



July 26, 2018

Via Electronic Submittal (eFile)

Kimberly D. Bose, Secretary  
FEDERAL ENERGY REGULATORY COMMISSION  
888 – 1st Street, N.E.  
Washington, D.C. 20426-0001

**Subject: Yuba River Development Project  
FERC Project No. 2246-042 – California  
Status - New Bullards Bar Dam Secondary Spillway Initiative**

Dear Secretary Bose:

This letter is an update regarding the Yuba County Water Agency's (YCWA) efforts related to constructing, operating and maintaining a second spillway (i.e., Secondary Spillway) at YCWA's New Bullards Bar Dam, which is part of YCWA's Yuba River Development Project, FERC Project Number 2246 (Project). New Bullards Bar Dam and Reservoir are located on the North Yuba River in Yuba County, California. The Secondary Spillway would be located on YCWA-owned lands.

### BACKGROUND

YCWA was established in 1959 for the primary purpose of providing flood protection and water supply for Yuba County. New Bullards Bar Dam is the primary component of YCWA's flood protection program. The dam is a 645-foot (ft) high, double curvature, thin arch concrete dam with an existing concrete ogee spillway that can pass about 20,000 cubic feet per second (cfs) of water at elevation 1,918 ft, which is the bottom of the flood pool. The spillway is controlled by three 30-ft high by 53-ft wide radial gates. New Bullards Bar Reservoir has a dedicated flood pool of 170,000 acre-feet (ac-ft) at elevation 1918 ft. and a maximum storage capacity of 966,103 acre-feet at an elevation of 1,956 ft.

The Secondary Spillway combined with improved levees is needed to help prevent reoccurrence of devastating floods that occurred in 1986 and 1987 (Figure 1), which cost several lives, devastated the local economy and cost the State of California \$500 million in legal claims.

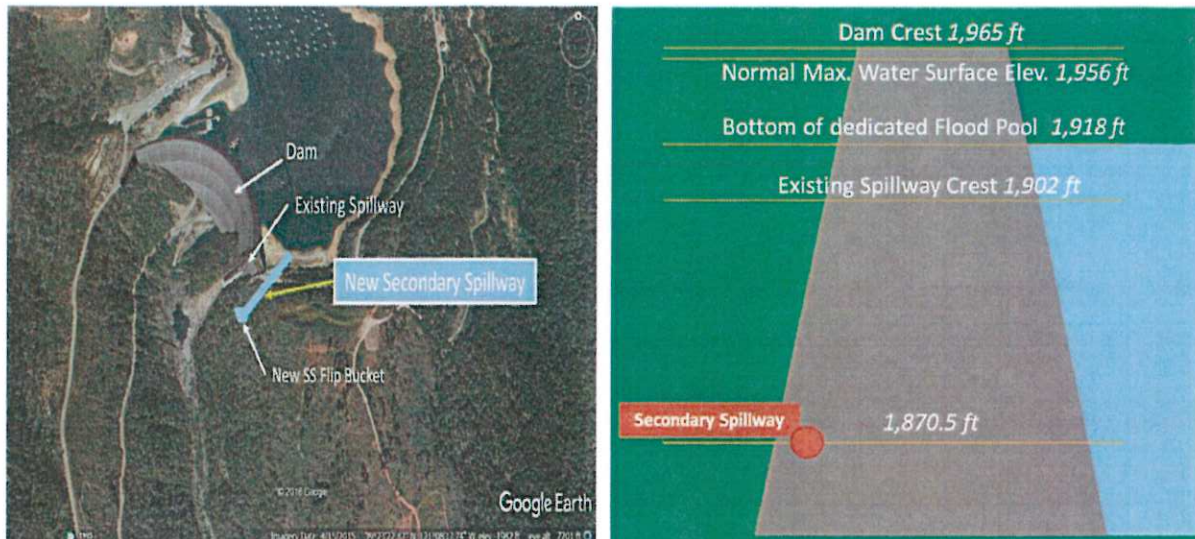


**Figure 1. Depictions of flooding during the 1986 (left photo) and 1997 (right photo) floods.**

In response to the 1997 flood, YCWA commissioned a study to identify potential flood risk reduction measures. One of the study recommendations was a second spillway at New Bullards Bar Dam, which has been part of YCWA's planning and investment strategy since then.

From the onset of Relicensing, the Secondary Spillway project was originally proposed and listed as the "New Bullards Bar Dam Auxiliary Flood Control Outlet" in YCWA's 2017 amended final application. The name was subsequently changed to Secondary Spillway.

Specifically, the Secondary Spillway would be constructed on the abutment side of the existing spillway and provide between 45,000 and 66,000 cfs of additional spillway capacity depending on reservoir elevation (Figure 2). For a detailed description of the Secondary Spillway's facilities, operations and construction refer to Section 5.1.2.1 in Exhibit A, Section 7.2.3 in Exhibit B, and Section 3.2.1 in Exhibit C, respectively, of YCWA's June 2017 amended application. YCWA estimates the cost to construct the Secondary Spillway is approximately \$160,000,000 in 2016 dollars.



**Figure 2. Location of proposed Secondary Spillway in relation to existing New Bullards Bar Dam facilities, and lower elevation from which the Secondary Spillway would withdraw water from New Bullards Bar Reservoir in relation to the existing spillway, dedicated flood pool and dam crest.**

The Secondary Spillway would significantly improve flood protection in Yuba County in many ways, such as:

- Create the ability to release additional water from New Bullards Bar Reservoir early in a major flood event when there is excess downstream flood channel capacity, which creates more flood space in New Bullards Bar Reservoir to absorb the peak inflow into the reservoir and reduce downstream peak flow.
- The Forecast Informed Operations of New Bullards Bar Dam, with the Secondary Spillway, and Oroville Dam results in a peak flood stage reduction of about 2 feet on the Yuba River at Marysville in a 1 in 200 year event. This is a significant flood stage reduction.
- Provide a cost effective flood risk reduction project with a benefit cost ratio of 2.14 at a Federal discount rate of 3.125%.
- Provide a redundant spillway that could handle the 1997 flood of record without any water flowing through the primary spillway.
- Provide additional dam safety enhancement by providing a large volume release capability at lower reservoir elevation.

