



Foothills Water Network

COMMENTS ON THE APPLICANT-PREPARED DRAFT ENVIRONMENTAL IMPACT REPORT (APDEIR) FOR THE NEW BULLARDS BAR ARC SPILLWAY THE YUBA RIVER DEVELOPMENT PROJECT (P-2246)

August 22, 2023

Mr. John James
Director of Resource Planning
Yuba County Water Agency
1220 F Street Marysville, CA 95901

Sent via email to jjames@yubawater.org and via U.S. mail

Re: Comments on the Applicant Prepared Draft Environmental Impact Report (DEIR) for the New Bullards Bar Atmospheric River Control Spillway as part of the Yuba River Development Project (P-2246)

Dear Mr. James:

The Foothills Water Network (FWN or Network) and its member organizations¹ respectfully respond to the Draft Environmental Impact Report (DEIR) for the New Bullards Bar Atmospheric River Control (ARC) Spillway (Project) prepared by the Yuba Water Agency (YWA). The Foothills Water Network represents a broad group of non-governmental organizations and water resource stakeholders in the Yuba River, Bear River, and American River watersheds. The overall goal of the Foothills Water Network is to provide a forum that increases the effectiveness of non-profit conservation organizations to achieve river and watershed restoration and protection benefits for the Yuba, Bear, and American rivers.

Project description and uses

The DEIR provides the following project description:

Releases from the ARC Spillway would be made in anticipation of large storms to provide increased capacity in the Reservoir during high precipitation events. The ARC Spillway would have a discharge capacity of approximately 35,000 cfs and operate conjunctively with the Primary Spillway and New Colgate Powerhouse to meet the Dam's overall target releases. The ARC Spillway will primarily be used during small-

¹ American Rivers, American Whitewater, California Sportfishing Alliance, Friends of the River, Gold Country Fly Fishers, Northern California Council, Fly Fishers International, Sierra Club-Mother Lode Chapter, South Yuba River Citizens League, and Trout Unlimited.

and medium-sized flood events to maintain the designated flood space as well as during larger floods to evacuate a portion of the conservation storage (i.e., reservoir storage space below USACE-mandated flood space) to manage flood flows. During smaller flood events, flood releases may be made using only the Primary Spillway or only the ARC Spillway.²

According to the Project Description, an objective is also to “(a)ddress and accommodate uncertainty in hydrologic predictions due to climate change and other factors and improve water conveyance flexibility and integrate enhanced operations to respond to these changes.”³

The Network is concerned that the DEIR is deficient in that it does not disclose all of the anticipated operations at the ARC Spillway. In accordance with CEQA, all anticipated operations must be fully identified, evaluated for impacts, and mitigated to the extent necessary. This includes instances where the implementation of a proposed project is a condition precedent to or is an integral part of a later action. In fact, YWA’s DEIR explicitly states:

Courts have considered separate activities as one CEQA project and required them to be reviewed together in these situations:

- When the second activity is a reasonably foreseeable consequence of the first activity (the project under review) and the second activity will be significant in that it will likely change the scope or nature of the first activity or its environmental effects.
- When the second activity is an integral part of the same project (i.e., a project description must include future phases or parts of the project that will foreseeably result from first project approval).
- Distinct activities should be reviewed together as a single project when the purpose of the first activity is to provide the necessary first step under a larger development and when development of the first activity review requires or presumes completion of the second activity. For example, is the first activity a crucial or required functional element of a larger proposed project such that, without the first activity, the larger project could not proceed?”⁴

Despite this clear articulation of CEQA’s project description standard, the DEIR fails to adequately describe operations the proposed project appears designed to facilitate based on information in the DEIR itself, YWA resources, and recent New York Times reporting.⁵

² DEIR, p. 1-4.

³ DEIR, p. 2-2

⁴ DEIR, p. 2-40.

⁵ Christopher Cox, “The Trillion Gallon Question: Extreme weather is threatening California’s dams. What happens if they fail?”, *NY Times Magazine*, June 22, 2023, updated July 21, 2023. (“New Bullards Bar had recently become part of a pilot program known as Forecast-Informed Reservoir Operations. Under standard procedures, Yuba Water was allowed to schedule releases only in response to actual reservoir levels. With FIRO, though, more water could be spilled in advance if the forecast called for a big storm, and more water could be held back if meteorologists predicted a dry spell.

