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#### **Overview of 2018 State Water Project Review**

#### **Background**

Water Code section 165 requires the California Water Commission to conduct an annual review of the construction and operation of the State Water Project (SWP) and to report its findings and recommendations to the Director of the Department of Water Resources (DWR) and the State Legislature.

At this meeting, Commission staff will present the attached proposed outline for the 2018 review of the SWP for Commission discussion and direction. At a future meeting, staff will present a draft report that will incorporate the Commission's feedback.

This is an informational item.

#### Contact

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# PROPOSED OUTLINE FOR THE 2018 ANNUAL REVIEW OF THE STATE WATER PROJECT

## **Background and Commission Authority**

Water Code section 165: The Commission shall conduct an annual review of the progress of construction and operation of the State Water Resources Development System, and shall make a report of its findings to the department and the Legislature, together with whatever recommendations it deems appropriate.

## Key Issues in 2018

1. Aging Infrastructure – In 2017, the Oroville spillway incident demonstrated the potential vulnerabilities of the State Water Project (SWP). With much of the SWP's infrastructure exceeding 50 years of age, the maintenance needs of the system have increased to require more frequent refurbishment, renewal, and replacement.

In October 2018, DWR adopted a <u>new Strategic Plan</u> in which it acknowledged the aging infrastructure and committed to several objectives that will secure the functions of the SWP for future generations.

- "...DWR's assets and the supporting water management infrastructure are reaching end of life. DWR will need to address its aging infrastructure, and impacts associated with climate change, population growth, ecosystem stressors, and funding constraints. In the next three years, DWR will adopt a unified framework for condition assessment, risk management, and strategic planning for capital investments to prepare the SWP infrastructure for the next 50 years." (DWR 2018 Strategic Plan, page 6)
- 2. Dam Safety Following the Oroville spillway incident, DWR initiated an assessment of its dam safety program. Progress in 2018 included program evaluation and improvements, such as reorganizing and expanding the Dam Safety Branch within the Operations & Maintenance Division and establishing a SWP dam safety program steering committee. DWR also adopted a new SWP Dam Safety Policy, which affirmed its commitment to public safety and a culture of continuous improvement.
  - Oroville: initiated comprehensive needs assessment for dam safety; completed spillway reconstruction.
  - Completed spillway assessments at seven SWP dams.
- 3. Updated Coordinated Operating Agreement (COA) with Bureau of Reclamation announced by Director Nemeth in November 2018.

## Findings and Recommendations

To be determined, based on Commissioner discussion and direction to staff.

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## 2018 Annual Review of The State Water Project

#### Overview of the SWP

Description of facilities, overview of water supply and operation issues

#### Planning

DWR Strategic Plan – Highlights relevant to SWP, goals and key objectives

Climate Change – Key findings of California Fourth Climate Change Assessment; risks faced by Central Valley water system; GHG Reduction & Renewable Energy Goals: progress toward goals, planning for adaptation.

Flood-Managed Aquifer Recharge (Flood-MAR) – After completing the Reoperation Phase II and Phase III reports, DWR initiated the Flood-MAR effort to examine the use of the system to deliver floodwater for recharge to agricultural lands.

- Findings of Phase II and Phase III Reoperation Reports;
- Overview of Flood-MAR and schedule for 2019

#### Dam Safety

Program reorganization, new policy, plans for SWP dam and spillway inspections and improvements

#### **Asset Management**

DWR has adopted Asset Management as an approach to decision making, using all available information to make the best infrastructure investment decisions for the SWP.

- o What is Asset Management and how is DWR implementing it?
- Key features (e.g., life cycles of plants and equipment; changing climate creates different stresses than original designs; risk-based management and decisions)
- What DWR achieved in 2018; how Asset Management affected internal and external actions
- o How Asset Management will help DWR address aging infrastructure

Aqueduct Subsidence – Status of investigations, mitigation actions, additional work planned

#### Delta Conveyance

Status update

#### **EcoRestore**

Progress & milestones in 2018

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## **Operations**

Table of water delivery and power generation

### **Status of Construction Projects**

- Oroville Spillways construction update; main spillway work completed; emergency spillway work completed; costs for emergency response \$160m, recovery \$940m;
- Other dams and spillways results of assessments; work performed or scheduled for 2019.

#### Updates on projects highlighted in 2017 Annual Review:

- Oroville River Valve Outlet System
- Ronald B. Robie Thermalito Powerplant
- North Bay Aqueduct Alternative Intake
- Perris Dam Remediation
- East Branch Extension
- Alamo Powerplant Unit 2