

OROVILLE DAM CITIZENS ADVISORY COMMISSION
Meeting on 11/13/2020

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STATE OF CALIFORNIA
OROVILLE DAM CITIZENS ADVISORY COMMISSION
MEETING
FRIDAY, NOVEMBER 13, 2020

TRANSCRIPT PREPARED BY MICHAEL HENSLEY, CSR, RDR

1 P R O C E E D I N G S

2 Friday, November 13, 2020

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4 MR. SAFFOLD: Good morning everyone. We're
5 going to get started. I'm Nick Saffold with Kearns &
6 West, and I'm going to be helping support today's
7 meeting. In just a minute, I'm going to turn it over to
8 Secretary Crowfoot. First, I want to run through a few
9 instructions and do roll call.

10 Today's meeting is going to be held in a virtual
11 format in accordance with the California executive
12 orders to protect public health during the COVID-19
13 pandemic. There will be time for public comment and
14 questions following today's presentations. Today's
15 meeting will be conducted over a Zoom webinar. A
16 complete virtual meeting guide with user instructions
17 can be found on the Citizens Advisory Commission web
18 page.

19 If this resource does not address your issues,
20 our call-in... is available during this meeting. We
21 help you troubleshoot... phone number is (530) 400-9068.
22 You can also ask technical questions by clicking the
23 Q & A icon at the button of your screen and submitting a
24 question.

25 The commissioners as well as the State officials

1 presenting today will be in presenter mode.
2 Commissioners will be able to mute and unmute themselves
3 to comment and ask questions. Members of the public
4 will be muted and in listen-only mode until we reach the
5 public comment period.

6 I'm now going to describe the ways you can make
7 public comment, and we'll repeat these instructions at
8 the start of public comment period.

9 For the members of the public joining by the
10 Zoom platform, there are two ways to ask a question or
11 make a comment. You can raise your hand on the Zoom
12 platform to indicate you want to provide public comment.
13 To do so, you'll want to click the hand icon, which
14 should be located at the bottom of the screen.

15 If you do that, the webinar host Justin will
16 call on you and unmute you so you can speak during
17 public comment. If you wish to submit a written
18 question or comment to be read for you, you may do so by
19 clicking the Q & A icon at the bottom of your screen
20 during the meeting. Your question will be held until
21 the public comment period and then read aloud at that
22 time.

23 If you're participating by phone instead of
24 Zoom, you'll need to press #2 to raise your hand to
25 speak during the public comment period. Note that you

1 may have to manually mute or unmute yourself, as your
2 line will have been muted already.

3 Each speaker will have three minutes. Your time
4 will show on the screen. If our dialing in by phone,
5 Justin will let you know when your time is coming to a
6 close. This meeting is be recorded and transcribed and
7 will be posted at a later date to the Citizens Advisory
8 Commission web page.

9 Commissioners, if you would unmute yourselves
10 now, we're going to do a quick roll call.

11 Okay. Supervisor Bradford.

12 SUPERVISOR BRADFORD: Good morning. I'm here.

13 MR. SAFFOLD: Lieutenant Collins.

14 (No verbal response.)

15 MR. SAFFOLD: Lieutenant Collins, do we have
16 you?

17 LIEUTENANT COLLINS: Yeah.

18 MR. SAFFOLD: Supervisor Conant.

19 SUPERVISOR CONANT: Present. Good morning.

20 MR. SAFFOLD: Good morning.

21 Supervisor Connelly.

22 (No verbal response.)

23 MR. SAFFOLD: Supervisor Connelly.

24 (No verbal response.)

25 MR. SAFFOLD: Secretary Crowfoot.

1 SECRETARY CROWFOOT: Here.
2 MR. SAFFOLD: Deputy Director Curry.
3 DEPUTY DIRECTOR CURRY: Good morning. Here.
4 MR. SAFFOLD: Supervisor Flores.
5 SUPERVISOR FLORES: Present.
6 MR. SAFFOLD: Assemblyman Gallagher.
7 ASSEMBLYMAN GALLAGHER: Here.
8 MR. SAFFOLD: Supervisor Lambert.
9 (No verbal response.)
10 MR. SAFFOLD: Supervisor Lambert.
11 (No verbal response.)
12 MR. SAFFOLD: Deputy Licon.
13 DEPUTY LICON: Present.
14 MR. SAFFOLD: Supervisor Lofton.
15 (No verbal response.)
16 MR. SAFFOLD: Supervisor Lofton.
17 (No verbal response.)
18 MR. SAFFOLD: Lieutenant Million.
19 LIEUTENANT MILLION: Here.
20 MR. SAFFOLD: Director Nemeth.
21 DIRECTOR NEMETH: Here.
22 MR. SAFFOLD: Senator Nielsen.
23 SENATOR NIELSEN: Here.
24 MR. SAFFOLD: Councilmember Pittman.
25 COUNCILMEMBER PITTMAN: Present.

