

# Emergency Action Plan (EAP)

for

## Lakeport Dam

Lake County, California

*795 Linda Ln*

*Lakeport, California, 95453*



**Dam Owner: City of Lakeport Municipal Sewer District**

DSOD North Region

DSOD Dam No. 2021.000

National Inventory of Dams (NID) No. CA01230

High Hazard Classification

Date Prepared: June 20, 2019

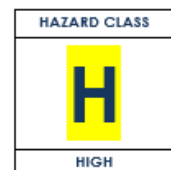
Revised: March 2021

Prepared by: City of Lakeport

Contact: Douglas Grider, Public Works Director

Email: [dgrider@cityoflakeport.com](mailto:dgrider@cityoflakeport.com)

Phone: (707) 263-3578 x401



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# Dam Contact Information

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## Lakeport Dam

### Physical Address:

795 Linda Lane  
Lakeport, California 95453

### Dam Coordinates:

Latitude: 39° 0' 53.42" N  
Longitude: 122° 55' 33.40" W

### Dam Owner: City of Lakeport Municipal Sewer District

Email: [PWinfo@cityoflakeport.com](mailto:PWinfo@cityoflakeport.com)

Phone: (707) 263-3578

### Dam Owner Contact: Douglas Grider, Public Works Director

Organization: Public Works Department, City of Lakeport

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Phone: (707) 263-3578 x401

### Dam Operator: City of Lakeport Municipal Sewer District

Dam Operator Contact: Steven Grossner, Wastewater Supervisor / Dam  
Operations Supervisor, City of Lakeport

Email: [Sgrossner@cityoflakeport.com](mailto:Sgrossner@cityoflakeport.com)

Phone: (707) 263-3578 x706

### EAP Coordinator: Andrew Britton, Compliance Officer

Organization: Public Works Department, City of Lakeport

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Phone: (707) 263-3578 x403

### Emergency Contact: Paul Harris, Utilities Superintendent

Organization: Public Works Department, City of Lakeport

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Mobile Phone: (707) 533-9168

Alternate Phone: (707) 263-3578 x402 (Answering Service 24/7)

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# Acronyms

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Although all acronyms are defined in the text upon their first use, many are employed throughout this plan. A concise list of the most commonly used acronyms is provided as Appendix L.



# PART I: EAP INFORMATION

# Section 1: Introduction

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## 1.1.Purpose

The purpose of Lakeport Dam Emergency Action Plan (EAP) plan is to reduce the risk of human life or injury and to minimize damage to property and the environment in the event of an actual or potential emergency situation associated with flooding or large releases from Lakeport Dam.

The Department of Water Resources (DWR), Division of Safety of Dams (DSOD) has rated Lakeport Dam as a High Hazard dam. Because of this and the passage of Senate Bill 92, this EAP was developed by the City of Lakeport, to meet the requirement of California Water Code Sections 6160 and 6161 and Government code 8589.5.

The Lakeport Dam is an earth fill dam constructed in 1980 that provides storage of tertiary treated wastewater for the City of Lakeport Municipal Sewer District (CLMSD).

The Lakeport Dam EAP establishes policies, procedures and an organizational structure for response to an actual or potential major emergency situation associated with the dam. These situations include, but are not limited to, dam instability, felt earthquakes, extreme storm events, major spillway releases, overtopping of the dam, vandalism or sabotage, spillway failure, dam failure or major power outage.

This EAP defines the responsibilities and provides procedures to identify and effectively address unusual and unlikely conditions that may endanger Lakeport Dam and nearby areas in time to take mitigating actions and notify the appropriate emergency management officials.

In an emergency flooding event, the Lakeport Police Department will take on the role of incident command. The Police Department will be supported by and work closely with the City, the County, the Lake County Sheriff's office, and the Lakeport Fire Protection District

The EAP establishes an annual notification exercise in which the City will confirm the phone numbers in the emergency flow charts are correct and document their annual review.

This copy of the EAP is delivered to all impacted agencies and is also included as an appendix to the City of Lakeport's Emergency Operations Plan.

## 1.2.Planning Team

The EAP Coordinator has coordinated the Lakeport Dam emergency action planning efforts. Lakeport Dam management and operations/maintenance staff have helped plan the EAP and will suggest future revisions as needed.

On March 14, 2019, the City of Lakeport contacted, by email, the following local agencies to request review of the EAP:

1. Lake County OES & Lake County Sheriff's Office
2. City of Lakeport Police Department
3. Lakeport Fire Protection District
4. City of Lakeport Community Development Department

The following State and local agencies were contacted and asked to review the EAP on October 10, 2019 due to their having assets or facilities that could be impacted by a failure of the Lakeport Dam:

1. California Highway Patrol, Kelseyville Office
2. California Department of Transportation (Cal Trans); District 1 office
3. County of Lake Public Works
4. County of Lake Community Development Department
5. County of Lake Special Districts
6. Lake Transit Authority (Public Transportation provider)
7. Mendocino College, Lake Center

The following State and Federal agencies were contacted by phone in May and June 2019 due to their having responsibilities for dam failures and flash flood warnings. They stated they were very familiar with the EAP process and did not have any specific input:

1. California Department of Water Resources Division of Dam Safety (DWR DSOD)
2. California Department of Water Resources Flood Operations Center (DWR FOC)
3. National Weather Service (NWS)

On March 10, 2021, the City of Lakeport contacted, by email, the following local agency to request review of the EAP including confirmation of contact information and indication if they wanted to be included in the Notification Flowcharts or be an EAP holder:

1. CAL FIRE Sonoma-Lake-Napa Unit (CAL FIRE LNU)

CAL FIRE replied via email on March 11, 2021 and provided updated phone contact information and indicated that based on their review of the EAP, they did not wish to be included in the Notification Flowcharts or be an EAP holder.

The EAP planning team is composed of representatives from the City of Lakeport and local agencies listed above that were contacted and consulted during the

development of this document. Additionally, while creating the Notification Flowcharts, the EAP Coordinator communicated with each contact to ensure that the EAP contains current information.

EAP Coordinator: Andrew Britton, Compliance Officer  
Organization: [Public Works Department, City of Lakeport](#)  
Email: [abritton@cityoflakeport.com](mailto:abritton@cityoflakeport.com)  
Phone: (707) 263-3578 x403

The table on the following page documents the outreach activities to the agencies listed in Section 1.2.

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Agency	Contact	Title	Date Contacted	Form of Consult	Confirmation Received	Feedback/Response
Lake County Sheriff Office/OES	Dale Carnathan	Emergency Services Manager	March 14, 2019 December 12, 2019	Email	Yes	Comments on reverse 911 system were incorporated
City of Lakeport Police	Brad Rasmussen	Police Chief	March 14, 2019, April 4, 2019 December 12, 2019	Email	Yes	Suggested edits to Section 6.1 which were incorporated
Lakeport Fire Protection District	Rick Bergem	Chief	March 14, 2019 April 4, 2019 June 17, 2019 December 12, 2019 January 19, 2021	Phone and Email	Yes	No changes
City of Lakeport Community Development Department	Jenni Byers	Community Development Director	January 21, 2021 February 8, 2021	Phone and Email	Yes	No changes
CHP	Randy England	Hydraulics Engineer	October 10, 2019	Email	Yes	Says EAP looks good. No Changes
Cal Trans District 1	Izzy Konopa	Emergency Coordinator	October 10, 2019	Email	Yes	Provided updated name for notification chart.
County of Lake Public Works	Scott De Leon	Public Works Director	October 10, 2019 January 19, 2021 February 8, 2021	Email	Yes	Suggested edits to Section 2.2--incorporated; updated contact info
County of Lake Community Development Department	Scott De Leon	Director	October 10, 2019 January 19, 2021 February 8, 2021	Email	Yes	Updated contact info
County of Lake Special Districts	Scott Harter	Director	October 10, 2019 January 20, 2021	Email	Yes	Include as Plan Holder
Lake Transit Authority	Mark Wall	Transit Manager	October 10, 2019 January 19, 2021 February 8, 2021	Email	No	No Response
Mendocino College, Lake Center	Judith Kanavle	Director	October 10, 2019 January 19, 2021 February 8, 2021	Email	No	No Response
DWR DSOD	Andy Mangney	Chief Field Engineering	May 2019	Phone	Yes	No Comments
DWR Flood Operations	Mike Thao	Engineer	May 2019	Phone	Yes	No Comments
National Weather Service	Cindy Mathews	Meteorologist in Charge	May 2019	Phone	Yes	No Comments
CAL FIRE Sonoma-Lake-Napa Unit (LNU)	Mike Parks	Deputy Chief-Operations	March 10, 2021	Email	Yes	Updated phone #; No further contact needed

## Section 2: Summary of EAP Responsibilities

### 2.1. Dam Owner Responsibilities

The City of Lakeport, through the Public Works Director, is responsible for detecting and evaluating Lakeport Dam safety incidents, classifying the incidents, activating the EAP, notifying appropriate agencies of emergency conditions, notifying public safety agencies, and taking appropriate response actions.

The table below summarizes Lakeport Personnel responsibilities.

EAP Title	City of Lakeport Personnel Title	Responsibilities
Dam Owner	Public Works Director	<ul style="list-style-type: none"><li>• Determine Emergency Level</li><li>• Activate EAP</li><li>• Authorizing appropriate response actions</li><li>• Facilitate after-action evaluation and report</li><li>• Terminate the EAP</li><li>• Maintain EAP and update annually</li></ul>
Dam Operator	Wastewater Supervisor	<ul style="list-style-type: none"><li>• Detecting and evaluating Lakeport Dam safety incidents</li><li>• Notifying City management and EAP coordinator</li></ul>
EAP Coordinator	Compliance Officer	<ul style="list-style-type: none"><li>• Notify appropriate agencies of emergency conditions, emergency level, EAP activation, and other critical information.</li><li>• Notify public safety agencies of updates or changes during the incident, including termination of the emergency and the plan</li></ul>

The City of Lakeport's City Council authorizes the Public Works Director to activate this plan under the authority of the City's Municipal Code. The City Council holds a supporting, non-decision-making role and will be available for emergency meetings as called by the City Manager.

## 2.2.Impacted Jurisdictions and Public Safety Agencies Responsibilities

Inundation maps of the downstream area of Lakeport Dam are maintained by and available from the County of Lake Office of Emergency Services (LCOES). Emergency response activities are coordinated closely with the LCOES. Additionally, LCOES maintains Operational Site-Specific Dam Failure Evacuation Data for Lakeport Dam.

The LCOES is responsible for alerting affected jurisdictions, notifying local, regional and state authorities, and coordinating multi-agency response activity.

The following Jurisdictions are located downstream of Lakeport Dam:

- City of Lakeport
- Lake County
- Mendocino College, Lakeport Branch
- Major Roadways:
  - CA-29
  - South Main Street

The law enforcement agencies are responsible for providing security, traffic control, evacuation and search and rescue operations within applicable jurisdictional areas. The Lake County Sheriff's Office (LCSO) is responsible for directing activities within the unincorporated areas as well as assisting city police departments in incorporated areas. The California Highway Patrol (CHP) is responsible for traffic law enforcement and traffic control on the State freeway system as well as all public roadways in the unincorporated areas. Local CHP will work in concert with LCSO in unincorporated areas. Law enforcement agencies are responsible for ensuring transportation for the disabled, the elderly and persons without vehicles. The following table is a summary of Local Public Safety Agencies:

Agency	Responsibilities of Public Safety Agencies
City of Lakeport	Initiate EAP
LCSO	<ul style="list-style-type: none"> <li>• Direct emergency activities in unincorporated areas</li> <li>• Execute evacuation from inundation areas and block access areas</li> </ul>
Lakeport Police Department	<ul style="list-style-type: none"> <li>• Traffic law enforcement and traffic control on all public roadways in the incorporated areas of Lakeport</li> </ul>

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	<ul style="list-style-type: none"> <li>• Ensuring transportation for the disabled, the elderly and persons without vehicles</li> </ul>
CHP	Traffic law enforcement and traffic control on the State freeway system as well as all public roadways in the unincorporated areas
LCOES	<ul style="list-style-type: none"> <li>• Implement public warning and notification</li> <li>• Establish evacuation routes and road closures</li> <li>• Provide security for the affected areas during, and after, evacuation</li> <li>• Establish shelters for evacuated individuals</li> <li>• Facilitate return of evacuated individuals</li> <li>• Participate in after action evaluation</li> </ul>
Lakeport Fire Protection District	<ul style="list-style-type: none"> <li>• Assist with evacuation from inundation areas and block access areas</li> <li>• Other relevant first-responder duties as needed</li> </ul>
Lake County Fire Protection District	No jurisdiction for the City of Lakeport or Lakeport Dam
Cal Trans District 1	<ul style="list-style-type: none"> <li>• Road maintenance and closures</li> </ul>
Lake County Public Works Department	<ul style="list-style-type: none"> <li>• Road maintenance and closures</li> </ul>
DSOD	Described in Section 6.2
CalOES	Described in Section 6.2
National Weather Service	Described in Section 6.2
DWR Flood Operations Center	Described in Section 6.2

There are homes, businesses and Mendocino College located downstream of the dam. These addresses will be notified during emergencies by various methods as described in Section 6 of this EAP. In an emergency, the Sheriff's office will use the tele-notification system, CodeRed, as well as LakeCoAlerts to notify those downstream of the dam. The City uses NIXLE to send text message alerts to those who have subscribed.



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In the event of a catastrophic dam failure, Clear Lake could be impacted by floodwaters. There may be water quality impacts to the lake, should floodwaters reach it. The City will complete all required reporting to the California State Water Resources Board in the event of any impacts to Clear Lake or related watercourses.

## Section 3: Notification Flowcharts

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### 3.1. Notification Flowcharts

The City of Lakeport created notification flowcharts to appropriately identify who needs to be contacted and in what order based on the appropriate emergency level. The four different emergency levels are described in more detail in Section 5 of this EAP. To reduce the number of calls per person, the Lakeport Dam Operator and Lakeport Dam Owner will share the responsibility of contacting the organizations listed on the notification flowcharts. The primary mode of communication by City of Lakeport personnel will be cellular phones. Handheld radios are an alternative internal communication system between staff at the Lakeport Dam and staff at the Emergency Operations Center (EOC) or the City's Corporation Yard.

Positive contact is a requirement for City staff when making these calls. Every number listed can be used 24-hours a day, except for the DSOD contacts, which have several numbers covering the 24-hour period.

The City of Lakeport has also created a Contact Table for secondary numbers and contact information for key stakeholders. These calls have been agreed to by those organizations making the calls.

The following pages are the Notification Flowcharts for each emergency level.

