

**FILED/ENDORSED**  
FEB - 1 2019  
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BY FAX

14 *Counsel for Plaintiffs City of Oroville; Akers Ranch, et al.;*  
15 *JEM Farms LP, et al.; and Mary's Gone Crackers, Inc., et al.*

16 **SUPERIOR COURT OF THE STATE OF CALIFORNIA**  
17 **IN AND FOR THE COUNTY OF SACRAMENTO**

18 Coordinated Proceeding  
Special Title (Rule 3.550)

19 **OROVILLE DAM CASES**

JCCP NO. 4974  
Assigned to: James E. McFetridge, Dept. 30

**DECLARATION OF  
RICHARD L. HARRIMAN IN SUPPORT  
OF PLAINTIFFS' OPPOSITION TO  
DEFENDANT'S MOTION TO STRIKE**

**Date: February 15, 2019**  
**Time: 10:00 a.m.**

1 I, **RICHARD L. HARRIMAN**, hereby declare as follows:

2 1. I am an attorney at law, duly licensed to practice law in the State of  
3 California and before this Court, and counsel for the *JEM Farms, et al., Akers Ranch, et al., and*  
4 *Mary's Gone Crackers, Inc., et al.* Plaintiffs in the above-captioned case. I make this declaration  
5 in support of Plaintiffs' Opposition to Defendant's Motion to Strike Allegations from the  
6 Complaints.

7 2. Chris Thomas, a former DWR employee, filed a First Amended Complaint for  
8 Damages against California Department of Water Resources (hereinafter, "DWR"), alleging (1)  
9 Discrimination, (2) Intentional Infliction of Emotional Distress, and (3) Harassment based on Race  
10 and National Origin, dated August 23, 2010 (Exhibit 1 to Mr. Thomas's April 27, 2011 deposition)  
11 is attached hereto as **Exhibit A**.

12 3. A true and correct copy of relevant excerpts of Chris Thomas's April 27, 2011  
13 **deposition transcript** are attached hereto as **Exhibit B**.

14 Q The person that said "Eenie meenie minie  
15 moe," and the inappropriate comment -- I don't want  
16 to say it it's so inappropriate. Is that Charles  
17 Reilly?  
18

19 A What comment was that?

20 Q "Eenie meenie minie moe catch a," N word,  
21 "by the toe."  
22

23 A Yes.

24 Q Okay. And that's back in 2002?

25 Thomas Transcript at 19:24-20:7.

26 ///

27 ///

28 ///

1 Q Okay. Did any -- I know we talked about the  
2 comments that Terry Dennis allegedly made and Charles  
3 Reilly. Did anybody else make any race-related  
4 comments that made your work environment  
5 uncomfortable?  
6

7 A Over the years, yes. If you want me to go  
8 over all that I will.

9 Q Can you think of anything since you filed  
10 your last lawsuit?  
11

12 A No.

13 Q Okay. I don't want to dredge up all the  
14 past. But I would like to -- if you could, tell me  
15 about some of the things that you're referring to  
16 that's happened over the years.

17 A Yes. Like, "Your black face makes me sick."  
18 You know. "They should take the nigger out and hang  
19 him." Talking about O.J. Simpson. It goes on.  
20

21 Thomas Declaration at 51:15-52:6.

22 Q And so you started telling me. Can you just  
23 continue to tell me some of the things that have  
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happened?

A "Your kind usually don't last long around here." Meaning working for the department. Told you, like, "Your black face makes me sick. Is making me sick. You shouldn't date white women. Why does the word nigger hurt you?"

Q So the O.J. Simpson comment, that -- obviously that happened probably around the time of the trial.

When the person said, "Your black face makes me sick," do you remember about how many years ago that was?

A No.

Q Do you remember who said that to you?

A Yeah. Clark. I forgot his first name. He was a supervisor. Last name was Clark. And Monty Freeman. Another supervisor.

Thomas Deposition at 52:24-53:17.

4. As a result of Mr. Thomas's lawsuit, he received a nearly **\$1 million settlement**. A true and correct copy of the Settlement Agreement and Release of all Claims made between Chris Thomas and Defendant DWR, dated May 2, 2012 is attached hereto as **Exhibit C**.

5. On January 5, 2018, the Independent Forensic Team (hereinafter, "IFT") retained by DWR released their Oroville Dam Spillway Incident Report. A true and correct copy of relevant excerpts of the IFT's January 5, 2018 report is attached hereto as **Exhibit D**.

6. A true and correct copy of DWR's Board of Consultants overview, which states that a "*Board of Consultants (BOC) is required by the California Water Code (Division 3, Part 1,*



1 Chapter 3, Section 6056) for modifications to any dam owned by DWR. ... The BOC is  
 2 compensated by DWR, and members may change as different technical expertise is required. ...  
 3 FERC does not make public documents designated as CEII by dam owners. DWR will evaluate  
 4 memos and reports by the BOC for CEII content and treat each document accordingly." is  
 5 attached hereto as **Exhibit E**.

6 7. A true and correct copy of the heavily-redacted Board of Consultants Memorandum  
 7 No. 4 - April 11, 2017, prepared by the Department of Water Resources, is attached hereto as  
 8 **Exhibit F**.

9 8. I declare under penalty of perjury under the laws of the State of California that the  
 10 foregoing is true and correct. Executed this 1st day of February 2019 at Chico,  
 11 California.

12  
 13   
 14 **RICHARD L. HARRIMAN**

# **EXHIBIT A**

1 LARRY L. BAUMBACH SBN 50086  
2 LAW OFFICES OF LARRY L. BAUMBACH  
3 686 Rio Lindo Avenue  
4 Chico, CA 95926  
5 Telephone: (530)891-6222  
6 Facsimile: (530)893-8245

7 Attorneys for Plaintiff CHRIS THOMAS

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**SUPERIOR COURT OF THE STATE OF CALIFORNIA  
IN AND FOR THE COUNTY OF BUTTE**

CHRIS THOMAS,

Plaintiff,

v.

CALIFORNIA STATE DEPARTMENT  
OF WATER RESOURCES; DOES 1  
through 20, Inclusive.

Defendants.

Case No.: 150543

**FIRST AMENDED COMPLAINT  
FOR DAMAGES :**

1. Discrimination (California Government Code §12900 et seq.);
2. Intentional Infliction of Emotional Distress;
3. Harassment based on Race and National Origin (California Government Code §12940(j)(3) & (k); 2 Cal. Code Reg. §7287.6(b)(2) & (3));

PLAINTIFF, CHRIS THOMAS, demanding a jury trial, brings this actions against DEFENDANTS, CALIFORNIA DEPARTMENT OF WATER RESOURCES, an entity of the State of California, and DOES 1 through 100, Inclusive, for: General, Compensatory, Punitive, Liquidated and Statutory Damages, Costs and Attorneys Fees, resulting from DEFENDANTS unlawful and tortuous conduct, and as grounds therefore alleges as follows:

**PARTIES**

1. Plaintiff, Chris Thomas worked for Defendants and resided in County of Butte, State of California at all times material to this Complaint.



1 2. At all times material to this Complaint Defendant, California Department of Water Resources  
2 was a department of the State of California with offices in the County of Butte and using the County  
3 of Butte as its principal place of business and office. On information and belief, the Defendant,  
4 California Department of Water Resources maintains records relevant to Plaintiff's employment and  
5 the claims herein at its office in Oroville, California. On information and belief, Defendant,  
6 California Department of Water Resources employs in excess of 20 employees in Butte county and  
7 elsewhere.

8 3. Plaintiff is ignorant of the true names and capacities of Defendants sued herein as Does 1  
9 through 20, inclusive and therefore sues these Defendants by such fictitious names and capacities.  
10 Plaintiff is informed and believes on that basis alleges that each Defendant sued under such fictitious  
11 names is some manner responsible for the occurrences herein alleged, and that Plaintiff's injuries  
12 as herein alleged was proximately caused by the conduct of such Defendants.

13 4. Plaintiff is informed and believes and thereon alleges that at all times material herein each  
14 of the Defendants was functioning as the agent, servant, partner, employee and/or were working in  
15 concert with his, her or its Co-defendants and was acting within the course and scope of such agency  
16 partnership employment and/or concerted activity. To the extent that certain acts and omissions were  
17 perpetrated by certain Defendants, the remaining Defendants confirmed and ratified said acts and  
18 omissions of the Co-defendants, and in doing the actions mentioned below was acting within the  
19 course and scope of his, her or its authority as such agent, servant, partner and employee with the  
20 permission, consent and ratification of the Co-defendants.

21 5. Plaintiff is informed and believes and thereon alleges that at all times material herein each  
22 Defendant was completely dominated and controlled by his, her or its Co-defendant and each was  
23 the alter-ego of the other.

24 6. Whenever and wherever reference is made in this Complaint to any act or failure to act by  
25 a Defendant or Defendants such allegations and references shall also be deemed to mean the acts of  
26 each Defendant acting individually, jointly and severally. Whenever and wherever reference is made  
27 to individuals who are not named as Plaintiff or Defendants in this Complaint, but who were  
28

1 employees, agents of Defendant California Department of Water Resources, such individuals at all  
2 relevant times acted on behalf of Defendant California Department of Water Resources within the  
3 course and scope of their employment.

4 7. Plaintiff is informed and believes and thereupon alleges that at all times material herein,  
5 Defendants and each of them, or their agents, employees and/or supervisors authorized, condoned  
6 and ratified the unlawful conduct of each other.

7 8. Plaintiff is informed and believes and thereon alleges that at all times material herein,  
8 Defendants and/or their agents, employees knew or reasonably should have known, that unless they  
9 intervened to protect Plaintiff and to adequately supervise, prohibit, control, regulate, discipline  
10 and/or otherwise penalize the conduct of the employees of Defendant California Department of  
11 Water Resources set forth above the remaining Defendants and employees perceived the conduct and  
12 omissions as being ratified and condoned.

### 13 FACTUAL SUMMARY

14 9. In or about May 21, 1992, Plaintiff entered into an employment agreement with Defendant  
15 California Department of Water Resources. Parts of the employment agreement were memorialized  
16 in writing by such things as Defendant's W2 forms, including, but not limited to, paychecks  
17 evidencing wage payments and time slips. At the time of employment, Defendant California  
18 Department of Water Resources made the following representations to Plaintiff which formed part  
19 of the employment agreement:

- 20 (A) Defendants assured Plaintiff that he would not be subject to differential standards of  
21 conduct from other employees;
- 22 (B) That Plaintiff would work in an environment free of harassment, discrimination, or  
23 hatred; and
- 24 (C) That in the event of a dispute with other employee or harassment by another  
25 employee, Defendant California Department of Water Resources promised Plaintiff  
26 that they had a policy in place for investigating and dealing with any such matter  
27 promptly and decisively.

1 (D) That Defendant California Department of Water Resources was an equal opportunity  
2 employer and would not discriminate against Plaintiff because of his race.

3 10. Plaintiff was employed as a utility craft worker for approximately 14 years earning \$3,684.00  
4 to \$4,034.00 per month.

5 11. Plaintiff is an African American.

6 12. Plaintiff filed a FEHA complaint on June 8, 2009 (Exhibit A) and received a Right-to-Sue  
7 Letter dated June 18, 2009 (Exhibit B). Plaintiff has exhausted all his administrative remedies.

8 **FACTS RELEVANT TO THE CAUSE OF ACTION**

9 13. Plaintiff realleges and incorporates by reference as if fully set forth herein Paragraphs 1  
10 through 12.

11 14. Plaintiff has been continually employed and worked as a utility craft worker for a period of  
12 17 years. During the year 2009, Plaintiff applied for a promotion to an open position in the Utility  
13 Craft Department. At all times during his employment, Plaintiff was a good, competent, dependable  
14 and loyal employee. Plaintiff has had no other employment than that of working for Defendants and  
15 has remained as a continuous employee since the commencement of his employment 17 years prior.

16 15. Throughout Plaintiff's employment, Defendants and each of them have exhibited racial  
17 animus by refusing to promote Plaintiff. In 2001, Plaintiff signed up for a training development  
18 program to become a hydro electric plant operator. Scoring 70% was required for Plaintiff to remain  
19 in the training development program and Plaintiff scored No. 1 on the tests with a 97% average.  
20 Customarily within the Department of Water Resources, Oroville Field Division when a utility craft  
21 worker was accepted into the training development program, upon successful completion of the  
22 program, the employee would be promoted to hydro electric plant operator. However, an exception  
23 was made in the case of Plaintiff and Plaintiff, upon successful completion of his training  
24 development program and scoring third highest in the State, was returned to his position as a utility  
25 craft worker. Defendant continues to refuse to promote Plaintiff up to the present time. Plaintiff  
26 filed a lawsuit, pursuant to Defendant's failure to promote Plaintiff to the position of HEP Operator,  
27 entitled Chris Thomas v. California State Department of Water Resources; Bill Holland, Supervisor.

