Incident Status Summary (ICS-209)

Incident: **Spillway - DWR Assist**

1. Incident Name:	2. Incident Number:
Spillway - DWR Assist	**CA-CDF-000114**

3. Report Version (check one box):	4. Incident Commander(s) & Agency or Organization:	5. Incident Management Organization:	6. Incident Start Date/Time:
Initial **X** Update Final	**Pat Whitlock - DWR - Day** **Gina House - DWR - Night**	**Type 1 Team**	Date: **02/07/2017** Time: **1400 PST**

7. Current Incident Size or Area Involved (use unit label – e.g., "Acres", "Square Miles"):	8a. Percent (%) Contained or Completed: **0 %** b. Total Percentage (%) of Perimeter that will be Contained or Completed: **0 %**	9. Incident Type: **Other** B. Incident Description: **Oroville Dam compromised spillway** C. Cause: **Unknown** D. Fire Suppression Strategy:	10. Incident Complexity Level: **X** Single Complex **CALFIRE Incident Management Team 3 assigned to assist Department of Water Resources.**	11. Report Time Period: From Date/Time: **02/11/2017 1800 PST** To Date/Time: **02/12/2017 0600 PST**

Strategy	Percent (%)
Monitor	
Confine	
Point Zone Protection	
Full Suppression	

12. Prepared By:	13. Approved By:
Print Name: **Kevin Robinson** Date/Time Prepared: **02/12/2017 0600 PST**	Print Name: **Pat Whitlock** Signature: _____

14. Date/Time Submitted:	15. Primary Location, Organization, or Agency Sent To:
	Department of Water Resources

16. State:	17. County / Parish / Borough:	18. City:
CA	**Butte**	**Oroville**

19. Unit or Other:	20. Incident Jurisdiction:	21. Incident Location Ownership (if different than jurisdiction):
Oroville Field Division	**DWR**	

22. Latitude/Longitude:	23. US National Grid Reference:	24. Legal Description:
Latitude: **39° 32' 22"** Longitude: **121° 29' 49"**	Grid Zone: x-Coordinate: y-Coordinate:	Principal Meridian: **Mt. Diablo** Township: **19N** Range: **4E** Section: **2** 1/4 Sec: of 1/4 Sec: **NW**

25. Short Location or Area Description (list all affected areas or a reference point):	26. UTM Coordinates:
Oroville Dam Spillway, Feather River, and Thermalito diversion pool	Zone: **10** Easting: **629160** Northing: **4377732**

27. Note any geospatial data available (indicate data format, content, and collection time information and labels):

28. Observed Fire Behavior or Significant Events for the Time Period Reported (describe fire behavior using accepted terminology. For non-fire incidents, describe significant events related to the materials or other causal agents):

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Narrative:
Water continues to crest over the auxiliary spillway and is causing minimal erosion to the hillside as expected. Lake elevation levels trending downward from maximum recorded height.

29. Primary Fuel Model, Materials, or Hazards Involved (hazardous chemicals, fuel types, infectious agents, radiation, etc):

Narrative:
Water, concrete, soil/dirt, trees, debris

30. Damage Assessment Information (summarize damage and/or restriction of use or availability to residential or commercial property, natural resources, critical infrastructure and key resources, etc):
A spillway located at the Oroville Dam was compromised during heavy rains. Flowing water was diverted toward the adjoining hillsides, effectively eroding and undermining the spillway causing a section to collapse. Water continues to crest over the auxiliary spillway, but is trending downward, and is causing minimal erosion to the hillside as expected. The Feather River Fish Hatchery moved most aquatic assets to safe areas. California State Parks has closed trails around the spillway and portions of the lake where necessary.