Table 3.1. Notification Flowchart for High Flow Operations and Non-Failure

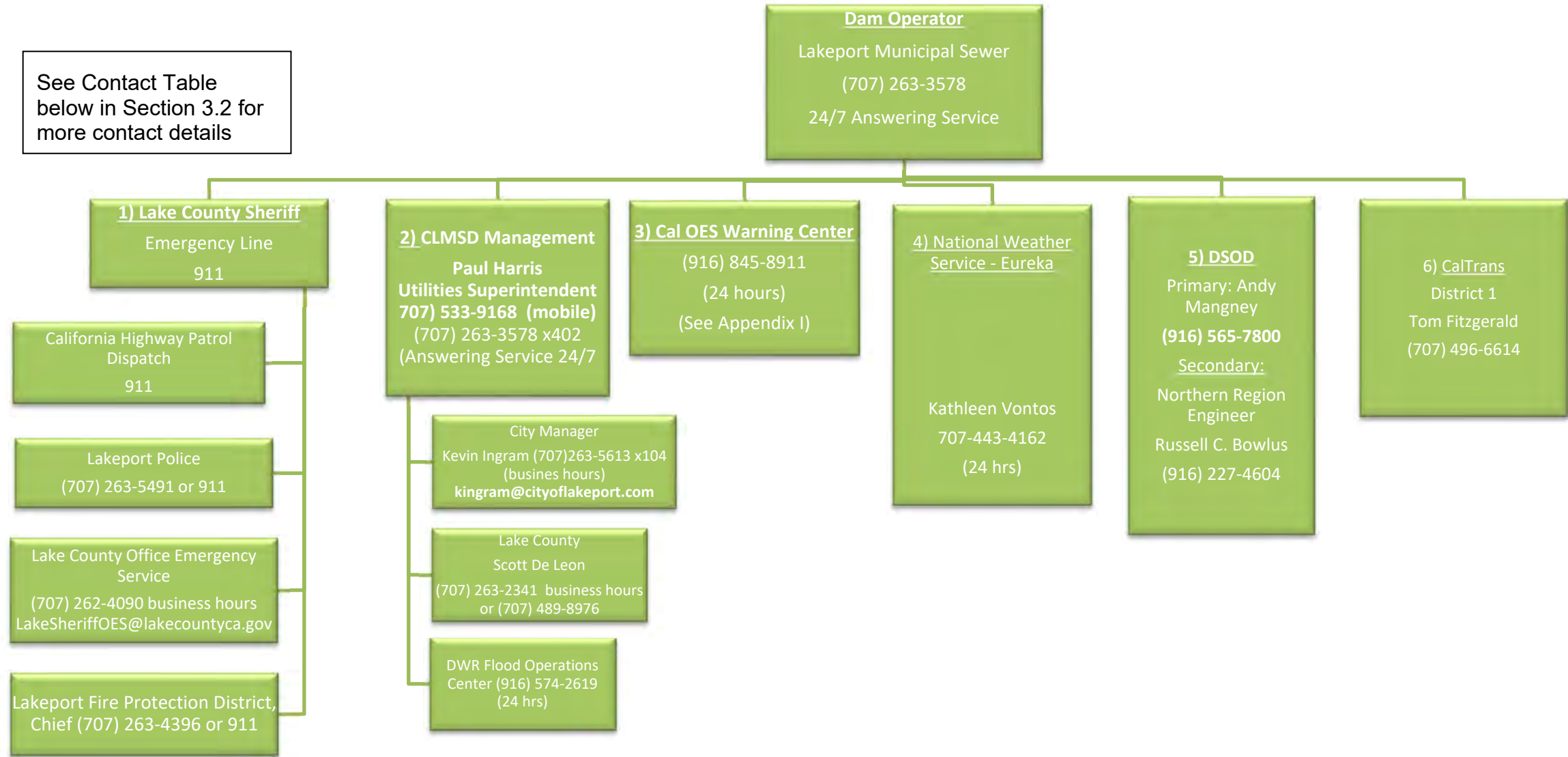


Table 3.2. Notification Flowchart for Potential Failure

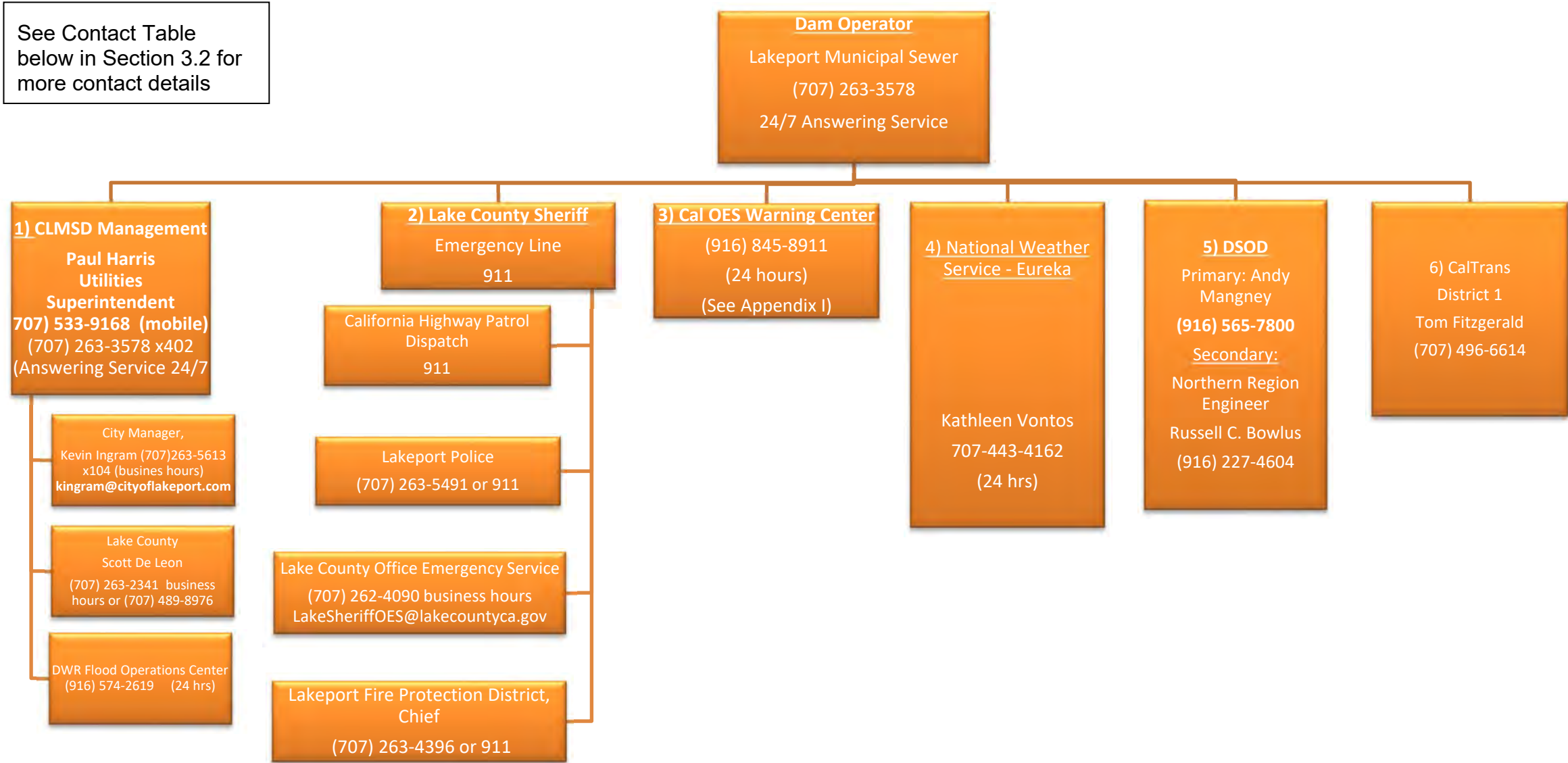
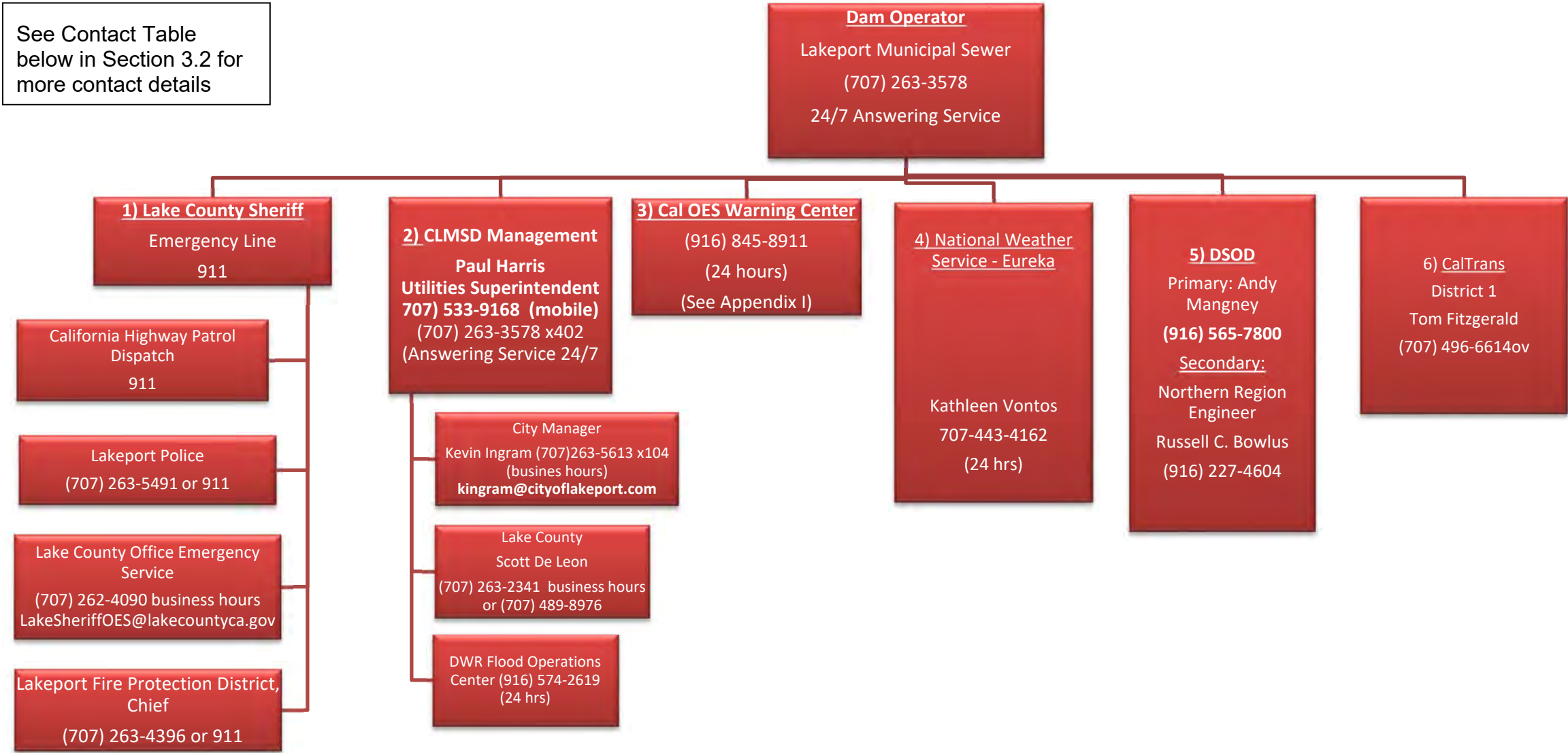


Table 3.3 Notification Flowchart for Imminent Failure



### 3.2. Contact Table

This table has supplementary contact information, as well as information for key stakeholders.

This table will be used as a secondary method to contact those on the flowcharts, but also additional information can be sent to key stakeholders that do not need immediate notification during an emergency.

Organization	Title	Phone #1	Phone #2	Address
Cal OES	California State Warning Center	916-845-8911	800-852-7550	3650 Schriever Ave Mather, CA 95655
Cal OES	Dam Safety Planning / Division Chief	916-845-8186		3650 Schriever Avenue, Mather, CA 95655
DWR DSOD	Chief Field Engineering Branch	916-227-9800		P.O. Box 942836 Sacramento, CA 94236
DWR DSOD	Northern Regional Engineer	916-565-7813		P.O. Box 942836 Sacramento, CA 94236
City of Lakeport	City Manager	707-263-5613 x104		225 Park St, Lakeport CA
Lake County Public Works	Director	707-263-2341	707-489-8976	255 N. Forbes St Lakeport, CA 95453
Lake County Community Development	Director	707-263-2221	707-489-8976	255 N. Forbes St Lakeport, CA 95453
Lake County Special Districts	Administrator	707-263-0119		230 N Main St, Lakeport, CA 95453
CHP	Commander	707-279-0103	911	5700 Live Oak Dr., Kelseyville, CA 95451
CalTrans	District 1 Emergency Coordinator	707-445-6556	707-445-6600	1656 Union Street Eureka, CA 95501
Lake County Sheriff's Office	Sheriff	707-262-4200	911	1220 Martin St., Lakeport CA
Lake County Sheriff's Office	Dispatch	707-262-4200	911	1220 Martin St., Lakeport CA

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Lakeport Police Department	Chief	(707)-263-5491	911	2025 South Main St. Lakeport, CA 95453
Lakeport Police Department	Lieutenant	(707)-263-5491	911	2025 South Main St. Lakeport, CA 95453
CAL FIRE	Sonoma-Lake-Napa Unit (LNU) Unit Chief	(707) 963-9636 LNU ECC	911	CAL FIRE Sonoma Lake Napa Unit 1199 Big Tree Rd. St. Helena, CA 94574
Lakeport Fire Protection District	Chief	707-263-4396	911	445 N. Main St., Lakeport CA
NWS – Eureka	Meteorologist in Charge	707-443-4162		300 Startare Dr Eureka, CA
DWR Flood Ops		916-574-2619		3310 El Camino Sacramento, CA
Lake Transit Authority	Director	707- 263-3334	559-499-3334	PO Box 698, Lower Lake, CA 95457
County OES	Manager	707- 263-3450	707- 263-2690	1220 Martin St., Lakeport CA
Mendocino College, Lake Center	Director	707-468-3280	707-468-3081	2565 Parallel Drive, Lakeport CA 95453

## Section 4: Project Description

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### 4.1. Dam Description and Statistics

The City of Lakeport encompasses approximately 1600 acres on the west shore of Clear Lake, within Lake County northwest of Sacramento. Lakeport Dam is located at the south end of City of Lakeport just west of Hwy 29 off of Linda Lane.

Since 1991, the City of Lakeport Municipal Sewer District has owned and operated a wastewater treatment system that serves approximately 5150 residents in the City of Lakeport. Wastewater is treated in a pond system prior to being transferred to a storage reservoir (Lakeport Dam). The treated effluent is stored in the reservoir for use by the City's 332-acre irrigation facilities. The effluent reservoir was designed to retain the excess wintertime effluent flows and rainfall that cannot be applied to the effluent irrigation fields during periods of rain as specified in the wastewater treatment plant discharge requirements issued by Regional Water Quality Control Board.

Lakeport Dam has been identified as a High Hazard that means the dam failure could cause loss of at least one human life (DSOD, 2018).

Lakeport Dam is an earthen dam with a surface area of approximately 28.6 acres and a storage volume of 650 acre-feet at the spillway elevation of 1,432 feet NAVD. The dam is 51 feet tall with the top width of 18 feet. The Lakeport Dam crest length is 890 feet and is located at elevation 1436.75 feet with a total freeboard of 4.75 feet. (i.e. the difference between the top of dam elevation and spillway crest elevation is 4.75 feet.) The table below summarizes the physical data for Lakeport Dam.

Total storage capacity of the Lakeport Dam is 650 acre-feet at spillway elevation, and the 12-foot-wide trapezoidal spillway has a capacity of approximately 279 cfs. The spillway has not been designated as a critical appurtenant structure by DSOD. DSOD has not identified any critical appurtenant structures connected to this dam.

The main outlet of Lakeport Dam is the spillway. If needed, water is released into a concrete channel downstream of the dam to a small creek which terminates in Clear Lake approximately 1.5 miles downstream. The channel capacity, from the dam to Clear Lake, is approximately 25 cfs.

The spillway serving the Lakeport Dam has never been activated in response to structural failure of the reservoir dam.

Portions of the City of Lakeport and unincorporated Lake County are downstream of the dam as well as Clear Lake. Clear Lake is a natural lake – not a reservoir. Upstream of the dam are foothills and mountainous areas with few inhabitants. There are no dams upstream or downstream of Lakeport Dam.



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Under normal operating conditions, the CLMSD reservoir spillway is not used to release any treated wastewater. Any such release is a violation of the City's waste discharge requirements established by the Central Valley Regional Water Quality Control Board. The last significant spillway release occurred in 2006, which occurred over an 11-day period in April and was estimated to be between 3.6 and 6.6 million gallons. The City/CLMSD subsequently made a number of improvements at the Lakeport dam site, including increasing the reservoir storage capacity and expanding the spray irrigation system. CLMSD makes every effort to prevent any unauthorized release from the reservoir.

Directions to access the dam are in Section 7.3.

<b>Dam Name:</b>	Lakeport Dam	<b>Dam No:</b>	2021.000	<b>NID No:</b>	CA01230
<b>Dam Owner :</b>	City of Lakeport Municipal Sewer City Number 1				
<b>Lat:</b>	39° 0' 36" N	<b>Long:</b>	122° 55' 48" W	<b>Sec/T/R/Baseline:</b>	S1-T13N-R10W
<b>Stream:</b>	N/A	<b>County:</b>	Lake County		
<b>DSOD Region:</b>	North				
<b>Type of Dam:</b>	Earth Fill	<b>Year Constructed:</b>	1980		
<b>Dam Height (ft):</b>	51	<b>Dam Crest Length (ft):</b>	890		
<b>Crest Elev (ft):</b>	1436.75	<b>Spillway Crest Elevation (ft):</b>	1432.0		
<b>Drainage Area (sq mi):</b>	<1	<b>Federal Hazard Class:</b>	High		
<b>Total Freeboard (ft):</b>	4.75	<b>Storage Capacity (af):</b>	650		
<b>Spillway Type:</b>	Chute Spillway	<b>Peak Outflow (cfs):</b>	279		
<b>Estimated Evacuation (check one):</b>	<input type="checkbox"/> <10	<input type="checkbox"/> 10-100	<input checked="" type="checkbox"/> 100-1000	<input type="checkbox"/> >1000	



## Dam Location

## 4.2. Description of Potential Downstream Impacts

There is potential for inundation of part of the City of Lakeport. According to the flood inundation study, the flood wave would inundate structures within the southern portion of the City of Lakeport, between Lakeport Dam and Clear Lake, north of the CA-29/ Hwy 175 junction (near Jack-in the Box), and south of Peckham Ct (near the Lakeport Police Department). Notably, Mendocino College, Lakeport Branch would be inundated by the flood wave. Major roadways affected include: Parallel Drive, CA-29, and South Main Street.

There is also potential for inundation in a small portion of unincorporated Lake County. The flood wave may inundate the area along South Main Street that is south of the City limit boundary. This area is developed with a mixture of retail, service commercial and light industrial businesses. A notable portion of the projected inundation area east of South Main Street is undeveloped. Some of this vacant area is used for seasonal cattle grazing.