1 Todd O'Brient, Supervisor; Dennis Babs, Superintendent; Does 1 through 100, Butte County  
2 Superior Court Case No.: 137162, a case which is now on appeal with the Court of Appeal, Third  
3 Appellate District, State of California. Thereafter, Plaintiff returned to his position as a Utility Craft  
4 Worker. Plaintiff learned of a promotion opportunity within the Utility Craft Department and  
5 applied for the position. Defendant department refused to promote Plaintiff or to fill the position in  
6 retaliation for Plaintiff's previous lawsuit and because of Plaintiff's race. However, while Plaintiff  
7 was off work due to an on-the-job injury, Defendant promoted a less senior, less qualified Caucasian  
8 employee to the very position for which Plaintiff had applied and for which Plaintiff was more  
9 qualified.

10 16. During the course of Plaintiff's employment, Defendants systematically and continuously  
11 engaged in racial discriminatory conduct in the following manner: 1) failed to promote Plaintiff  
12 because of Plaintiff's race and promoted Caucasians ahead of Plaintiff; 2) implemented promotions  
13 of less qualified employees from outside of Plaintiff's geographical areas so as to force Plaintiff's  
14 name from the promotion list; 3) advised Plaintiff that the promotion he sought was not like "picking  
15 cotton."; 4) allowed the supervisor who made the "picking cotton" remark to remain in a group that  
16 interviewed Plaintiff for a promotion; 5) during a vote on a 12-hour day, a fellow employee stated,  
17 "Eeny, meeny, miney, mo, catch a nigger by the toe" within hearing of Plaintiff, but received no  
18 disciplinary action or counseling whatsoever; 6) in the gathering office where employees received  
19 work assignments from utility craft supervisors, a "hangman's noose" was openly displayed on the  
20 bulletin board in plain view of supervisors and employees; 7) upon returning from Worker's Comp  
21 disability leave, Plaintiff found a plush child's stuffed toy hanging by the neck inside his personal  
22 locker. Plaintiff's supervisor claimed he personally removed the lock from the locker, but  
23 discounted and failed to investigate the hanging toy; 8) despite applications by African-Americans  
24 for open positions at the Oroville section, Plaintiff remains the only African-American employee.

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**FIRST CAUSE OF ACTION**  
**California Government Code §12900**  
**(Racial Discrimination)**

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3 17. The allegations set forth in Paragraphs 1 through 16 are realleged and incorporated herein  
4 by reference.

5 18. At all times herein mentioned Defendants employed five or more persons and Government  
6 Code §12900 et seq was in full force and effect and was binding on Defendants. These sections  
7 require Defendants to refrain from discriminating against any employee on the basis of race among  
8 other things.

9 19. Plaintiff is a member of a protected class within the meaning of the foresaid statutes. At all  
10 material times hereto Plaintiff satisfactorily performed his duties and responsibilities as expected by  
11 Defendant.

12 20. Plaintiff believes and now alleges that his race was a factor in Defendants actions including  
13 harassing and intimidating as set forth herein. Such discrimination is in violation of Government  
14 Code §12940 et seq and has resulted in damage and injury to Plaintiff as alleged herein.

15 21. Within the time provided by law, Plaintiff filed a Complaint with the California Department  
16 of Fair Employment and Housing in full compliance with these sections and received a Right to Sue  
17 Letter. The Right to Sue Letter is attached hereto as Exhibit "1".

18 22. As a proximate result of Defendant's willful, knowing and intentional discrimination against  
19 Plaintiff, Plaintiff has sustained and continues to sustain substantial losses of earnings and other  
20 employment benefits.

21 23. As a direct and proximate result of Defendant's unlawful conduct, Plaintiff has sustained and  
22 continues to sustain pain and suffering and extreme and severe mental anguish and emotional  
23 distress; Plaintiff has incurred and will continue to incur medical expenses for treatment and for  
24 incidental medical expenses; and Plaintiff has suffered and continues to suffer a loss of earnings, and  
25 other employment benefits. Plaintiff is hereby entitled to general and compensatory damages in  
26 amounts to be proven at trial.

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**SECOND CAUSE OF ACTION  
Failure to Promote Due to Racial Discrimination**

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3 24. The allegations set forth in Paragraphs 1 through 23 are realleged and incorporated herein  
4 by reference.

5 25. During the course of seventeen (17) years of employment with Defendant, Plaintiff has  
6 acquired extensive skills, knowledge and abilities within the Utility Craft Department. As a result  
7 of such skills, knowledge and abilities, Plaintiff was the most highly eligible person for promotion.  
8 Because of racial animus, discrimination and belief in the superiority of the Caucasian race,  
9 supervisors and directors within the Department of Water Resources, Oroville Division, determined  
10 to deny promotion to Plaintiff because of his race. In furtherance of its desire to oppress Plaintiff  
11 for reasons of race, Defendants bent rules and regulations so as to deny Plaintiff's promotion to  
12 higher rank within the Utility Craft Department and to promote instead, a lesser experienced, less  
13 trained, less qualified and white male.

14 26. As a proximate result of Defendant's willful, knowing and intentional discrimination against  
15 Plaintiff, Plaintiff has sustained and continues to sustain substantial losses of earnings and other  
16 employment benefits.

17 27. As a direct and proximate result of Defendant's unlawful conduct, Plaintiff has sustained and  
18 continues to sustain pain and suffering and extreme and severe mental anguish and emotional  
19 distress; Plaintiff has incurred and will continue to incur medical expenses for treatment and for  
20 incidental medical expenses; and Plaintiff has suffered and continues to suffer a loss of earnings, and  
21 other employment benefits. Plaintiff is hereby entitled to general and compensatory damages in  
22 amounts to be proven at trial.

**THIRD CAUSE OF ACTION  
Hostile Work Environment**

23  
24 28. The allegations set forth in Paragraphs 1 through 27 are realleged and incorporated herein  
25 by reference.

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1 29. As part of its campaign to discourage, intimidate, terrorize, bully, and racially discriminate  
2 against Plaintiff, Defendants hung a hangman's noose in the Utility Craft Department meeting room.  
3 The noose was hung on the bulletin board openly visible to all who entered the room.

4 30. When Plaintiff returned from a work-related disability leave, he discovered a child's plush  
5 toy hanging on a hook in Plaintiff's locker as though it had been lynched.

6 31. Plaintiff brought several incidents of harassment and discrimination as described herein  
7 above to the attention of senior level management of Defendant, but the situation did not improve.

8 32. Upon learning of Plaintiff's complaint of racially motivated harassment and discrimination,  
9 Defendants failed to undertake an effective, thorough, objective and complete investigation in a  
10 manner which is free of stereotypical assumptions of the situation complained of.

11 33. Defendants failed to consult with persons who they had reason to believe may have relevant  
12 information, including the complaining employee, the alleged harassers, any witnesses to the conduct  
13 and victims of similar conduct that the employer had reason to believe there may be.

14 34. Plaintiff is informed and on that basis believes and contends that to the extent Defendants  
15 conducted an investigation, the result of any such investigation was not communicated to Plaintiff,  
16 though the alleged harassers and as appropriate to all others directly concerned.

17 35. Defendants took no appropriate action against the harassers.

18 36. Plaintiff is informed and believes and on that basis contends that to the extent Defendants  
19 conducted an investigation, any alleged investigation and/or remedial action taken as a result thereof,  
20 was ineffective and not commensurate with the severity of the offenses complained of by Plaintiff.

21 37. Plaintiff is informed and on that basis believes and contends that Defendants could have  
22 reasonably anticipated the possibilities of harassment and racially motivated discriminatory conduct  
23 occurring in its work place.

24 38. As a proximate result of Defendant's willful, knowing and intentional discrimination against  
25 Plaintiff, Plaintiff has sustained and continues to sustain substantial losses of earnings and other  
26 employment benefits.

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1 39. As a direct and proximate result of Defendant's unlawful conduct, Plaintiff has sustained and  
2 continues to sustain pain and suffering and extreme and severe mental anguish and emotional  
3 distress; Plaintiff has incurred and will continue to incur medical expenses for treatment and for  
4 incidental medical expenses; and Plaintiff has suffered and continues to suffer a loss of earnings, and  
5 other employment benefits. Plaintiff is hereby entitled to general and compensatory damages in  
6 amounts to be proven at trial.

7 **FOURTH CAUSE OF ACTION**  
8 **Intentional Infliction of Emotional Distress**

9 40. The allegations set forth in Paragraphs 1 through 39 are realleged and incorporated herein  
10 by reference.

11 41. In doing the aforesaid acts, the Defendants acted with the willful, premeditated, deliberate  
12 intent to terrorize, harass, discourage, demean, dehumanize the Plaintiff forcing him from his  
13 occupation and seeking his resignation from his employment. Defendants were motivated by a cruel,  
14 unlawful, dehumanizing desire to emotionally, psychologically and physically injure Plaintiff by  
15 causing him to understand that his position and desire for promotion within Oroville Division,  
16 Department of Water Resources, was an impossible ambition solely because of Plaintiff's race and  
17 the Defendants strong expressed desires not to allow an African-American to be promoted within  
18 the division.

19 42. As a proximate result of Defendant's willful, knowing and intentional discrimination against  
20 Plaintiff, Plaintiff has sustained and continues to sustain substantial losses in earnings and other  
21 employment benefits.

22 43. As a direct and proximate result of Defendant's unlawful conduct, Plaintiff has sustained and  
23 continues to sustain physical injuries, pain and suffering, and extreme and severe mental anguish and  
24 emotional distress; Plaintiff has incurred and will continue to incur medical expenses for treatment  
25 and for incidental medical expenses and Plaintiff has suffered and continues to suffer loss of  
26 earnings, retirement benefits and other employment benefits. Plaintiff is thereby entitled to general  
27 and compensatory damages in amounts to be proven at trial.

1 WHEREFORE PLAINTIFF PRAY'S DAMAGES:

- 2 1. General and Special Damages  
3 2. Costs of Suit  
4 3. Attorney Fees  
5 4. Interest  
6 5. Such other and further damages as the law may provide or the Court deem  
7 appropriate.

8  
9 Dated August 23, 2010

LAW OFFICES OF LARRY L. BAUMBACH

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12 LARRY L. BAUMBACH

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# **EXHIBIT B**

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SUPERIOR COURT OF THE STATE OF CALIFORNIA  
IN AND FOR THE COUNTY OF BUTTE

CHRIS THOMAS,

Plaintiff,

vs.

No. 150543

CALIFORNIA STATE DEPARTMENT  
OF WATER RESOURCES, and  
DOES 1 through 20, inclusive,

Defendants.

**CERTIFIED COPY**

**DEPOSITION OF CHRIS THOMAS**

Wednesday, April 27, 2011

Chico, California

JAMIE LYNNE GUILLES, C.S.R.

License No. 8086

**CHICO REPORTING SERVICES**  
1281 Marvin Way  
Chico, California 95926  
(530) 345-3004

1           A       I don't remember.  But yes.  Somewhere in  
2 there.

3           Q       And was that referenced in your last  
4 lawsuit?

5           A       Yes.

6           Q       Is he still with DWR?

7           A       I don't know.

8           Q       When was the last time that you saw him?

9           A       Back then.  2000 -- in 2003.

10          Q       Okay.  So after he made that inappropriate  
11 comment to you, did you have any other problems with  
12 him?

13          A       No.  Yes.

14          Q       Okay.  What happened?

15          A       He was on the interview panel.

16          Q       And was that for the HEP operator position?

17          A       Yes.

18          Q       And that was part of your last lawsuit;  
19 correct?

20          A       Yes.

21          Q       Okay.  After that, any other interaction  
22 with him?

23          A       No.  Not that I recall.

24          Q       The person that said "Eenie meenie minie  
25 moe," and the inappropriate comment -- I don't want

1 to say it it's so inappropriate. Is that Charles  
2 Reilly?

3 A What comment was that?

4 Q "Eenie meenie minie moe catch a," N word,  
5 "by the toe."

6 A Yes.

7 Q Okay. And that's back in 2002?

8 A Yes. From what I remember, yes.

9 Q And you knew about that incident when you  
10 filed your last lawsuit?

11 A I'm sorry. Say that again.

12 Q Did you know about that incident when you  
13 filed the last lawsuit?

14 A Did I know about the incident?

15 Q Yes.

16 A Yes.

17 Q Okay. It was part of your -- was it  
18 included in your last lawsuit?

19 A I don't know. Yes. I believe it was.

20 Q Okay. Does Mr. Reilly still work at DWR?

21 A Yes.

22 Q What is his title?

23 A Senior operator.

24 Q In which branch?

25 A Hydroelectric plant operator.

1 working environment other than -- I'm not talking  
2 about the promotions now. We're talking about  
3 harassing kinds of incidents that you've alleged in  
4 your complaint.

