

Lake Oroville 2018 – 2019 Flood Operations Plan

64th Annual Meeting
Cooperative Snow Surveys Program
November 14, 2018

Tracy Pettit-Polhemus

Overview

- Goals
- Objectives
- Oroville Dam Outlets
- Operational Constraints
- Operations Strategy
- Next Steps

Goals

- Maintain dam safety
- Provide flood control benefits

Objectives

- Meet the USACE's 1970 WCM requirements
- Safely pass the SPF without activating the Emergency spillway
- Ensure
 - Equal or Greater Flood Protection
 - Elevations
 - Releases
 - Downstream flow levels
- No Increase to Dam Safety Risk

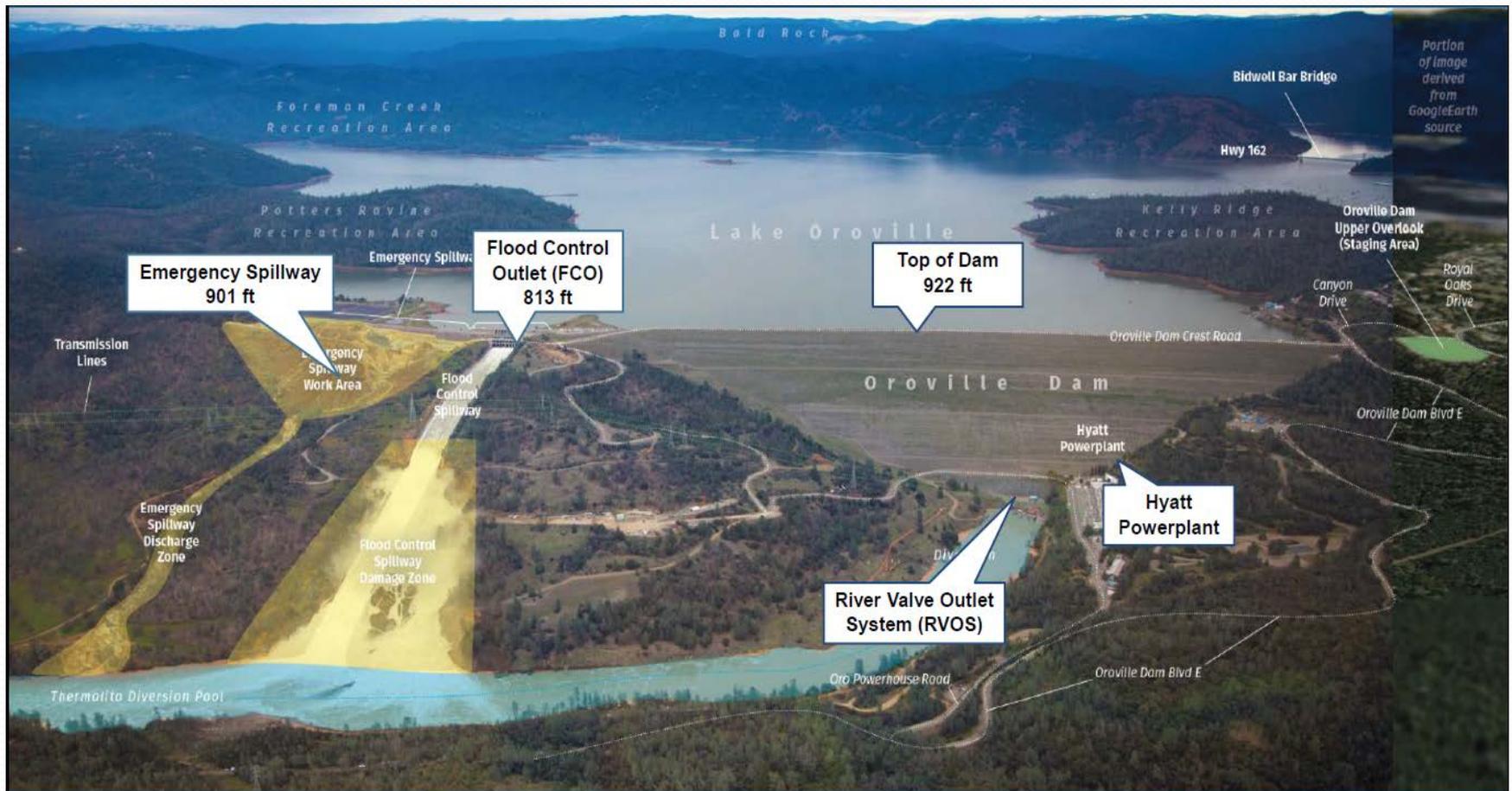
November 1, 2017



October 19, 2018



Oroville Dam Outlets



Operational Constraints

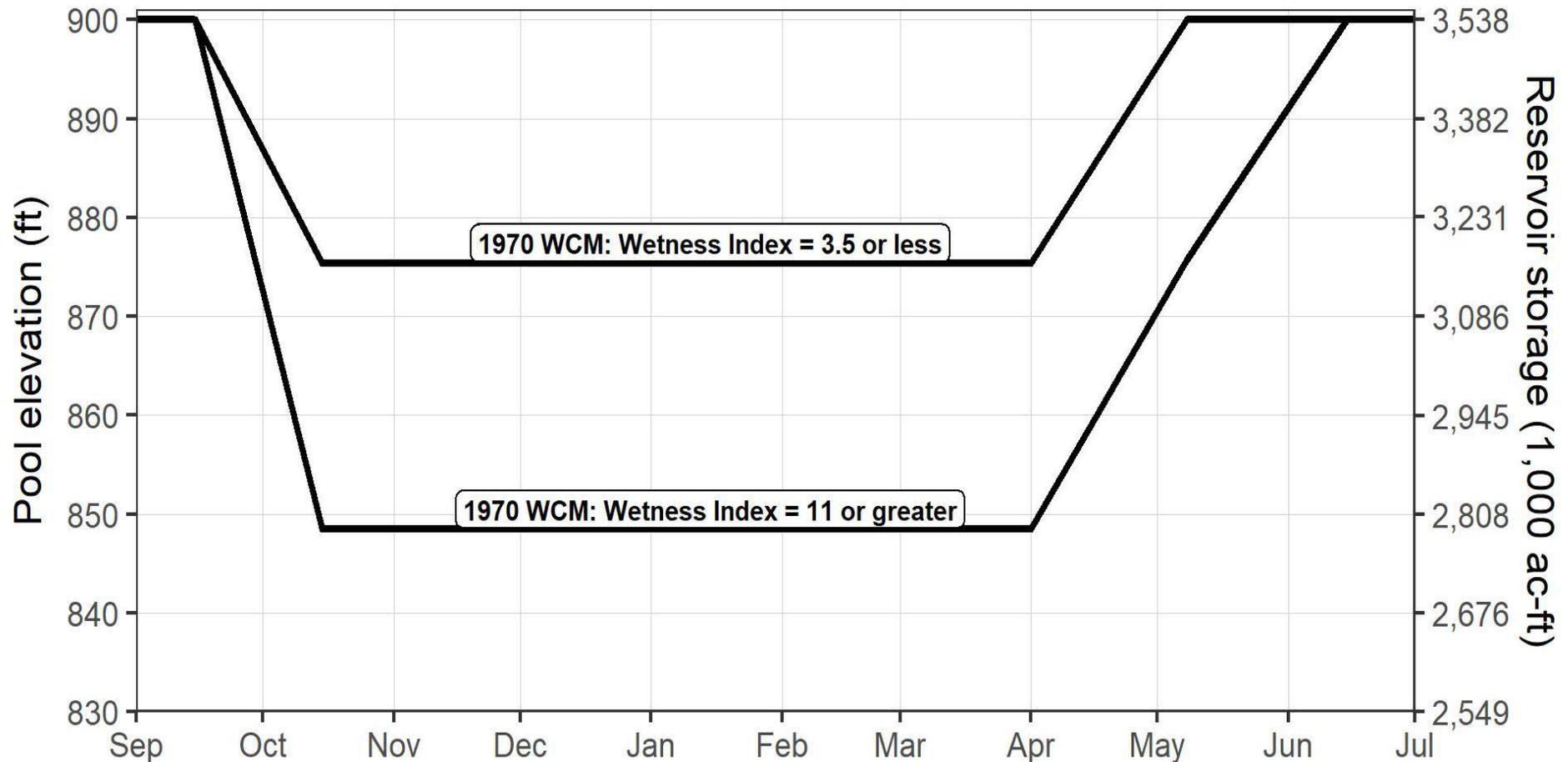
- Follows 1970 water control manual
- Limits FCO releases to 150,000 cfs in line with the 1970 WCM
- Avoids use of emergency spillway
 - Pass standard project flood (SPF) without using emergency spillway
- Does not increase the frequency at which critical pool elevations, releases, or downstream flow levels are exceeded

Operations Strategy for November 2018 to June 2019

- Maintain flood control standards given the construction status of the Main and Emergency Spillways
 - Emergency Spillway enhancements not complete until Spring
 - Manage and pass events up to and including the standard project flood (SPF) without using the Emergency Spillway
- Limit FCO releases to 150,000 cfs
- Enhanced Flood Pool (Increases from 750 TAF to 920 TAF)
 - Uses 1970 WCM release schedules and ramping rates
 - Operates more conservatively than current 1970 USACE WCM