1 MR. SAFFOLD: Mayor Reynolds.

2 (No verbal response.)

3 MR. SAFFOLD: Mayor Reynolds.

4 (No verbal response.)

5 MR. SAFFOLD: Lieutenant Stokes.

6 SERGEANT STORM: This is Sergeant Storm filling
7 in for Lieutenant Stokes.

8 MR. SAFFOLD: Noted. Thank you.

9 Superintendent Teague.

10 SUPERINTENDENT TEAGUE: Here. Good morning.

11 MR. SAFFOLD: Genoa Widener.

12 (No verbal response.)

13 MR. SAFFOLD: Genoa, are you with us?

14 (No verbal response.)

15 MR. SAFFOLD: Okay. Are there any commissioners
16 or designees that I've missed?

17 (No verbal response.)

18 MR. SAFFOLD: All right. We're done with roll
19 call. Thank you everyone.

20 Secretary Crowfoot, I'll turn it over to you.

21 SECRETARY CROWFOOT: Hey, thanks so much, and
22 thanks all for joining our fifth meeting of the Orville
23 Dam Citizens Advisory Commission. Big thanks as always
24 to Senator Nielsen and Assembly Member Gallagher. They
25 are really the leaders that created this commission and

1 the reason why we're meeting.

2 As you all know, we had our first three meetings
3 in person up in Oroville, and I think that those
4 in-person meetings were really helpful to get to know
5 one another and then also to have some real, direct
6 conversation among each other but then also with
7 community members.

8 The challenge of the pandemic, of course, has
9 brought our meetings to a virtual format. And so in
10 August, we met virtually, and we're doing so again
11 today. That being -- you know, that being -- while the
12 virtual format is not ideal, I think we all agree that
13 our work at the Citizens Advisory Commission has to
14 continue, and so really appreciate the patience you all
15 have with all the technology to ensure a good meeting
16 here today. As always, this meeting is broadcast live
17 in public and will also be recorded and can be accessed
18 on the website.

19 Today we're meeting for three hours, which is a
20 little longer than we normally meet, specifically to
21 delve deep into the Comprehensive Needs Assessment,
22 which I think most, if not all, commission members know
23 was a detailed process to really understand the needs of
24 the dam and the reservoir, specifically around safety.
25 And that process involved the formation of an ad hoc

1 committee that participated and helped to oversee that
2 process.

3 Today we'll get a presentation from Department
4 of Water Resources on the CNA for those that are not
5 initiated into its details; but, importantly, we're
6 going to allow for a lot of time for commissioner
7 questions and comments as well as hearing from our ad
8 hoc committee who really spent a lot of time and energy
9 sort of in parallel to the development of the
10 Comprehensive Needs Assessment and really informing
11 that.

12 We'll also, before we jump into the discussion
13 on the CNA, hear a brief update on the wildfires and, of
14 course, the winter operations as we move into the rainy
15 season.

16 The CNA, the Comprehensive Needs Assessment, has
17 been posted on our Citizens Advisory Commission website.
18 So if you just -- if -- for members of the public, if
19 you want to actually see that document, the
20 Comprehensive Needs Assessment, you can do so by logging
21 on to our website or Googling Oroville Dam Citizens
22 Advisory Commission. And DWR also has that document up
23 in numerous places.

24 I think that's it. I'll say that after each of
25 our presentations on wildfire and winter operations and

1 of course, the CNA, we want to make sure that
2 commissioners have the opportunity to ask all the
3 questions that they want and can. And then we're hoping
4 to reserve at least an hour for public comment here at
5 the end. And I think we've done a pretty good job
6 making sure that community members that join have their
7 voices heard, and I'll continue to do that, ensure that
8 today.