The Secondary Spillway is not needed to meet dam safety requirements: YCWA is currently in full compliance with all FERC dam safety and Part 12 requirements.

The recent DWR's Oroville Dam spillway incident has highlighted the benefits of having multiple means of passing water during major storm events. Further, as evidenced by the 1986 and 1997 floods, the flood risks and associated costs to Yuba County and the State are real and could occur at any time. Therefore, YCWA believes it is in the best public interest to have the Secondary Spillway, which would significantly reduce these flood risks, in place as soon as reasonably possible, and not wait until FERC issues the new Project license, which could be many years away.

### **STATUS OF YCWA's EFFORTS**

On June 5, 2018, the YCWA Board authorized \$11 million dollars over three years to complete the engineering and design of the Secondary Spillway. This includes the below actions.

Over the next few months, YCWA will complete the design of a geotechnical investigations work plan and obtain any necessary permits and approvals, including from FERC, and consult with potentially affected Tribes, as needed, to perform the geotechnical investigations beginning in September 2018. These investigations will inform the design of the Secondary Spillway. YCWA anticipates that the 30 percent design for the Secondary Spillway will be complete by October 2019 and final design by late 2020.

With regards to National Environmental Policy Act (NEPA) review for construction, operation and maintenance of the Secondary Spillway, YCWA anticipates that the NEPA environmental impact statement (EIS) being prepared by FERC for the Project relicensing will address NEPA issues related to the Secondary Spillway in a timely manner since the final EIS is scheduled to be issued by late 2018. YCWA intends to work with FERC and other agencies regarding any necessary federal reviews for the Secondary Spillway, if any are needed in addition to those in the relicensing final EIS.

While the Secondary Spillway is included in YCWA's AFLA for the Project relicensing for FERC's approval, it is possible that the new license may not be issued for many years. To ensure that the relicensing process does not hold up the public safety benefit of the Secondary Spillway, YCWA plans to request FERC's approval to construct and include the Secondary Spillway in the existing FERC license. To do that, YCWA intends to file with FERC a non-capacity application to amend the existing license in late 2019 when the 30 percent design is complete. YCWA might include in the filing an applicant-prepared draft environmental assessment (EA) specifically for the Secondary Spillway to facilitate FERC's review. The draft EA would use information from YCWA's AFLA and FERC's final EIS for Project relicensing, as well as any more current information available at that time. YCWA would request that FERC designate YCWA as its non-federal representative for consultation under Section 7 of the Endangered Species Act and Section 106 of the National Historic Preservation Act. When YCWA files its non-capacity amendment application, it would file a letter with FERC asking FERC to consider YCWA's early construction of the Secondary Spillway when FERC sets the

Ms. Kimberly D. Bose, Secretary  
Federal Energy Regulatory Commission  
June 29, 2018  
Page 5

term of the new Project license, consistent with FERC's current policy regarding credit for early implementation when setting the license term. YCWA intends to consult with FERC at the appropriate time regarding the formation of an independent board of expert consultants to review the design and construction.

YCWA anticipates it will prepare a stand-alone CEQA document for construction, operation and maintenance of the Secondary Spillway and apply to the SWRCB for the necessary WQC for the spillway. This is because construction of the Secondary Spillway may begin before YCWA, as the Lead Agency, completes a California Environmental Quality Act (CEQA) document for the Project relicensing and the State Water Resources Control Board, as a Responsible Agency, issues a Clean Water Act Section 401 Water Quality Certification (WQC) for the relicensing. The CEQA document would use information from YCWA's AFLA and FERC's final EIS for Project relicensing, as well as any more current information available at that time. YCWA would consult under CEQA with potentially-affected Tribes as needed, and obtain all necessary state and local permits and approvals to construct, operate and maintain the Secondary Spillway. At this time, YCWA anticipates conducting the CEQA review and obtaining the permits and approvals for construction, operation and maintenance of the Secondary Spillway in 2020 or early 2021.

YCWA looks forward to working with FERC to construct, operate and maintain the New Bullards Bar Dam Secondary Spillway, an important flood control facility for Yuba County and the State of California.

If you have any questions regarding this letter, please contact me.

Sincerely,



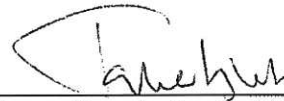
Curt Aikens  
General Manager

cc: Alan Mitchnick, FERC DC  
Parties on FERC's Official Service List for the Yuba River Development Project  
Relicensing, FERC Project No. 2246-042  
Relicensing Participants on YCWA's Yuba River Development Project's  
Relicensing E-Mail Contact List (via e-mail)

**CERTIFICATE OF SERVICE**

I hereby certify that I have this day served the foregoing document upon each person designated on the official service list compiled by the Secretary of the Federal Energy Regulatory Commission in this proceeding (Yuba River Development Project, FERC Project No. 2246-042).

Dated in Sacramento, CA this 26 day of June, 2018.



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James Lynch, Senior Vice President  
HDR Engineering, Inc.  
Hydropower Services  
2379 Gateway Oaks, Suite 200  
Sacramento, CA 95833  
(916) 679-8740