OROVILLE DAM CITIZENS ADVISORY COMMISSION

Hosted by the California Natural Resources Agency



ROLL CALL

- Supervisor Gary Bradford
- Lieutenant Steve Collins
- Supervisor Mat Conant
- Supervisor Bill Connelly
- Deputy Director Ted Craddock
- Secretary Wade Crowfoot
- Deputy Director Christina Curry
- Supervisor Dan Flores
- Assemblyman James Gallagher
- Supervisor Steve Lambert

- Deputy Andre Licon
- Supervisor Doug Lofton
- Lieutenant Joe Million
- Senator Jim Nielsen
- Councilmember David Pittman
- Mayor Chuck Reynolds
- Lieutenant Marc Stokes
- Superintendent Matt Teague
- Genoa Widener

ITEM 1:

WELCOME AND INTRODUCTIONS

ITEM 2:

COMPREHENSIVE NEEDS ASSESSMENT UPDATE

CALIFORNIA DEPARTMENT OF WATER RESOURCES

Oroville Dam Safety Comprehensive Needs Assessment

Oroville Dam Citizen's Advisory Commission Meeting August 21, 2020



John Yarbrough, DWR

Multiple Sources of Oroville Activities and Projects





Comprehensive Needs Assessment



Level 2 Risk Assessment and Part 12D



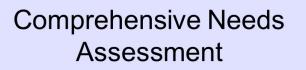
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CNA Purpose

The CNA is a planning study tasked with completing the following:

- Identify and prioritize dam safety and operational needs.
- Identify measures to improve the safety and reliability of Oroville Dam and its related structures.
- Identify potential plans (combinations of measures) for DWR to consider for future implementation and prioritization through normal practices and procedures.







Scope and Scale of the CNA

The CNA was organized into six technical focus areas, which were referred to as "tasks" in the CNA. Each of these tasks focused on a different aspect of the Oroville Dam facilities:

- Task 1 Emergency spillway
- Task 2 Operations
- Task 3 Flood Control Outlet headworks and chute
- Task 4 Low-level outlets (Hyatt Powerplant, River Valve Outlet System, and Palermo Tunnel Outlet)
- Task 5 Embankments (Main Dam, Bidwell Bar Canyon Saddle Dam, and Parish Camp Saddle Dam)
- Task 6 Monitoring and instrumentation



Independent Review Board

DWR has convened an Independent Review Board (IRB) to conduct independent technical reviews of key deliverables and document its review of DWR's work products

- Bruce C. Muller, Jr. (Chair), Independent Consultant; retired from US Bureau of Reclamation in 2018 as the Director of Security Safety and Law Enforcement.
- Elizabeth Andrews, PE, Vice President and Principal Engineer, Environmental Science Associates.
- Lelio Mejia, PhD, PE, GE, Senior Principal, Geosyntec Consultants, Inc.
- Paul G. Schweiger, PE, CFM, Vice President, Dams and Hydraulics Section Manager, Gannett Fleming, Inc.
- Daniel L. Wade, PE, GE, Director of San Francisco Public Utility Commission's Water Capital Programs (Mr. Wade resigned from the IRB in December 2019).



CNA Ad Hoc Group

Senator Jim Nielsen and Assemblyman James Gallagher appointed a group of community members to represent the community during the CNA.

- Senator Jim Nielsen (Co-Chair)
- Assemblymember James Gallagher (Co-Chair)
- DWR Representative John Yarbrough (Co-Chair)
- U.S. Representative Doug La Malfa
- Butte County Sheriff Kory Honea
- Butte County Supervisor Bill Connelly
- Matt Mentink
- Ron Stork

- Michael Bessette
- Mark Spannagel
- Genoa Widener
- Sean Earley
- Rune Storesund