Notable downstream structures and facilities are listed below:

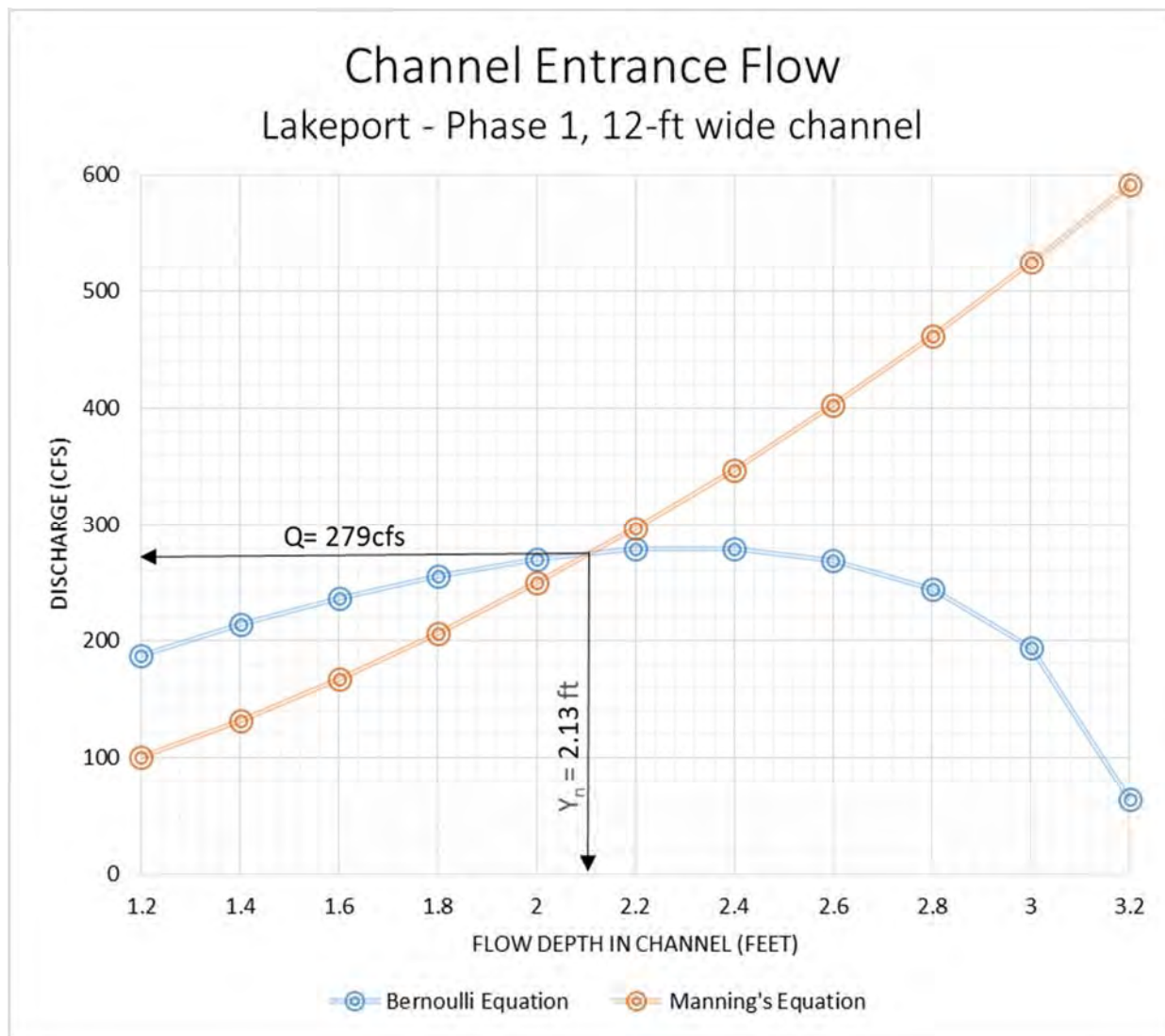
Downstream Structure	Contact Name	Contact Information
CA State Route 29 (SR 29)	District 1 Emergency Coordinator	707- 445-6556
S. Main St (unincorporated)	County PW Director	707-263-2341
S. Main St & Parallel Dr (incorporated Lakeport)	Lakeport PW Director	707-263-3578
County Utilities (sewer)	County Special Districts Administrator	707-263-0119
Lakeport Utilities (sewer & water)	Utilities Superintendent	707-263-3578 x402
Mendocino College Lake Center	Director	707-468-3280



### Schematic of Dam

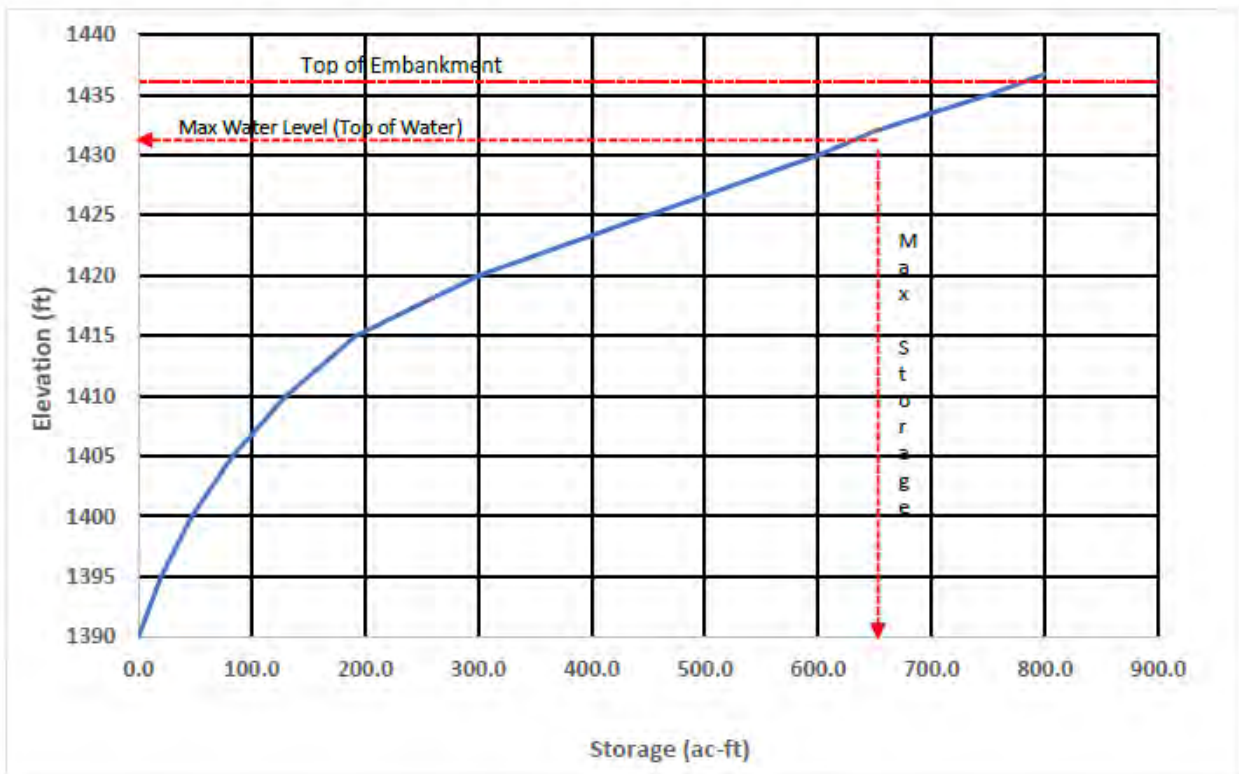


### 4.3. Spillway Rating Curve and Storage Elevation Curve



#### Spillway Channel Design Curve – Depth of Flow (feet) vs Discharge (cfs)

Note: Plot reproduced from Pace Engineering Design Calculations (1991)



**Lakeport Dam Rating Curve (Elevation-Storage Relationship)**



## Section 5: EAP Response Process

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### 5.1. Step 1: Incident Detection, Evaluation, and Emergency Level Determination

City of Lakeport Municipal Sewer District has personnel on-site at the Lakeport Dam during regular working hours Monday through Friday. The Public Works Director is the first line of defense against a dam failure. The Wastewater Supervisor is charged with visually inspecting the dam daily for any anomalies. Daily inspections are conducted when the dam is staffed by personnel (Monday through Friday). It is expected that the routine inspections would discover potentially dangerous conditions before any danger of a dam failure occurs.

After identification of a dam threatening condition, the Public Works Director or a qualified engineer, will determine if there is sufficient time for additional investigation before declaring an emergency situation, and assumes the responsibility to:

- Make an evaluation of the severity of the condition and the progressive nature of the failure; (i.e., how quickly will the dam be in danger of failing);
- Select an appropriate notification sequence based on the above decision.

For conditions beyond the normal range of operations, the dam owner or operator will contact the Division of Safety of Dams (DSOD) for assistance with evaluation.

Prior to activating the EAP, the Public Works Director will determine the Emergency Level. The following four Emergency Levels, named by the Federal Emergency Management Agency's (FEMA) Federal Guidelines for Dam Safety, have been adopted for this EAP and are listed in order of severity:



The Public Works Director will immediately attempt to classify the emergency according to the severity and urgency of the situation. Some of the factors to be considered when evaluating the emergency may include reservoir levels, weather conditions, location of the leak or seep, etc. Guidance for determining the Emergency Level is provided in Table 5.

**High Flow Operations**

A high flow condition exists when there is no danger of dam failure, but natural or man-made flows in the river system may cause flooding downstream of the dam. During flooding, flows may cause water to overflow river banks and may cause unusually large spillway releases.

**Non-Failure Emergency**

A non-failure or possible hazardous situation developing exists when there is time to correct or modify an observed dam safety condition, which could escalate into dam failure if left unattended, but does not pose immediate danger.

**Potential Failure**

This is a situation where a failure may eventually occur, but pre-planned actions taken during certain events (such as major floods, earthquakes, evidence of piping, etc.) may moderate or alleviate failure. The Wastewater Supervisor is responsible for maintaining close surveillance of a potential hazardous situation until a qualified engineer can be summoned to assist. The Emergency Level may be terminated if proactive measures and/or further evaluation lead to a determination that no further elevated risk exists. On the other hand, there should be a smooth transition from Potential Failure to Imminent Failure, if the situation appears to be developing and cannot be controlled. The Wastewater Supervisor or Utilities Superintendent will be responsible for notification of officials on the Notification Flowchart whenever the emergency classification changes.

**Imminent Failure**

This emergency level signifies when no corrective action will stop the failure of the dam, that there is no longer any time available for corrective measures to prevent or mitigate the failure of the dam, or the dam has already failed. It is impossible to determine how long it will take for a failure to occur or for a complete breach to occur once failure begins. All emergency and evacuation measures will be initiated at once.

Table 5 at the end of Section 5 provides guidance for determining the emergency level for a variety of events that could develop at the Lakeport Dam.

**5.2.Step 2: Notification and Communication**

Once a decision has been made to activate the EAP and the Emergency Level is defined, notifications will be made. Notification flowcharts have been prepared to assist personnel during an emergency for the various levels and are included in Section 3. The flowcharts identify 1) who is to be notified, 2) the prioritized order in which individuals are to be notified; and 3) who is responsible for notifying the identified representatives and/or emergency management officials;

The City makes phone calls to deliver the message manually and through a tele-notification service. To assist in this step, this EAP includes pre-scripted messages to help the caller adequately describe the emergency situation to City



personnel, emergency management agencies, and other notification recipients (see Appendix C.1-C.3).

After notifications are made, the Public Works Director, or someone he/she designates, will complete the Contact Log (see Appendix D). Contact Log may be used to track the notifications that have been made or attempted. The contacts within the notification flowcharts will be reviewed annually.

Regardless of the status, whether consistent or changing, the Public Works Director, or someone he/she designates, will make periodic status/incident updates to the contacts on the appropriate Notification Flowchart. If an Incident Commander (IC) has been identified for the incident, the IC, or Incident Command Post, will be added to the notification list. Frequent and thorough communication is a priority for managing an emergency.

### **5.3.Step 3: Emergency Actions**

In the event of an emergency at Lakeport Dam, the Wastewater Supervisor will coordinate dam operations and involve outside agencies as necessary. CLMSD staff, under the direction of the Utilities Superintendent, will work to mitigate the incident by determining what remediation actions to take. Table 5 at the end of Section 5 contains preventative action guidelines for specific events that may occur at the Lakeport Dam. Appendix F: Emergency Incident Log may be used during the emergency event to document conditions, actions, and event progression.

- i. **High Flow Event**  
For an unusual event that is slowly developing, follow the notification chart in Part 1, Section 3 (Notification Flowchart for High Flow Event) in this document, and provide the information outlined in Appendix I: Cal OES Warning Center Dam Incident Report. Then follow the expected actions outlined in Table 5.
- ii. **Non-Failure Event**  
For an unusual event that is slowly developing, follow the notification chart in Part 1, Section 3 (Notification Flowchart for Non-Failure Event) in this document, and provide the information outlined in Appendix I: Cal OES Warning Center Dam Incident Report. Then follow the expected actions outlined in Table 5.
- iii. **Potential Failure**  
For a potential dam failure situation or a rapidly developing situation, make the necessary notifications in Part 1, Section 3 (Notification Flowchart for Potential Failure) in this document and provide the information outlined in Appendix I: Cal OES Warning Center Dam Incident Report. Then follow the expected actions outlined in Table 5.

iv. **Imminent Failure**

For a dam failure that is in progress or appears to be imminent, make the necessary notifications in Part 1, Section 3 (Notification Flowchart for Imminent Failure) in this document, and provide the information outlined in Appendix I: Cal OES Warning Center Dam Incident Report. If dam failure is in progress or appears to be imminent, nothing further can be done to save the dam. Personal safety must take priority.

## **5.4. Step 4: Termination and Follow-up**

The City of Lakeport, through the EAP Coordinator, will provide incident information to the responding federal, state, and local officials. Based on data received from the field, in conjunction with the conditions at the dam, the Public Works Director will determine when to terminate the EAP and convey that information to responding officials through the Notification Flowcharts. EAP Termination usually occurs once the dam incident has been resolved at the dam site – this does not signify termination of the incident or Incident Command.

The EAP Coordinator will follow the notification flowchart to alert all contacts of the plan's termination.

The Public Works Director will ensure that the Termination Log (see Appendix G) is completed, so that the conditions and decisions are documented.

Post-incident, the Public Works Director will set up and facilitate a meeting to review the incident and EAP implementation activities. The dam personnel involved with the plan implementation, as well as the responding agencies, should be present at the meeting. The following topics will be discussed and evaluated in an After Action Review (AAR):

- Events or conditions leading up to, during, and following the incident
- Significant actions taken by each participant and improvements for future emergencies
- All strengths and deficiencies found in the incident management process, materials, equipment, staffing levels, and leadership
- Corrective actions identified and a planned course of action to implement recommendations

The results of the After Action Review should be documented in an AAR and used to revise the EAP. A template for an AAR is found in Appendix H.

**Table 5 – Example Situations, Emergency Levels and Guidance for Possible Actions**

Below is a table of example situations, potential emergency levels for those situations and guidance for possible actions. Each dam and situation are unique and therefore judgment is needed when making decisions.