5 A I've been off work since then. No.

6 Q Before -- before then, in the last year, you  
7 know, talking about in 2008, 2009, anything else  
8 other than what we've talked about?

9 A Just the constant write-ups. False  
10 write-ups. And all -- the noose that's hanging and  
11 all that. Yes.

12 Q But no other things like the noose or the  
13 toy?

14 A Not that I remember.

15 Q Okay. Did any -- I know we talked about the  
16 comments that Terry Dennis allegedly made and Charles  
17 Reilly. Did anybody else make any race-related  
18 comments that made your work environment  
19 uncomfortable?

20 A Over the years, yes. If you want me to go  
21 over all that I will.

22 Q Can you think of anything since you filed  
23 your last lawsuit?

24 A No.

25 Q Okay. I don't want to dredge up all the

1 past. But I would like to -- if you could, tell me  
2 about some of the things that you're referring to  
3 that's happened over the years.

4 A Yes. Like, "Your black face makes me sick."  
5 You know. "They should take the nigger out and hang  
6 him." Talking about O.J. Simpson. It goes on.

7 Q Do you want to take a break for a second?  
8 Are you okay?

9 A No. I'm fine.

10 Q Is that like -- how long ago was that?

11 MR. BAUMBACH: Chris, this is a point that  
12 she's asking you for everything. So it's important  
13 that you tell her what you recall.

14 THE WITNESS: Okay.

15 MR. BAUMBACH: And don't leave anything out.

16 THE WITNESS: I need to take a break then.

17 MR. BAUMBACH: Okay.

18 MS. SLAGER: Okay. Okay.

19 (Break taken in proceedings.)

20 Q BY MS. SLAGER: So I was just trying to --  
21 and I just have to ask you to tell me all the things  
22 that you can remember. Okay?

23 A Okay.

24 Q And so you started telling me. Can you just  
25 continue to tell me some of the things that have

1 happened?

2 A "Your kind usually don't last long around  
3 here." Meaning working for the department. Told  
4 you, like, "Your black face makes me sick. Is making  
5 me sick. You shouldn't date white women. Why does  
6 the word nigger hurt you?"

7 Q So the O.J. Simpson comment, that --  
8 obviously that happened probably around the time of  
9 the trial.

10 When the person said, "Your black face makes  
11 me sick," do you remember about how many years ago  
12 that was?

13 A No.

14 Q Do you remember who said that to you?

15 A Yeah. Clark. I forgot his first name. He  
16 was a supervisor. Last name was Clark. And Monty  
17 Freeman. Another supervisor.

18 Q And are they gone now?

19 A (Witness nods head.)

20 Q Good. What about, "Your kind don't last  
21 long here"?

22 A Dave Revis.

23 Q Is he gone?

24 A Yeah.

25 Q When did he leave?

1           A       Actually, he just moved from the department.  
2 He went down south.

3           Q       About when -- do you remember when that  
4 happened? Like, was it more than five years ago?

5           A       Yeah. It was more than five years ago.

6           Q       Do you remember when he went down south? Is  
7 his last name Revis?

8           A       Revis.

9           Q       R-e-v-i-s?

10          A       Yes.

11          Q       Okay. And who said that thing to you that  
12 you shouldn't date white women?

13          A       That was Forrest for one. Curtis Trujillo  
14 questioned it.

15          Q       I know Forrest is still there. Is Curtis  
16 still there?

17          A       Yeah. Curtis is still there.

18          Q       Was that during a conversation with them,  
19 or --

20          A       I don't remember. I'm sure it was a  
21 conversation.

22          Q       Are you kind of friends with Forrest?

23          A       I wouldn't call us friends. I mean, I talk  
24 to Forrest.

25          Q       Okay. And who said the comment to you

1 about, "Why does the N word hurt you?"

2 A That was asked why by me and Forrest as  
3 well.

4 Q What I was -- I didn't ask it very well.  
5 But what I was trying to understand is -- you know.  
6 There's a certain context. Like were you and Forrest  
7 having a conversation about race and about different  
8 topics and he's trying to, like, understand so he's  
9 asking you questions? Or is it like he just blurted  
10 out this comment like, "You shouldn't date white  
11 women."

12 A You never really know how to take Forrest.  
13 He's transparent, meaning you can -- you seem like  
14 you can have a conversation with him. And there's  
15 other days where he's very sarcastic and trying to  
16 knit at you. Knit -- knit-pit at you. Pit. Pit.

17 MR. BAUMBACH: Knit-pick.

18 THE WITNESS: Yeah. Knit-pick at you. So,  
19 you know, we have had conversations, you know,  
20 about -- you know. Race relation conversations  
21 between us. So it's however you want to take it.

22 Q BY MS. SLAGER: Did you consider him to be a  
23 racist or --

24 A Sure. I do. I do.

25 Q I was going to say or more an ignorant

1 person?

2 A I think it's both with Forrest. I think  
3 it's both.

4 Q So in the complaint it talks about that you  
5 brought incidents of harassment and discrimination to  
6 the attention of management over the years. Can you  
7 tell me some of the people that you reported  
8 discrimination and harassment to?

9 A I guess it should say that they were in the  
10 proximity when it happened. I didn't feel like I  
11 needed to bring it up to them because they were right  
12 there. The supervisor would be standing right there.

13 Q Maury Miller would be an example?

14 A Yeah.

15 Q Who were some of the others?

16 A Todd O'Briant. They all standing right  
17 there. They know what's going on behind it.

18 Q So -- not to put words in your mouth.  
19 You're talking more about instead of you going and  
20 saying, "Todd, I want to report this to you," he --  
21 you know he knew about it because he actually was  
22 there?

23 A Yes.

24 Q Do you know whether or not anybody did any  
25 investigation about the hanging noose?

1 A No. I don't know.

2 Q Okay. Do you know if anybody did any  
3 investigation about the hanging toy?

4 A No.

5 Q No, you don't know, or --

6 A I don't know.

7 Q Okay. The complaint also talks about the  
8 fact that not many African-American employees have  
9 been hired at the division over the years. Do you  
10 know how many African-American individuals have  
11 applied in the last ten years, for example, to be  
12 utility craftsmen?

13 A Off the top of my head --

14 Q Or approximately.

15 A Approximately 30, 35, 40 that I know of.

16 Q And so -- and how do you know of that?

17 A Personal friends. Church members.

18 Acquaintances.

19 Q So people told you that they did?

20 A I gave them applications and they handed  
21 them in.

22 Q Do you know if they ranked in the top three?

23 A Couple of them did that I know.

24 Q Do you know about -- less than five?

25 A I don't know. Not -- I didn't talk to

1 you, the corrective memo, was that placed in your  
2 official personnel file?

3 A I don't know.

4 Q Did they -- they didn't tell you one way or  
5 the other?

6 A No.

7 Q Have you asked to see your personnel file?

8 A Sacramento? There's two files. No. I  
9 haven't seen the Sacramento file.

10 Q Have you seen the Oroville file?

11 A Yes.

12 Q Is it in that file?

13 A I don't remember. I don't remember if it  
14 was or not.

15 Q Did you ask anyone if it was going to be put  
16 in that file?

17 A He said it would be put in my file.

18 Q Todd O'Briant said that?

19 A Yes.

20 Q Okay. What is your understanding, if you  
21 have one, of what a corrective memo means?

22 A A corrective?

23 Q Um-hum.

24 A My understanding of a corrective memorandum?

25 Q Um-hum.

1           A       Just gives you time to discuss and deal with  
2 that issue. And it goes -- I believe it goes in your  
3 file for three to six months, from what I remember.  
4 I don't -- I don't recall.

5           Q       I'm going to show you a document that's  
6 dated June 23rd, 2009. A memo to you from Todd  
7 O'Briant. Subject line says corrective memorandum.  
8 And ask that that be marked as Exhibit 6.

9                   (Exhibit 6 was marked for identification.)

10          Q       BY MS. SLAGER: Okay?

11          A       Um-hum.

12          Q       Now that you got a chance to look at it, is  
13 this, then, the failure to follow directions memo  
14 approximately June 23rd, 2009 that's referred to in  
15 the interrogatories?

16          A       Yes.

17          Q       Okay. Did you receive any deduction in your  
18 salary as a result of the corrective memo?

19          A       I'm not sure. I don't think so.

20          Q       Were your benefits changed in any way as a  
21 result of the memo?

22          A       I don't believe so.

23          Q       Were your hours changed?

24          A       No.

25          Q       Were your duties affected?

1           A     In some way, yes.

2           Q     What way are you referring to?

3           A     Just that, you know, I was not able to  
4 participate in transporting these materials down to  
5 Alameda.

6           Q     My question wasn't very clear. What I more  
7 meant was that after you got this, did they change  
8 your duties? Your regular job duties?

9           A     No.

10          Q     Okay. Do you think that Todd O'Briant gave  
11 you this memo because you're African-American?

12          A     Yes.

13          Q     Why do you say that?

14          A     I think because it was a way for them to  
15 show or to make me look like I was incompetent of  
16 being a supervisor because of these pieces of paper  
17 in my file, as well as to keep from promoting me  
18 because of things like this. This -- you know.  
19 Again, this was a false report. We've always taken  
20 the same route. They didn't listen to me about the  
21 issues that took place on this date, nor did they  
22 listen to Jeff. And none of it made a difference.  
23 I still ended up with a memorandum.

24          Q     So even if you disagree with all of Todd's  
25 reasons for giving it to you, what about it makes you

1 kept him in a dual roll as superintendent and utility  
2 supervisor. Then they reopened the exam. Then  
3 they -- then several people were on it, including  
4 Chuck and yourself and Jason Newton. And then John  
5 Morse retired, and then they filled that position  
6 with Chuck Saiz. Is that --

7 A They filled the position with Chuck Saiz.  
8 A position. Yes.

9 Q Okay. And Mr. Thomas, can you look at the  
10 bottom of the same page, page 19, number 32. I'm  
11 asking for the names of witnesses who saw that DWR  
12 basically intimidated, terrorized, bullied, and  
13 discriminated against you. And you listed a bunch of  
14 names. So I want to go through the names and ask you  
15 what these people witnessed.

16 What did Nicole Cottrell witness?

17 A She witnessed just the racial comments in  
18 -- that was made towards me. And they would make  
19 racial comments towards her, what I recall, about me.  
20 And she was a security guard.

21 Q And when did she witness these comments?

22 A I don't recall. I don't recall dates.

23 Q When did she work there?

24 A I don't remember.

25 Q Do you know what she heard people say about

1 you?

2 A Yeah. "He's a nigger." You know. "You  
3 shouldn't be talking to that nigger." Those type of  
4 comments.

5 Q Did you -- were you and she friends, or did  
6 you have a dating relationship?

7 A No.

8 MR. BAUMBACH: Well, there were two  
9 questions there.

10 THE WITNESS: I never dated her.

11 MR. BAUMBACH: Were you and she friends?

12 THE WITNESS: Yes. We were.

13 Q BY MS. SLAGER: Okay. So she told you that  
14 other staff members were coming up to her and saying  
15 racist things about you?

16 A Yes.

17 Q Did she tell you names of people?

18 A Yes.

19 Q Who?

20 A She told me Curtis Trujillo and Dave  
21 Pearson, I believe. And I don't remember all the  
22 other ones.

23 Q Okay. Is Dave Pearson still there?

24 A I don't know. He's a security guard.

25 Q What did Grace King witness?

1           A       The "Eenie meenie minie moe catch a nigger  
2 by his toe."

3           Q       And she was interviewed by the EEO office?

4           A       Yes. I believe so.

5           Q       Did she witness anything else?

6           A       I don't recall. I don't know.

7           Q       And then you said Charles Reilly. Did he  
8 witness something else, or are you talking about he  
9 witnessed what he said?

10          A       What he did. Yeah.

11          Q       And then Terry Dennis. He witnessed what he  
12 said; right?

13          A       Right.

14          Q       What about Dennis Babbs?

15          A       What he did. Trying not to -- he was part  
16 of not trying to promote me. To allow me to go into  
17 the T and D process.

18          Q       So he worked in --

19          A       Utility crafts.

20          Q       Okay.

21          A       He was a utility craft superintendent at the  
22 time.

23          Q       Do you know when he left?

24          A       No. I don't recall how long -- what the  
25 date was he left.

1 Q Was it more than five years ago?

2 A About five, six years ago I guess.

3 Q Did he ever say anything racist to you?

4 A I don't remember.

5 Q So his was more just you thought he was  
6 involved? He was one of the people that was kind of  
7 preventing you from promoting; is that right?

