OROVILLE DAM CITIZENS ADVISORY COMMISSION

Hosted by the California Natural Resources Agency
ROLL CALL

- Lieutenant Collins
- Supervisor Connelly
- Supervisor Conant
- Secretary Crowfoot
- Deputy Director Curry
- Supervisor Flores
- Supervisor Fuhrer
- Assemblyman Gallagher
- Supervisor Kimmelshue

- Deputy Licon
- Captain Million
- Director Nemeth
- Senator Nielsen
- Councilmember Pittman
- Mayor Reynolds
- Lieutenant Stokes
- Superintendent Teague
- Supervisor Vasquez
- Genoa Widener
ITEM 1
WELCOME AND INTRODUCTIONS
ITEM 2
ACTION ITEMS & ROADMAPS
## Commission Action Items Tracker

<table>
<thead>
<tr>
<th>Item</th>
<th>Meeting</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Report out how instrumentation performed and was managed during winter operations</td>
<td>Mtg 2 11/2019</td>
<td>Ongoing.</td>
</tr>
<tr>
<td>Item</td>
<td>Item Description</td>
<td>Meeting</td>
</tr>
<tr>
<td>------</td>
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</tr>
<tr>
<td>6</td>
<td>Follow-up on the status of Federal Emergency Management Agency (FEMA) reimbursement for spillway reconstruction</td>
<td>Mtg 3 02/2020</td>
</tr>
<tr>
<td>7</td>
<td>Discussion to help state agencies and local partners address homelessness concern around Feather River</td>
<td>Mtg 3 02/2020</td>
</tr>
<tr>
<td>8</td>
<td>CalOES follow up with CalTrans on the status of their post-fire mitigation along County highways</td>
<td>Mtg 5 11/2020</td>
</tr>
<tr>
<td>9</td>
<td>DWR updates on debris and storm inflows</td>
<td>Mtg 5 11/2020</td>
</tr>
<tr>
<td>10</td>
<td>DWR follow-up re: Hyatt Power Plant</td>
<td>Mtg 5 11/2020</td>
</tr>
<tr>
<td>Item</td>
<td>Action</td>
<td>Meeting</td>
</tr>
<tr>
<td>------</td>
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</tr>
<tr>
<td>11</td>
<td>Offer new Commissioners an orientation.</td>
<td>Mtg 6 2/19/21</td>
</tr>
<tr>
<td>12</td>
<td>Post additional contact information on OCAC website.</td>
<td>Mtg 6 2/19/21</td>
</tr>
<tr>
<td>14</td>
<td>State Parks to provide information on investments related to fuel and vegetation management.</td>
<td>Mtg 7 5/28/21</td>
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</table>
# Commission Action Items Tracker

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<thead>
<tr>
<th>Item</th>
<th>Meeting</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>Request to develop single tracking log cataloging ongoing or future safety projects</td>
<td>Mtg 7 5/28/21</td>
</tr>
<tr>
<td>17</td>
<td>Continue to discuss Risk Assessment and hear from outside experts</td>
<td>Mtg 7 5/28/21</td>
</tr>
</tbody>
</table>
# Commission Roadmap

## Public Meeting: Q4 (December 3, 2021) Operations

<table>
<thead>
<tr>
<th>Topics</th>
<th>Status Updates</th>
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<tbody>
<tr>
<td><strong>Oroville Dam Facility Operations</strong></td>
<td>Commission Report</td>
</tr>
<tr>
<td>• Winter Operations Plan</td>
<td>Wildfire Season Update</td>
</tr>
<tr>
<td>• Downstream flood management and preparedness</td>
<td></td>
</tr>
<tr>
<td>• U.S. Army Corp of Engineers (water control manual update)</td>
<td></td>
</tr>
</tbody>
</table>

## Public Meeting: Q1 (TBD 2022) Partnerships

<table>
<thead>
<tr>
<th>Topics</th>
<th>Status Updates</th>
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</thead>
<tbody>
<tr>
<td><strong>Dam Facility Partnerships</strong></td>
<td>Commission Report</td>
</tr>
<tr>
<td>• FERC Relicensing</td>
<td></td>
</tr>
<tr>
<td>• Recreation Partnerships</td>
<td></td>
</tr>
<tr>
<td>• Public Safety Partnerships</td>
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</tr>
</tbody>
</table>
# Commission Roadmap