Dam Emergency Response Guide			
Event	Situation	Emergency Level	Possible Actions
Earthquakes	Measurable earthquake felt or reported within 50 miles of the dam.	<b>Non-Failure</b>	Conduct visual observation. If no unusual conditions are noted, contact Treatment Plant to document initial report and subsequent inspection results. If unusual conditions are verified, immediately contact the City's Utilities Superintendent or Public Works Director. The contact receiving the report will notify the Executive Management Team and the EOC Damage Assessment Unit regarding the next course of action.
	Earthquake resulting in visible damage to the dam or spillway.	<b>Potential Failure</b>	
	Earthquake resulting in uncontrolled release of water over the dam or rapidly developing flow through cracks or rapidly developing erosion through increased seepage	<b>Imminent Failure</b>	
Spillways	Reservoir water surface elevation at spillway is flowing with no active erosion	<b>Non-Failure</b>	Lower the water level in the reservoir by opening all gates and valves at a rate, and to an elevation that is considered safe. Consider pumping or siphoning if required.
	Spillway flow that could result in flooding of people downstream if the reservoir level continues to rise	<b>High Flow</b>	
	Spillway flowing with active erosion gullies	<b>Potential Failure</b>	Provide temporary protection at the point of erosion by placing sandbags, riprap materials or plastic sheet weighted with sandbags. Consider pumps and siphons to help reduce the water level in the reservoir. When inflow subsides, lower water level in the reservoir to a safe level; continue operating at a lower level in order to minimize spillway flow.
	Spillway flowing with significant erosion and head cutting advancing rapidly towards reservoir	<b>Imminent Failure</b>	
Seepage	New seepage areas in or near the dam.	<b>Non-Failure</b>	If the leak is originating from within the reservoir or the upstream embankment, plug the flow with whatever material is available (hay bales, bentonite, or plastic sheeting). Lower the water level in the reservoir until the flow decreases to a non-erosive velocity or until it stops. Place an inverted filter (a protective sand and gravel filter) over the exit area to
	Boils observed downstream of dam.	<b>Non-Failure</b>	
	New seepage areas with cloudy discharge or increasing flow rate.	<b>Potential Failure</b>	

## Emergency Action Plan

Dam Emergency Response Guide			
Event	Situation	Emergency Level	Possible Actions
	Boils observed downstream of dam with cloudy discharge.	<b>Potential Failure</b>	hold materials in place. Continue lowering the water level until a safe elevation is reached; continue operating at a reduced level until repairs are made. Stabilize damaged areas on the downstream slope by weighting the toe area below the slide with additional soil, rock, or gravel.
	Increasing and rapidly developing seepage with cloudy discharge Or Seepage with discharge greater than ten gallons per minute.	<b>Imminent Failure</b>	
Sinkholes	Observation of a new sinkhole in reservoir area or on embankment.	<b>Potential Failure</b>	Complete an immediate engineering exploration to determine the cause of the sinkhole and evaluate the damage sustained and the potential danger of failure. Determine exit point of flowing water. Implement temporary measures to protect the damaged structure, such as closing the inlet and lowering the water level in the reservoir to a safe level, until permanent repairs can be made.
	Rapidly enlarging sinkhole.	<b>Imminent Failure</b>	
Embankment Cracking	New cracks in the embankment greater than one-quarter inch wide without seepage.	<b>Non-Failure</b>	Lower the water level by releasing it through the outlet or by pumping or siphoning. If necessary, restore freeboard. Lower water level in the reservoir to a safe level; continue operating at a reduced level until repairs are made.
	Cracks in the embankment with seepage	<b>Potential Failure</b>	
Embankment Movement	Visual shallow movement/slippage of embankment slope.	<b>Non-Failure</b>	Lower the water level in the reservoir by opening all gates and valves at a rate, and to an elevation that is considered safe given the slide situation. If outlet is damaged or blocked, pumping or siphoning may be required.
	Visual deep-seated movement/slippage of the embankment slope.	<b>Potential Failure</b>	
	Sudden or rapidly occurring slides of embankment slope.	<b>Imminent Failure</b>	
Security Threat	Unauthorized personnel are seen or reported to be at the dam.	<b>Non-Failure</b>	Contact law enforcement and notify appropriate City management staff, according to the severity of the threat.
	Verified bomb threat that, if carried out, could result in damage to the dam.	<b>Potential Failure</b>	
	Detonated bomb that has resulted in damage to the dam or appurtenances.	<b>Imminent Failure</b>	
Fire	Significant fire in the area that affects access to the dam.	<b>Non-Failure</b>	Implement fire procedures (if applicable)
Sabotage / Vandalism	Damage to dam or appurtenances with no impacts on the functioning of the dam.	<b>Non-Failure</b>	Contact law enforcement to help evaluate. If the embankment or spillway has been damaged, provide temporary protection in the damaged area. Lower water level by using outlet or pumps and siphons if necessary. If water supply has been contaminated, immediately close
	Modification to the dam or appurtenances that could adversely impact the functioning of the dam.	<b>Potential Failure</b>	
	Damage to dam or appurtenances that has resulted in seepage flow.	<b>Potential Failure</b>	

## Emergency Action Plan

Dam Emergency Response Guide			
Event	Situation	Emergency Level	Possible Actions
	Damage to dam or appurtenances that has resulted in uncontrolled water release or rapidly developing erosion.	<b>Imminent Failure</b>	all inlets to the water supply system and notify appropriate authorities.
Instrumentation Reading Abnormal	Instrumentation reading beyond predetermined values.	<b>Non-Failure</b>	Conduct periodic inspections of the dam to check and record the following: reservoir elevation, rate at which the reservoir is rising, weather conditions, discharge conditions of creeks/rivers downstream, new or changed conditions associated with this event. Evaluate accuracy of instrumentation.
Outlet System Failure	Releases are causing erosion around the outlet.	<b>Non-Failure</b>	Implement temporary measures to protect the damaged structure, such as closing the inlet. Lower the water level in the reservoir to a safe elevation possibly using pumps or siphons. Consider severity of flow through outlet and increased flows determining emergency level.
	Uncontrolled releases through the outlet.	<b>Potential Failure</b>	
	High uncontrolled release through the outlet or damage to the outlet works	<b>Potential Failure/ Imminent Failure</b>	

## Section 6: General Responsibilities

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### **6.1. Dam Owner/Operator Responsibilities**

As the owner of Lakeport Dam, CLMSD/City of Lakeport (lead by the Public Works Director) is responsible for detecting and evaluating dam safety incidents, classifying the incident, notifying emergency management authorities, and taking appropriate response actions. The emergency response effort will be led by the Public Works Director and the Utilities Superintendent with recommendations and advice from the Wastewater Supervisor, who is on site at the dam regularly.

#### **6.1.1. Notification and Communication Responsibilities**

CLMSD staff, under the guidance of the Public Works Director, will use its Notification Flowcharts and procedures when an incident occurs (see Sections 3 and 5.2). While not directly responsible for public notifications or issuing evacuation orders, the Utilities Superintendent and Wastewater Supervisor, along with CLMSD personnel, will work with local authorities in providing them situational awareness to assist them in making timely and accurate decisions regarding warnings and evacuations.

#### **6.1.2. Onsite Evacuation Responsibilities**

The CLMSD, led by the Wastewater Supervisor, will evacuate its on-site personnel as needed, depending on the situation. The CLMSD is not responsible for issuing evacuation orders or evacuating the public.

The Lakeport Police Department and Lake County Sheriff's Office will issue any official evacuations for the public as noted in Section 6.3.

#### **6.1.3. Monitoring, Security, Termination, and Follow-up Responsibilities**

The City of Lakeport is responsible for monitoring Lakeport Dam and its security. During an emergency, CLMSD personnel will be maintained at the dam site 24/7 for the duration of the dam emergency or high flow event. Visual inspections will be performed regularly. The reservoir levels can also be monitored through the SCADA system from other locations. Since Lakeport Dam is a holding area for treated wastewater and natural watershed runoff is diverted before entering the reservoir, there are no unexpected inflows to the reservoir, therefore inflow monitoring is unnecessary.

The Public Works Director is responsible for termination of the EAP, and follow up after termination of the EAP as outlined in Section 5.4 of this document.

The Wastewater Supervisor and other staff will monitor the dam and incident information as needed. The Wastewater Supervisor and Utilities Superintendent also oversees the security onsite.

When an incident has been resolved, the Public Works Director will officially terminate the EAP, and ensure the Termination Log is completed (see Appendix H). The Public Works Director will notify authorities that the condition of the dam has stabilized and declare an end to the public emergency response. Section 5.4 details termination.

#### **6.1.4. EAP Coordinator Responsibilities**

The EAP Coordinator's main responsibilities include:

- EAP revisions and distributions
- EAP exercises and trainings
- Organizing and facilitating after action meeting

Serving as Point of Contact for questions about EAP Post-incident, the EAP Coordinator will facilitate a meeting with City of Lakeport personnel involved with the EAP implementation, as well as the impacted jurisdictions. From this forum, the EAP Coordinator will consolidate the information and produce an After Action Report (AAR). The Coordinator will then use AAR to update/review the EAP.

The City of Lakeport Compliance Officer is the EAP Coordinator and is responsible for coordinating the annual EAP review, as described in Section 8.1. The EAP Coordinator also prepares revisions to this EAP, provides updated copies of the EAP to the designated agencies and serves as Point of Contact for questions on the EAP. Sections 8.1 and 8.2 provide EAP Coordinator information.

## **6.2. Local Public Safety Agencies' Responsibilities**

The EAP has summary information for those jurisdictions that have a prominent role in responding to an incident affecting the Lakeport Dam. These summaries have been reviewed by each respective organization, and will be reviewed on an annual basis, to ensure their accuracy.

The Public Works Director is responsible for initiating the Dam EAP by proclaiming an emergency condition exists. The Public Works Director will consult with the City Manager prior taking action unless the emergency involves public safety concerns or if the City Manager or designee is unavailable. Once an Emergency has been proclaimed, local public safety agencies will become involved and take on the responsibilities listed below.

### **Incident Commander**

The Lakeport Police Department will likely assume the role of Incident Command. The Incident Commander (IC), in coordination with the Sheriff's Office, Lakeport Fire District, CHP, City of Lakeport OES and LCOES, will be responsible for all emergency activities, including development, implementation and review of strategic decisions, as well as post event assessments. The IC will also be responsible for protecting life and property, controlling personnel and equipment resources, maintaining accountability for responder and public safety, and establishing and maintaining effective communication with outside agencies and organizations. Duties may include the following:

- i. Establishing command.
- ii. Ensuring responder safety.
- iii. Assessing incident priorities.
- iv. Determining operational objectives.
- v. Developing and implementing the Incident Action Plan.
- vi. Developing an appropriate organizational structure.
- vii. Maintaining a manageable span of control.
- viii. Managing incident resources.
- ix. Coordinating overall emergency activities.
- x. Coordinating the activities of outside agencies.
- xi. Authorizing the release of information to the media.
- xii. Terminating the emergency.
- xiii. Participating in an annual review and update of the EAP.

The City of Lakeport uses the NIXLE public alert system which will be used in the event of a public emergency related to the Lakeport Dam. NIXLE has the Lakeport landlines loaded into the database for emergency calls and it sends text messages to those who have subscribed.



## **Dam Owner Contact**

The Dam Owner Contact will coordinate contact with the National Weather Service for flash flood warnings in the case of potential failure or imminent failure. The Dam Owner Contact will also coordinate contact with the Lake County Emergency Operations Center.

## **Lake County Sheriff's Office**

The County Sheriff's Office, in coordination with the City of Lakeport/CLMSD and the County Office of Emergency Services (OES), has the primary responsibility in alerting and warning the public, with assistance from the Public Information Officer and Team, as deemed necessary. Alerting and warning the public may be accomplished through the Emergency Alert System (CodeRED or LakeCoAlerts), special broadcasts, or simply driving up and down the streets using the public address system.

During a dam incident, the County Sheriff's Office will:

- Report to the Incident Command Post, receiving briefing from Incident Commander (IC) or Operations Section Chief, if position is filled.
- In coordination with the Lakeport Fire Protection District, and as directed by the IC or Operations Chief, take the following actions:
  - Establish a perimeter to isolate the incident.
  - Control access to incident site, restricting access to emergency responders only.
- Through Dispatch, request that off-duty Deputies be recalled to duty.
- Request Dispatch to notify and request that the Operational Area Law Enforcement Mutual Aid Coordinator respond to the incident. Activate the Law Enforcement Mutual Aid System as required.
- If evacuation of affected areas is requested by the Incident Commander, take the following actions in coordination with the Lakeport Fire Protection District:
  - Identify safe evacuation routes.
  - Identify and establish adequate evacuation reception areas.
  - Request that the American Red Cross activate a shelter, if long-term evacuation is expected.
  - Provide security for evacuated areas.
- In coordination with the Lakeport Police Department and the Lakeport Fire Protection District, take the following actions in response to a dam failure:
  - Develop and implement a traffic control plan, coordinating with Lakeport Public Works, County of Lake Public Works and/or California Department of Transportation for the use of street barricades.
  - Provide for crowd control.

- Provide regular status reports on all response actions to the Incident Commander
- Ensure that all emergency public information is transmitted through the Incident Commander.

The Law Enforcement Mutual Aid Plan partners include: Lake County Sheriff's Office, Lakeport Police Department, Clearlake Police Department, California Highway Patrol, California Department of Forestry & Fire Protection, California Department of Parks & Recreation, and California Department of Fish & Wildlife.

## **Lakeport Fire Protection District**

In a dam incident the Fire Protection District will:

- Activate the Mutual Aid Agreement.
- Coordinate with City of Lakeport Police Department and County Sheriff's Office to isolate and deny entry to dam inundation area.
- Assist the Lakeport Police Department and County Sheriff's Office with evacuating areas within the dam inundation area and in the identification of safe evacuation routes to be used.
- Assist the Lakeport Police Department and County Sheriff's Office with identifying adequate evacuation reception areas. (If long-term evacuation of area is required, notify and coordinate with the Northern California Chapter of the American Red Cross regarding the activation of a shelter.)
- Provide periodic status reports to Central Dispatch and the City or County Emergency Operations Center, if activated. At a minimum, provide information regarding response activities, injuries, and sustained damage.
- Ensure that rescue operations are established; include swift water rescues if required.
- Assist the CLMSD/City of Lakeport, in any way possible, with diverting flood waters or pumping out critical facilities that have become flooded.
- Coordinate emergency public information with City of Lakeport and County OES.

Most public agencies within Lake County are participants in local mutual aid activities.

## **Lake County Office of Emergency Services**

The Lake County's Office of Emergency Services (OES) will provide emergency preparedness information from local, state, and federal sources to the Operational Area member jurisdictions including the citizens of Lake County.

The County of Lake Disaster Council is an official advisory body of OES to the County Board of Supervisors. As an advisory body, the Disaster Council's purpose is to lead ongoing efforts to improve preparedness countywide and provide oversight for critical disaster functions. The Council is made up of

County Supervisors, City Managers, the County Public Works Director, Fire and Police Chiefs, and CHP representatives.

The County OES maintains a list of all the County emergency operations plans.

Additionally, the Lake County Office of Emergency Services maintains and operates the LakeCoAlerts system to send out critical information to the community. LakeCoAlerts is pre-programmed with all the land-lines in the county and is also an opt-in system in which residence can specify how they want to be alerted. The County OES will have a major role in proclaiming a local emergency.

## **Lakeport City Engineering Division**

During any incident, the City Engineering Division supports emergency response operations and provides guidance for initial size-up, rapid needs, and preliminary disaster safety reports on the areas affected, damaged, and destroyed during an emergency event.

During a dam incident, the Division would:

- Report to the Incident Command Post and obtain an incident briefing from the Incident Commander or the Operations Section Chief, if the position is established.
- Establish communications and coordinate efforts with the CLMSD, the operator of the dam.
- Assess the damage sustained to City of Lakeport public roadways including Parallel Drive and South Main Street and determine if they are structurally safe to use.
- In any way possible, divert flood waters.
- Provide technical support to the Fire Protection District or other personnel in pumping water out of critical facilities that have become flooded.

## **Neighboring Area Public Safety Agencies**

The City of Lakeport has formal and informal mutual aid agreements with several nearby public agencies, including the Lake County Public Works Department. The operational area includes the cities of Lakeport and Clearlake as well as unincorporated communities and areas under the County of Lake's jurisdiction. For the purpose of this EAP, it's important to note that the City of Lakeport also relies on the State of California Master Mutual Aid Agreement which calls for "all of the resources and facilities of the State, its various departments and agencies, and all its political subdivisions, municipal corporations, and other public agencies be made available to prevent and combat the effect of disasters which may result from such calamities as flood, fire, earthquake, pestilence, war, sabotage, and riot."

In addition to mutual aid agreements, the Law Enforcement Mutual Aid System can be relied upon. It was established in 1961 and is used to restore order during emergencies including natural disasters such as wildfires, earthquakes and floods. According to the California Office of Emergency Services (OES), the Law Enforcement Mutual Aid System is based on the concept of ‘neighbor helping neighbor’. The basic concept provides that within the operational area, adjacent or neighboring law enforcement agencies will assist each other. Should the event require assistance from outside the county, the region will provide requested assistance to the impacted county.

## **Other Public Safety Agencies**

The California Governor’s Office of Emergency Services (Cal OES) and the Department of Water Resources (DWR), Division of Safety of Dams (DSOD) co-manage the state’s dam safety program. DSOD is responsible for the review and approval of inundation maps while Cal OES is responsible for overseeing the review, approval, and ongoing activities associated with EAPs under California Government Code Section 8589.5.

## **California Governor’s Office of Emergency Services (Cal OES)**

The mission of Cal OES is to protect lives and property, build capabilities, and support our communities for a resilient California. Cal OES plays an assortment of roles in managing the dam safety program and related emergencies.

### **Dam Safety Planning Division**

The division is responsible for reviewing and approving dam owners’ Emergency Action Plans (EAP). This process includes division outreach and technical assistance to dam owners and local emergency management personnel. The Cal OES Dam Safety Planning Division may also provide guidance to local public safety agencies with regard to incorporating EAPs into their existing all-hazards key response and mitigation plans. The division will also participate in the annual review and update of the EAP.

### **California State Warning Center (CSWC)**

The CSWC is staffed 24 hours per day, 365 days per year, to provide round-the-clock situational awareness. The mission of the CSWC is to be the central information hub for statewide emergency communications and notifications. It is equipped with a number of telephone, data, and radio systems. The majority of these systems are used on a day-to-day basis, while others are available for use in an emergency or as conditions require. The CSWC has the responsibility to receive, coordinate, verify, and disseminate information pertaining to events which occur within California or that could affect California.

