

# State Maintained Areas & Maintenance Areas



Michael Sabbaghian

Flood Maintenance Office Chief, DWR

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# Outline

- State Maintained Areas
  - Authorization
  - Funding
- Maintenance Areas
  - Authorization
  - Formation Process
  - Operation and Funding
- O&M Priorities & Challenges



# Department of Water Resources

## *O&M Responsibilities*

- State Maintained Areas
  - California Water Code Section 8361(a)-(p)
    - O&M costs - State General Fund
    - Sacramento River Flood Control Project
      - ~ 1,200 miles of channels (flood flow conveyance)
      - Pumping Plants, Hydraulic Control Structures, Weirs, Certain Seepage and Collecting Canals, specific Bridges
      - Levees (~145 miles)
- Maintenance Areas
  - California Water Code Section 12878 et seq.
    - O&M costs – reimbursed by benefiting properties
    - Maintenance Areas
      - Levees (~150 miles)
      - 10 designated areas
      - 1 pump station and 1 diversion weir



# State Maintained Areas: *Authorization*

- The Sacramento River Flood Control Project was authorized by 4 acts of Congress between 1917 and 1954 and was then adopted and authorized by the California legislature
- The CA Water Code Section 8361 states:  
“The department shall maintain and operate on behalf of the state the following units or portions of the works of the Sacramento River Flood Control Project, and the cost of maintenance and operation shall be defrayed by the state:”
- Section 8361 (a) – (p) specify the levees, channels and structures that are included



# State Maintained Areas: *Funding*

- Routine O&M is funded through the California General Fund
- Specific projects/programs are funded through California Bonds (i.e. FSRP, major structure renovations)
- Or through a cost share with the Federal Government (i.e. PL84-99 rehabilitation projects, Sac Bank)



# Maintenance Areas: *Authorization*

- Water Code Sections 12878 – 12878.21.
- Assumes unit is part of “project” defined by WC Section 12639 or 12850.
- Assumes assurances for O&M have been given to Federal Government by CVFPB or Department



# Maintenance Areas: *Formation*

- One of the following must occur to initiate the MA formation process.
  - LMA determines it no longer desires to operate and maintain a unit of a project, and provides a resolution to that effect to DWR
  - or
  - State determines that a unit of a project is not being operated or maintained in accordance with federal regulations



# Maintenance Areas: *Formation*

- DWR prepares a “Statement of Necessary Work” containing:
  - Documentation DWR has either:
    - Received a resolution from an LMA
    - Has determined that current O&M is inadequate
  - Description of necessary work
  - O&M budget for the current and following fiscal years (this includes the cost of forming the MA)



# Maintenance Areas: *Formation*

- DWR transmits the statement to LMA
- LMA has 45 days to protest the statement to The Board or DWR.  
(waiting period may be waived by the LMA)
- If the LMA protests within the 45 day waiting period, a hearing will be held 30 days later
- If LMA does not protest, The Board or DWR must use the budget amount specified in the Statement of Necessary Work



# Maintenance Areas: *Formation*

- The Board or DWR prepares a map and description of the maintenance area boundaries, flood benefit zones, and benefit percentages  
(the costs of O&M incurred by DWR will be paid by the benefitting parties according to their benefit classification)
- To determine flood benefit zones a hydraulic modeling study may be needed
  - Properties that are shown to flood during a simulated levee breach and that remain protected under original design(1957) flood simulation are considered to be in the benefit zone



# Maintenance Areas: *Formation*

- A hearing is held to establish MA boundaries, flood benefit zones, and benefit percentages
  - The map is made available to interested parties and notices are posted 2 weeks before the hearing



# Maintenance Areas: *Formation*

- At the hearing, the Board establishes the boundaries, zones and benefit percentages in such a way that all lands benefitted by O&M are included and classified according to the benefits received
- MA is officially established by
  - A Board resolution
  - or
  - Order of the Director of DWR