A. Structural Summary	B. # Threatened (up to 72 hrs)	C. # Damaged	D. # Destroyed
E. Single Residences	0	0	0
F. Multiple Residences	0	0	0
G. Mixed Commercial / Residential	0	0	0
H. Nonresidential Commercial Property	0	0	0
I. Other Minor Structures	0	0	0

31. Public Status Summary:
C. Indicate the Number of Civilians (Public) Below:

	Previous Report Total	A. # this Reporting Period	B. Total # to-date
D. Fatalities	0		0
E. With Injuries/Illness	0		0
F. Trapped/In Need of Rescue	0		0
G. Missing	0		0
H. Evacuated	0		0
I. Sheltering in Place	0		0
J. In Temporary Shelters	0		0
K. Have Received Mass Immunizations	0		0
L. Require Immunizations	0		0
M. In Quarantine	0		0
N. Total # Civilians (Public) Affected:	0		0

32. Responder Status Summary:
C. Indicate the Number of Responders Below:

	Previous Report Total	A. # this Reporting Period	B. Total # to-date
D. Fatalities	0		0
E. With Injuries/Illness	1	0	1
F. Trapped/In Need of Rescue	0		0
G. Missing	0		0
H. Evacuated	0		0
I. Sheltering in Place	0		0
J. In Temporary Shelters	0		0
K. Have Received Mass Immunizations	0		0
L. Require Immunizations	0		0
M. In Quarantine	0		0
N. Total # Responders Affected:	1	0	1

33. Life, Safety, and Health Status/Threat Remarks:
All work on the auxiliary spillway ceased due to Oroville lake reaching spillover

34. Life, Safety, and Health Threat Management:

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height. Lake elevation levels trending downward from maximum recorded height.	
35. Weather Concerns (synopsis of current and predicted weather; discuss related factors that may cause concern): **Forecast for February 11th 2017:** **Sunny Dry weather and warming temperatures expected through Tuesday as high pressure builds in. Breezy northerly winds through tonight.** **No chance of precipitation.** **LAST TONIGHT...** **Sky/weather.....Clear.** **Min temperature.....43-48.** **Surface winds.....Northeast winds 8 to 15 mph.** **Wind (20 ft).....** **Slope/valley.....Northeast winds 8 to 15 mph.**	

	Active?
A. No Likely Threat	
B. Potential Future Threat	
C. Mass Notifications in Progress	
D. Mass Notifications Completed	
E. No Evacuation(s) Imminent	
F. Planning for Evacuation	
G. Planning for Shelter-in-Place	
H. Evacuation(s) in Progress	
I. Shelter-in-Place in Progress	
J. Repopulation in Progress	
K. Mass Immunization in Progress	
L. Mass Immunization Complete	
M. Quarantine in Progress	
N. Area Restriction in Effect	
O. Road Closure	X
P. Trail Closure	X
Q. Area Closure	X

36. Projected Incident Activity, Potential, Movement, Escalation, or Spread and influencing factors during the next operational period and in 12-, 24-, 48-, and 72-hour time frames:

12 hours:	**Spillway operations to continue at 55,000 cfs depending on amount of erosion.**
24 hours:	**Spillway operations to continue at 55,000 cfs depending on amount of erosion.**
48 hours:	**Spillway operations to continue at 55,000 cfs depending on amount of erosion.**
72 hours:	**Spillway operations to continue at 55,000 cfs depending on amount of erosion.**
Anticipated after 72 hours:	**TBD**

37. Strategic Objectives (define planned end-state for incident):

Establish roadway on left side of diversion pool to provide access for debris removal in tailrace. Use barges and boat to survey and remove debris blockages. Build rock protection for right side of spillway. Remove debris and logs out of diversion pool and chip. Continue contingency planning for Butte, Yuba, Sutter and Sacramento counties.

