment accumulated behind Project dams; State Water Board staff are available to discuss methods and parameters to be measured, and encourage collection of sediment toxicity data simultaneously with additional water quality sampling in 2024.

## REFERENCES

Barnett, T.P., Pierce, D.W., Hidalgo, H.G., Bonfils, C., Santer, B.D., Das, T., Bala, G., Wood, A.W., Nozawa, T., Mirin, A.A. and Cayan, D.R., 2008. Human-induced changes in the hydrology of the western United States. *science*, *319*(5866), pp.1080-1083.

Sadro, S., Sickman, J.O., Melack, J.M. and Skeen, K., 2018. Effects of climate variability on snowmelt and implications for organic matter in a high-elevation lake. *Water Resources Research*, *54*(7), pp.4563-4578.