8 A Yes.

9 Q Okay. Bill Holland.

10 A Bill Holland, what he did. I mean witnessed  
11 what he did.

12 Q Okay. And we talked about that was not  
13 helping you promote or keeping you down from  
14 promoting. But you said he didn't make any racist  
15 comments to you?

16 A I didn't say that. I don't recall what me  
17 and Bill discussed or what he -- comments he made.

18 Q So you don't know what -- you just don't  
19 know whether or not -- he might have said something?

20 A Yes.

21 Q Okay. What about Jim Richardson?

22 A Jim Richardson -- Jim Richardson is one of  
23 the ones that actually said the nigger comment to me  
24 at work. And I don't remember. I think it was Maury  
25 Miller that was there on that one as well.

1 Q And Richardson, was he a co-worker, or --

2 A He was an operator. And yes. He was a  
3 co-worker.

4 Q Did anything happen to him for saying that?

5 A No.

6 Q And is he gone now?

7 A Yes.

8 Q And Maury Miller. We talked about he  
9 witnessed things?

10 A Yeah. Um-hum.

11 Q What about Horace Brown?

12 A Horace Brown witnessed a lot of the racial  
13 comments. I would bring him in as a rep. On these  
14 incidents when I would talk with supervisors, he  
15 would come and represent me. And he'd also dealt  
16 with the racial --

17 Q He's African-American?

18 A Yes.

19 Q Was he a union rep or just rep just to --

20 A He was a union rep as well.

21 Q Okay. Did he himself personally witness any  
22 of the comments?

23 A Yes.

24 Q Which things?

25 A I don't recall which ones he actually

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REPORTER'S CERTIFICATE

STATE OF CALIFORNIA     )  
                                  )     Ss.  
COUNTY OF BUTTE        )

I, JAMIE LYNNE GUILLES, a Certified Shorthand Reporter, licensed by the state of California and empowered to administer oaths and affirmations pursuant to Section 2093 (b) of the Code of Civil Procedure, do hereby certify:

That the witness, CHRIS THOMAS, was present at the time and place herein set forth and was by me sworn to testify as to the truth;

That the said proceedings were recorded stenographically by me and were thereafter transcribed under my direction via computer-assisted transcription.

That the foregoing transcript is a true record of the proceedings which then and there took place.

That I am a disinterested person to said action.

IN WITNESS WHEREOF, I have subscribed my name on May 9, 2011.

  
\_\_\_\_\_  
Jamie Lynne Guiles  
Certified Shorthand Reporter No. 8086

# **EXHIBIT C**

**SETTLEMENT AGREEMENT AND**  
**RELEASE OF ALL CLAIMS**

This Settlement Agreement and Release of All Claims (the "Agreement") is made and entered into on May 2, 2012, by and between Chris Thomas ("Thomas" or "plaintiff") and the CALIFORNIA DEPARTMENT OF WATER RESOURCES ("DWR" or "Defendant"), collectively referred to as the "Parties."

**RECITALS**

A. Whereas on or about July 31, 2009, Thomas initiated a civil lawsuit in the Butte County Superior Court entitled Thomas v. DWR, Case Number 150543 (hereinafter collectively referenced as "the Action"). The allegations, facts and details of the Action are more fully set forth in the pleadings, briefs, and records therein, which are incorporated herein by this reference.

B. Whereas the Parties have concluded that it would be desirable and in the best interests of the Parties and the public to settle the disputes between the Parties, including, but not limited to, the Action, in the manner and on the terms set forth herein. By this Agreement, the Parties intend to fully and completely resolve any and all disputes between the Parties, including, but not limited to, the Action.

**TERMS OF AGREEMENT**

Accordingly, in consideration of the mutual promises contained herein, the Parties agree as follows:

**DWR's Obligations:**

**1. Initial Payment**

In consideration of the releases and obligations set forth herein, DWR shall pay to Thomas and his attorney of record, Larry L. Baumbach the total gross sum of \$430,704.00 within sixty (60) days. Plaintiff shall characterize all payments for tax purposes and agrees to indemnify and hold DWR harmless from any and all tax consequences.

## 2. Periodic Payments

In consideration of the releases and obligations set forth herein, the Defendant agrees to pay to the individual(s) named below ("Payee(s)" or "Claimant") the sums outlined below:

Periodic payments made according to the schedule as follows (the "Periodic Payments") payable to Chris Thomas:

\$60,000 annually, guaranteed for 9 payments, beginning 08/01/2013, and ending 08/01/2021.

All sums set forth herein constitute damages on account of alleged emotional distress and wage loss.

## 3. Claimant's Rights to Payments

Claimant acknowledges that the Periodic Payments cannot be accelerated, deferred, increased or decreased by the Claimant; nor shall the Claimant have the power to sell, mortgage, encumber, or anticipate the Periodic Payments, or any part thereof, by assignment or otherwise.

## 4. Recipient of Any Guaranteed Payments Remaining After Death

Any periodic payments to be made after the death of any Payee pursuant to the terms of this Settlement Agreement shall be made to such person or entity as shall be designated in writing by Claimant to the Annuity Issuer. If no person or entity is so designated by Claimant, or if the person designated is not living at the time of the Payee's death, such payments shall be made to the estate of the Payee. No such designation, nor any revocation thereof, shall be effective unless it is in writing and delivered to the Defendant or to the Annuity Issuer. The designation must be in a form acceptable to the Annuity Issuer or Assignee before such payments are made.

## 5. Consent to Non-Qualified Assignment

Claimant acknowledges and agrees that the Defendant may enter into a Non-Qualified Assignment with BARCO Assignments, Ltd. ("Assignee") to make the Periodic Payments set forth in Section 2 of this Agreement. Assignee's obligation for payment of the Periodic Payments shall be no greater than that of the Defendant (whether by judgment or agreement) immediately

preceding the transfer of the Periodic Payments obligation. Claimant agrees to sign the "Non-Qualified Assignment and Release of Periodic Payment Obligation" attached as Exhibit A and incorporated by reference herein as part of this Agreement.

Any such transfer, if made, shall be accepted by the Claimant without right of rejection and shall completely release and discharge the Defendant from the Periodic Payments obligation assigned to Assignee. The Claimant recognizes that, in the event of such an assignment, Assignee shall be the sole Obligor with respect to the Periodic Payments obligation, and that all other releases with respect to the Periodic Payments obligation that pertain to the liability of the Defendant shall thereupon become final, irrevocable and absolute.

#### **6. Right to Purchase an Annuity or a Funding Agreement**

The Defendant, itself or through its Assignee, reserve the right to fund the liability to make the Periodic Payments through the purchase of an annuity contract from Liberty Life Assurance Company of Boston. In the event that an annuity contract is purchased to fund the liability to make the Periodic Payments, the Defendant or the Assignee shall be the sole owner of the annuity contract and shall have all rights of ownership. The Defendant or the Assignee may have Liberty Life Assurance Company of Boston mail payments directly to the Payee. The Claimant shall be responsible for maintaining a current mailing address with the Annuity Issuer.

#### **7. Discharge of Obligation**

The obligation of the Defendant or the Assignee, with respect to any particular installment of the Periodic Payments shall be discharged upon the mailing or other transmission on the due date or earlier of a valid check or its electronic equivalent in the specific amount of such payment to the designated address of the Payee named in Section 2 of this Settlement Agreement.

#### **8. Dismissal of Judgment against Chris Thomas in Case No. 137162.**

DWR will dismiss the judgment against Chris Thomas in Case No. 137162.

9. It is understood and agreed by the Parties that this Settlement Amount constitutes payment in full for all amounts that may be due and owing from DWR to Thomas, and that may

be claimed to be due and owing from DWR to Thomas, of any nature whatsoever, including, but not limited to, any and all amounts constituting or arising from any discrimination, failure to hire, lost wages, lost benefits, back pay, work place injuries, future pay, interest, pain and suffering, emotional distress, damages, awards, verdicts, judgments, orders, liens, costs, expenses or attorneys' fees.

**Thomas' Obligations:**

10. Thomas shall dismiss the Action with prejudice as to all the defendants and all causes of action asserted therein. Within five days of the signing of this Agreement, Thomas will provide to DWR a copy of the signed dismissal with prejudice of the Action. The Parties agree that the Dismissal shall be filed with the Court within five (5) days after payment of the settlement proceeds described in Paragraph 1. The Dismissal shall include a provision that each party is to bear its own costs and fees.

11. If necessary, within 2 days of execution of this agreement, plaintiff will file a Motion to Continue the May 14, 2012, trial date.

12. Upon execution of the settlement agreement by signature of the parties, Thomas will utilize his banked leave in the following order until the initial settlement payment is made: vacation, sick leave, and holiday credit. Upon payment of the \$430,704 monetary settlement payment, Mr. Thomas shall in writing irrevocably resign his employment with DWR for personal reasons and agree never to apply to DWR in the future.

13. Thomas hereby releases and forever discharges Defendant DWR, including its officers, directors, commissioners, board members, trustees, agents, employees, former employees, representatives, attorneys, insurers, departments, divisions, sections, successors and assigns (including the State of California and all of its officers, directors, commissioners, board members, trustees, agents, employees, former employees, representatives, attorneys, insurers, departments, divisions, sections, successors and assigns), and each of them, from any and all claims, complaints, demands, causes of action, obligations, damages, costs, expenses, liens,

attorneys' fees, warranties, rights and liabilities of any nature whatsoever, whether known or unknown, suspected or not suspected to exist, claimed or not claimed, of any nature whatsoever, whether known or unknown, suspected or not suspected to exist, claimed or not claimed, which have arisen in connection with Thomas' employment with DWR, or any other matter of any nature whatsoever from the beginning of time up to the date of the execution of this Agreement, including but not limited to any claims that could be brought under Title VII of the Civil Rights Act of 1964, the Americans with Disabilities Act, the Whistleblower Protection Act and any other related state or federal law protecting whistleblowers, the Age Discrimination in Employment Act and the California Fair Employment and Housing Act for harassment, retaliation, or discrimination on the basis of race, age, ancestry, color, religion, sex, marital status, national origin, physical or mental disability, medical condition, sexual orientation, or another protected classification, which have arisen in connection with his employment with DWR, the Action, the facts and circumstances alleged in the Action or in any way pertaining to the Action, subsequent to the Action, or any other matter of any nature whatsoever from the beginning of time up to the date of the execution of this Agreement. The Plaintiff expressly releases DWR from liability for existing and future worker's compensation claims excluding his current claim for injury to his right shoulder, which has been recognized as a workplace injury; nor does Plaintiff waive his right to claim injury to his left shoulder subject to his obligation to demonstrate that it is an industrial injury.

14. This Agreement, and the covenants and conditions herein, shall be subject to, and conditioned upon, satisfaction of the requirements set forth in Section 948 of the California Government Code and any other approvals required by rule or law or otherwise required to effectuate the terms and conditions of this Agreement, including, but not limited to, approval by the California Department of Finance.

15. The Parties understand that this Agreement is a compromise settlement of disputed claims and no party admits any wrongdoing, liability or fault in relation to the matters alleged in the Action.

16. This Agreement shall be binding upon the heirs, successors and assigns of the Parties.

17. The Parties each represent and warrant that they have independently investigated and evaluated the facts in the Action, including, but not limited to, independently investigating and evaluating the allegations, defenses, testimony, and documents of the Parties. No party has made any statement, representation or warranty in connection herewith which has been an inducement for the other party to enter into this Agreement, except as is expressly set forth in this Agreement. The Parties each represent and warrant that they fully understand that if the facts with respect to which this Agreement is executed should be found hereafter to be different from the facts now believed to be true by any party, each of them expressly accepts and assumes the risk of such possible differences in facts and agrees that this Agreement shall be and remain effective notwithstanding such differences in facts.

18. The Parties each represent that they know and understand the contents of this Agreement and that this Agreement has been executed voluntarily. The Parties each further represent that they have been fully advised by their attorneys with respect to their rights and obligations and with respect to the execution of this Agreement.

19. This is a full and final settlement of all claims related to Thomas' employment with DWR. Thomas hereby waives any right of appeal in this matter and any claim in federal or state court or any other forum that may arise out of this matter which he may have or hereafter acquire by reason of the dispute which is settled. Thomas represents and warrants that he understands and hereby expressly waives any rights or benefits available to him under Section 1542 of the Civil Code of California, which provides:

*A general release does not extend to claims which the creditor does not know or suspect to exist in his favor at the time of executing the release, which if known by him must have materially affected his settlement with the debtor.*

20. Thomas represents and warrants that he has not initiated, nor will he initiate in the future, any legal or administrative proceeding against DWR (or its representatives), with the exception of the Action. Thomas further represents and warrants that he has not assigned, transferred, or purported to assign or transfer to any person or entity any matter otherwise released herein. Thomas agrees to indemnify and hold harmless DWR, its respective heirs, successors and assigns against any claims, demands, causes of action, damages, debts, liabilities, costs or expenses, including, but not necessarily limited to, attorneys' fees, arising out of or in connection with any such transfer, assignment or purported transfer or assignment.