9 Before we kick off, I want to invite, as always,
10 Senator Nielsen and Assembly Member Gallagher for any
11 high-level thoughts that they have, given their sort of
12 thought leadership on this commission.

13 So let me turn to Senator Nielsen first.

14 And, Senator Nielsen, if you are talking, you're
15 not actually coming through, I think, on the broadcast.

16 SENATOR NIELSEN: There we go.

17 SECRETARY CROWFOOT: There you are.

18 SENATOR NIELSEN: This is a very unique
19 opportunity in state government for the -- in
20 government, period, for the state level and the
21 community to be able to participate; very necessary in a
22 matter of this significance, and made a bit more so by
23 virtue of what we're dealing with with the fires. That
24 does affect all of these things that we've been dealing
25 with related to the dam as well. And it gives us an

1 opportunity to know what's on the minds of each and
2 every one of us.

3 And it is also helpful as we prepare -- I keep
4 talking about the budget, but there are budget matters
5 of concern, and it's certainly helpful to me to be
6 apprised of what we're doing and the things that are on
7 your minds as we proceed.

8 And I very particularly want to thank the
9 administration for the high level of participation here.
10 Secretary Crowfoot, it's very rare for a secretary to be
11 able to put so much time into something like this. It
12 shows that they -- that you've made this very important.
13 And Assemblyman Gallagher and I, we will certainly
14 attest that the constituents that we represent
15 appreciate that kind of opportunity and that input and
16 your hands-on participation.

17 I'm looking forward to it, and I appreciate the
18 tempering of the format here, because we've had some
19 folks concerned that they didn't get to speak their
20 piece. I think that that opportunity will be much more
21 availed today.

22 Thank you everybody, and happy Thanksgiving in
23 advance.

24 SECRETARY CROWFOOT: Thanks so much, Senator.

25 Assembly member.

1 ASSEMBLYMAN GALLAGHER: Yeah. Thank you.

2 So, first of all, I want to thank everyone for
3 making the time and getting together here. The work of
4 this commission is very important; and, again, I'm glad
5 that we're all ensuring that this -- these meetings
6 continue to happen, that the critical input is provided
7 to the department. And I want to thank the secretary
8 for his continued just attention and focus on Oroville
9 Dam and his commitment to helping address, you know,
10 the -- some of these long-standing issues that we
11 have -- have felt needed to be addressed.

12 And so I'm looking forward to the discussion
13 today. You know, I think the CNA, you know, is a -- is
14 what I have described as a substantial step in the right
15 direction in terms of addressing the infrastructure
16 needs of the Oroville Dam Complex; and, you know,
17 they'll -- we'll be kind of delving into that today.

18 I think it's important to, you know, get good
19 feedback and input from the community on that document
20 and, you know, what we need to do really going forward,
21 which is probably the most important work.

22 So with that, I will turn it back, and looking
23 forward to the discussion today.

24 SECRETARY CROWFOOT: Thanks so much to you both.

25 So as I said, we're going to spend most of our

1 time over the next three hours on the Comprehensive
2 Needs Assessment; but before we do that, we'll hear --
3 we need to hear an update on the recent wildfires and
4 particularly the North Complex and how those wildfires
5 impacted the reservoir and DWR operations in the state
6 recreation area as well.

7 So we're joined by Christina Curry who is, of
8 course, a commission member, Chief Deputy Director at
9 the Governor's Office of Emergency Services, really the
10 nerve center of all emergency response in the state; and
11 Brian Marshall, a fire chief who leads all the mutual
12 aid at the California Office of Emergency Services or
13 Cal OES. And joined, of course, by Superintendent Matt
14 Teague of State Parks, also a commission member who
15 oversees the Oroville state recreation area.

16 So Christina, Brian, Matt, I'll turn it over to
17 you for a presentation now.

18 DEPUTY DIRECTOR CURRY: Thank you, Secretary.
19 I'll kick it off. Again, Tina Curry with Cal OES. Just
20 so appreciative that you included this on the agenda and
21 give us a chance to provide an update on fire response,
22 fire recovery.

23 It's certainly been a historic year for
24 California, unfortunately, again, with wildfires. Over
25 4 million acres burned throughout the state. 31

1 fatalities. Over 10,000 structures lost. And about 27
2 counties currently, so far, in -- under a federal
3 declaration of emergency just for wildfires on top of
4 everything else that California has -- is contending
5 with this year.