“That forecast wasn’t terribly useful, however, without the second part of Yuba’s plan: a new spillway, which they wanted to install to the right of the current one. Crucially, its intake would be lower, allowing it to release water even when the reservoir was nowhere near the crest.”)

Anticipated Operations

The project description and discussion of operations focus solely on the spillway's use for rare major flood events or emergencies. Nowhere in the DEIR is there a discussion or analysis of operations outside of flood events.

YWA, however, also intends to benefit from the spillway during dry years. According to a public education film on the YWA's relicensing website: "Additionally, during some dry water years, if no storms are forecast, we can potentially hold on to water that we normally would have had to release, which could be especially valuable when water availability is scarce." The film also states that "water can be held in the reservoir during times of scarcity."⁶

In other words, with the new spillway, YWA will have more operational flexibility, not only during atmospheric river events, but also to conditionally encroach into the New Bullards Bar flood reservation during and after high flow, but non-flood, events in years of relative water scarcity, in a re-evaluation that is already ongoing. The DEIR makes no effort to evaluate the impacts associated with this strategy or, for that matter, of any operations plans outside of flood event releases.

The DEIR thus does not address impacts associated with all anticipated operational uses of the spillway. As described in the aforementioned YWA video, the second spillway's location 31.5 feet below the currently existing New Bullards Bar Dam spillway location will allow YWCA to operate the reservoir based on Forecast Informed Reservoir Operations (FIRO), rather than an inflexible time-of-year based approach. The FIRO model will allow for more flexible operations that result in more storage of water during certain times of the year, including the fall (when storms are intermittent and, in dry years). The FEIR must address the potential impacts of reduced flood control releases that such operations will enable.

Forecast Informed Reservoir Operations

In analyzing impacts of the ARC Spillway project, the FEIR must analyze the reasonably foreseeable impacts of FIRO operations, because construction of the ARC Spillway is a condition precedent to FIRO modifications to New Bullards Bar operations. However, the DEIR fails to analyze FIRO operations and new anticipated operations⁷ implemented under a new USACE Flood Control Manual (Water Control Manual).⁸ As a result, the DEIR fails to analyze the impacts to fish, other aquatic species, hydrology, and the riparian corridor that result from the associated reduction in downstream flow, and in particular, reduced frequency of flood control releases, associated with potentially increased effective storage availability.

⁶ (See ARC Sillway Animation Explainer, available at <https://www.yubawater.org/252/ARC-Spillway-at-New-Bullards-Bar-Dam>.)

⁷ https://cw3e.ucsd.edu/FIRO_docs/Yuba-Feather_PVA.pdf.

⁸ "New Bullards Bar Reservoir, North Yuba River, California, Reservoir Regulation for Flood Control, Appendix V to Master Manual of Reservoir, Regulation, Sacramento River Basin, California," Department of the Army, Sacramento District, Corps of Engineers, Sacramento, California, June 1972.

Operational Alternatives

The DEIR looks at only one potential operational alternative: to benefit from the new spillway in “small flood” periods. It explains that YWA’s “initial investigations” determined that this is not a feasible alternative. The DEIR states:

“Initial investigations by YCWA determined that more frequent use of the ARC Spillway under the existing Flood Control Manual could result in greater and more frequent changes in water temperature downstream during periods of release from the ARC Spillway; further investigation and hydraulic modeling would be required to identify and evaluate additional potential changes in temperature and water quality, and their related environmental impacts.”⁹

The DEIR does not provide sufficient information and data for the public to understand, evaluate, and respond to this potential alternative. The FEIR needs to disclose the hydrology and water temperature data used to make this conclusion.

Cumulative Impacts

Section 1.1.1 of the DEIR states, “The New Bullards Bar Reservoir (Reservoir) and Dam are the cornerstone of the multipurpose Yuba River Development Project (YRDP) constructed and operated by YCWA under Federal Energy Regulatory Commission (FERC) License Number 2246.”¹⁰ Other ongoing work related to License Number 2246 escapes evaluation in the DEIR, raising piecemealing concerns. YWA explicitly identifies “other pending or proposed YCWA river-related activities,” including (1) Yuba River Development Project FERC Relicensing, (2) USACE Water Control Manual Update, (3) Bay-Delta Voluntary Agreement Memorandum of Understanding, and (4) Lower Yuba River Accord Water Transfer Program Extension. However, the DEIR fails to analyze the cumulative impacts of the ARC Spillway construction and operation when considered with these additional identified activities, as well as impacts from past and ongoing activities.