21. This Agreement sets forth the entire understanding of the Parties in connection with the subject matter herein. It is expressly understood and agreed that this Agreement may not be altered, amended, modified or otherwise changed in any respect whatsoever except by a writing duly executed by the Parties or by authorized representatives of the Parties. The Parties agree that they will make no claim at any time or place that this Agreement has been orally altered or modified or otherwise changed by oral communication of any kind or character.

22. The Parties hereby instruct their attorneys of record to use their best efforts to execute all documents necessary to carry out the terms of this Agreement.

23. This Agreement shall be governed by the laws of the State of California. The Parties agree that this Agreement shall constitute a written stipulation for purposes of enforcement of settlement. Any action brought to enforce this Settlement Agreement shall be venued in Sacramento, California.

24. In the event any portion of this Agreement is deemed to be unenforceable, or is in conflict with applicable law, the remainder of this Agreement shall be enforced and shall remain in full force and effect.

25. This Agreement may be executed in two or more counterparts, each of which will be an original and all of which shall constitute a part of this Agreement.

26. If any party to this Agreement files a lawsuit to enforce or interpret this Agreement, the prevailing party in any such suit shall be entitled to reasonable attorneys fees.

27. Except as set forth herein, each party agrees to pay their own fees and costs of the Action.

This Agreement has 8 pages, and consists of Recital paragraphs A and B, and Paragraphs 1 through 27.

DATED: May 2, 2012

DATED: May \_\_, 2012

  
CHRIS THOMAS, Plaintiff

  
DAVID STARKS  
for Defendant California Department of Water Resources

DATED: May 2, 2012

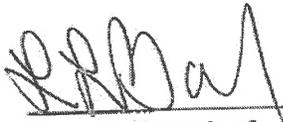
DATED: May 2, 2012

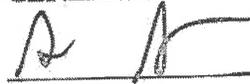
Approved as to form:

Approved as to form:

LARRY L. BAUMBACH

CALIFORNIA DEPARTMENT OF JUSTICE/ OFFICE OF THE ATTORNEY GENERAL

  
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## Non-Qualified Assignment and Release of Periodic Payment Obligation

"Claimant" Chris Thomas  
"Assignor" State of California  
"Assignee" BARCO ASSIGNMENTS LTD.  
"Annuity Issuer" LIBERTY LIFE ASSURANCE COMPANY OF BOSTON  
"Effective Date"

This Agreement is made and entered into by and between the parties hereto as of the Effective Date with reference to the following facts:

- A. Claimant has executed a settlement agreement or release dated May 2, 2012 (the "Settlement Agreement") that provides for the Assignor to make certain periodic payments to or for the benefit of the Claimant as stated in Addendum No. 1 (the "Periodic Payments"); and
- B. The parties desire to effect an assignment of Assignor's periodic payment liabilities to Assignee.

NOW, THEREFORE, in consideration of the foregoing and other good and valuable consideration, the parties agree as follows:

1. The Assignor hereby assigns and Assignee hereby assumes all of Assignor's liability to make the Periodic Payments. The Assignee assumes no liability to make any payment not specified in Addendum No. 1.
2. The Assignee's liability to make the Periodic Payments is no greater than that of the Assignor immediately preceding this Agreement. Assignee is not required to set aside specific assets to secure the Periodic Payments. The Claimant has no rights against the Assignee greater than a general creditor. None of the Periodic Payments may be accelerated, deferred, increased or decreased and may not be anticipated, sold, assigned, or encumbered.
3. The obligation assumed by Assignee with respect to any required payment shall be discharged upon the mailing on or before the due date of a valid check in the amount specified to the address of record.
4. This Agreement shall be governed by and interpreted in accordance with the laws of California.
5. The Assignee may fund the Periodic Payments by purchasing an annuity contract or funding agreement issued by the Annuity Issuer. All rights of ownership and control of such annuity contract shall be and remain vested in the Assignee exclusively.
6. The Assignee may have the Annuity Issuer send payments under any annuity contract or funding agreement purchased hereunder directly to the payee(s) specified in Addendum No. 1. Such direction of payments shall be solely for the Assignee's convenience and shall not provide the Claimant or any payee with any rights of ownership or control over the annuity contract, funding agreement or against Annuity Issuer.
7. Assignee's liability to make the Periodic Payments shall continue without diminution regardless of any bankruptcy or insolvency of the Assignor.

8. In the event the Settlement Agreement is declared terminated by a court of law this Agreement shall terminate. The Assignee shall then assign ownership of any annuity contract or funding agreement purchased hereunder to Assignor, and Assignee's liability for the Periodic Payments shall terminate.

9. This Agreement shall be binding upon the respective representatives, heirs, successors and assigns of the Claimant, the Assignor and the Assignee and upon any person or entity that may assert any right hereunder or to any of the Periodic Payments.

10. The Claimant hereby accepts Assignee's assumption of all liability for the Periodic Payments and hereby releases the Assignor from all liability for the Periodic Payments.

Assignor: State of California

Assignee: BARCO ASSIGNMENTS LTD.

X By:   
Authorized Representative

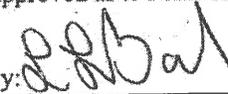
By: \_\_\_\_\_  
Authorized Representative

X Title: Chief, Division of O+M

Title: \_\_\_\_\_

Claimant: 

Approved as to Form and Content:

By:   
Claimant's Attorney

**Addendum No. 1**  
**Description of Periodic Payments**

Payee (1): **Chris Thomas**

Benefit(s):  
1. **Period Certain Annuity - \$60,000.00 payable annually, guaranteed for 9 year(s), beginning on 08/01/2013, with the last guaranteed payment on 08/01/2021.**

Initials

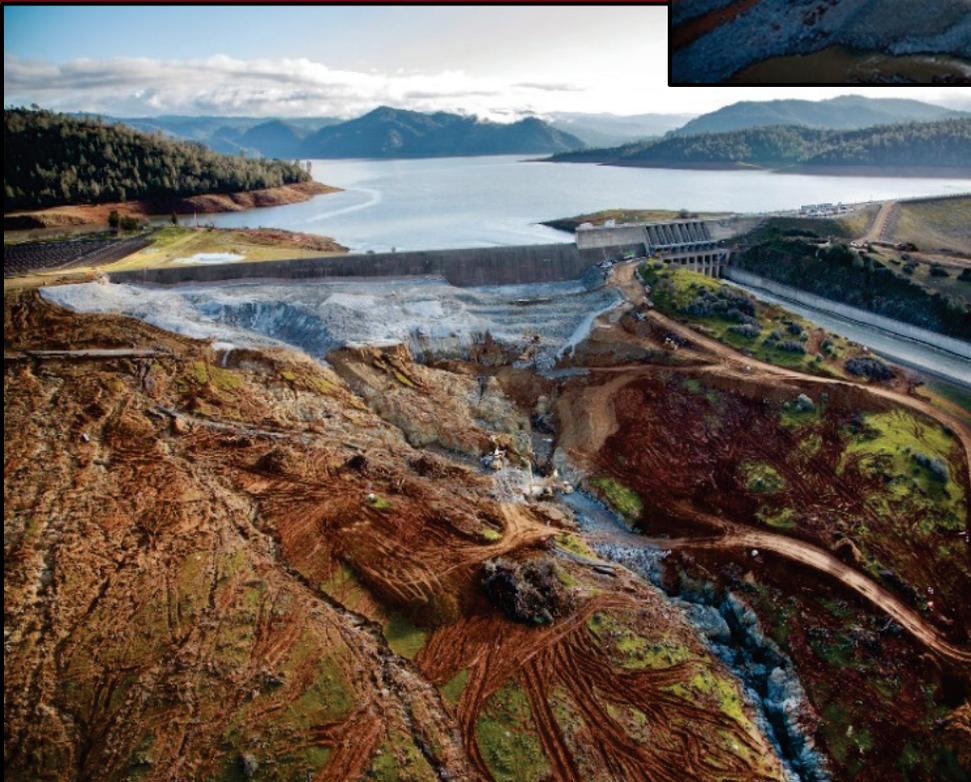
Claimant: Chris Thomas

X Assignor: Chris Thomas

Assignee: \_\_\_\_\_

# **EXHIBIT D**

# INDEPENDENT FORENSIC TEAM REPORT OROVILLE DAM SPILLWAY INCIDENT



JANUARY 5, 2018

more specific and specialized classifications such as “Dam Engineer,” “Hydraulic Structures Engineer,” “Hydraulic Engineer,” and “Dam Safety Engineer.” In addition, the Senior Engineer and higher positions were salaried positions, with no eligibility for overtime compensation, whereas the Engineer positions included compensation for overtime, which sometimes resulted in higher net compensation for individuals in the Engineer classification as compared to the Senior Engineer classification. These factors significantly diminished DWR’s ability to attract and retain highly-qualified technical specialists.

## **6.8 Strained Relationships Within DWR**

Within large utility organizations such as DWR, it is not uncommon for there to be strain in relationships between design and construction groups, as well as between operations and maintenance groups, and DWR was not an exception to this. The strain between DWR’s Division of Engineering (DOE) and Division of Operations and Maintenance (O&M) was a recurring theme during the IFT’s interviews (see Appendix K1), has existed for decades, and was described in a 1996 DWR “organizational study” report. [29]

While this strain has been a significant problem in general, it is not the case that there has been a uniform degree of strain in the relationship between DOE and O&M. Rather, the extent of strain between DOE and O&M has varied considerably, depending on the specific groups in DOE and O&M which were working together and the specific projects on which they were working. While there have been cases where groups in DOE and O&M worked together poorly, there have also been cases where they worked together well.

The IFT believes that this strained relationship, over time, likely had a negative impact on DWR’s decision-making and deployment of technical expertise with respect to managing its civil infrastructure, including Oroville Dam and its spillways. It also clearly had a negative impact on the ability of DWR to meet the expectations of its two dam safety regulators, DSOD and FERC.

The IFT identified several key factors which contributed to the development and perpetuation of this strained relationship, including differences in the priorities and culture of DOE and O&M, historical shift and ambiguity of their respective roles, disparity of their relative influence in developing and managing infrastructure projects, and mutual dissatisfaction with their relationship of consultant and client. These factors are discussed below.

### **6.8.1 “Two cultures”**

DOE and O&M have had fundamentally different priorities and cultures. DOE was focused on long-term reliability and safety of civil infrastructure and, as a matter of engineering ethics, was resistant to cost controls which could compromise that reliability and safety. By contrast, O&M had a shorter-term operational focus on delivering water and generating power on a cost-effective basis. As one interviewee described it, “one culture is engineering, another culture is O&M, which has some engineering in it” (see Section 6.2).

Due to these two different cultures – neither of which are inherently “wrong” – and the associated differences in areas of expertise, there was a communications gap between the two divisions, as

well as a lack of mutual respect, with interviewees indicating that each side sometimes viewed the other as being “arrogant.”

### **6.8.2 Historical Shift and Ambiguity of Roles**

Historically, there was a major shift in the sizes and roles of DOE and O&M.

When the State Water Project (SWP) was being designed and constructed, DOE (called the Division of Design & Construction prior to 1996) was very large and had a dominant role in DWR. Once construction of the SWP was tapering off, DOE began a process of necessary downsizing, and DWR’s focus turned to operating and maintaining the SWP, which resulted in substantial growth in the size and role of the O&M Division as DWR became increasingly “operations-centric.” As a result of this transfer of stewardship of the SWP, O&M functioned in the role of DWR’s “dam owner,” and DWR’s Dam Safety Branch (DSB) was eventually developed entirely within O&M, even though DWR also had a Dams & Canals section within DOE (see Appendix K1).

Some interviewees opined that, with this transition in roles, O&M took on too many responsibilities and DOE became too marginalized, which resulted in resentment on the part of some DOE staff. Other interviewees opined that the roles of each division were appropriate for DWR’s needs, and that DOE needed to adapt accordingly, rather than comparing with a past era.

Concurrent with this shift in roles of DOE and O&M during the past half-century, the IFT found that there was some ambiguity in defining the specific roles of each division, which contributed to the strain in their relationship. Recognizing this, DWR made efforts to clarify the roles and working protocols of the two divisions, as documented by several memoranda and a “Service Level Agreement” [30] which was prepared in 2014 and updated in 2016. However, in the opinion of the IFT, these efforts had limited effectiveness in resolving the fundamental and deeply entrenched issues which contributed to the strained relationship.