6 And certainly it has been a repeated situation
7 for you, for the residents there in the Butte County
8 area; and our hearts go out to you as we continue to
9 contend with these repeated fires. And they've been
10 through so much, and our commitment at OES is to support
11 not just the response but the recovery along with all
12 the state partners.

13 So I'll turn it to Chief Marshall to talk a
14 little bit about the fire response and some of the
15 winters prep activities we're doing for watershed and
16 other post-fire threats, and then I'll come back and
17 talk about some of the recovery operations and
18 infrastructure restoration that is underway. And then
19 certainly Matt with State Parks will provide an update
20 on those issues as well.

21 So with that, I'll turn it over to Chief
22 Marshall who's joining me here in the room.

23 CHIEF MARSHALL: Thank you, Tina.

24 Chief Marshall, Cal OES Fire and Rescue. The
25 mutual aid system, which is like no other in the United

1 States, is vitally important to our success in
2 containing and controlling these major wildfires. The
3 state was under a siege, obviously. Through our office
4 we used the Emergency Management Assistance Compact,
5 EMAC, to get resources from throughout the United
6 States. In fact, FEMA helped us fly fire engines and
7 firefighters from the East Coast into California to
8 fight these major wildfires.

9 A little update on the North Complex. Nearly
10 320,000 acres burned in that fire. 1,523 single-family
11 residence totally destroyed; another 51 damaged.
12 Commercial properties: 59 commercial properties totally
13 destroyed with another 5 receiving major damage. So
14 quite the devastating fire.

15 My office in conjunction with Butte County
16 Sheriff's office conducted search and rescue operations
17 to make sure everybody was accounted for. We searched
18 hundreds of homes with our urban search and rescue
19 assets, documenting that -- structures that were
20 destroyed, structures that were searched with no victim
21 remains, determining any hazardous materials that were
22 on-site, any animals that were killed in the fire. So
23 pretty active response from Cal OES as we've
24 coordinated -- helped coordinate the response to the
25 fire.

1 And now where we're at today. One of the things
2 that we do in the state of California is we pre-position
3 resources in the advance of a weather event. Typically
4 that's for red flag warning where we upstaff local
5 government fire departments throughout the state so we
6 have surge capacity. But another aspect of this program
7 is for mud and debris flow. So if we get into
8 situations where there is a anticipated heavy rain that
9 will fall over the burn scars, we will be
10 pre-positioning fire engines, firefighters, swift water
11 rescue assets ahead of the storm so we have resources in
12 place.

13 Another thing that we're doing, we have a
14 airplane that we're flying in conjunction with the
15 Orange County Fire Authority in Southern California.
16 This airplane has live video streaming. It also has
17 what we call "change detection software" as part of the
18 airplane sensors, and we'll be able to determine if we
19 have the beginning of a mud and debris flow, a hillside
20 starting to move.

21 We are currently flying all the fires across
22 Southern California and Northern California to get a
23 baseline. So that's going on right now, and then as we
24 monitor the weather here at the state operations center,
25 we'll be able to fly that aircraft in the -- in the

1 middle of the storm to determine if we have the
2 potential for a mud and debris flow.

3 So a lot of things going on in the Fire and
4 Rescue division. We're still not out of the woods
5 across California with wildfires. We're into the
6 Southern California fire season, but we have resources
7 staffed and ready to go.

8 Thank you very much.

9 DEPUTY DIRECTOR CURRY: And --

10 SECRETARY CROWFOOT: Thank you, Chief.

11 Oh, sorry, Tina.

12 DEPUTY DIRECTOR CURRY: No, no, no. Go ahead,
13 Wade.

14 SECRETARY CROWFOOT: No. I was going to just
15 turn it over to Matt from State Parks, but if you wanted
16 to add, please do.

17 DEPUTY DIRECTOR CURRY: I will, if it's okay,
18 just to jump in just to frame a little bit more about
19 Chief Marshall's presentation. And that's -- I
20 mentioned at the beginning that we do have a federal
21 disaster declaration for a number of fires in
22 California, including the North Complex; and that turns
23 on various programs through the Federal Emergency
24 Management Agency, including to help those that lost
25 their homes or property as a result of this fire.

