



Engineering Services Manager's Report

Engineering and Operations Committee

Item 7b

August 14, 2017

Dam Emergency Action Plans (EAPs)

● Purpose

- Identify potential emergency conditions that could occur at a dam, & prescribe procedures to follow to minimize loss of life & property damage
- Not previously required in California

● EAPs Provide Guidance to Responders

- Evaluating hazards
- Determining level of emergency
- Defining communication protocols

● New Requirements

- EAPs required for Extremely High, High & Significant classifications
- EAPs to follow FEMA guidelines
- CalOES to review & approve EAPs
- Owner has responsibility to coordinate with local agencies

EAP Due Dates

Extremely High Hazard Classification

Due by 1/1/2018

- Diamond Valley Lake
- Garvey Reservoir
- Lake Mathews
- Lake Skinner
- Live Oak Reservoir
- Palos Verdes Reservoir

High Hazard Classification Due by 1/1/2019

- Cajalco Creek Detention Basin
- Copper Basin Reservoir
- DVL Forebay
- DVL Goodhart Detention Basin
- Diemer Basin No. 8
- Diemer Ozone Contactor Basins
- Diemer Treated Water Reservoir
- Gene Wash Reservoir
- Mills Treated Water Reservoir No. 1
- Mills Treated Water Reservoir No. 2
- Mills Reclamation Basins
- Orange County Reservoir (out of service)
- Skinner Treated Water Reservoir
- Weymouth Treated Water Reservoir

Metropolitan's EAP Preparation Schedule

To Be Completed by 12/2017

- Copper Basin Reservoir
- Diamond Valley Lake
- DVL Forebay
- DVL Goodhart Detention Basin
- Diemer Basin No. 8
- Diemer Ozone Contactor Basins
- Diemer Treated Water Reservoir
- Garvey Reservoir
- Gene Wash Reservoir
- Lake Mathews
- Lake Skinner
- Live Oak Reservoir
- Palos Verdes Reservoir

To Be Completed by 3/2018

- Cajalco Creek Detention Basin
- Mills Treated Water Reservoir
- Mills Treated Water Reservoir No. 2
- Mills Reclamation Basin
- Orange County Reservoir
- Skinner Treated Water Reservoir
- Weymouth Treated Water Reservoir

Inundation Maps

● Purpose

- Show maximum water surface resulting from a complete dam breach & draining of a full reservoir (former scenario)

● New Requirements

- Inundation maps required for Extremely High, High & Significant classifications
- New failure scenarios to be identified & evaluated
- Required to be included in EAPs
- DSOD to review & approve inundation maps

Inundation Map Due Dates

Extremely High Hazard Classification

Due 1/1/2018

- Diamond Valley Lake
- Garvey Reservoir
- Lake Mathews
- Lake Skinner
- Live Oak Reservoir
- Palos Verdes Reservoir

High Hazard Classification Due 1/1/2019

- Cajalco Creek Detention Basin
- Copper Basin Reservoir
- DVL Forebay
- DVL Goodhart Detention Basin
- Diemer Basin No. 8
- Diemer Ozone Contact Basin
- Diemer Treated Water Reservoir
- Gene Wash Reservoir
- Mills Treated Water Reservoir
- Mills Treated Water Reservoir No. 2
- Mills Reclamation Basin
- OC Reservoir*
- Skinner Treated Water Reservoir
- Weymouth Treated Water Reservoir

Metropolitan's Inundation Mapping Schedule

Completed

- Diemer Ozone Contactor Basins
- Diemer Treated Water Reservoir
- Lake Mathews
- Lake Skinner
- Skinner Treated Water Reservoir

To Be Completed Next Month

- Cajalco Detention Basin
- Copper Basin Reservoir
- Diemer Basin No. 8
- Gene Wash Reservoir
- Live Oak Reservoir
- Mills Treated Water Reservoir No. 1
- Mills Treated Water Reservoir No. 2
- Mills Reclamation Basins
- Palos Verdes Reservoir
- Weymouth Treated Water Reservoir

To Be Completed by 11/2017

- Diamond Valley Lake
- DVL Forebay
- DVL Goodhart Detention Basin
- Garvey Reservoir

Spillway Re-Evaluations

● Purpose

- Perform detailed evaluations of spillways at Extremely High & High Hazard dams
- Comply with Governor's directive

● DSOD Letters to Dam Owners

- Lake Mathews & Lake Skinner – High Hazard classification

● Scope of Assessment

- Hydraulic capacity
- Structural integrity (Concrete lining, drainage system)
- Geologic hazards & geotechnical conditions
- Review of original construction
- Work Plan due to DSOD by 9/1/17

Reservoir Drainage Areas