DWR Commitment to FERC and DSOD

January 12, 2018 Letter from DWR to FERC

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Janu	Jary 12, 2018	
	Frank L. Blackett, P.E.	
Regi Fede	fonk E. Backet, F.E. Ional Engineer eral Energy Regulatory Commission First Street. Suite 2200	
	Francisco, California 94105-3084	
	C Project No. 2100 – Croville Dam, Dam S prehensive Needs Assessment Plan and S	
Dear	r Mr. Blackatt	
Fede Nen: Orov	star dated Juna 28, 2017, the Department - eral Energy Regulatory Commission (FERC to Assessment (project) to identify measure life Dem and the epotrement structures. (tified the following six project tasks:	c) of its intent to initiate a Comprehensive es to boister the safety and reliability of
•	Task 1 - Acematives Evaluation to Rest Probable Maximum Flood	ore Spillway Design Capacity to Pass the
•	Task 2 - Operations Needs Assessment Reservoir Outflow Enhancement	
	Task 3 - Flood Contro Outlet Enhanced	Reliability
	Task 4 - Attemstives Evaluation for Low	-level Outlet
	Task 5 - Oroville Dam Embankment Rel	liability and Improvements
•	Task 6 - Instrumentation and Monitoring	for the Oroville Dam Complex
2019 throu man the p	project is scheduled to begin January 16, 2 3. A list of prioritized cam safety and opera- ugh completion of the project. Those needs egement and scheduled as projects throug project progresses, the Project Manager mu- licant public safety and risk inclusion benc	Itional reliability needs with be produced s will then be evaluated by DWR in normal practices and procedures. As sy identify projects that provide

January 12, 2018 Letter from DWR to DSOD

State of California

Memorandum Date: JAN 12 2018

Te: Sharon K. Tapia, Chief Division of Safety of Dams

David R. Duval, Chief

Division of Operations and Maintenance From: Department of Water Resources

Subject: Dam Safety Comprehensive Needs Assessment Plan and Schedule, Oroville Dam (No. 1-48)

> By letter dated June 27, 2017, the Division of Operations and Maintenance (0&M) informed the Division of Safety of Dams (DSOD) of its intent to initiate a Comprehensive Needs Assessment (project) to dentify measures to botister the safety and reliability of Oroville Dam and the appurtnannt structures. Over the past several months, O&M has identified the tolowing six project tasks (Tasks 11 through B):

mia Natural Resources Agenc

- Task 1 Alternatives Evaluation to Restore Spillway Design Capacity to Pass the Probable Maximum Flood
- Task 2 Operations Needs Assessment to Support Development of Alternative Reservoir Outflow Enhancements
- Task 3 Flood Control Outlet (FCO) Enhanced Reliability
- Task 4 Alternatives Evaluation for Low-level Outlet
- Task 5 Oroville Dam Embankment Reliability and Improvements
 Task 5 Improvements
- Task 6 Instrumentation and Monitoring for the Oroville Dam Complex

The project is scheduled to begin January 16, 2018 and conclude by December 31, 2019. A list of privinged dam safety and operational reliability needs will be produced through completion of the project. Those needs will then be evaluated by DVM Management and scheduled as projects through normal practices and procedures. As the project progresses, the Project Manager may identify projects that provide significant pable safety and risk reduction benefits. Such projects may be project to project project progresses, the Project Manager may identify projects that provide significant pable safety and risk reduction benefits. Such projects may be project and the project progresses due to the provide supervised project and the project progresses as part of the implementation.

O&M will periodically request DSOD's participation in this effort so that DSOD staff can become familiar at an early stage of the development of future projects and supporting technical studies that may ultimately become formal submittals for review and approval.





General Approach

- Assess the condition of the facilities through a risk analysis
 - Identify any immediate dam safety concerns
 - Identify areas needing further investigation
 - Identify risks that warrant the development of measures
- Compare the risk analysis results with the parallel Level 2 Risk Assessment
- Identify potential risk-reduction measures and plans (combinations of measures)
- Identify any measures for immediate or near-term implementation
- Consider the remaining measures and plans in DWR's ongoing long-term planning of projects



Preliminary Results

- No dam safety issues were identified that had a need for immediate risk-reduction actions
- Several areas identified where additional information is needed
- Several measures identified for near-term implementation
- Additional measures identified for further consideration



What Comes Next for the CNA

- Complete and file the full CNA report with FERC by August 31, 2020
- Final meeting of the Ad Hoc group to review the draft Public CNA Report in September 2020
- Completion of the Public CNA Report in October 2020
- Present findings more thoroughly at the next OCAC