1 So far we have, you know, some 3,000 or so
2 registrants from Butte County that have applied for that
3 assistance. That is a larger number than the number of
4 structures lost. And that's because those programs are
5 available for other types of losses, you know, even if
6 the home wasn't destroyed for, you know, the
7 replenishment of household property and things like
8 that. So we encourage people to register and kind of
9 see what it -- what they can access at -- through those
10 programs.

11 The housing and shelter was also unique because
12 of COVID; so we utilized, this year, throughout the
13 state, a program to put people into hotels rather than
14 congregate shelters that you traditionally see in fires.
15 There're still some 100 or so residents that are in a --
16 some kind of shelter situation there in Butte County.

17 And we, for the first time -- well, maybe not
18 for the first time, but in this event, we activated the
19 Chico State dormitories. It was closed for campus
20 operations because of COVID, but we put the first
21 responders and other staff that were working the
22 wildfires into that so that we could free up the hotel
23 rooms for the people of Butte County that needed
24 housing. And then we're working with the county on
25 more -- you know, transition to permanent housing and to

1 meet those needs in cooperation with FEMA as part of the
2 programs that have been activated.

3 And the last item that I'll mention is the
4 debris cleanup. I think that many are familiar with
5 this now because we had so many wildfires and
6 particularly up in this area; and we are about halfway
7 done with what we call "Phase 1," which is the household
8 hazardous waste removal, that initial step to get the
9 toxic materials off of the properties. And then
10 hopefully in the coming weeks we'll be initiating with
11 the state -- California Environmental Protection Agency,
12 CalRecycle, the debris removal operations for the
13 parcels, which is this first step in many steps to come
14 on the recovery.

15 And then as part of the watershed, I just want
16 to recognize Director Nemeth. California Conservation
17 Corps in partnership is also assisting the county with
18 some of the watershed protection that Chief Marshall
19 eluded to to get some immediate protective measures in
20 place to protect the watershed against the incoming
21 rains and winter season and any mud and debris flow
22 concerns so that we ensure those are mitigated; so we
23 appreciate that partnership.

24 And with that, I know Matt is waiting to speak,
25 but I think all of us are -- stand by to answer any

1 questions you have about the wildfire recovery, but
2 certainly remain -- we remain committed to continue to
3 help the residents of Butte County and all of you as we
4 continue the wildfire recovery.

5 SECRETARY CROWFOOT: Thanks Tina and Brian.

6 Let's hold on questions and just hear from Matt
7 as it relates to the state recreation area, and then
8 we'll take questions or suggestions from commissioners.

9 Matt.

10 MR. SAFFOLD: Real quickly, Matt, sorry.

11 Justin, would you mind pulling up the slides
12 again.

13 And, Matt, you can just direct the slides for
14 Justin to move through through your section.

15 SUPERINTENDENT TEAGUE: Okay. Yeah. I believe
16 there's only about four.

17 Thank you, Secretary. Thank you Chief Deputy
18 Curry. Appreciate the opportunity to provide an update.
19 I think it's much needed on the recreation side.

20 Go backing -- go back before the North Complex,
21 I think one of the most difficult things we all are
22 having a hard time with are keeping up with these fire
23 names. We used to be able to remember the names pretty
24 easily; but going back to, you know, three, four years
25 ago, and now I can't keep up with the names in the last

1 year.

2 I started with the Potters Fire, and that was
3 started -- you know, that was the Butte Complex, the
4 Butte Lightning Complex. That impacted the area north
5 of the spillway and impacted the spillway boat launch
6 area. That was only about a thousand acres. However,
7 it burned really hot in that zone, and that was on
8 August 18th. It forced the closure of that spillway and
9 the dam crest. We worked closely with DWR and CHP
10 during those efforts.

11 We saw about 6,000 feet of dozer line
12 suppression damage repair needed in that area, and we
13 were able to get that completed. However, we have
14 extensive tree damage as the fire did burn really hot in
15 that zone; so we are going to keep the trail network in
16 that area closed through the winter due to wind storms
17 and significant rainfall just to kind of reassess.
18 We're hoping to be able to complete assessments and
19 finish any kind of hazard tree work in the late
20 winter/spring with the hopes of opening that trail, the
21 trail system for the Potters and the North Fork, and
22 that is about 12 miles of trail that is closed right
23 now.