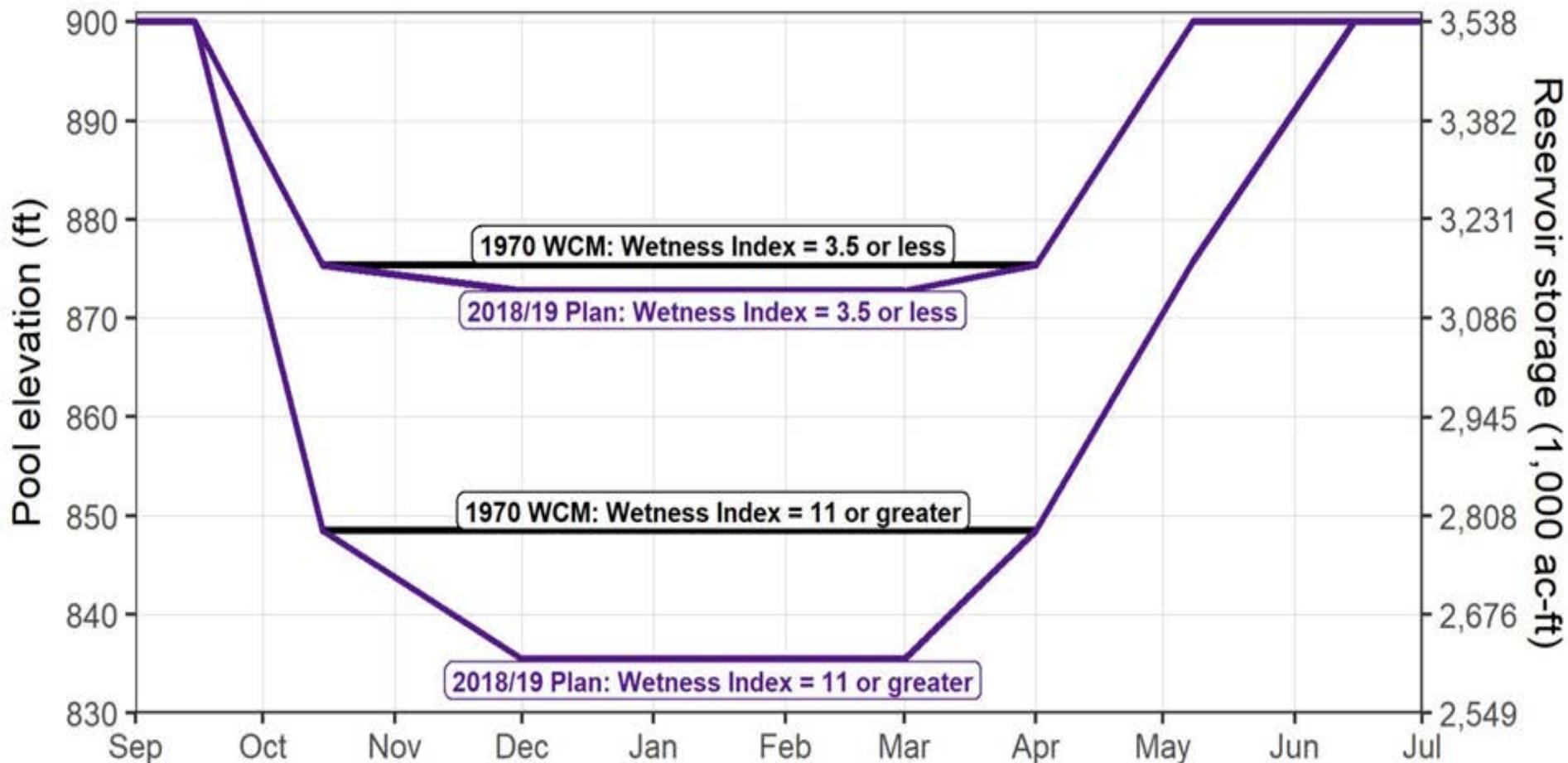
Lake Oroville

Existing Flood Control Diagram



Lake Oroville

Enhanced Flood Control Diagram



Operations Strategy for November 2018 to June 2019

- RVOS - contingency and temperature management
- Continue to meet fishery and water supply objectives when the flood control and dam safety needs outlined in the plan are not controlling

Next Steps

- Briefed FERC, DSOD and USACE
 - Will provide Plan to FERC, DSOD and USACE
- Still coordinating with the USACE over interim flood rules and working towards a formal update of the WCM