OROVILLE RECREATION UPDATE

LAKE OROVILLE STATE RECREATION AREA RECREATION FACILITY OVERVIEW

Day Use

- 7 Main Developed Day Use / Boat Launch Areas
- 5 Primative Day Use / Car-Top Boat Launch Areas
- Visitor Center Museum
- 3 Concessions
 - Bidwell Canyon Marina
 - Lake Oroville Marina at Lime Saddle
 - North Forebay Aquatic Center
- 88 Miles of Trails
 - 38 Miles Multi-Use
 - 22 Miles Equestrian / Hiking
 - 22 Miles Bicycle / Hiking
 - 6 Miles Hiking only

Camping

- S Developed RV/Tent Campgrounds containing a total of:
 - 255 Individual Family Campsites (8 person max)
 - 8 Group Campsites (25 person max)
 - 10 Equestrian campsites
- 5 Boat-In Campgrounds
- I0 Floating Campsites

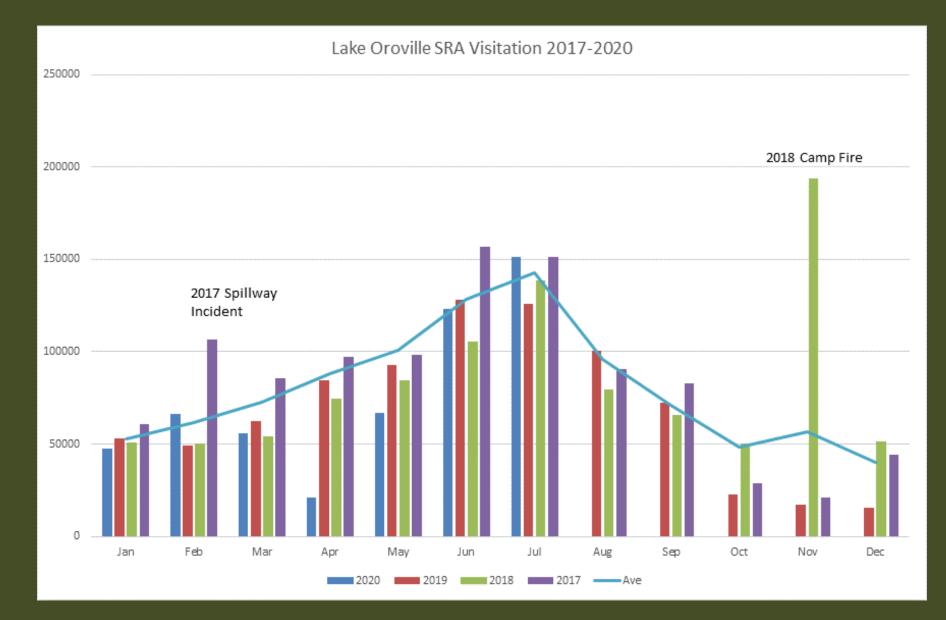


COVID-19 IMPACTS

- March 13, 2020: Closure of LOSRA Visitor Center and cancellation of tours and school programs and all special events.
- March 28, 2020: Closure to all vehicular traffic in all locations. Pedestrian and non-motorized access allowed for Day Use recreation only. Concession operations closed.
- May 15, 2020: LOSRA re-opened for Day Use only.
 Campgrounds and Visitor Center remained closed.
- June 22, 2020: LOSRA Campgrounds re-opened to individual family camping only. All group and floating campsites remain closed.
- Currently: Visitor Center all museum tours and programming remains closed. Group and floating campsites remain closed.



ATTENDANCE



Status of Recreation Projects - Oroville Spillways Reconstruction

Project Name	Status	
1. Boat Ramp Shuttle Service	Complete	
2. Lime Saddle Parking Expansion	Complete	
3. Bidwell Canyon Marina Parking Expansion	Complete	
4. Bidwell Canyon Stage 1 Boat Ramp Expansion	Complete	
5. Loafer Creek Parking Expansion	Complete	
6. Bidwell Saddle Dam Trailhead Improvements	Complete	
7. New Loafer Point Boat Ramp Stage 1	Complete	
8. Bidwell Canyon Stage 2 Expansion	80% Complete (to be completed fall 2020)	
9. Low Water Marina Access at Lime Saddle	~60% Complete (on hold due to Lake Elev.)	
10. New Loafer Point Boat Ramp Stage 2	Constr. to begin during fall 2020	
11. Enterprise Boat Ramp Extension	Design at 65%. (Est. Construction in 2023)	
12. Low Water Marina Access Bidwell Canyon	Design in progress (requires low Lake Elev.)	
Total Estimated Cost for Program:	\$43 Million	