Immediate notifications would be provided to:

- Department of Water Resources, Division of Safety of Dams;

- National Weather Service;
- Cal OES Dam Safety Planning Division;
- Cal OES Duty Officers;
- Department of Water Resources Flood Operations Center;
- State Parks and Recreation; and/or
- Other agencies/departments as dictated by the event or required by law.

City of Lakeport liaison to Cal OES will be:

Andrew Britton, Compliance Officer

Organization: [Public Works Department, City of Lakeport](#)

Email: [abritton@cityoflakeport.com](mailto:abritton@cityoflakeport.com)

Phone: (707) 263-3578 x403

### **California Department of Water Resources (DWR), Division of Safety of Dams (DSOD)**

The mission of DSOD is to protect people against the loss of life and property due to dam failure. The California Water Code entrusts this regulatory power to the Department of Water Resources, which delegates the responsibility to DSOD. Section 6110 of the Water Code directs the Department to immediately employ any remedial means necessary to protect life and property if either: (a) the condition of the dam is so dangerous to the safety of life or property as to not permit time for the issuance and enforcement of an order relative to maintenance or operation, or (b) passing or imminent floods threaten the safety of any dam or reservoir. Section 6111 of the Water Code states that in applying the remedial means “the department may, in emergency, do any of the following: (a) lower the reservoir; (b) completely empty the reservoir; (c) take such other steps as may be essential to safeguard life and property.” In the event of an emergency at the dam, DSOD actions could include, but are not limited to:

- Advising the dam owner’s/operator’s representative of remedial actions
- Ordering the dam owner’s/operator’s representative of remedial actions
- Assuming control of the dam, if necessary, to safeguard life and property
- Advising the dam owner’s/operator’s representative of the emergency level determination
- Inspecting the dam during and after the emergency
- Design review and approval of emergency repairs
- Acting as a dam technical specialist in the State Operations Center (SOC), or other emergency operations center (EOC)

Additionally, per Water Code Sections 6160 and 6161, DSOD is responsible for the review and approval of inundation maps. The California Code of Regulations, Title 23, Division 2, Chapter 1, Article 6 defines the specific requirements of the inundation maps.

DSOD has approved the Lakeport inundation maps. The approval letter is included in Part II of this EAP.

## **California Office of Emergency Services (Cal OES) and the Warning Center**

Cal OES plays dual roles in managing an emergency; one at the Regional level and the other at the State level. The Regions include North Region, Inland Region, Coastal Region, and Southern Region, while the State level constitutes the Executives and brokers resources between the Regions. The State level also interfaces with the National Response Framework, and informs the Governor, Legislature, and State Emergency Management stakeholders. Cal OES also implements State Level Media Policy, and provides the primary coordination with the Standardized Emergency Management System (SEMS) and the National Incident Management System (NIMS) at the federal level.

The Lakeport Dam Owner/Operator will send a copy of the EAP Annual Review form (Appendix A) to Cal OES North Region. EAP updates will also be provided to Cal OES.

The Warning Center is the link for notifications between State and Federal agencies for this Emergency Action Plan. At the request of the Operational Area Manager or another State Agency, the Warning Center is able to gain rapid response from the proper personnel who would coordinate resources for response.

The Warning Center is operated 24/7 by Cal OES and, in extreme conditions, a Dam Operator/Owner may request the Warning Center provide notification to the Sheriff's Office on their behalf as a backup notification plan. The Lake County Sheriff would be the first agency notified if this were to be requested.

Immediate notifications would be provided to:

- DWR - Division of Safety of Dams
- National Weather Service
- Cal OES Duty Officers
- Flood Operations Center
- State Parks and Recreation and/or
- Others as dictated by the event or required by law

## **National Weather Service (NWS)**

The mission of the NWS is to provide weather forecasts and flash flood warnings. In the case of dam failure, the NWS would provide warning of imminent flash flood danger impacting downstream locations. The NWS is contacted by the Lakeport Dam Operator.

In the event of a known or potential dam/levee failure, which will or could cause high flows and pose a risk to life and property, Weather Forecast Offices (WFOs), in this case will be the Eureka office, issue flash flood/flood watches and warnings for areas/points in their Hydrologic Service Area (HSA) impacted by potential/imminent dam/levee failures.

Upon notification of an imminent/potential dam/levee failure, WFOs should follow the guidance provided in Section 3.6 of NWS Instruction 10-921 and notify the SR Regional Operations Center as soon as possible. The WFO should coordinate follow-up watches/warnings/statements with the River Forecast Center, dam/levee owner, and/or local emergency management officials. (NWS, 2019)

### **California Department of Water Resources (DWR), Emergency Operations Center (EOC)**

When a severe storm pattern or other flood potential develops, the DWR's Emergency Operations Center is activated. The EOC is primary center for Center coordination of DWR's overall flood fight assistance and coordination with other State agencies.

## **6.3. Evacuation Responsibilities**

The Lakeport Police Department is responsible for evacuation notifications and related activities in the incorporated areas of Lakeport.

The Lake County Sheriff's Office is responsible for directing evacuation activities within the County's unincorporated areas as well as assisting the Lakeport Police Department in the incorporated area of Lakeport.

Given the limited resources in the Lakeport area, it's likely that the Lakeport Fire Protection District will assist with evacuation efforts.

The California Highway Patrol (CHP) is responsible for traffic matters (traffic law enforcement and traffic control) on the State Highway system, as well as all public roadways in unincorporated areas of the State.

Evacuation warning and route alert information is coordinated by the County OES using its tele-notification system.

## **6.4. Monitoring, Security, Termination and Follow-up Responsibilities**

See Section 6.1.3

## **6.5. EAP Coordinator Responsibilities**

See Section 6.1.4

## Section 7: Preparedness

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### 7.1. Surveillance and Monitoring

Regular surveillance and monitoring of Lakeport Dam are to be conducted by CLMSD personnel. The Wastewater Supervisor will regularly inspect and maintain the dam infrastructure by performing daily visual inspections. Daily inspections are conducted when the dam is staffed by personnel (Monday through Friday).

Onsite CLMSD Staff monitor the water levels at Lakeport reservoir. Water levels in the reservoir are also recorded automatically via the SCADA system. If water levels become too high or too low for unknown reasons, Staff notify the Wastewater Supervisor to begin work on mitigating any dam issues that may arise.

During all Dam emergencies or high level events CLMSD staff will be on site 24/7. Lakeport Police Department can provide surveillance if necessary during an emergency event.

### 7.2. Evaluation of Detection and Response Timing

Any incidents warranting an emergency event at Lakeport Dam shall be reported to the Public Works Director immediately. Public access to Lakeport Dam is restricted to the public, as it is a holding area for treated wastewater. However, the City of Lakeport, along with homes and businesses, are located downstream of the dam. Therefore, timely identification and reaction to an incident or an actual or impending failure is essential. Timely implementation of the EAP is essential and it is a high priority for the City as well as the local public safety agencies. The time from the initial detection of an incident through the determination of the emergency level and execution of the notifications to the appropriate entities, should take no more than twenty minutes.

### 7.3. Access to the Site

Access to the site is restricted to City of Lakeport personnel, unless permitted and supervised by the City of Lakeport. There are primary and secondary access routes to the dam. Access directions to both are listed below.

Dam Located at **795 Linda Ln, Lakeport, California, 95453** past a locked gate.

#### **Primary Access:**

##### **Approaching Lakeport from the North on CA-29 S:**

Drive through Lakeport 2.5 miles past exit 103 for Scotts Valley Road/11th Street



Turn right onto Hwy 175 W/Hopland Rd  
Take the next immediate Right after ~184 ft on to Parallel Drive  
Take the next immediate Left after ~0.1 miles on to Linda Lane  
Continue on Linda Lane for 0.7 miles past gate arrive at Lakeport Dam

**Approaching Lakeport from the South on CA-29 N / Hwy 175 W:**

Drive through Kelseyville Continue 5.5 miles  
Turn Left onto Hwy 175 W/Hopland Rd  
Take the next immediate Right after ~184 ft on to Parallel Drive  
Take the next immediate Left after ~0.1 Miles on to Linda Lane  
Continue on Linda Lane for 0.7 miles past gate arrive at Lakeport Dam

**Approaching Lakeport from the West on Hwy 175 E:**

From 101 junction continue on Hwy 175 E for 16.4 miles  
Before CA-29, take a left onto Parallel Drive  
Take the next immediate Left after ~0.1 Miles on to Linda Lane  
Continue on Linda Lane for 0.7 miles past gate arrive at Lakeport Dam

**Secondary Access to Lakeport Dam:** First responders and emergency personnel can access the Lakeport Dam site via a driveway located at 3655 Highway 175. See Dam Location and Access map on following page for more details.

**Approaching Lakeport from the North on CA-29 S:**

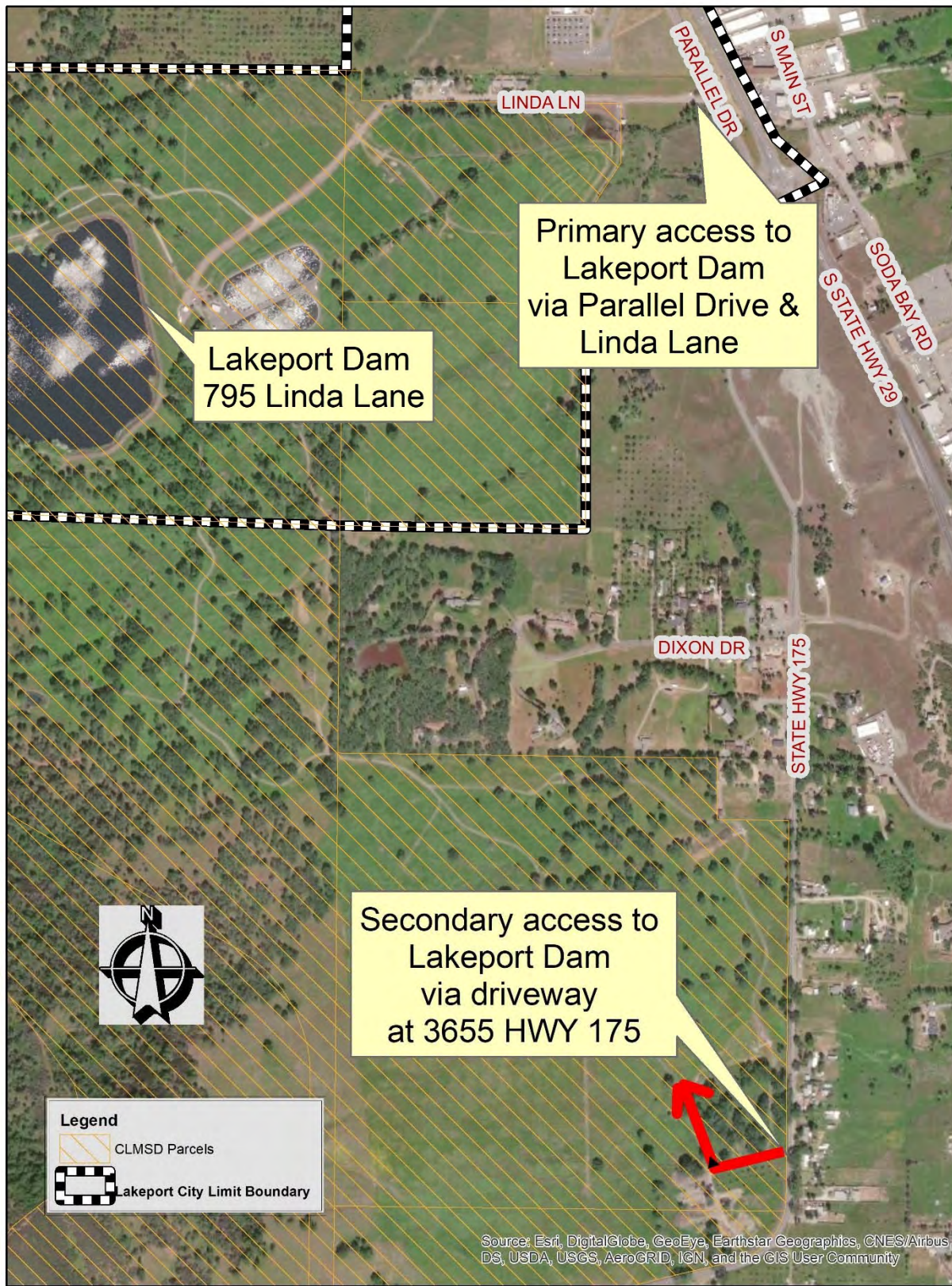
Drive through Lakeport 2.5 miles past exit 103 for Scotts Valley Road/11th St.  
Turn Right onto Hwy 175 W/Hopland Rd  
In 1.1 miles, turn Right onto driveway at 3655 Hwy 175  
Continue on driveway to arrive at Lakeport Dam

**Approaching Lakeport from the South on CA-29 N / Hwy 175 W:**

Drive through Kelseyville Continue 5.5 miles  
Turn Left onto Hwy 175 W/Hopland Rd  
In 1.1 miles, turn Right onto driveway at 3655 Hwy 175  
Continue on driveway to arrive at Lakeport Dam

**Approaching Lakeport from the West on Hwy 175 E:**

From 101 junction continue on Hwy 175 E for 15.4 miles  
Turn Left onto driveway at 3655 Hwy 175  
Continue on driveway to arrive at Lakeport Dam



**Map of showing Lakeport Dam and Approach Roads**

## **7.4. Response during Periods of Darkness**

The dam is operated as a holding area for water until it can be used as irrigation water and applied to nearby fields. Regular nighttime operations are not necessary.

In an emergency situation, lighting may be required for dam inspections. Portable lighting is available for the dam face so Lakeport Dam personnel will be able to inspect normally during periods of darkness if required.

If the electricity fails at the dam, there is a standby generator permanently on site that can operate all the necessary functions of the dam. City will deploy exterior emergency lighting as needed.

If darkness corresponds with an after-hours/weekend/holiday response, the response time to the Lakeport Dam may be up to 30 minutes longer than usual.

## **7.5. Response during Weekends and Holidays**

No special instructions are deemed necessary for the execution of this EAP during nights, weekends and holidays. The City of Lakeport Utilities Division maintains on-call staff during nights, weekends and holidays. The phone number for the Dam Operator (707-263-3578) provided in the Notification Flowcharts in Section 3 is connected to a 24/7 answering service during nights, weekends and holidays.

Staff response time to the Lakeport Dam may be up to 30 minutes longer during weekends and holidays when staff are not present at the dam site.

## **7.6. Response during Adverse Weather**

Depending on the weather situation, including the severity, those accessing the dam may have to use an alternate route. Section 7.3 describes three ways to arrive at the dam via the primary access road and three ways to arrive at the dam using the secondary access road. A map is also included in Section 7.3.

Typical adverse weather is not expected to impact response time to the Lakeport Dam. However, if secondary access is required, the response time may be delayed for approximately 10 minutes.

## **7.7. Alternative Sources of Power**

The City's wastewater treatment plant facility is located east of the face of the Lakeport Dam and has a permanent, 125 KW, standby generator which can power the facility's electronic control systems including the treated wastewater reservoir level.

## Emergency Action Plan

In addition, the City owns and maintains three standby diesel generators which will meet the needs of the dam facility during loss of power:

- One (1) 175 KW
- Two (2) 40 KW

During an emergency situation the onsite generator will be readied for operation in case of loss of power. If more back-up power is needed at the site, one or all of the City's stand-by generators will be transported to the site.

Regarding Lakeport Dam operations, all control valves and release gates operated by hand controls. As such, alternative sources of power for dam operations are not needed.