24 And then on September 8th, when the North
25 Complex, which was the Claremont-Bear Fire that rolled

1 in as every knows. In that picture, what you see on the
2 screen now is that night of September 8th as it was
3 rolling extremely fast down in towards the Lake Oroville
4 State Recreation Area. That view is obviously looking
5 east across from Bidwell Canyon Marina.

6 We fortunately -- and I've had the opportunity
7 to have discussions with Secretary Crowfoot on this.
8 What you see in the foreground in front of the flames
9 there is Loafer Creek area. We've done extensive
10 prescribed burn, and those efforts are coordinated
11 between Department of Water Resources, the local CalFire
12 Butte Unit, and State Parks.

13 For the past approximately five years, we've
14 done prescribed burn plots in that area, which -- I
15 can't say -- I can't say enough of how much that helped
16 slow this fire down and helped it from turning that
17 corner and causing potential significant damage to the
18 marina and into Kelly Ridge and other parts of the city
19 of Oroville.

20 Next slide, please.

21 These are some photos of the Loafer Creek. The
22 photo on the left, as you see, is looking west,
23 completely in an opposite direction of the previous
24 photo you saw of that night. The photo on the right is
25 the Loafer Creek/Dave's Beach area, and you can see

1 those efforts of prescribed burning. That fire burned
2 nice and slow as it made its way into that recreation
3 area. We did not suffer any structural damage to any of
4 the buildings or any other facilities in the area. The
5 only damage we did suffer were a few picnic tables and
6 some fire campsite furniture that were damaged by dozer
7 during the suppression efforts.

8 Next slide, please.

9 This is an example of what the dozer lines
10 looked like in the Loafer Creek campground area. Some
11 of the areas did burn really hot in that zone as well.
12 We do have a lot of tree damage. We worked with CalFire
13 to jump right on the suppression damage repair. I have
14 to say the coordination -- we are all getting very
15 experienced in these efforts, and I am extremely
16 impressed by the coordination between local agencies,
17 state agencies, federal agencies. Before the fire was
18 even out, we had trees burning in this area where we had
19 dozer lines and suppression damage repair completed
20 before the fire was out.

21 Next slide.

22 This is the same viewpoint where we actually are
23 in there doing erosion control efforts using some of the
24 downed trees and some others. This is a CalFire
25 contractor that was put on-site. After they were done

1 with suppression, they immediately -- CalFire local got
2 these contractors on-site to help out with that repair.

3 Next slide.

4 This is Enterprise. This was probably the
5 hottest area of the fire. Significant damage.
6 Enterprise is -- consists of very loose, decomposed
7 granite soils. We're very concerned with heavy impacts
8 to erosion runoff and siltation into the lake on the
9 boat ramp facilities itself.

10 We -- we had a great -- we had a great
11 partnership with PG&E here. We've able to offer
12 Enterprise boat ramp/Loafer Creek parking lots for their
13 boat ramps. Foreman Creek utilizes a PG&E pull laydown
14 yard. And in exchange they have helped us tremendously
15 in these erosion control efforts. They have removed all
16 the hazard trees in these areas around these facilities
17 and been able to save all the chips, lay the chips down;
18 and they completed this these efforts with more
19 vegetation-type control or use of vegetation for that
20 erosion control on these hill slides. We're going to
21 assess them through these rains, which we're getting
22 today, and add to that those erosion control efforts as
23 necessary.

24 We're pretty much done with all of our damage
25 facilities as far as erosion control. This -- and,

1 again, I don't want to stress -- or I can't stress
2 enough of how this effort with other agencies and other
3 partners to get this work done before the winter season
4 and how much this will save our facilities through this
5 year.

6 As far as closures, we do have Loafer Creek
7 closed at this point still. We've been able to offer
8 staging areas for Butte County during the event, law
9 enforcement staging, and also the urban search and
10 rescue. Like I mentioned before, PG&E has used a lot of
11 those parking lots for PG&E laydown. That gets them
12 closer to the fire damage sites and speeds up the
13 recovery efforts for restoring the power up in those
14 areas.