# Maintenance Areas: *Operation and Funding*

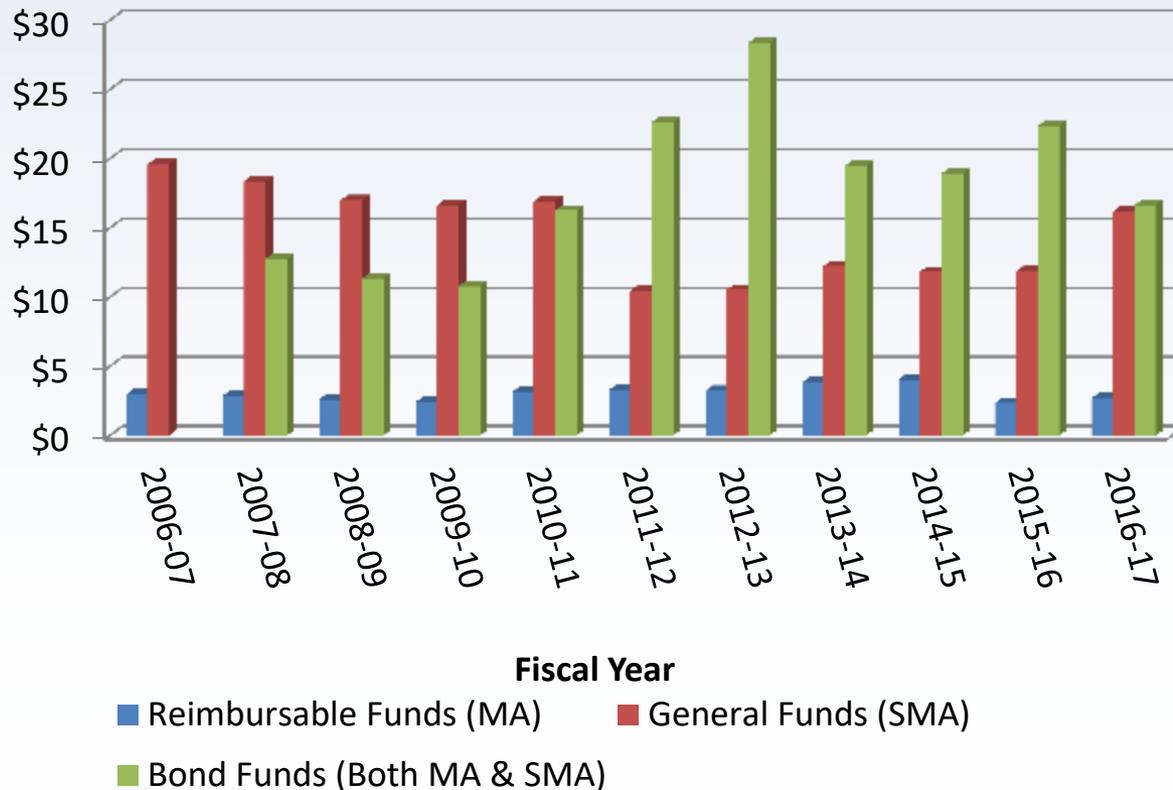
- DWR maintains the MA.
- DWR establishes the MA budget annually before April 1, the Board adopts the budget, and certifies the amounts of assessments to the county auditors and supervisors
- The counties levy and collect the taxes, and transmit the net amount to DWR



# Funding Overview

- Funding allocations for State Maintained Areas can vary significantly from year to year depending on California's economy and other factors. Periods of under funding, can lead to deferred maintenance and deficiencies.
- Maintenance Area budgets remain fairly consistent year to year. When MA budgets are overestimated the following year's budget will be decreased to account for the difference and vice versa.