## 7.8. Emergency Supplies and Information

In the event of an emergency, the following list of suppliers could be contacted:

Heavy Equipment Service and Rental	Sand and Gravel Supply	Ready-Mix Concrete Supply
<b>Primary</b>		
<b><i>UCC Rental &amp; RV</i></b>	<b><i>Point Lakeview Rock &amp; Redi-Mix</i></b>	<b><i>Point Lakeview Rock &amp; Redi-Mix</i></b>
2590 S Main St Lakeport, CA 95453 (707) 263-6488 5 to 10 minute drive to dam	13329 Point Lakeview Rd Lower Lake, CA 95457 (707) 995-1515 30 minute drive to dam	13329 Point Lakeview Rd Lower Lake, CA 95457 (707) 995-1515 30 minute drive to dam
<b>Secondary</b>		
<b><i>R.B. Peters</i></b>	<b><i>Clearlake Redi-Mix</i></b>	<b><i>Clearlake Redi-Mix</i></b>
78 Soda Bay Rd Lakeport, CA 95453 (707) 263-3678 5 to 10 minute drive to dam	99 Soda Bay Rd Lakeport, CA 95453 (707) 263-5297 5 to 10 minute drive to dam	99 Soda Bay Rd Lakeport, CA 95453 (707) 263-5297 5 to 10 minute drive to dam
<b>Pumps</b>	<b>Sand Bags</b>	<b>Road Maintenance</b>
<b>Primary</b>		
<b><i>Lake County Pump</i></b>	<b><i>Point Lakeview Rock &amp; Redi-Mix</i></b>	<b><i>A-T Wanzer Grading &amp; Excavating</i></b>
808 Bevins St Lakeport CA 95453 (707) 462-9080 5 to 10 minute drive to dam	13329 Point Lakeview Rd Lower Lake, CA 95457 (707) 995-1515 30 minute drive to dam	690 Todd Rd Lakeport, CA 95453 (707) 262-0799 5 to 10 minute drive to dam



## Emergency Action Plan

<b>Secondary</b>		
<b><i>Cal Tech Pump</i></b>	<b><i>Kelseyville Lumber &amp; Supply Co</i></b>	<b><i>R.B. Peters</i></b>
17930 Deer Hill Rd Hidden Valley Lake, CA 95467 (707) 987-4488 or (707) 350-8106 50 minute drive to dam	3555 North Main St Kelseyville, CA 95451 (707) 279-4297 15 minute drive to dam	78 Soda Bay Rd Lakeport, CA 95453 (707) 263-3678 5 to 10 minute drive to dam

## 7.9. Stockpiling Materials and Equipment

Stockpiling of materials and equipment on site are not deemed necessary. Materials and equipment suppliers are available near the site of the dam.

## 7.10. Coordination of Information

The Public Works Director will work with emergency personnel to keep them up-to-date on any situation involving Lakeport Dam, including changes in weather, changes in inflow to the reservoir, changes in releases from the reservoir or other emergency situation that may arise. The Public Works Director may designate a staff member to take the role of liaison, so that he/she can dedicate his attention to the incident. Communication will be via email and/or cell phone or office phone, depending on the circumstances of the incident. If the incident is large enough, the City may send a liaison to the dam site, or the Incident Command Post, depending on the circumstances.

Emergency personnel with whom coordination should occur are listed below and their contact information is in the Table in Section 3.2:

- Incident Commander (likely to be the Police Chief or his/her designee)
- City Police Department
- Fire Chief, Lakeport Fire Protection District
- Lake County Sheriff/County OES
- California Highway Patrol

There are no dams or control structures upstream or downstream of Lakeport Dam. Because of this, there are no organizations that need to be coordinated with. Since the inflow to Lakeport Dam is not controlled there is no method to reduce inflow to the Dam.

## **7.11. Training and Exercise**

In order to ensure all people involved in the EAP are familiar with the elements of the EAP, their responsibilities and duties, and the types of availability of equipment in the EAP, training will be provided for all new staff and an annual Notification Exercise will be performed as described below.

### **Exercise**

On an annual basis the EAP Coordinator organizes the notification call down drill, which is required by California Government Code Section 8589.5 (see Appendix K for more information). During this exercise, the on-site personnel conduct a test of calling the numbers on the Notification Flowcharts to ensure their accuracy. Additionally, the staff will also verify the secondary and stakeholder contact information in the Contact Table. The EAP Coordinator will then make sure that the EAP contact information is updated, and updated pages will be sent to Plan Holders (see Appendix D). The EAP Coordinator will then send an EAP Status Report (see Appendix A) to the Cal OES Dam Safety Planning Division to demonstrate that CLMSD has complied with the legislative mandate for an exercise.

Following the exercise, the EAP Coordinator will fill out an EAP Status Report (see Appendix A). This Report will then be sent to the Dam Safety Planning Division at Cal OES to verify that the exercise occurred.

### **EAP Training**

Personnel should be familiar with problem detection and evaluation, and appropriate corrective measures. The EAP Coordinator will give an introductory training to new CLMSD personnel regarding the EAP and that staff person's role in an emergency. The Coordinator also facilitates an annual EAP Workshop for Lakeport staff and stakeholders to review the EAP.

## **7.12. Alternative Systems of Communication**

In addition to cell phones, the City of Lakeport maintains portable radios as a supplemental communication system.

## **7.13. Public Awareness and Communication**

During an emergency incident, the City will designate a Public Information Officer who will:

- Serve as the liaison to the news media and provide news releases and other information as approved by the Incident Commander, assuring that

official statements are issued only by those administrators authorized to issue such statements.

- Provide information for the response to inquiries from the public relative to the disaster.
- Ensure that a multi-agency Joint Information Center (JIC) is staffed as required.
- Utilize the City's social media platforms for important disaster-related messages and information.

It should be noted that as of the time this EAP was prepared, there has not been an incident at the Lakeport Dam requiring any public outreach or communication.

The primary means of dissemination information for those downstream will be the tele-notification system. It will be supplemented with media new releases and information posted on social media platforms in a timely manner. Lakeport maintains a twitter and Facebook accounts that will be utilized in this regard. Lakeport Police Department maintains twitter and Facebook accounts, as does Lake County, for instant news releases.

In emergency evacuations, the tele-notification system will be utilized in addition the Lakeport Police Department will drive up and down the streets using the public address system. These notification systems will be supplemented with news releases and social media notifications.

In non-emergency times, the EAP Coordinator will take on the role of Public Awareness Coordinator and will work to educate the public regarding emergency response. Direct mail flood safety information will be sent to those addresses directly downstream of the dam. It will include instructions on how to subscribe to NIXLE and LakeCoAlerts so they have emergency alerts sent to their cell phones. The City will also dedicate a page on their website to flood safety education.

There is currently a Flood Safety Tips webpage published by Lake County to educate the public:

[http://www.lakecountycalifornia.gov/Government/Directory/WaterResources/Programs/Projects/Flood\\_Management/Flood\\_Safety\\_Tips.htm](http://www.lakecountycalifornia.gov/Government/Directory/WaterResources/Programs/Projects/Flood_Management/Flood_Safety_Tips.htm)

## Section 8: Plan Maintenance

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### 8.1. Plan Review

The EAP Coordinator will review/update the EAP notification contacts on an annual basis, or when notified of an update. It is critical to maintain current contact information. This review will include calling all contacts to verify contact names and phone numbers are current. The review will also include calling local available resources to verify current phone numbers, addresses, and services. The review and update will be documented using the status form in Appendix A; this form will also be forwarded to Cal OES.

The EAP document held by the City of Lakeport is the master document. When revisions occur, the City of Lakeport will update the revision summary page, found in Appendix B, and will distribute the revised version to all EAP document holders. The document holders are responsible for replacing the outdated copy of the EAP whenever revisions are received. The City of Lakeport has numbered the EAP copies prior to initial distribution (Appendix D).

The EAP will be updated based on the expiration and re-approval of the inundation map or sooner if there is (1) a significant modification to the dam or a critical appurtenant structure as determined by the Department of Water Resources, Division of Safety of Dams, or (2) a significant change to downstream development that involves people or property.

Additionally, the City/CLMSD will begin preparing the updated inundation maps in nine years (2028), so that we can meet the 10-year update deadline, as stated in California Water Code Section 6161.

To notify the City of a revision to the Plan, please contact:

Andrew Britton, EAP Coordinator

[Public Works Department](#)

City of Lakeport

Email: [abritton@cityoflakeport.com](mailto:abritton@cityoflakeport.com)

Phone: (707) 263-3578 x403

### 8.2. Distribution

Copies of the EAP are distributed to local public safety agencies and those jurisdictions that may be impacted by an incident at Lakeport Dam. This distribution includes all agencies listed in the notification flowcharts. EAP will be distributed by the EAP Coordinator once approved and each time there is an update. Please see Appendix D for a list of all Plan Holders.



To request a copy of the Emergency Action Plan for Lakeport Dam, please contact:

Andrew Britton, EAP Coordinator

[Public Works Department](#)

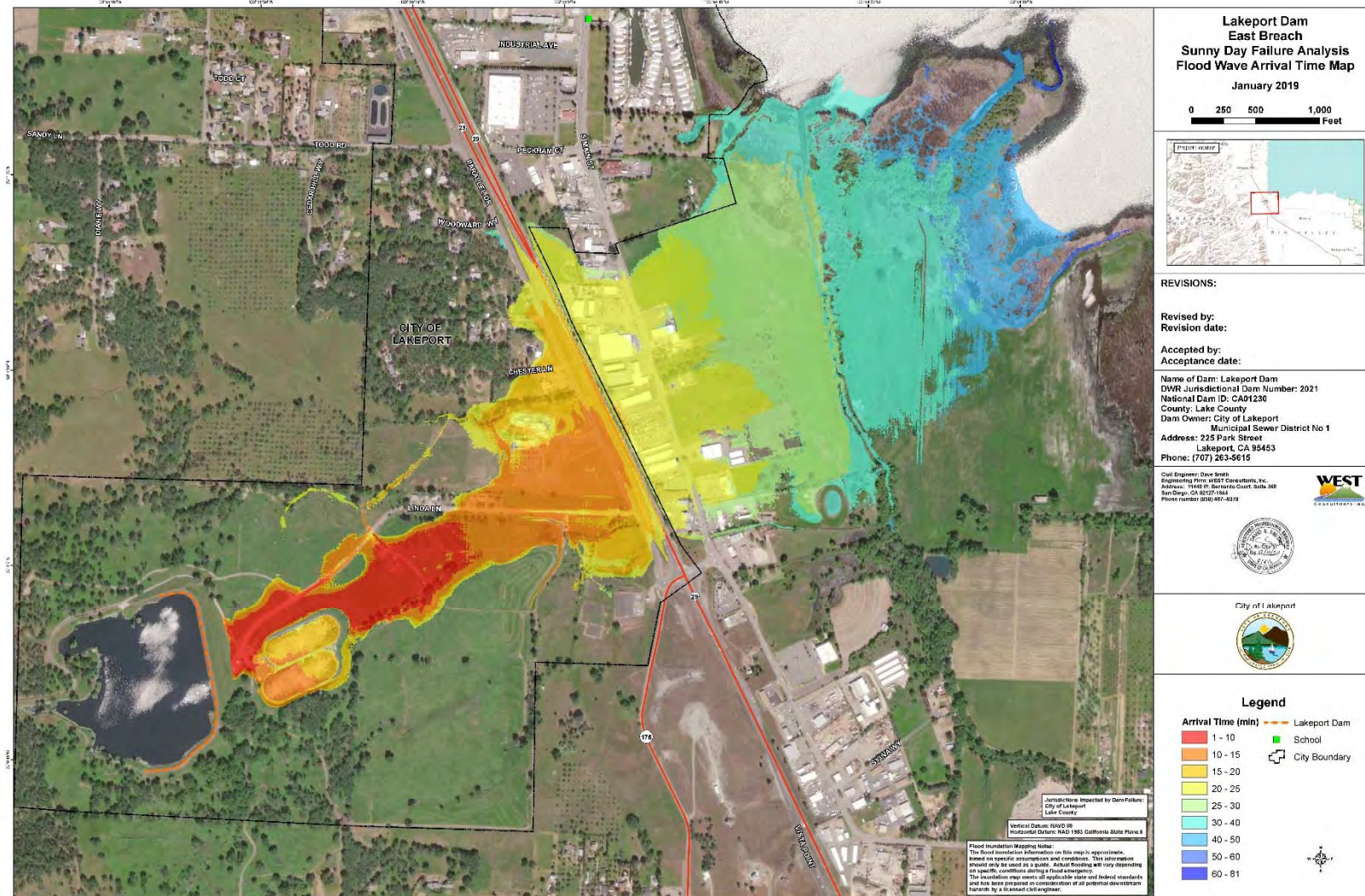
City of Lakeport

Email: [abritton@cityoflakeport.com](mailto:abritton@cityoflakeport.com)