The Yuba River was once home to one of California’s largest salmon runs. However, spring-run Chinook salmon in the Lower Yuba River are well below the numbers needed to sustain a viable population. In the last decade, numbers of wild origin fall-run Chinook salmon are substantially depressed.¹¹ The FEIR must situate the impacts of the proposed project within the context of the cumulative impacts of other actions on lower Yuba River fisheries.

Potential Mitigation Measures for Project Related Impacts

CEQA requires mitigation where feasible of significant impacts of a proposed project. Since the DEIR does not analyze all the anticipated operations made possible at New Bullards

⁹ DEIR, p. 5-10

¹⁰ DEIR, p. 1-1

¹¹ See “Yuba River Fall Run Salmon – Status Winter 2023,” Figure 3, available at: <https://calsport.org/fisheriesblog/?p=4301>.

Bar Reservoir associated with the operation and presence of the new spillway, and the impacts of such operations and presence, it does not propose mitigation for those impacts. As described above, reduced downstream flow, and particularly reduced frequency of flow pulses, will negatively impact already threatened and endangered fish populations in the Lower Yuba River.

YWA could mitigate the reduced frequency of flow pulses due to FIRO operations enabled by the new spillway. YWA could devote a portion of water conserved through changes to the effective flood reservation to additional pulse flow releases to the lower Yuba River. The River Management Team or successor could define the details of such releases. A starting point for quantity would be 20% of the gained water; this amount would be equivalent to the “gainshare” water that East Bay Municipal Utility District applies to fisheries benefits from water diverted in dry years through its Freeport facilities.

The FEIR should include this, or a similar, mitigation measure.

Conclusion

Thank you for consideration of the Network’s comments on the Applicant Prepared Draft Environmental Impact Report (DEIR) for the New Bullards Bar Atmospheric River Control Spillway. Please contact Traci Sheehan, Coordinator, Foothills Water Network, if you have any questions.

Respectfully submitted,



Traci Sheehan
Coordinator, Foothills Water Network
PO Box 573
Coloma, CA 95613
(530) 919-3219
Traci.sheehan@gmail.com



Chris Shutes
Executive Director
California Sportfishing Protection
Alliance
1608 Francisco St., Berkeley, CA 94703
(510) 421-2405
blancapaloma@msn.com



Meghan Quinn
California Dam Removal, Program
Director
American Rivers
120 Union Street,
Nevada City, CA 95959
(530) 539-5530
mquinn@americanrivers.org



Dave Steindorf
California Field Staff
4 Baroni Dr.
Chico, CA 95928
dave@amwhitewater.org



Ronald Stork
Senior Policy Staff
Friends of the River
3336 Bradshaw Road, Suite 335
Sacramento, CA 95827
(916) 442-3155
rstork@friendsoftheriver.org



Frank Rinella
Conservation Education Chair
Gold Country Fly Fishers
303 Vista Ridge Dr.
Meadow Vista CA, 95722
(530) 906-4116
sierraguide@sbcglobal.net



C. Mark Rockwell, Sr.

Mark Rockwell
Director and VP of Education
Northern California Council, Fly Fishers
International
5033 Yapple Ave.
Santa Barbara, CA 93111
(530) 559-5759
mrockwell1945@gmail.com



Robert C. Burness

Robert C. Burness
Conservation Committee Acting Chair
Sierra Club - Mother Lode Chapter
1722 J Street, Suite 226
Sacramento, CA 95811
(916) 956-0362
rmburness@comcast.net



Aaron Zettler-Mann

Aaron Zettler-Mann
Executive Director
South Yuba River Citizens League
313 Railroad Avenue, Suite 101
Nevada City, CA 95959
(530) 265-5961
aaron@yubariver.org



Brian J. Johnson

Brian J. Johnson
California Director
Trout Unlimited
5950 Doyle Street, Suite 2
Emeryville, CA 94608
(510) 528-4772
bjohnson@tu.org