### **6.8.3 Development and Management of Projects Related to Dam Safety**

With the historical shift in roles of DOE and O&M, there was also a pronounced shift in the influence of each division in developing and managing infrastructure projects, including projects related to dam safety.

With O&M functioning as DWR’s “dam owner” and containing its Dam Safety Branch (DSB), during the past decade especially, O&M also had a dominant influence in determining what projects related to dam safety should be initiated, what project budgets and schedules are reasonable, and who should provide the services on each project. DOE had some input to these processes and decisions, however O&M was effectively “in charge” of these decisions, and not always receptive to the input of DOE, sometimes partly due to O&M not fully appreciating civil engineering values and technical issues (see Appendix K1 and Section 6.6). This contributed to DOE’s feeling of often being marginalized and its technical expertise not being recognized, as described above in Sections 6.8.1 and 6.8.2. Cost considerations were also a factor in O&M’s assertion of a leadership role in managing projects, since O&M viewed itself as being accountable

for costs and cost overruns on projects for which DOE provided engineering services (see Sections 6.2 and 6.8.4).

#### **6.8.4 “Captive” Client and Consultant**

DOE generally has not been providing engineering services outside of DWR, and O&M has been its largest client, representing close to half of DOE’s total workload in recent years. To a significant extent, this put DOE in a position of being a “captive consultant” to O&M, and caused DOE to tend to view external consultants as unwelcome competition.

At the same time, DWR had established an understanding that O&M will generally give DOE the “right of first refusal” to provide engineering services for its projects before seeking external consultants to provide those services, and this arrangement was formalized by the “Service Level Agreement” described in Section 6.8.2. To a significant extent, this arrangement put O&M in the position of being a “captive client” to DOE.

Based on its extensive discussions on this topic with dozens of interviewees, the IFT believes that this mutually “captive” client/consultant relationship between O&M and DOE contributed to the strain in their relationship. Each side had developed grievances which, as noted above, were largely the same as described two decades ago in the 1996 DWR “organizational study” report [29]. Most of the IFT’s interviewees in both O&M and DOE opined that the grievances by both divisions were largely valid, rather than placing “blame” only on one side.

Some of the key grievances from the O&M side were as follows:

- DOE tended to take O&M for granted as a client, and did not have a “customer” focus. O&M wanted to be treated as a valued and respected client by DOE, as it was treated by external consultants.
- Once DOE had been assigned a project, it tended to seek control of the work rather than partnering collaboratively with O&M.
- DOE tended to overestimate its technical expertise, and its expertise did not always compare favorably with some external consultants. This varied considerably among the various branches and sections of DOE, with some DOE groups being viewed much more favorably than others.
- Some of DOE’s managers were viewed as not being strong technically, and/or not strong enough managers to elicit adequate performance from their staff, resulting in an excessive percentage of low-performing staff and associated cost increases (see Section 6.7).
- DOE’s engineering designs did not always meet O&M’s practical needs, and O&M felt that they were sometimes overdesigned, resulting in excessive construction cost. The State Water Contractors (SWC) also expressed this criticism of DOE’s designs, sometimes directly to DOE and sometimes through O&M.
- DOE’s costs for engineering services did not always compare favorably with external consultants. A contributing factor is that DOE tried to prevent its overhead from increasing by billing staff time to active projects, even if those staff were not working fully

productively on those projects. This sometimes resulted in assigning available staff to projects in order to keep them busy and billable, even if those staff had limited qualifications for those projects, which further drove up costs.

- DOE sometimes had difficulty meeting schedules.
- DOE was viewed as not sufficiently effective in managing the work of external consultants, possibly in part because it viewed those consultants as competitors.

From the DOE side, the grievances included the following:

- O&M tended to take DOE for granted as a consultant, and lacked understanding and consideration for the general challenges DOE faced as a consultant which is constrained by being part of a stage agency.
- O&M, and also the SWC, sometimes had unrealistic expectations of DOE, especially with regard to costs, because they lacked sufficient understanding of the technical aspects of civil engineering work and the associated provisions required to safely manage project risks.
- O&M often changed its project priorities, scopes, and schedules with limited notice, which made it difficult for DOE to plan workflow and project staffing. This, in turn, resulted in overhead and cost increases, and made it more difficult for DOE to meet schedules.
- Because O&M was generally in control of developing and assigning projects, DOE staff lacked opportunity to work on the same types of projects on a regular basis. This prevented development and maintenance of expertise with those types of projects.
- When O&M used external consultants for projects because DOE's cost was perceived as being too high, those consultants sometimes did substandard work which required revisions by DOE or resulted in an increase in construction costs or project risks. From the DOE perspective, external consultants lacked institutional knowledge related to the SWP, did not "take ownership" of their SWP work to the same extent as DOE, and therefore often did not develop designs and contract documents that sufficiently addressed the needs of DWR.

### **6.8.5 General Comments on the Strained Relationship**

It is clear to the IFT that DOE and O&M have been engaged, for decades, in a difficult working relationship. Out of necessity for DWR and the SWP, and in turn the SWC and California public, the two divisions have needed to work together effectively, but have often had difficulty in doing so.

It would be inappropriate to point fingers and find fault with either division, or DWR overall, since this type of strain is somewhat typical of large utility organizations. However, it must be acknowledged that the strained relationship between DOE and O&M is a significant issue, and the IFT found that DWR's senior managers and executives did not appear to have a good grasp of the magnitude of the problem as it was experienced at the working level of staff and middle managers.

In the opinion of the IFT, serious and sustained involvement by DWR's senior managers and executives will be needed to make meaningful progress in improving this relationship, and experience shows that simply writing more study reports and memoranda is unlikely to provide much benefit. While it was not in the scope of the IFT's investigation to attempt to make specific recommendations regarding this issue, the IFT notes that substantial organizational changes may be needed to address the fundamental needs and grievances of both divisions, based on a realistic understanding of their respective cultures, goals, values, limitations, and circumstances.

## 7.0 LESSONS TO BE LEARNED

The IFT recognizes that, with the benefit of hindsight, it is much easier to determine “what went wrong” in terms of the physical sequence of events leading to the February 2017 incident, as well as the human judgments, decisions, actions, and inactions which contributed to that physical sequence of events. Therefore, the IFT has strived to avoid “hindsight bias” and a “blame” mindset, and has instead focused on understanding the contributing factors to the incident and the associated lessons to be learned.

This report section presents the IFT’s findings regarding these lessons to be learned. The IFT has divided these lessons into two categories. First, industry-level lessons, which apply to dam safety practice in the United States are discussed in Section 7.1. Next, additional lessons, which apply more specifically to DWR are discussed in Section 7.2.

### 7.1 Industry-Level Lessons to be Learned for US Dam Safety Practice

The IFT offers six industry-level lessons to be learned that it has identified during the investigation. These lessons apply generally to dam safety practice in the United States and are related to:

- Physical inspections
- Comprehensive facility reviews
- Regulatory compliance
- Potential Failure Mode Analyses (PFMAs)
- Consideration of appurtenant structures
- Owners’ dam safety programs and dam safety culture

The lessons identified by the IFT in these six areas are presented below.

#### 7.1.1 Physical Inspections

In the IFT’s opinion, physical inspections, while a necessary part of a dam safety program, are not sufficient to identify risks and manage safety. At Oroville Dam, more frequent physical inspections would not likely have uncovered the issues which led to the spillway incident. The warning signs of these issues were already known to DWR and others, but had been accepted as normal conditions.

In dam safety practice, physical inspections are typically visual inspections from accessible locations and do not directly provide insight into latent conditions which cannot be detected by visual inspection. For the Oroville Dam service spillway, the observed slab cracking and the drain flows had become accepted by DWR, DSOD, FERC, and external consultants as “normal” conditions, and the slab details which increased its vulnerability to failure went unnoticed. As long as the physical inspections revealed no detected change in the observed conditions, no concerns were identified. For the emergency spillway, it had become assumed that the hillside downstream of the crest control structure was comprised of non-erodible rock with 3 to 4 feet of soil cover. Here also, visual inspection alone would not have provided information to change that opinion.

### 7.1.5 Consideration of Appurtenant Structures

It is the IFT’s impression that the 770-foot high embankment dam and the service spillway headgate structure at Oroville Dam received much more attention during the PFMA’s than did other components of the facility, such as the service spillway chute and the emergency spillway. However, the February 2017 incident demonstrates that the spillway structures are significant structures themselves. The spillway chute is a 500-foot high structure intended to perform adequately under high discharge volumes with high velocities. Although the common perception was that the emergency spillway would be needed only during “extreme” events, the operation plans indicated that the emergency spillway may operate more frequently (see Appendix F3). Moreover, as this and prior incidents demonstrate, severe erosion at unlined spillways can occur at relatively low discharges.

It is the IFT’s opinion that appurtenant structures can sometimes be eclipsed in dam safety evaluations by the main dam structure, and it is important that appurtenant structures receive the attention appropriate to their importance and their associated risks.

### 7.1.6 Owner’s Dam Safety Program and Dam Safety Culture

Dam owners must develop and maintain mature dam safety management programs which are based on a strong “top-down” dam safety culture.

Along with the regulatory requirement for a Chief Dam Safety Engineer, there should be one executive specifically charged with overall responsibility for dam safety, and this executive should be fully aware of dam safety concerns and prioritizations through direct and regular reporting from the CDSE, to ensure that “the balance is right” in terms of the corporation’s investments.

## 7.2 Other Specific Lessons to be Learned for DWR

The IFT believes that all of the industry-level lessons identified above in Section 7.1 are applicable to DWR. In addition, the IFT also identified several lessons which are specific to DWR. These DWR-specific lessons are based primarily on the IFT’s evaluation of information gathered during interviews with more than 75 people, including current and retired employees of DWR, DSOD, and FERC. The IFT found that these lessons can be categorized into four areas. Progressing from broader organizational aspects to considerations more specific to dam safety, these four areas are:

- Organizational culture and internal working relationships
- Appropriate staffing for technical positions
- Technical expertise related to dam engineering and safety
- Dam safety program and risk management

The suggested lessons in these four areas are discussed below. The IFT provides these lessons not to criticize DWR, but rather to offer suggestions which may be helpful to DWR.

### **7.2.1 Organizational Culture and Internal Working Relationships**

The IFT believes that DWR has been somewhat overconfident and complacent about the integrity of its State Water Project (SWP) civil infrastructure, including its dams, and should, therefore, shift its organizational culture in a direction that reflects more humility and vigilance regarding the risks associated with this infrastructure. As demonstrated by the February 2017 incident, there are risks associated with this infrastructure mainly having been designed and built a half-century ago, and, therefore, potentially having design and construction features that may be judged inadequate based on current states of practice and knowledge. This infrastructure also has risks due to aging and associated potential failure modes that develop over the course of years and may not be readily detected using conventional inspection and evaluation methods.

Similarly, the IFT believes that DWR has been somewhat overconfident regarding its technical expertise related to dam engineering and safety. Rather than associating itself with the accomplishments of its engineers and geologists from two generations ago, DWR should instead shift its organizational culture in a direction of more humility regarding its expertise and an orientation towards being more of a “learning organization.” This is discussed further in Section 7.2.3 below.

Another broader organizational aspect which DWR needs to address is the strain in the relationships between some of its internal groups, especially between the Division of Operations & Maintenance (O&M) and Division of Engineering (DOE). These strains have been present for decades, and past efforts to alleviate them have not had significant and lasting impact. While these types of strains are not atypical in the industry, they do potentially impact dam safety, and, therefore, need to be actively addressed by DWR, with involvement of staff at all levels of the organization, including DWR’s executives and senior management. To some extent, “silos” will be unavoidable in a large, complex, and multi-objective organization such as DWR, and so DWR should learn to better communicate and coordinate effectively across silos.

### **7.2.2 Appropriate Staffing for Technical Positions**

The IFT found that DWR has been faced with very significant bureaucratic constraints with respect to maintaining a size and composition of its technical staff that fits its evolving needs. These constraints have substantially inhibited recruiting and hiring of qualified individuals, promoting staff to senior technical positions, and redirecting or terminating chronically underperforming staff. Additional inhibiting factors have included lack of overtime compensation for senior staff, and use of generic position titles which do not reflect the specialized roles and expertise of technical staff. These constraints have significantly impaired DWR’s ability to develop and maintain organizational technical expertise, control costs, meet schedules, and maintain morale.

