Anderson Dam Seismic Retrofit Project Update

June 10, 2020
Anderson Dam Project Goals

• Public Safety: Expeditiously complete the project to safeguard against loss of life and reduce property damage due to earthquake and/or subsidence.

• Water Supply: Ensure a resilient water system to benefit the community’s access to safe, clean, and reliable water while supporting a healthy groundwater basin.

• Environmental Enhancements: Protect the creek habitat during construction and provide improved habitat after construction.

• Financial Sustainability: Use resources prudently to build a reliable, long lasting project for the community.
Anderson Dam Existing Components

- Spillway
- Outlet Pipe
- Dam Crest
- Dam Embankment
Anderson Dam Seismic Retrofit Project Components

- Replace Spillway
- High Level Outlet Pipe
- Low Level Outlet Pipe
- Temporary Diversion System
- Remove all liquefiable material and reconstruct embankment
February 20, 2020 FERC Directive - Interim Risk Reduction Measures

1) Lower reservoir to new restriction (El. 565’)

2) Take all necessary measures to safely prepare and drain the reservoir to El. 488’

3) Oct. 1 - Begin draining reservoir to dead pool (El. 488’)

4) Develop plan to maintain dead pool elevation in event of significant inflow

5) Expedite design and construction of new Outlet Tunnel

6) Secure permits and complete design of larger Seismic Retrofit Project
Valley Water Response

• Ensure immediate compliance with new reservoir level restriction
• Create Anderson Dam Tunnel Project (ADTP) to expedite design and construction of the outlet tunnel
• Create Federal Energy Regulatory Commission Order Compliance Project (FOCP) to safely drain and maintain the lowest practicable reservoir operating level while minimizing water supply and environmental impacts
• Board of Directors approval of FOCP preliminary project description
1) Lower Reservoir to Elevation 565’ – In compliance

2) October 1 – Begin draining reservoir to Elevation 488’
   • Dewatering Plan to accomplish order and address impacts underway.
3) Expedite Construction of New Outlet Tunnel - ADTP
   - Plan for design and construction submitted to FERC 3/20/2020
   - Begin construction in early 2021
   - Tunnel construction 18-24 months from commencement

4) Other Measures to Draw Down Safely
   - Downstream flood protection mitigation
   - Embankment and outlet monitoring until outlet tunnel complete
   - Enact necessary mitigation measures to minimize water supply and environmental impacts
Necessary Permits

• **Federal**
  - FERC: Amendment to Exemption for Licensing
  - USACE: CWA Section 404 Permit
  - USFWS: Incidental take permit (VHP – see below)
  - NMFS: Incidental take permit (steelhead trout)

• **State**
  - DSOD: New dam application
  - CDFW: LSAA
  - VHP: Incidental take authorization (covered species for state and federal ESA)
  - SWRCB: General Construction NPDES Stormwater Permit
  - SWRCB/SFRWQCB: CWA Section 401 Water Quality Certification
  - SHPO: Section 106 of the NHPA

• **Local** — municipal approvals, encroachment permits, temporary rights of way.
Project Schedule

Calendar year


WE ARE HERE

Anderson Dam Tunnel Project

- 2013 Design
- 2018 Construction
- 2021 Drained to El 488

Anderson Seismic Retrofit Project

- 2013 Design
- Environmental Review (CEQA/NEPA)
- Permitting

Site Prep — Dam Construction — Restoration

Construction

Fully Dewatered — Restore Ops