38. Current Incident Threat Summary and Risk Information in 12-, 24-, 48-, and 72-hour timeframes and beyond. Summarize primary incident threats to life, property, communities and community stability, residences, health care facilities, other critical infrastructure and key resources, commercial facilities, natural and environmental resources, cultural resources, and continuity of operations and/or business. Identify corresponding incident-related potential economic or cascading impacts:

12 hours:	**Lake levels rose to 90% elevation creating the use of the auxiliary spillway. Due to the rise of the lake waters, the boat launch and parking lot are completely inundated with 1' of flowing water and 2 downhill roads from the auxiliary spillway have been significantly eroded with one appearing to be washed out. Uprooted trees were found lodged in the Thermalito Diversion Dam, located 4 miles downstream. Contractors are assessing how to remove blockage. Due to continued threat of erosion to both spillways, monitoring continues by DWR geology/engineering departments. Continued erosion threatens DWR power lines with a risk of flooding to Hyatt Power Plant if tailrace elevation exceeds 252'. Tailrace water currently resides at 244'. Barges and cranes are**

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	being mobilized to remove debris in the tailrace . Potential plant flooding is being mitigated by sandbagging and pumps placed around stoplog slots. The Feather River Hatchery reports show that turbidity levels are down and fish are healthy and feeding. Steelhead egg hatchery pools are being supplemented with de-chlorinated hydrant water since they cant be moved safely. All Baby Chinook along with 3 million fall run Fry have been moved to an Annex facility located away from the river. 3 million out of 6 million fall run Fry remain at the main facility due to the Annex being at capacity. If conditions worsen or turbidity levels rise the 3 million remaining fry will be released into the river to increase chances for survival. California State Parks made positive contact to all local cultural groups that potentially may be effected by use of the auxiliary spillway and are updated on the current situation. Additionally, representatives from the cultural groups were escorted into the auxiliary spillway area and given the opportunity to observe the damage in the area from a distance. The trail system directly affected by the damaged spillway include the Brad Freeman and Dan Beebe Trails and have been closed, along with a portion of Oroville Lake directly above the spillways. Impacts to the park include Soil erosion, water turbidity downstream, and tree and vegetation removal.
24 hours:	**Same as above.**
48 hours:	**Same as above.**
72 hours:	**Same as above.**
Anticipated after 72 hours:	**Predicted rainfall for the end of next week, Thursday 2/16/17.**

39. Critical Resource Needs in 12-, 24-, 48-, and 72-hour timeframes and beyond to meet critical incident objectives. List resource category, kind, and/or type, and amount needed, in priority order:

12 hours:	**N/A**
24 hours:	**N/A**
48 hours:	**N/A**
72 hours:	**N/A**
Anticipated after 72 hours:	**N/A**

40. Strategic Discussion: Explain the relation of overall strategy, constraints, and current available information to:
1) critical resource needs identified above,
2) the Incident Action Plan and management objectives and targets,
3) anticipated results.

Explain major problems and concerns such as operational challenges, incident management problems, and social, political, economic, or environmental concerns or impacts.

Resources at scene have been relocated due to lake elevation reaching thresholds. Efforts will continue to ensure that outflow of stored water matches inflows into Oroville Reservoir.

41. Planned Actions for Next Operational Period:

Spillway operations to continue at 55,000 cfs depending on amount of erosion observed.

42. Projected Final Incident Size/Area (use unit label – e.g., “Acres”, “Square Miles”):

43. Anticipated Incident Containment or Completion Date: **02/28/2017**

44. Projected Significant Resource Demobilization Start Date:

45. Estimated Incident Costs to Date: **$625,000.00**

46. Projected Final Incident Cost Estimate:

47. Remarks (or continuation of any blocks above – list block number in notation):

49. Resources (summarize resources by category, kind, and/or type; show # of resources on top ½ of box, show # of personnel associated with resource on bottom ½ of box):

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48. Agency or Org		50. Ovhd	51. Tot Pers
C&L	Rsrc		
	Pers	20	20
CA	Rsrc		
	Pers	139	139
CA-CDF	Rsrc		
	Pers	33	33
52. Total Resources			192

53. Additional Cooperating and Assisting Organizations Not Listed Above:
Butte County OES, Caltrans, Yuba Fire Department, Marysville Police Department, Calfire, PG&E, CHP, Cal State Parks, Butte County Sheriff, Oroville Police Department, Oroville Fire Dept, Butte County Public Works, Marysville Hospital