15 Cal OES just utilized a staging area for
16 mobilization of some of their BMP erosion control
17 materials that were coming in and being distributed out
18 to the field. We now have US EPA in there. They're
19 doing the hazmat cleanup up the Forbestown, Feather
20 Falls, Brush Creek area. They will be in there for
21 several weeks, if not months, utilizing the -- some of
22 the campground areas of Loafer Creek. And Caltrans has
23 also been able to use that for staging to help out with
24 those response efforts.

25 We plan on looking at opening up some of the

1 trail systems and other units in Loafer, but because of
2 the tree damage and hazard tree potential in those
3 campground areas, we will -- like Potters Fire, we will
4 assess those through the winter and hopefully be back on
5 board for the spring.

6 So thanks for the opportunity to update. I'll
7 leave it -- or I'll hand it back to the secretary for
8 questions.

9 Thank you.

10 SECRETARY CROWFOOT: Hey, thanks so much, Matt.
11 Appreciate it. And we got up there and saw the damage
12 at Loafer Creek, and I just want to emphasize, that
13 prescribed fire that you all did there for -- in
14 preceding years is what we need to do more of across the
15 state: More forest management, obviously, to reduce the
16 severity of the catastrophic fires and importantly, as
17 you said, slow down fires where we can.

18 I want to turn it over to any commissioners that
19 have questions or suggestions, both for OES as it
20 relates to winter and stability of watersheds, et
21 cetera, or State Parks or anything we can relate to
22 CalFire.

23 You can raise your hand virtually through, I
24 think -- let's see. The participants, if you click on
25 "Participants," at the bottom of the participants list

1 on the right side, you see a "Raise Hand" button; or you
2 can just unmute yourself and ask a question.

3 ASSEMBLYMAN GALLAGHER: Hi, Assemblyman
4 Gallagher here. My question is I know we had talked
5 about, you know, the concern regarding mud slides and
6 more specifically -- and maybe this is for DWR...

7 (Indecipherable audio distortion.)

8 ASSEMBLYMAN GALLAGHER: ...it seems to me,
9 because of this fire, you know, I guess, stored as well,
10 you know, upstream, I guess, from the dam. And, you
11 know, the -- could this kind of create more of a rush of
12 water, surge of water in the drainage, you know, coming
13 into Oroville Dam for this winter season? And what are
14 we kind of doing to, you know, I guess, watch for,
15 mitigate that issue.

16 SECRETARY CROWFOOT: Thanks, Assemblyman.

17 Carla, Ted, or John, can you respond to the
18 question around mud slides, its impact on the reservoir,
19 and any safety considerations as a result of that.

20 DIRECTOR NEMETH: Ted, can you take this
21 question?

22 MR. CRADDOCK: Yeah, I sure can.

23 Good morning everyone. Ted Craddock here.

24 So, Assemblyman, what we've been working on is a
25 plan focused on control of debris as they enter into

1 Lake Oroville; so that's the primary mechanism that
2 we'll be employing.

3 We've contracted to have another vessel out on
4 the lake. So we'll have two vessels on the lake that
5 will be able to help basically round up debris as they
6 enter into different parts of the reservoir; so that's
7 our current focus.

8 Additionally we've been doing some work such as
9 we were -- worked with the County to replace a couple
10 bridges on Craig Access Road to help out there. And
11 there's other miscellaneous erosion control work we're
12 doing on the lands that the State has control of around
13 Lake Oroville.

14 SECRETARY CROWFOOT: So, Ted, that makes sense
15 to me. And can you -- can DWR commit to providing any
16 update to this commission if you lose control of any
17 debris or significant amount actually gets in the
18 reservoir?

19 In other words, can members of this commission
20 be updated in real-time if anything goes sideways with
21 all your mitigation efforts on this?

22 MR. CRADDOCK: Yeah, absolutely, Secretary.

23 SECRETARY CROWFOOT: Good.

24 ASSEMBLYMAN GALLAGHER: And this is a follow-up,
25 and I don't know if I was -- maybe I wasn't very clear

1 in my question; so I apologize.

2 I'm not really talking about the debris, which
3 is obviously an issue. I'm more concerned about do --
4 are we worried about any changes in hydrology --

5 SECRETARY CROWFOOT: Ah.

6 ASSEMBLYMAN GALLAGHER: -- how this drains into
7 Oroville.

8 SECRETARY CROWFOOT: Got it.

9 ASSEMBLYMAN GALLAGHER: You've had, you know, a
10 huge burning of the forests up there. You know, is this
11 going to increase the surge of water coming into the
12 lake in winter months?