## Commissioner Tour: Q2 (2022) Commissioner Joint Ops Center – Sacramento

<table>
<thead>
<tr>
<th>Topics</th>
<th>Status Updates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joint Operations Center</td>
<td>N/A</td>
</tr>
<tr>
<td>• Tour of Joint Operations Center</td>
<td></td>
</tr>
<tr>
<td>• Overview of Joint Ops and Flood Ops</td>
<td></td>
</tr>
<tr>
<td>• 2017 Lessons Learned and Current Procedures</td>
<td></td>
</tr>
</tbody>
</table>

## Public Meeting: Q3 (TBD 2022) Safety

<table>
<thead>
<tr>
<th>Topics</th>
<th>Status Updates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dam Facilities Safety</td>
<td>Commission Report</td>
</tr>
<tr>
<td>• Recap of Joint Operations Tour</td>
<td></td>
</tr>
<tr>
<td>• Commission Report – Draft review</td>
<td></td>
</tr>
</tbody>
</table>

## Public Meeting: Q4 (TBD 2022)

<table>
<thead>
<tr>
<th>Topics</th>
<th>Status Updates</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Finalize Commission Report</td>
<td>Commission Report</td>
</tr>
<tr>
<td>• TBD</td>
<td></td>
</tr>
</tbody>
</table>
Commission Report
Senate Bill 955 Requirements

SB 955 states the Commission will publish a report at least once every three years that provides the following:

• An **overview of ongoing maintenance and improvements** made at the Dam and Dam complex;

• A **register of communications** received from State Agencies and other parties to the Commission;

• **Notice of upcoming plans** made by State Agencies for the Dam and Dam Complex; and

• An **overview of flood management projects on the Feather River** affecting public safety and flood risk reduction.
Commission Report Development Timeline

- Review timeline for Report development (Aug 2021)
- High-Level Report Outline (December 2021)
- Present Detailed Report Outline (Q1 2022)
- Version 1 Draft Report (Q2 2022)
- Version 2 Draft Report (Q3 2022)
- Present Final Report (Q4 2022)
ITEM 3
SPILLWAY CAMERAS
Oroville Spillway WebCam

Oroville Citizen’s Advisory Commission

August 27, 2021

John Yarbrough

Webcam view of Thermalito Diversion Pool and Forebay (in distance)
Webcam view of Lake Oroville
(looking toward Spillway Boat Ramp Cove)
ITEM 4
STATE WATER CONTRACTING AGENCY: UTILIZATION OF STATE WATER PROJECT IN CALIFORNIA
ITEMS 5 & 6
DAM FACILITIES:
ASSET MANAGEMENT &
ANNUAL MAINTENANCE PLAN
State Water Project
Asset Management & Oroville
Annual Maintenance & Projects

Oroville Citizens Advisory Commission Meeting
August 27, 2021

David Duval, Division Manager
Division of Operations and Maintenance
State Water Project
Project Prioritization

- Project Prioritization is one component of DWR’s Asset Management (AM) program
  - Builds upon other AM processes
    - **Risk identification** through inspections, condition assessments, and studies
    - **Risk assessment** for each proposed project using common matrix
    - **Financial management** and **Resource planning**
  - Approach considers mandatory requirements, benefits, risk, and resources to find the right balance between performance, cost, and risk
Risk-Informed Prioritization

Why do we use risk to inform prioritization?

• To select a portfolio of projects that reduces the most risk in the least amount of time with the available funding and resources

• Public utilities often use risk, rather than other financial metrics such as (Net Present Value) NPV, to evaluate the priority and urgency of project and other actions

• Risk scoring assigns a quantitative value to the risk associated with an issue or event

• SWP has modeled its process after international standards (ISO 55001)
State Water Project Capital Prioritization Process

Condition Assessment, Monitoring, Studies → Identify Projects → Evaluate Risk → Estimate Resources → Prioritize Projects

Prioritization Output
- Next year’s Budget
- Multi-year Capital Plan
## Historical Oroville Expenditures

<table>
<thead>
<tr>
<th>Expense Type</th>
<th>CY2018</th>
<th>CY2019</th>
<th>CY2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual O&amp;M</td>
<td>42,700,565</td>
<td>47,187,723</td>
<td>46,218,162</td>
</tr>
<tr>
<td>Capital Projects</td>
<td>44,410,391</td>
<td>50,875,835</td>
<td>46,324,324</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>87,110,956</strong></td>
<td><strong>98,063,558</strong></td>
<td><strong>92,542,487</strong></td>
</tr>
</tbody>
</table>

Note: Excludes costs for Oroville Spillways Emergency and Reconstruction
# Planned Oroville Expenditures