The IFT believes that executives and managers in DWR, including the Division of Safety of Dams (DSOD), should be provided with greatly increased autonomy, discretion, and flexibility with respect to defining position descriptions; adding, removing, merging, and modifying technical positions in its organizational charts; recruiting, interviewing, and hiring staff; promoting staff to senior technical positions; compensating staff for overtime and specialized qualifications; and redirecting or terminating chronically underperforming staff. Rather than the decisions of DWR’s

managers related to these aspects being “micro-managed,” the IFT believes that DWR should be provided with reasonable staffing budgets which should be allocated and used at the discretion of DWR’s executives and managers.

### 7.2.3 Technical Expertise Related to Dam Engineering and Safety

Each dam owner should have access to a level of interdisciplinary breadth and depth of technical expertise that is sufficient to assure management of the risk profile associated with its dam portfolio. In the case of DWR, the risks associated with Oroville Dam and its other dams are obviously quite high, as evidenced by the large number of people evacuated during the February 2017 incident.

The IFT believes that, prior to this incident, DWR did not have sufficient breadth and depth of expertise to manage the risk associated with its dam portfolio, and should therefore increase its expertise related to dam engineering and safety. The following are suggested measures to help accomplish this:

- **Communication, Coordination, and Staffing:** As noted above, communication and coordination between DOE and O&M should be improved, including between the DOE Dams and Canals section and the O&M Dam Safety Branch. The Dams and Canals section should learn more about dam safety management, the Dam Safety Branch should draw more on the technical expertise of the Dams and Canals section, and the Dam Safety Branch should continue to develop the technical expertise of its own staff. In addition, as noted in Section 7.2.2 above, the general human resources constraints on DWR’s staffing of technical positions should be substantially reduced.
- **Cultivating In-House Specialized Expertise:** DWR should cultivate development of teams of specialists in various aspects of dam engineering and safety, supporting them by allocating time and funding for them to learn about and keep up with evolving states of practice. These staff should be provided with compensation and position titles that are commensurate with their specialized expertise. It should be recognized that it is not reasonable or prudent to rely on generalist civil and structural engineers to make engineering judgments and decisions for dams and appurtenant structures which are large, complex, and/or high-risk facilities.
- **Interaction with the World Beyond DWR:** As an organization, DWR should interact more with the national and international dam engineering and safety communities, in order to learn from others and identify best practices. This interaction could include attending and presenting papers at conferences, participating in technical committees, reading and contributing to technical publications, and networking with colleagues, including counterparts who have similar roles at other dam owner organizations.
- **Enhanced Continuing Education and Training:** DWR should generally increase the level of the continuing education and training provided to its technical staff involved in dam engineering and safety. In addition to options which involve travel, DWR should also increase its use of less costly options such as participating in webinars, bringing training to DWR, review of technical literature, and networking with colleagues via phone, email, etc.

#### 7.2.4 Dam Safety Program and Risk Management

Although the DWR dam safety program is still in development, the program is on the right path and has been maturing rapidly in recent years. This progress should continue. In that regard, it is important that the dam safety program, particularly the Dam Safety Branch (DSB), have adequate funding and also adequate, qualified staff. The IFT found that most of the senior staff of the DSB, and certainly the Chief Dam Safety Engineer, have been highly dedicated and have worked long hours without overtime compensation. While this dedication is laudable, this situation is neither sustainable nor in the interest of DWR's dam safety program. Instead, the IFT believes that the DSB should have sufficient staff and funding to identify and manage dam safety issues on a proactive basis, rather than merely struggling to keep up with regulatory requirements on a reactive basis.

From an organizational structure standpoint, the IFT discussed the placement of the DSB in DWR's organizational chart with numerous interviewees. The IFT heard diverse opinions regarding where the Dam Safety Branch should be positioned. This is clearly an issue which requires consideration of numerous factors and their tradeoffs, and the IFT suggests that DWR evaluate whether a change in the positioning of the DSB and CDSE is warranted. Regardless of whether a change is made, the IFT emphasizes that it is essential that DWR have clear "top-down" leadership on dam safety from a designated and accountable DWR executive, and that the Chief Dam Safety Engineer have a regular, direct line of communication with this particular executive.

The IFT also believes that DWR should continue with development of its Asset Management Program, with dam safety and risk-informed decision-making incorporated as an integral part of this program. The development of an appropriate prioritization scheme is central to this effort. This will facilitate proper resource allocation and risk management for DWR's dam portfolio, in the context of the overall State Water Project infrastructure and DWR's multiple organizational objectives. To support both this Asset Management Program and DWR's dam safety program, the IFT suggests that DWR continue to work towards improving its information management, and should aim to develop a state-of-the-practice information management system for its dams and other infrastructure.

DWR should also contemplate what could improve its approach to dam safety, over and above simple regulatory requirements. A review of dam safety program procedures and components utilized by others, both nationally and internationally, would be appropriate, and could include consideration of detailed governance, implementation, and Operations, Maintenance, and Surveillance (OMS) manuals.

# **EXHIBIT E**

# Board of Consultants

A Board of Consultants (BOC) is required by California Water Code (Division 3, Part 1, Chapter 3, Section 6056) for modifications to any dam owned by DWR. In addition, the Federal Energy Regulatory Commission (FERC) requires a Board of Consultants to review and comment on repairs to dams. Therefore, the recovery of the Oroville spillways is being reviewed by the BOC. DWR has engaged a five-member BOC for the emergency response and repairs of the Oroville Dam spillways. The BOC, along with the California Division of Safety of Dams (DSOD), and FERC are one of the main independent entities overseeing the design and construction at the Lake Oroville spillways. The BOC is compensated by DWR, and members may change as different technical expertise is required. The primary BOC members include:

- Kerry Cato, Ph.D., Engineering Geology; M.S., Engineering Geology; B.S., Geology
- John J. Cassidy, Ph.D., Mechanics and Hydraulics; M.S., Civil Engineering; B.S., Civil Engineering
- Eric Kollgaard, B.S., Civil Engineering
- Faiz Makdisi, Ph.D., Geotechnical and Geoenvironmental Engineering; M.A., Geotechnical and Geoenvironmental Engineering; B.E., Civil Engineering

The accelerated review process includes frequent meetings where the DWR team presents partial design concepts to DSOD, FERC and the BOC for review and comment. This is an interactive and deliberative process, with the goal of developing a final design for the project.

All comments and recommendations by the BOC are preliminary, with each comment individually evaluated by DWR. In some cases, BOC comments and recommendations are incorporated into the design. In other cases, further evaluation is necessary prior to implementation; or information is developed and presented that reverses a prior opinion of the BOC. In all cases, each recommendation is carefully tracked and worked through between the BOC, DSOD, FERC, and DWR.

## BOC Memos

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- [BOC Memo 16 -March 29, 2018](#)
  - [BOC Memo 15 - February 22, 2018](#)
  - [BOC Memo 14 - December 1, 2017](#)
  - [BOC Memo 13 - October 20, 2017](#)
  - [BOC Memo 12 - September 22, 2017](#)
  - [BOC Memo 11 - August 25, 2017](#)
  - [BOC Memo 10 - July 25, 2017](#)

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- [BOC Memo 9 - July 19, 2017](#)
  - [BOC Memo 8 - June 23, 2017](#)
  - [BOC Memo 7 - May 31, 2017](#)
  - [BOC Letter of Approval for Spillways Recovery Construction Plans](#)
  - [BOC Memo 6 - May 16, 2017](#)
  - [BOC Memo 5 - April 25, 2017](#)
  - [BOC Memo 4 - April 11, 2017](#)
  - [BOC Memo 3 - March 31, 2017](#)
  - [BOC Memo 2 - March 17, 2017](#)
  - [BOC Memo 1 - March 10, 2017](#)

## Safeguarding Security Information

Because dams such as Oroville are critical infrastructure, FERC regulations provide that certain sensitive details may be kept confidential. Given the nature of its work, the memos by the BOC are likely to contain specific engineering, vulnerability and detailed design information about proposed or existing infrastructure that DWR considers critical energy/electrical infrastructure information, or CEII, under [guidelines set by the FERC](#).

FERC does not make public documents designated as CEII by dam owners. DWR will evaluate memos and reports by the BOC for CEII content and treat each document accordingly.

Within the bounds of security restrictions, DWR is committed to regularly updating the public on the work, findings and recommendations of the BOC and on the work to rebuild the Oroville spillways before the next storm season.

# **EXHIBIT F**

## Lake Oroville Spillways Emergency Recovery

# Board of Consultants Memorandum No. 4 –April 11, 2017

Prepared by the Department of Water Resources

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## Summary & Response

### Question 1

Question 1 relates to the construction work that is just beginning adjacent to the lower chute of the gated (flood control) spillway. The slope is being laid back to provide a safe working environment for future work in the lower chute.

The “slope” is the massive rocky area adjacent to the gated spillway. “Laid back” refers to cutting back the slope to make an area for the construction crew and equipment.

### Question 2

Recent exploration reveals the foundation of the upper chute is better than the foundation under the failed section. Previous BOC reports concluded the best option is to replace the upper chute slab, rather than placing a concrete overlay on it.

The BOC concurs with DWR’s approach to replace portions of the upper chute in the first season, and replace any remaining slabs in the second season. Although the BOC concurs with the recommendation to replace the entire chute, they recommend that repair measures should be completed for any slabs not replaced in the first season.

### Question 3

Material that eroded from the hillside adjacent to the gated spillway and deposited in the river was removed and stockpiled. This material will be used to make roller compacted concrete (RCC). The contractor is now preparing this material so it can be used for the RCC. The BOC describes the details on how best to prepare this material so it can be used efficiently.

### Question 4

Question 4 refers to the exploration that is currently being completed to evaluate the foundation rock of the spillway and slopes adjacent to the lower spillway chute. The evaluation of the information is not yet complete.



**Question 5**

The BOC concurs with the preliminary design on the gated spillway chute that has thus far been completed. The BOC notes that the proposed design of the spillway is the current state of the practice, and therefore updates and corrects a number of the design details that were included in the 1960s design.

**Question 6**

The BOC describes the details that were presented to them regarding the slope work that is being completed adjacent to the lower spillway chute. This work is being completed to allow workers in the lower chute area.



# OROVILLE EMERGENCY RECOVERY – SPILLWAYS

## Board of Consultants Memorandum

DATE: April 10 - 11, 2017  
TO: Mr. Ted Craddock, Project Manager  
Oroville Emergency Recovery – Spillways  
California Department of Water Resources  
FROM: Independent Board of Consultants for  
Oroville Emergency Recovery – Spillways  
SUBJECT: Memorandum No. 4

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### **INTRODUCTION**

On April 10 and 11, 2017, the Independent Board of Consultants (BOC) met at offices of the California State Department of Water Resources (DWR) for a presentation of design criteria, further development of design concepts by DWR and the status of Construction Contracts No.1 and No. 2. The meeting ended on April 11 with a reading of the BOC's report at 4:30 pm. An agenda for the meeting is attached. All BOC members were present. The BOC met with representatives of DWR Engineering Division, DSOD, FERC, and industry consultants that are working on the Oroville Spillway Recovery project; the attendees at the meeting are shown on the attached Attendance List.

The BOC has reviewed the status of past comments and recommendations in the log and this is included in the attachments.

### **QUESTIONS FOR THE BOC**

- 1. Does the BOC have any recommendations or comments on Construction Contract No. 1?**

*Response*

The contractor for Construction Contract 1 has been working onsite for about 3 weeks. The work has focused on the left slope modification (left of the FCO chute spillway) and testing for the RCC aggregate and mix design. The BOC's comments on RCC are contained in our comments on Question 3. [REDACTED]

[REDACTED] The excavations maintain a safe distance from the steep slope, and as such, efforts to stabilize the steep portions have yet to commence. The removal of soil and weathered rock has been by excavators and no blasting has occurred to date.

A summary of the kinematic analysis of the slope stability was provided. [REDACTED]

[REDACTED] See additional discussion on this in Item 6 – Stabilization of Slopes.

**2. Does the BOC have any recommendations or comments on Construction Contract No. 2?**

*Response*

The Board has the following comments on Construction Contract No. 2

Alternative Approach for Construction of the Upper Spillway Chute Section

The Design Team presented a detailed review of construction documents that included photographs taken during foundation preparation of FCO spillway chute slab, the Division of Safety of Dams (DSOD) and DWR inspection reports during construction, and the results of borings and core holes drilled through the spillway chute slab during the current field investigations. On the basis of this review, the design team concluded that the foundation conditions under the upper spillway chute are different from and better than those encountered under

the failed section downstream [REDACTED]  
[REDACTED]

On the basis of this assessment, the project design team informally presented the BOC with an option that is being considered as an interim repair measure for the upper spillway chute. This modification of the sequence of construction would keep the existing structure in place, and, with appropriate strengthening, measures that could be completed in the first construction season, would allow the interim design flows to pass over this upper section during the coming flood season. The motivation for adopting such an approach is to replace the currently proposed "remove-and-replace" option of the upper spillway chute (which has been slated for the 2017 construction season) which is likely to present challenges in being completed by the November 1<sup>st</sup> deadline. This alternative option would allow completion of the reinforced concrete lower spillway chute (founded on an RCC-backfilled foundation) and the scour hole repair to be accomplished during the 2017 construction season.