## Annual Expenses in Millions



# O&M Priorities & Challenges

- The amount of work required to keep the levees in compliance can vary considerably year to year depending on weather and water levels
- Higher work loads are not always reflected in the General Fund Budget
- Time limitations on specific funding sources can be a challenge “use it or lose it”



# O&M Priorities & Challenges

- Environmental Permitting
  - There are several State and Federal protected/endangered species within our work areas that limits work activities and timing of work
  - Former Lake and Streambed Alteration Agreement with CDFW has expired (Jan 2018)
  - EPOM will replace it and will provide 12 years of permitting, including incidental take permits, through CDFW for most routine O&M activities
    - EIR complete
    - 1600 (LSAA) in progress, exp. to be complete in early 2018
    - 2081 (CESA ITP) exp. in 2018 following finalization of 1600



# O&M Priorities & Challenges

- Grouting of rodent holes has been prohibited for approximately  $\frac{1}{2}$  of the levees maintained by DWR for the last 4 years because of the endangered *Giant Garter Snake* habitat in the vicinity
  - EPOM and associated permits are in process and will include State take coverage for GGS
  - DWR is working on determining an avenue for federal permitting which could include:
    - Federal Nexus 7 under SWIF
    - HCP under Nexus 10
    - Possible legislative change



# O&M Priorities & Challenges

- Culverts/Discharge Pipes
  - UCIP Database Developed based on visual inspections
  - Risk based assessment and pipe repair program (DMP) for system gravity drains
  - Completed reconnaissance to determine pipe accessibility and environmental issues (over 2100 pipes evaluated)
  - 2 cameras purchased by FMO
  - 20% of DWR's pipes inspected so far
  - 31 contracts with LMAs to fully fund internal pipe inspections and one pipe replacement confirmed, more expected
  - \$100 million allocated to DMP, reduced to ~\$20 million after funds diverted to 2017 emergency response effort with a 2 year deadline to allocate all \$100 million.
  - CVFPB staff have sent letters to pipe permit holders requiring internal video inspection



# O&M Priorities & Challenges

- Encroachments
  - In the USACE’s periodic inspections, thousands of “unacceptable” encroachments were identified systemwide
  - Easement identification is on-going
  - Targeting correction on “worst-first” basis
  - If encroachment owners do not voluntarily comply, significant CVFPB staff support is required and can be a very lengthy process



# O&M Priorities & Challenges

- Vegetation Management
  - Levee Vegetation Management: goal is to achieve visibility and accessibility
  - Channel Vegetation Management: goal is to maintain channel capacity
  - California Levee Research Program: evaluation of high hazard trees for removal



# O&M Priorities & Challenges

- Emergency Response from 2017 Storms
  - High water patrolling and emergency response
  - SDDER
    - 511 sites were evaluated and prioritized by FMO staff
    - 30 repairs completed by DWR, 9 planned for 2018.
    - 58 rated critical & 97 rated serious
    - Contingency plans prepared for all critical and serious sites not repaired in 2017
  - PL84-99
    - 15 sites completed in 2017, 53 planned for repair at a later date