<table>
<thead>
<tr>
<th>Expense Type</th>
<th>CY2021</th>
<th>CY2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual O&amp;M</td>
<td>45,544,395</td>
<td>51,618,546</td>
</tr>
<tr>
<td>Capital Projects</td>
<td>53,898,106</td>
<td>62,049,756</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>99,442,500</strong></td>
<td><strong>113,668,302</strong></td>
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</table>
Annual Operation & Maintenance Activities

**HYATT POWERPLANT**
- Unit Reliability Outage/CAP Inspection
- Unit Transformers Annual Maintenance
- Unit Annual Maintenance & Relay Testing
- Switchyard and Breaker Inspections
- Unit Runner Inspections and Repair
- Fire Systems Annual Inspection/Testing
- Station Service Annual Maintenance
- Battery/Charger Testing

**THERMALITO POWERPLANT**
- Unit Reliability Outage/CAP Inspection
- Unit Transformer Annual Maintenance
- Station Service Transformer Annual Maintenance
- Fire Systems Annual Inspection/Testing
- Unit Breaker Maintenance
- Bypass Gate Reliability Inspection
- Battery/Charger Testing

**THERMALITO DIVERSION DAM POWERPLANT**
- Unit Annual Outage/Inspection
- Radial Gate Full Open Testing
- Battery/Charger Testing

**OROVILLE DAM/LAKE / THERMALITO FB/AB / OTHER LOCATIONS**
- Flood Control Systems Annual Maintenance
- **DSOD/FERC Annual Inspections**
- Intake Shutter Annual Maintenance
- Fence Repair and Gate/Sign Maintenance
- Oroville Spillway Radial Gate Testing
- Roadway Maintenance
- Fish Hatchery Annual Maintenance
- Oroville Lake Debris Removal/Log Boom Maintenance
- **Dam Surveillance and Monitoring – DAILY**
  - Water Flow and Temperature Monitoring – DAILY
  - Water Quality Sampling
  - Debris Removal/Erosion Repair – All Dams
  - Vegetation Maintenance – All Dams
  - Fuel Load Reduction

**UPPER FEATHER RIVER DAMS/LAKES**
- **DSOD Annual Inspections**
- Vegetation Maintenance – All Dams
- Debris Removal – All Dams
- Roadway Maintenance
- Debris Removal/Erosion Repair
- Precipitation Site Maintenance
- **Dam Surveillance and Monitoring**
  - Two – Watermaster Areas
  - Annual Snow Surveys

**CALIFORNIA DEPARTMENT OF WATER RESOURCES**
Capital Improvement Projects

- Power Canal Erosion Repair
- Diversion Dam Radial Gate Inspection and Repairs
- River Outlet Radial Gate Refurbishment
- Bidwell Dam Toe Weir Design/Construction/Installation
- RVOS Rehabilitation
- Hyatt Unit 1 Valve Refurbishment and Turbine Replacement
- Hyatt – Station Service Protective Relay Replacement
- Thermalito Powerplant Restoration Complete
- Hyatt Unit 4 Cooling System Replacement
- Hyatt Battery Charger Replacement
- Thermalito Diversion Dam Transmission Line Repair
- Fire Systems Modernization – Entire Field Division
- Physical Security Modernization
- Craig Access Road Bridge Replacements
- Loafer Creek Launch Ramps
- FERC Emergency Action Plan Functional Exercise
- Flood Control Outlet - Structural Re-analyses
- Flood Control Outlet Monolith 25 & 26 Piezometer Installation
- Oroville Dam Toe Piezometer Installation
- Core Block and Grout Gallery Piezometer Installation
- Palermo Tunnel Bulkhead Improvements
- Spillway Inspections – Flood Control Outlet, Thermalito Diversion Dam and Thermalito Powerplant Bypass Spillway
- Power Canal Headworks Concrete Repairs
- Oroville Comprehensive Needs Assessment Early Implementation – Parish Camp Saddle Dam Raise
- Oroville Comprehensive Needs Assessment Early Implementation – Palermo Canal Relining
- Hyatt Powerplant Reliability Study
- Feather River Paleoflood Investigation
- Hyatt Intake Structure and Penstock Inspections
- Non-destructive Examination Of Radial Gate Anchors
- Oroville Dam - High density LiDAR/deformation surveys
ITEM 7
PUBLIC COMMENT

The Oroville Dam Citizens Advisory Commission will now take public comment.

We appreciate your input.
ITEM 8
ADJOURN

Thank you all for joining us today, our next Oroville Dam Citizens Advisory Commission meeting will be on December 3, 2021.