The replacement of the upper chute with the new design for the chute slab and training walls could proceed from the lower end as time allows in 2017 with the completion of the entire new lining in 2018. A major benefit of this sequence of construction would be the provision of a fully concrete-lined chute capable of carrying the interim design flood discharge during the coming 2017/2018 flood season.

The BOC considers this option a feasible alternative, provided repair measures to the existing chute consider the following measures:

[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

With these provisions made, the BOC would agree that the revised sequence of construction is the preferable plan for restoration of the FCO spillway to full functionality and recommends this construction plan be adopted.

**3. Does the BOC have any recommendations or comments on the RCC mix and production planning?**

*Response*

The results of the investigations for crushing the eroded rock recovered from the river channel as aggregate for RCC have shown that the crushing methodology used in the initial tests does not produce suitable material. However, useful information was obtained by the tests. The tests have demonstrated that washing of aggregate will probably be necessary. The results of crushing using a cone crusher to produce the sand fraction show that this type of crushing equipment is not suitable. The samples from these early tests have a high percentage of flat particle shapes and elongated pieces. Another type jaw crusher will be needed. The decision on the type of crushing equipment will be left to the Contractor for Contract 2.

The test program has produced a stockpile of 6-inch minus material that the Contractor for Contract 2 can use to setup his own crushing methodology. This work needs to be accomplished as soon as possible in order to start the RCC test program. The BOC looks forward to seeing the results of this test program.

An RCC test mix is specified in the Contract 2 documents. [REDACTED]

[REDACTED]

The Contractor will be required to demonstrate his means and methods for placing RCC on a 25% slope. Although RCC dams have been constructed in other countries using the sloping lifts placement, American contractors are generally not familiar with this type of RCC construction. [REDACTED]

[REDACTED]

The RCC test pad is expected to be done in June. The BOC would appreciate the opportunity to witness the placement of the RCC test pad.

**4. Does the BOC have any recommendations or comments on the geologic/geotechnical exploration program?**

*Response*

The BOC received a status update of the on-going field exploration program that includes mapping, drilling, surface geophysics, and instrumentation. As of this meeting 23 of 56 exploratory borings, 10 of 13 FCO concrete cores, and 6 of 16 seismic lines have been completed.

The geologic characterization and coring undertaken in the upper chute to date, were summarized. The five borings described were drilled in areas where shears were located with the results that somewhat deeper weathering and poorer rock quality were encountered. [REDACTED]

[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]

[REDACTED] This has an impact on the necessary required removal volume and excavation depth in this local area. The BOC recommends that the amount of additional excavation required, and its effect on the schedule, be determined.

The exploratory borings that are being drilled to evaluate steep slopes on the left side of the FCO spillway are in progress. [REDACTED]

[REDACTED] it should be noted that this borehole is located along trend of some of the shears mapped in the deep scour hole. [REDACTED]

[REDACTED]  
[REDACTED]

[REDACTED] Also the effect of such features on slope stability should be evaluated.

Four cores of concrete and rock obtained from the floor of the FCO chute were described. [REDACTED]

[REDACTED]

[REDACTED] Locations of the aforementioned concrete borings were guided by targeting anomalous GPR (Ground Penetrating Radar) results and areas designated on the foundation cleanup maps as not well cleaned (reference Construction Geology Report C-38). [REDACTED]

[REDACTED]

[REDACTED]

The completed six seismic geophysical lines are just now being processed so no technical details were presented. Since the last meeting the line layout was expanded to include coverage of the emergency spillway, and specifically lines that parallel the weirs and the cutoff call. The BOC endorses these attempts to determine rock weathering depths along these alignments. Due to the “noise” interference that is created by the increasing use of onsite construction machinery and the upcoming spillway flow at the end of the week, it appears that the geophysical data obtained this week will be all that can be feasibly obtained before Construction Contract 2 is in full force. The BOC awaits the results of this program.

Inclinometers and piezometers (about 10 of each) installed in boreholes should be remotely accessible on Dashboard by later this week. A plan to install a piezometer underneath the FCO chute was described; however, since this only results in one instrument at one location and requires considerable expense and labor, the consensus was that the effort should not be pursued.

As this was a status report of ongoing field activities, the BOC awaits the completed results.

**5. Does the BOC have any recommendations or comments on the spillway design?**

*Response*

The BOC has the following comments on spillway design:

**Design Provisions for the Lower Chute**

The spillway chute design is in general, well done. Some design details are the same as those developed for the Folsom Auxiliary spillway, which operated for the first time during the same storm that led to the failure of the Oroville service spillway in February. It could be valuable to the design team to determine if any

lessons learned from the recent experience at the Folsom spillway in passing the February flood.

The designs developed have corrected a number of problems that were inherent in the original design. [REDACTED]

[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]

Historical photos and construction reports indicate that there were locations where the surface of the [REDACTED]

[REDACTED]  
[REDACTED]  
[REDACTED] Water methods should continue to be used as well.

The joint details, shown in DWRG S-403, as used on the Folsom Auxiliary spillway appear to be satisfactory.

[REDACTED]  
[REDACTED]  
[REDACTED] Proper attention is given to cleanout provisions for cleaning all lengths of the drain piping. All bends in the cleanout piping should be specified as "long-radius" bends in order to provide for ease in using the cleanouts. No drain piping should be installed without cleanout provisions.

The BOC recommends that, in the lower chute, where the new slab will be placed on RCC, [REDACTED]

### **Design Provisions for the Existing Upper Chute**

Since the lower chute is to be constructed first, the existing upper chute needs to be updated to provide confidence that it will provide satisfactory operation during the next rainy season. Part of the rehab considerations should be complete surface restoration of all surface defects. That will include patching of all holes and other surface defects. Patching of these holes should include dressing the holes to remove all loose material, painting the interior of the hole with epoxy to provide adequate bond, and then filling the hole with concrete. Proper dressing or grinding is then required to produce a smooth surface.

Addressing cracks is particularly important. All cracks should be chipped out and then filled with an epoxy grout. The finished patching should then be dressed to provide a smooth watertight surface.

### **RCC Design Details**

The reinforced concrete chute slab and training walls that will be placed on RCC surface at the lower spillway portion have somewhat different details than the slab and training walls placed on a rock foundation. It is intended that joints will be built in the RCC by the usual methods employed for dam construction. The RCC joints will be spaced to match the spacing of joints in the slab. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]



The BOC recommends that the RCC shoulders that were to be constructed to the height of the training walls for support of the reinforced concrete wall be omitted since it is now intended that the reinforced chute lining of the lower spillway section will be completed during the 2017 construction season.

Therefore, the same training wall design, used where the chute lining is on rock foundation, can be used throughout the length of the lower chute. The RCC section can thereby be made somewhat smaller and there will be no transition sections needed for the wall design.

The RCC placement has assumed uniform side slopes at 1.0 H to 1.0 V with the slope being smoothed and compacted by tamping equipment during placement. The BOC agrees this is an acceptable solution and eliminates forming. On the right side of the upper erosion hole, suitable foundation rock has not been uncovered for properly founding the RCC toe. It appears that considerable excavation of overburden and highly weathered rock will be needed to expose suitable foundation. To avoid this excavation, the contractor may elect to form this side of the RCC vertically or on a steeper stepped slope. Precast concrete blocks have also been used as forms to construct steep slopes on some RCC construction.

A section of the RCC buttress designed for the Emergency Spillway weir blocks was shown during the presentation but the details were not discussed at this BOC meeting. The BOC endorses the use of a buttress to stabilize the weir blocks instead of anchors and believes the stepped downstream face of the RCC buttress will provide some energy dissipation to the overflowing discharge.

**6. Does the BOC have any other recommendations or comments for the Design Team?**

### Stabilization of Slopes

The design team presented results of field investigations to help characterize rock quality and strength in the vicinity of erosion holes next to the failed slab to aid in the design of slope stabilization measures to provide for safe access for placing mass and RCC in the erosion holes that will form the foundation for the lower spillway chute.

Both surface mapping and the results of core drilling provided rock weathering profile, discontinuities, and joint spacing that would help in performing kinematic and stability analyses of proposed slope inclinations.

Two design slope profiles (Slopes 1 and 2) were presented in the vicinity of the large, deep erosion hole to the left of the failed portion of spillway chute. Slope 1 was in the immediate vicinity and to the left (east) of the upper end of the break in the slab. Slope 2 was to the left (east) and downstream of the upper end of the spillway break. Slope 2 was above the deepest point of the scour hole. At this location, the height of the erosion scarp is about 140 feet. Proposed design inclinations for these two slope stabilization sections were 2H:1V and 1H:1V. Both Wedge sliding and Flexural toppling analyses were performed for the two slopes. Results of analyses for slope 1 indicate an inclination 2H:1V (1.7H:1V between benches) would provide for a stable slope. Similar results were presented for Slope 2.

Proposed approaches were presented for laying back these slopes to a safe inclination that included the following:

1. Full slope layback
2. Fill-in the hole with Concrete
3. Provide a high concrete buttress against the slope
4. A combination of partial slope layback and partial fill-in with concrete.

Drilling and blasting was presented as an option for excavating and laying back the slopes to the stable inclination and for avoiding the potential for debris falling into the hole.

It is the BOC's understanding that these assessments are ongoing, and will be improved as more field investigation data becomes available to refine properties of the rock that feed into the stability analyses.

[REDACTED]  
[REDACTED]  
[REDACTED]

The BOC also indicates that the stabilization of these two slopes at this location, as well as laying back the slopes on the right side of the spillway chute training wall on the opposite side of Slope 1, (because of the highly weathered and sheared nature of the rock formation at this location) may create challenges for the schedule of completing filling of these erosional holes to allow for timely completion of the lower chute section. Specifically, the BOC notes that the FCO spillway will begin flowing on Friday of this week (April 14) and, except for a one-week hiatus, will flow continuously until about June 1. During this time, access to the scour hole and slope will be unavailable. [REDACTED]

[REDACTED]  
[REDACTED] to

begin placing RCC in this area by the planned date of July 1. While this task appears to be doable, completing it in the time allowed appears to be challenging. The BOC encourages the development of other options to continue work to proceed while the FCO spillway flows occur.

### **BOC RECOMMENDATIONS SUMMARY**

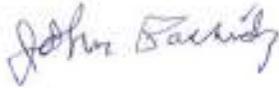
- The BOC recommends that efforts to investigate and stabilize the steep slope left of the big scour hole proceed so that stabilization efforts do not impact the start of RCC or cement-stabilization at the bottom of the scour hole that is scheduled to begin on July 1.
- The BOC suggests that consideration be given to allowing the Contractor the option of using vertically formed RCC walls in the deep scour hole, on both or just one side. On the right side its use could minimize the current extensive and deep excavation necessary to expose slightly weathered rock. On the left side, its use could minimize the need for personnel to work directly under the steep slope and could have an advantage on the construction schedule."
- The BOC endorses the sequence of construction now planned to finish the RCC and new concrete lining of the lower spillway portion during the 2017 construction season, and to construct the replacement chute on the upper section in 2018.
- The RCC aggregate production and the RCC mix strength testing are now turned over to the Contract 2 constructor. Results of this work are needed at an early date. The BOC would appreciate the opportunity to witness the RCC test pad placement.
- Demonstration of the Contractor's RCC placement means and methods will include construction of an RCC Test Pad. The BOC would wish to observe construction of the test placement.

[REDACTED]

[REDACTED]

- The BOC recommends that RCC shoulders for chute training walls be eliminated and the standard reinforced cantilevered training wall detail be used throughout the lower chute.
- The BOC endorses the use of an RCC buttress to strengthen the Emergency Spillway weir blocks and looks forward to further discussion on the design of this RCC buttress.
- The design details for the replacement chute and training walls have corrected problems that were inherent in the original design. The current design has much smaller and thicker concrete slab panels with increased reinforcement and anchorage. All joints have waterstops and a better underdrainage system is employed. Training walls designs are more robust and designed to meet seismic criteria. The BOC agrees that the design details are satisfactory for the replacement design.
- The existing upper chute condition needs to be further improved to provide assurance that it will provide satisfactory operation during the next rainy season. Rehabilitation measures should be taken to properly repair concrete spalls, seal cracks and joints and add anchorage.

Respectfully submitted,



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