Phone: (707) 263-3578 x403

## PART II: Inundation Maps

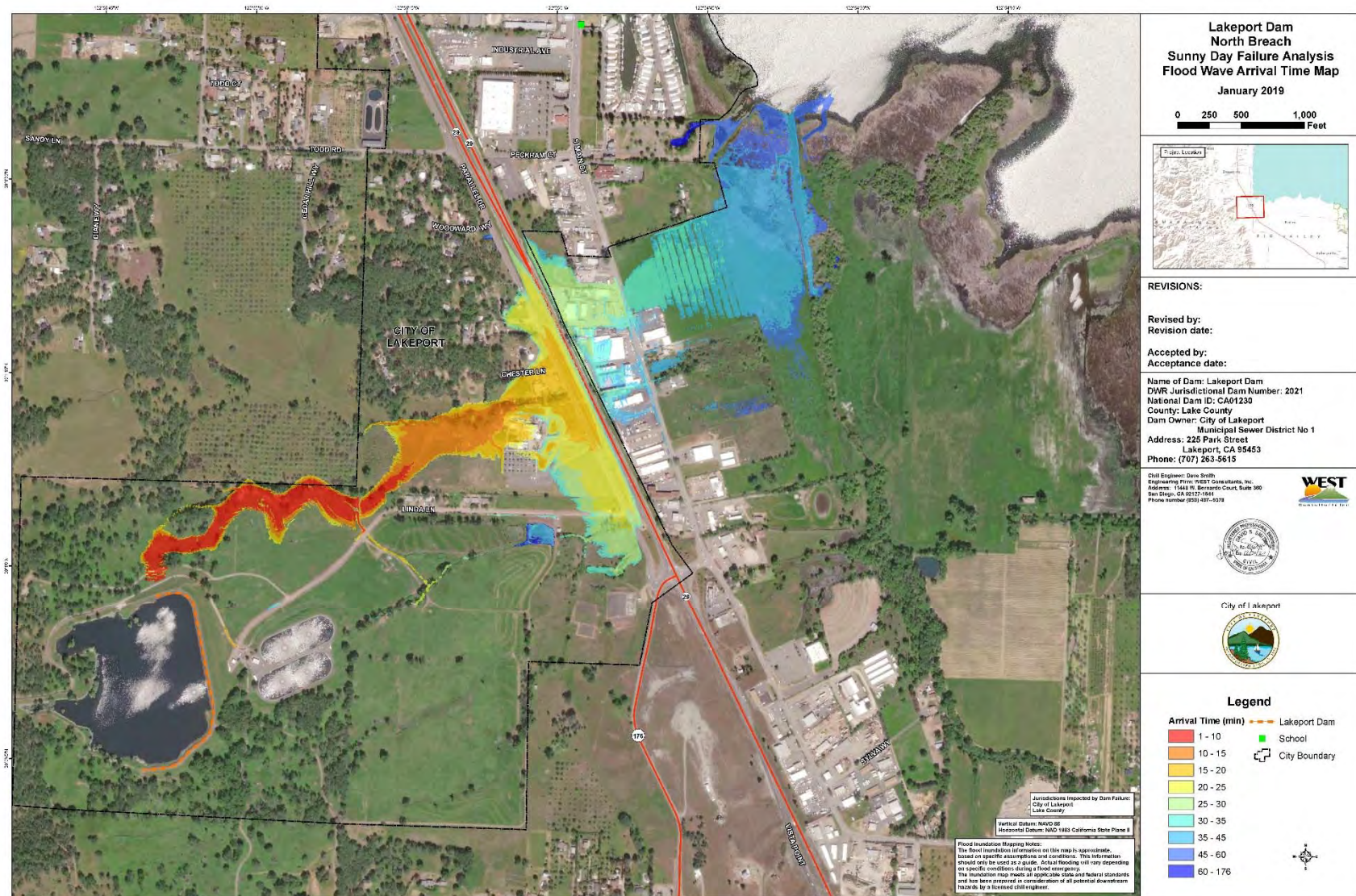
# Arrival Time Map





## Emergency Action Plan

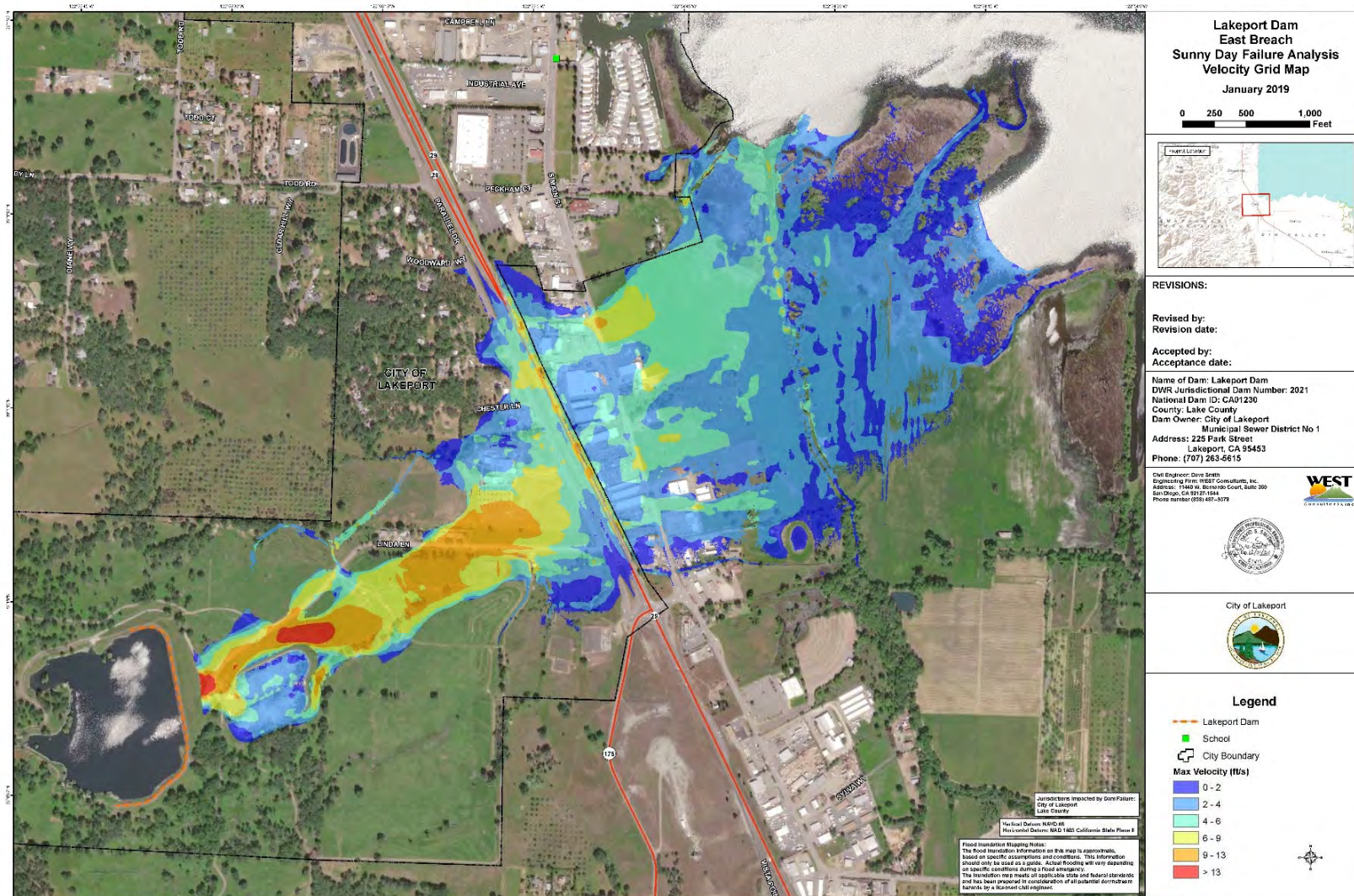
## Arrival Time, East Failure Scenario



## Arrival Time, North Failure Scenario



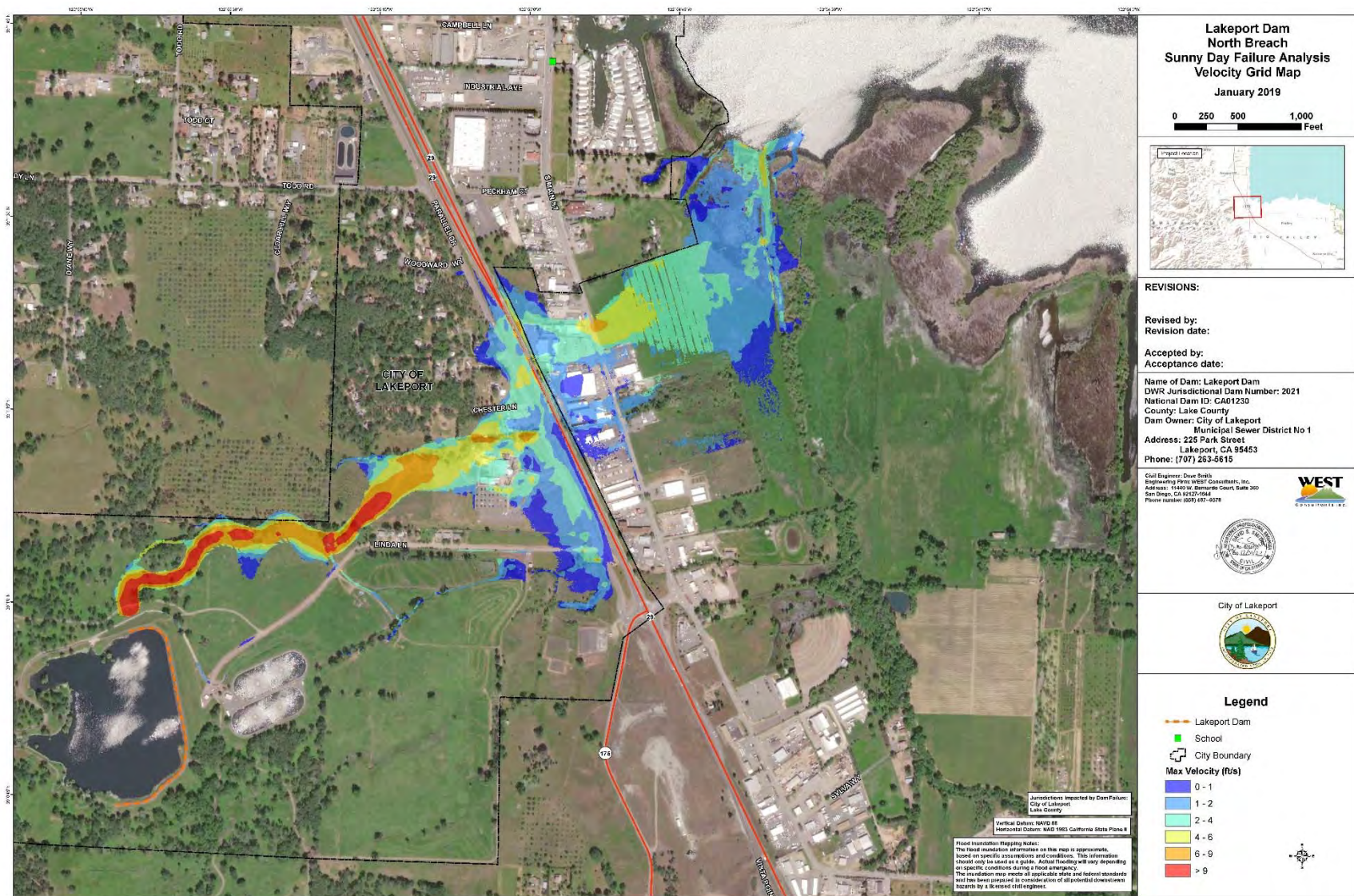
# Maximum Velocity Map



## Maximum Velocity, East Failure Scenario



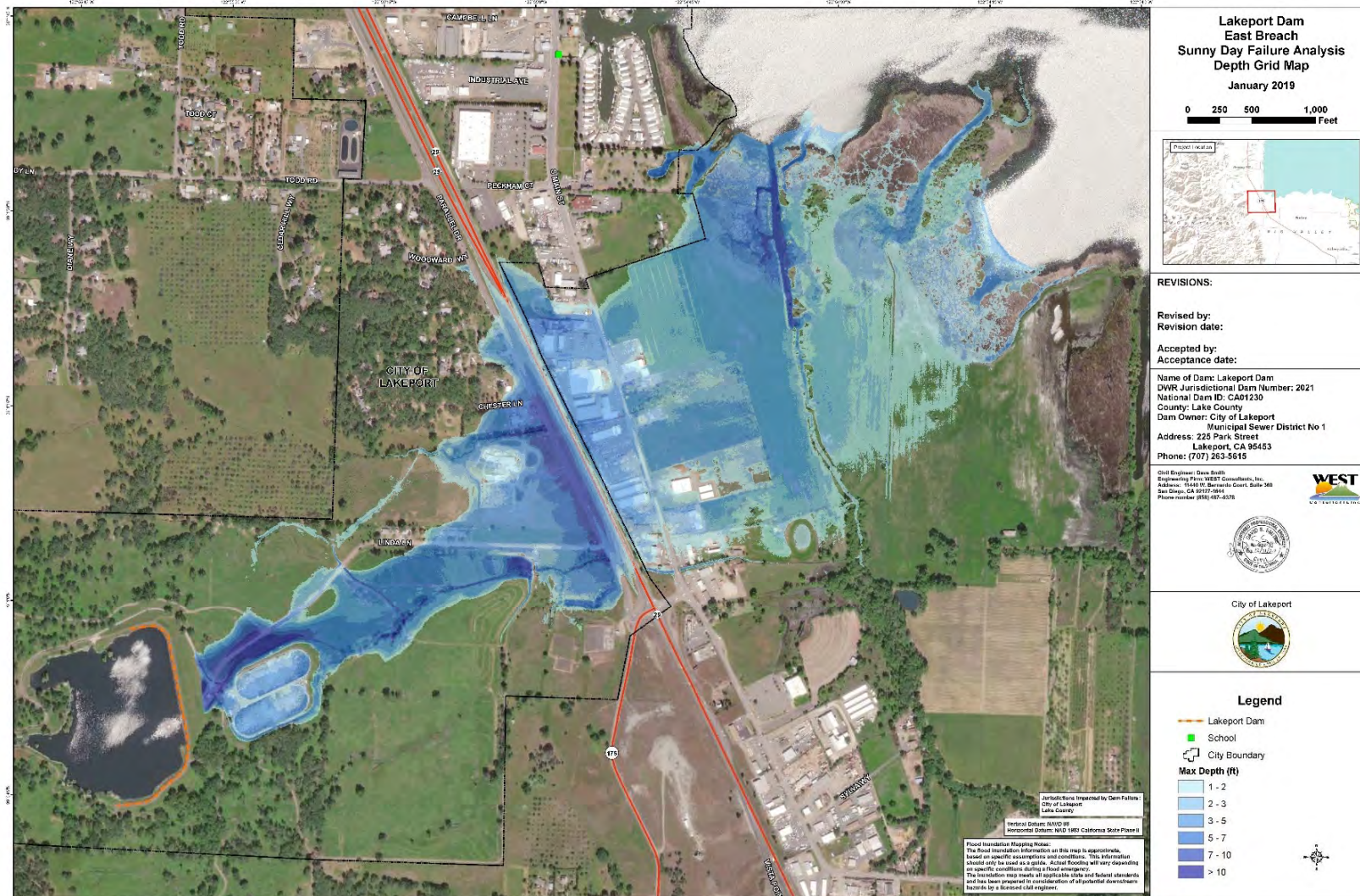
## Emergency Action Plan



## Maximum Velocity, North Failure Scenario



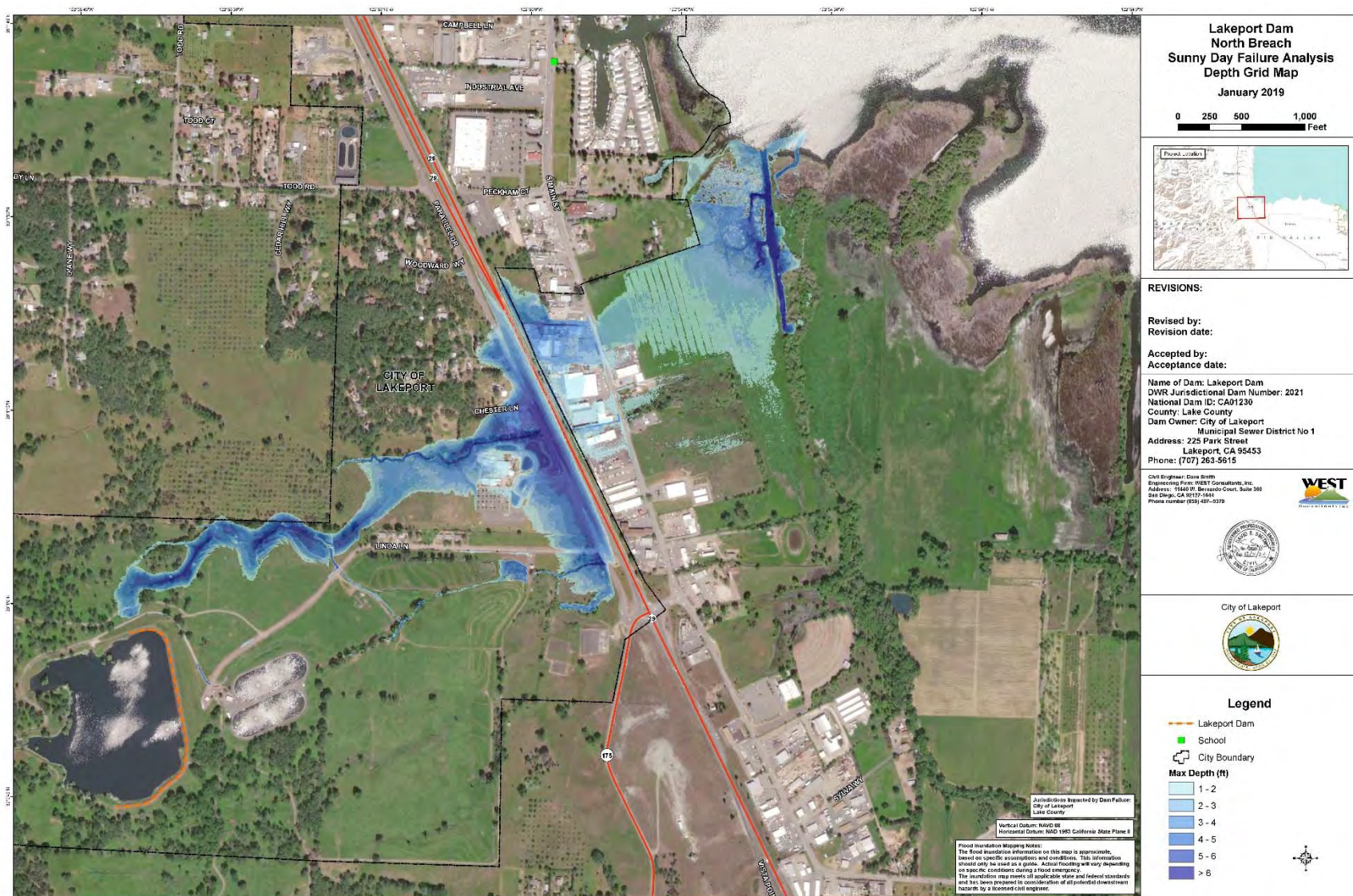
# Inundation Map



## Maximum Depth, East Failure Scenario



## Emergency Action Plan



## Maximum Depth, North Failure Scenario



# DSOD Acceptance Letter

STATE OF CALIFORNIA - CALIFORNIA NATURAL RESOURCES AGENCY

GAVIN NEWSOM, Governor

**DEPARTMENT OF WATER RESOURCES**1416 NINTH STREET, P.O. BOX 942636  
SACRAMENTO, CA 94236-0001  
(916) 653-5791

JUN 04 2019

Mr. Doug Grider, Director  
City of Lakeport Sewer District 1  
591 Martin Street  
Lakeport, California 95453

Attention: Andrew Britton, Compliance Officer II

Lakeport Dam, No. 2021  
Lake County

Dear Mr. Grider:

We have reviewed the inundation maps submitted for Lakeport Dam. We have determined that the dam has no critical appurtenant structures and the maps listed below for the main dam breached at two locations are in substantial compliance with the requirements of Title 23, Division 2, Chapter 1, Article 6 of the California Code of Regulations. Therefore, the following inundation maps are approved:

1. Main Dam - East Breach (sunny day failure scenario) map dated January 2019.
2. Main Dam - North Breach (sunny day failure scenario) map dated January 2019.

The approved maps will be made publicly available as required by section 6161(c) of the California Water Code. An emergency action plan (EAP) based on the approved inundation maps must now be submitted to the California Governor's Office of Emergency Services (Cal OES) for their review and approval. Upon Cal OES approval, please submit to us an electronic copy of the approved EAP with a hard copy of a transmittal letter.

Pursuant to section 6161(e) of the CA Water Code, the EAP and inundation maps must be updated no less frequently than every 10 years, and sooner under conditions that include, but are not limited to, the following: (1) a significant modification to the dam or a critical appurtenant structure as determined by the department, or (2) a significant change to downstream development that involves people and property. Based on the requirement, the approved maps will expire on January 1, 2029. Please submit the updated maps at least six months prior to the expiration date for our review and approval.

If you have any questions or need additional information, you may contact Project Engineer Phu Huynh at (916) 565-7872 or Re-evaluation Engineering Branch Chief Ariya Balakrishnan at (916) 565-7870.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Sharon K. Tapia'.

Sharon K. Tapia, Chief  
Division of Safety of Dams

cc: (See Attached List.)