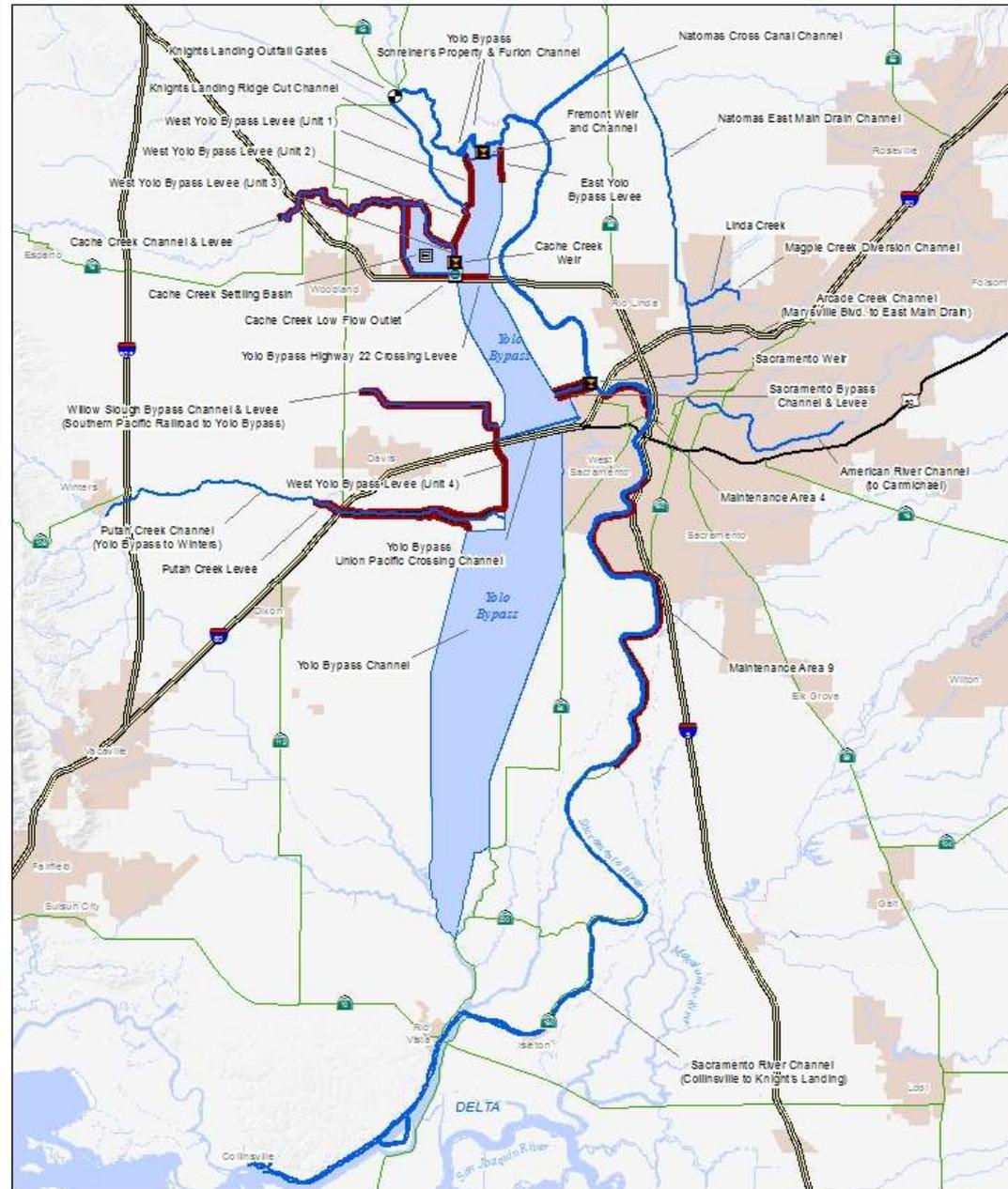


# Questions



# DWR Sacramento Yard Areas of Responsibility

(NOT TO SCALE)



Division of Flood  
Management  
Flood Maintenance Office

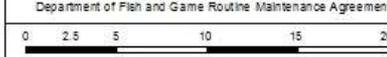
N	Channel	Diversion Structure
Levee	Low Flow Outlet	Outfall Gate
Bridge	Weir	Pumping Plant