Boat Ramp Shuttle Service



Bidwell Canyon Marina Parking Lot Expansion







Bidwell Saddle Dam Trailhead Improvements



Lime Saddle Parking Lot Expansion





Accessibility Improvements (a noteworthy side benefit!)

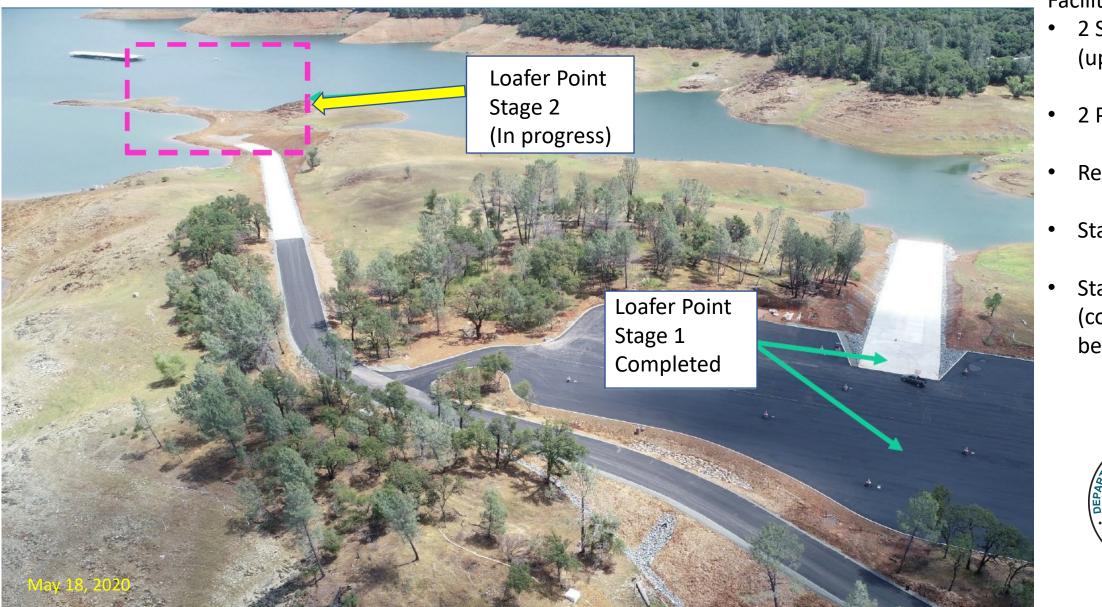




Upcoming Work (Fall 2020) Bidwell Canyon Stage 2 Improvements



Upcoming Work (Fall 2020) - New Loafer Point Boat Ramp



Facilities:

- 2 Stage Boat Ramp (upper & lower)
- 2 Parking Lots
- Restrooms
- Stage 1 Completed
- Stage 2 (construction to begin fall 2020)

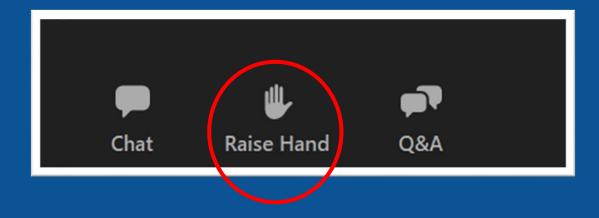




ITEM 4: PUBLIC COMMENT

• To comment, join queue by:

- Phone only: Dial "#2"
- Browser or Desktop App: Click "raise hand" button within the Participants tab as shown



 The operator will call on participants in the order that requests are received by announcing your name and unmuting you.

ITEM 5: ADJOURN

Thank you all for joining us today, our next Oroville Dam Citizens Advisory Commission meeting will be in November 13, 2020.

An audio record and transcription of this meeting will be posted on the CAC webpage.