Mr. Grider

JUN 04 2019  
Page 2

cc: Mr. José Lara, Chief  
Dam Safety Planning Division  
California Governor's Office of Emergency Services  
3650 Schriever Avenue  
Mather, California 95655

## PART III: Appendices

# Appendix A: EAP Status Report (for Non-FERC dams)

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## **EAP Status Report for Lakeport Dam, DSOD No. 2021-000**

**Annual EAP Review Performed:**

**Annual Update Sent to Plan Holders:**

**Prepared by:**

Mail this document, or something similar, to the Cal OES Safety Planning Division:

Dam Safety Division Chief Dam Safety Planning Division  
3650 Schriever Avenue  
Mather, CA 95655

Or send it electronically to the Division at [eap@caloes.ca.gov](mailto:eap@caloes.ca.gov).

## Appendix B: Record of EAP Revisions

Revision #	Date	Sections Reviewed or Revisions Made	By Whom
0	4.15.2021	EAP Issued	City of Lakeport

# Appendix C1: Notification Message

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## **Emergency Level: High Flow Operations**

The City of Lakeport has activated the Lakeport Dam Emergency Action Plan.

We are notifying local emergency management agencies and entities of changes in releases from the Dam. The current emergency level falls under High Flow Operations. The Lakeport Dam is NOT in danger of failing.

The current release from the Dam is \_\_\_\_\_ cfs and will increase to \_\_\_\_\_ cfs by \_\_\_\_\_ (time) \_\_\_\_\_ (date). These flow increases will be gradual over time.

The City of Lakeport will provide updates as appropriate of any changes in flows, conditions at the dam, changes in the Emergency Level, and upon termination of this event.

If you serve in an emergency management role and need additional information, please contact the Lakeport Utilities Superintendent at (707) 263-3578 or via email @ [PWinfo@cityoflakeport.com](mailto:PWinfo@cityoflakeport.com)

Date Issued:

Time Issued:

Issued By:

## Appendix C2: Notification Message

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### Emergency Level – Non-Failure Emergency

The City of Lakeport has activated the Lakeport Dam Emergency Action Plan. The Emergency Level at this time is Non-Failure Emergency. Again, this is a Non-failure Emergency.

At \_\_\_\_\_ (time) on \_\_\_\_\_ (date) the City of Lakeport verified, determined, or observed that:

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The City of Lakeport is in the process of contacting the appropriate staff and partnering agencies to address the situation.

SLWC will provide updates as appropriate of any changes in flows, conditions at the dam, changes in the Emergency Level, and upon termination of this event.

If you serve in an emergency management role and need additional information, please contact the Lakeport Utilities Superintendent at (707) 263-3578 or via email @ [PWinfo@cityoflakeport.com](mailto:PWinfo@cityoflakeport.com)

Date Issued:

Time Issued:

Issued By:

## Appendix C3: Notification Message

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### Emergency Level – Potential Failure

The City of Lakeport has activated the Lakeport Dam Emergency Action Plan.

The Emergency Level at this time is Potential Failure.

At \_\_\_\_\_ (time) on \_\_\_\_\_ (date) the City of Lakeport verified, determined, or observed that:

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Based on this information, SLWC has activated the EAP and determined the appropriate Emergency Level to be Potential Failure.

The SLWC is taking remediation measures to reduce the potential for failure.

Prepare to evacuate the following locations:

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SLWC will provide updates as appropriate of any changes in flows, conditions at the dam, changes in the Emergency Level, and upon termination of this event. Please remain on alert for any further communications from SLWC or your local emergency management agencies.

If you serve in an emergency management role and need additional information, please contact the Lakeport Utilities Superintendent at (707) 263-3578 or via email @ [PWinfo@cityoflakeport.com](mailto:PWinfo@cityoflakeport.com)

Date Issued:

Time Issued:

Issued By:



## Appendix C4: Notification Message

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### Emergency Level – Imminent Failure (or Dam has Failed)

The Lakeport Dam's Emergency Level is (pick one: Immanent Failure / Dam has Failed).

The City of Lakeport has activated the Lakeport Dam Emergency Action Plan.

The Emergency Level at this time is (pick one: Imminent Failure / Dam has Failed).

At \_\_\_\_\_ (time) on \_\_\_\_\_ (date) the City of Lakeport verified, determined, or observed that:

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Based on this information, the City has determined the appropriate Emergency Level to be Imminent Failure.

It has been determined that no further measures can be taken to prevent the failure of and release of water behind the Lakeport Dam. City of Lakeport personnel are being directed to find appropriate locations and shelter from the dam breach and failure.

Prepare to evacuate the following locations:

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We will provide updates as appropriate of any changes in flows, conditions at the dam, changes in the Emergency Level, and upon termination of this event.

Please remain on alert for any further communication from the City of Lakeport or the Lake County Office of Emergency Services.

If you serve in an emergency management role and need additional information, please contact the Lakeport Utilities Superintendent at (707) 263-3578 or via email @ [PWinfo@cityoflakeport.com](mailto:PWinfo@cityoflakeport.com)

Date Issued:

Time Issued:

Issued By:

# Appendix D: Record of Plan Holders

## Record of Holders of Numbered EAP's for DSOD Dam # 2021.000

All numbered EAPs will be distributed via email to the addresses listed in Section 3.2

Copy Number	Organization	Person Receiving Copy
1	City of Lakeport	Public Works Director
2	City of Lakeport	Utilities Superintendent
3	City of Lakeport	Wastewater Supervisor
4	City of Lakeport	EAP Coordinator / Compliance Officer
5	City of Lakeport	City Manager
6	Lake County Office of Emergency Services	Emergency Services Coordinator
7	County of Lake Sheriff	Sheriff
8	City of Lakeport Police Department	Chief
9	Lakeport Fire Protection District	Chief
10	California Department of Water Resources	Division of Safety of Dams
11	California Department of Water Resources	Flood Operations Center
12	CalTrans District 1	District Emergency Coordinator
13	National Weather Service, Eureka Office	Service Hydrologist
14	California Highway Patrol, Kelseyville Office	Area Commander
15	Lake County Public Works Department	Director
16	County of Lake Special Districts	Administrator
17	Mendocino College Lake Center	Director
18	Cal OES / Dam Safety Planning	Division Chief

## Appendix E: Contact Log

<b>Dam Name:</b> Lakeport Dam		<b>Date:</b>	
<b>NID #:</b> CA01230	<b>DSOD Dam #:</b> 2021.000		<b>FERC #:</b> N/A
<b>DSOD Region:</b> North		<b>County:</b> Lake	
<b>Emergency Level:</b>		<b>Incident/Exercise:</b>	
After determining the emergency level, immediately contact the following agencies/entities. The person making the contact should initial and record the time of the call and who was contacted at each agency/entity.			
<b>Agency/Entity</b>	<b>Person Contacted</b>	<b>Contact Time</b>	<b>Contacted By</b>

Emergency Action Plan

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## Appendix F: Emergency Incident Log

[illegible]

# Appendix G: Emergency Termination Log

Dam Name: Lakeport Dam	County: Lake
Dam Location: 750 Linda Lane Lakeport, California, 95453	Stream/River: N/A
Date/Time:	
Weather Conditions:	
General Description of Emergency Situation:	
Area(s) of Dam Affected:	
Extent of Damage to Dam and Possible Causes:	
Effect on Dam Operation:	
Initial Reservoir Elevation/Time: Maximum Reservoir Elevation/Time: Final Reservoir Elevation/Time:	
Description of Area Flooded Downstream/Damage/Loss of Life:	
Justification for Termination of Dam Safety Emergency:	
Other Data and Comments:	
Report Prepared By (Printed Name and Signature): Date:	

# Appendix H: After Action Report

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## **Background**

### **Event Details**

Type of Event:

Location:

Incident Period:

Brief Description of Event:

### **Response Activities**

### **Summary of Successes**

### **Summary of Recommended Improvements**

### **Organizations Contributing to this Report**

# Appendix I: Cal OES Warning Center Dam Incident Report

## DAM INCIDENT – CALIFORNIA STATE WARNING CENTER

<b>EVENT TYPE:</b>	<input type="radio"/> DRILL <input type="radio"/> ACTUAL EVENT		
<b>DATE:</b>		<b>TIME:</b>	
<b>CALLER INFORMATION</b>			
<b>NAME/AGENCY:</b> City of Lakeport		<b>PHONE #:</b>	
<b>ALTERNATE CONTACT:</b>		<b>PHONE #:</b>	
<b>DAM INFORMATION</b>			
<b>DAM NAME:</b> Lakeport Dam		<b>DSOD DAM #:</b> 2021.000	<b>FERC:</b> N/A
<b>DSOD HAZARD CLASSIFICATION:</b> HIGH			
<b>LOCATION OF DAM</b>			
<b>DSOD REGION:</b> <input checked="" type="radio"/> NORTHERN <input type="radio"/> CENTRAL <input type="radio"/> SOUTHERN			
<b>PHYSICAL ADDRESS:</b> 750 Linda Ln, Lakeport, California, 95453			
<b>LATITUDE:</b> 39° 0' 53.42" N		<b>LONGITUDE:</b> 122° 55' 33.40" W	
<b>COUNTY:</b> Lake		<b>DOWNSTREAM JURISDICTIONS:</b> City of Lakeport	
<b>NEAREST CITY OR POPULATED AREA:</b> City of Lakeport & Unincorporated Lakeport area			
<b>NEAREST OR AFFECTED HIGHWAY OR CROSS ROADS:</b> Parallel Drive (local) and CA State Route 29 (SR 29)			
<b>RIVER OR CREEK THAT FLOWS INTO RESERVOIR:</b> N/A			
<b>SITUATION</b>			
<b>ACTIVATION OF EAP:</b>	<input type="radio"/> Yes <input type="radio"/> No		
<b>EMERGENCY LEVEL:</b>	<input type="radio"/> High Flow <input type="radio"/> Non-Failure <input type="radio"/> Potential Failure <input type="radio"/> Imminent Failure		
<b>EMERGENCY TYPE:</b>			
<div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%;"> <input type="checkbox"/> Earthquake         </div> <div style="width: 50%;"> <input type="checkbox"/> Sand Boils         </div> <div style="width: 50%;"> <input type="checkbox"/> Embankment Cracking or Settlement         </div> <div style="width: 50%;"> <input type="checkbox"/> Security Threats         </div> <div style="width: 50%;"> <input type="checkbox"/> Embankment Movement         </div> <div style="width: 50%;"> <input type="checkbox"/> Seepage, Springs, Piping         </div> <div style="width: 50%;"> <input type="checkbox"/> Erosion of Spillway         </div> <div style="width: 50%;"> <input type="checkbox"/> Sinkholes         </div> <div style="width: 50%;"> <input type="checkbox"/> Instrumentation Reading (Abnormal)         </div> <div style="width: 50%;"> <input type="checkbox"/> Storm Event         </div> <div style="width: 50%;"> <input type="checkbox"/> Outlet System Failure         </div> <div style="width: 50%;"> <input type="checkbox"/> Other: List Below         </div> <div style="width: 50%;"> <input type="checkbox"/> Sabotage/Vandalism         </div> </div>			
<b>OTHER:</b>			
<b>RESERVOIR LEVEL:</b>	<input checked="" type="checkbox"/> Full <input type="checkbox"/> Partially Full <input type="checkbox"/> Empty		
	<b>Approximate % Full (Acre-Feet):</b>		
<b>WHEN/HOW EVENT WAS DETECTED:</b>			
<b>OBSERVER IN POSITION:</b>	<input type="radio"/> Yes <input type="radio"/> No		
<b>ADDITIONAL DETAILS:</b>			



## Appendix J: EAP Planning Team

The following people participated in the planning process for the Emergency Action Plan for Lakeport Dam:

<b>Name/Title</b>	<b>Title/Organization</b>
Doug Grider	Director, Public Works Department, City of Lakeport
Paul Harris	Utilities Superintendent, City of Lakeport
Andrew Britton	Compliance Officer II, City of Lakeport
Steven Grossner	Wastewater Supervisor/Dam Operations Supervisor, City of Lakeport
<b>Staff and Agencies Consulted</b>	
Dale Carnathan	Lake County Office of Emergency Services & Lake County Sheriff's Office
Brad Rasmussen	City of Lakeport Police Department
Rick Bergem	Lakeport Fire Protection District
Kevin Ingram	City of Lakeport Community Development Department Director/Assistant City Manager
Margaret Silveira	City Manager, City of Lakeport (Retired July 2020)
Lt. Randy England	California Highway Patrol (Kelseyville Office)
Izzy Konopa	Caltrans District Emergency Coordinator
Scott De Leon, PE	County of Lake Public Works and Community Development Director
Michalyn Delvalle	County of Lake Community Development Director (Left agency February 2020)

## Emergency Action Plan

Jan Coppinger	Administrator, County of Lake Special Districts (Retired December 2020)
Wanda Gray	General Manager, Lake Transit Authority
Judith Kanavle	Mendocino College Lake Center Director

# Appendix K: Exercises

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## **Annual Call-Down Drill**

During the call-down drill, the personnel at the dam will begin making the calls to those on the Notification Flowcharts. The person assigned to make the calls will begin with the High Flow-Non-Failure Notification Flowchart and alert the people called that this is only an exercise and confirm the emergency contact person and phone number. The caller will then move on to the Potential Failure and then Imminent Failure Notification Flowcharts and contact those that have not yet been contacted to confirm emergency contact information is correct. The caller will not contact 911 but will call the agency on their non-emergency line as noted in the Contact Table in Section 3.2.

After the call down drill is completed, any updates/changes that the caller receives will be recorded and emailed to the EAP Coordinator. The Coordinator will then update the information in the EAP following the procedures for revisions and distributions outlined in Section 8 of this document.

## Appendix L: Acronym List

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Cal OES	California Office of Emergency Services
CHP	California Highway Patrol
CLMSD	City of Lakeport Municipal Sewer District
DSOD	California Division of Safety of Dams
DWR	California Department of Water Resources
EAP	Emergency Action Plan
EOC	Emergency Operations Center
EOP	Emergency Operations Plan
FEMA	Federal Emergency Management Agency
FERC	Federal Energy Regulatory Commission
ICS	Incident Command System
JIC	Joint Information Center
LCOES	Lake County Office of Emergency Services
LCSD	Lake County Sheriff's Office
MACS	Multi-Agency Coordination Systems
NAVD	North American Vertical Datum
NGVD	National Geodetic Vertical Datum
NID	National Inventory of Dams
NIMS	National Incident Management system
NWS	National Weather Service
OES	Office of Emergency Services
SCADA	Supervisory Data Control and Data Acquisition system
SEMS	Standardized Emergency Management System



March 30, 2021

Mr. Doug Grider, Director  
City of Lakeport Sewer District 1  
591 Martin Street  
Lakeport, CA 95453

**Subject: Emergency Action Plan – Approval  
Lakeport Dam, No. 2021.000, Lake County**

Dear Mr. Grider:

The California Governor's Office of Emergency Services, Dam Safety Planning Division, has reviewed the Emergency Action Plan for the subject dam listed above. Pursuant to California Water Code Section 6161, subdivision (b)(1), we have determined that the Emergency Action Plan meets the requirements of Government Code Section 8589.5 and is consistent with the Federal Emergency Management Agency's *Federal Guidelines for Dam Safety: Emergency Action Planning for Dams*. **The Emergency Action Plan for Lakeport Dam is therefore approved.**

Please ensure that the approved plan, as well as a copy of this approval letter, is disseminated to the appropriate public safety and emergency management agencies as required by Water Code Section 6161, subdivision (b)(3). As the dam owner, you are required to submit an updated plan based on an approved inundation map by January 01, 2029, or sooner if there is 1) a significant modification to the dam or a critical appurtenant structure as determined by the Department of Water Resources, Division of Safety of Dams, or 2) a significant change to downstream development that involves people or property as outlined in Water Code Section 6161, subdivision (e).



Please submit the finalized hard copy and digital copy of your Emergency Action Plan to:

- Dam Safety Planning Division  
California Governor's Office of Emergency Services  
3650 Schriever Avenue  
Mather, CA 95655
- [eap@caloes.ca.gov](mailto:eap@caloes.ca.gov)

Additionally, at least once annually, dam owners must conduct notification exercise(s) for the Emergency Action Plan. These exercises are necessary to ensure that emergency communications plans and processes are current and implemented effectively. For assistance coordinating exercise participation or any other Emergency Action Plan needs, please contact Leonela Vallecillo-Curiel at 916-845-8193 or [Leonela.Vallecillo-Curiel@caloes.ca.gov](mailto:Leonela.Vallecillo-Curiel@caloes.ca.gov) or Casey Meredith at (916) 845-8160 or [Casey.Meredith@caloes.ca.gov](mailto:Casey.Meredith@caloes.ca.gov), with a copy to [eap@caloes.ca.gov](mailto:eap@caloes.ca.gov).

Thank you for your continued efforts and commitment enhancing safety in your community and throughout California.

Sincerely,



LORI NEZHURA  
Deputy Director

Enclosure (Final EAP Review Report)

cc: Sharon Tapia, Chief, Division of Safety of Dams  
Department of Water Resources  
Sheriff Brian Martin, Sheriff-Coroner, Lake County Office of Emergency  
Services (OES), Lake County Sheriff's Office  
Lee Dorey, Regional Administrator, Cal OES Coastal Region