Date: January 4, 2013

Prepared By: Pat Gilbert and Melanie Powers

## DWR SACRAMENTO YARD MAINTENANCE PROJECT AREAS

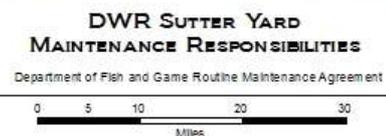
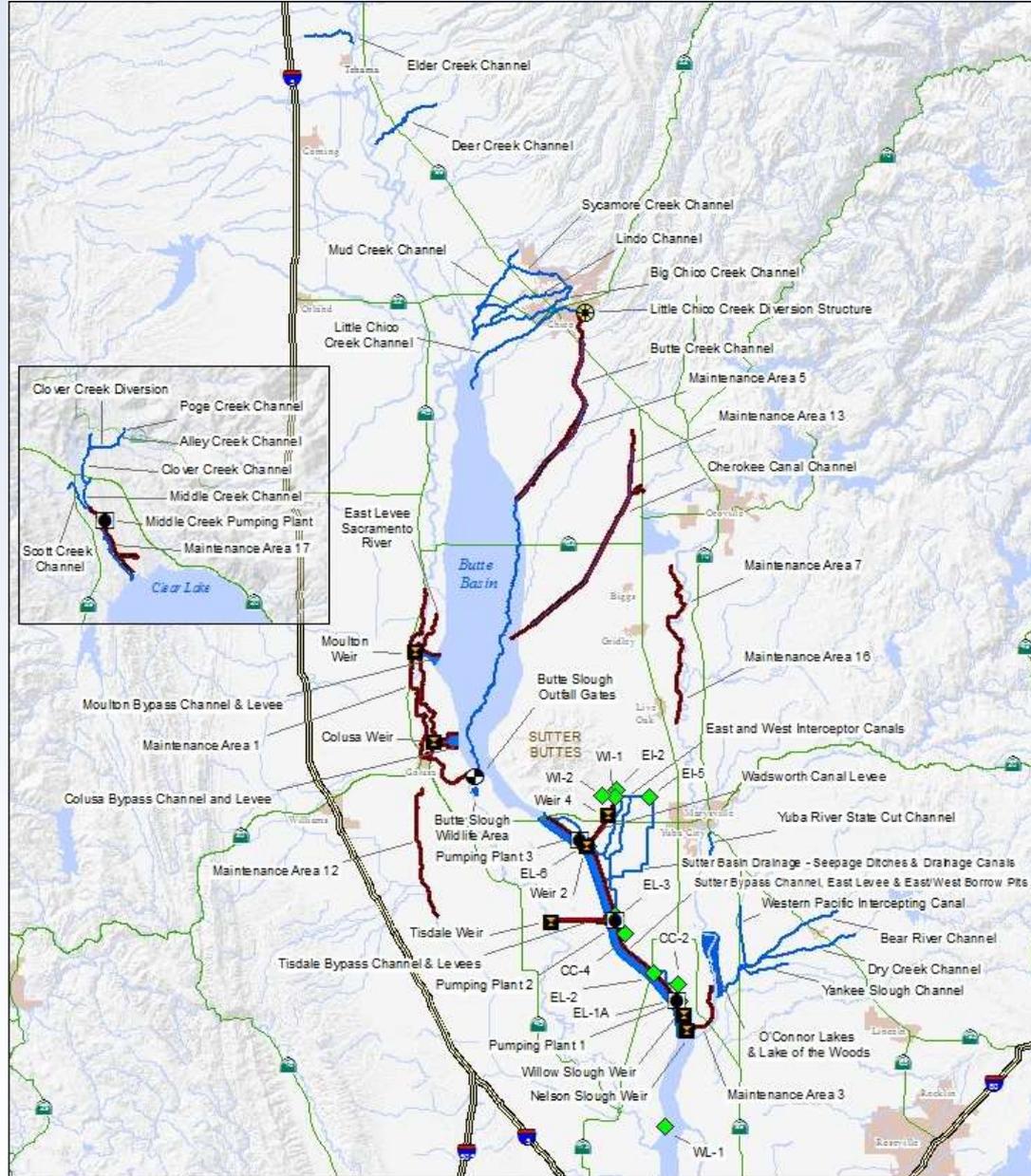
Department of Fish and Game Routine Maintenance Agreement



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# DWR Sutter Yard Areas of Responsibility

(NOT TO SCALE)



# Maintenance Areas

(NOT TO SCALE)