13 That's really more my concern, and are we --
14 what are we doing on that front?

15 SECRETARY CROWFOOT: Got it. Because presumably
16 the ground is less absorptive as -- you know, because
17 it's got all the ash on top of it. So will that bring
18 more water more quickly into the reservoir? Good
19 question.

20 Ted.

21 MR. CRADDOCK: Yeah. Thank you for clarifying
22 that, Assembly Member. What I may do is ask John
23 Leahigh, who's our hydrologist and operation lead that's
24 here today, to help respond to that question.

25 John, would you mind taking that one?

1 MR. LEAHIGH: Yeah. Sure, Ted.

2 Assemblyman Gallagher, so myself and my staff
3 have had extensive conversations with the National
4 Weather Service and the California Nevada River Forecast
5 Center who produces the inflow forecasts for Lake
6 Oroville, and they -- the models that they use to
7 predict that forecast have various parameters that can
8 be adjusted based on the watershed conditions.

9 And so they -- they've done this in the past.
10 Actually it's pretty standard routine for them to
11 compare modeling results with actual observed inflows.
12 They have some experience with some of the more recent
13 fire burn areas, with the Campfire, for example, a
14 couple of years ago.

15 It actually turned out that the response wasn't
16 as large as they might have expected. But, again, you
17 know, the scarring this year is much more extensive than
18 the Feather Basin; so it's certainly something they're
19 going to be monitoring very closely and making
20 appropriate adjustments to those models as they, you
21 know, tweak the parameters and match that up with the
22 actual observed inflows through the lake.

23 SECRETARY CROWFOOT: And, John, Wade here. If
24 you can keep the Assemblyman and the Senator's offices
25 apprised just of how the early flows are looking into

1 the reservoir as we get more rains and if that's
2 coming -- if it's coming in heavier than we thought just
3 so that apprised.

4 And then if it reaches, you know, concerning
5 levels same request I had of Ted's response which is
6 commitment from us to communicate with the advisory
7 council or the citizen committee commissioners about
8 those changes; in other words, just so nobody's
9 surprised if something unexpected happens.

10 MR. LEAHIGH: Yes, absolutely.

11 DIRECTOR NEMETH: Secretary, if I might, this is
12 Carla Nemeth, DWR Director. We may not be ready to go
13 there just now, but, you know, we are going to talk
14 about our winter operations. And part of that is how we
15 communicate our winter operations both, you know, to
16 community members but others as well as, and this will
17 be a dimension of that. So it's kind of a -- it's a
18 terrific segue, but I don't want to presuppose they're
19 ready to go there yet.

20 MS. WILLIAMSON: This is Lizzy Williamson from
21 resources agency. I know that there was some Internet
22 technical difficulties; so I'm just going to chime in
23 see if there were any other questions from commissioners
24 on this item.

25 MR. SAFFOLD: Councilmember Pittman may have had

1 a question.

2 COUNCILMEMBER PITTMAN: I do, if we're ready for
3 that.

4 MS. WILLIAMSON: Yeah. Please chime in.

5 COUNCILMEMBER PITTMAN: Yes. My name's
6 Councilman Dave Pittman, and I appreciate all the
7 efforts, especially, as Matt says, we've had too much
8 experience with this locally between all the agencies.
9 And the local coordination -- and I want to send a big
10 thank you to State Parks in helping out so many agencies
11 here locally with facilities and trying to work out the
12 issues. And there's been many. Two more to talk --
13 many more to talk about than this conference.

14 But we also have private property at Lake
15 Madrone, Berry Creek area, and we lost about 70 homes in
16 that particular location. And the residents have taken
17 upon themselves to put in many erosion control efforts.
18 And hopefully it will -- it will hold. Let's just use
19 that term.

20 But the utility work of -- well, over 4,000
21 poles lost. And our big issue is getting the domestic
22 water supply systems back up to speed so that the
23 residents that do live there year-round can have water,
24 because right now they pretty much are out of luck. And
25 we've got to get the electric utility up there; so

1 that's a huge effort by itself.

2 The big issue, though, I'm looking at is erosion
3 control along the highways, especially State
4 Highway 162, many of those hillsides, which is a very
5 steep roadway area. My concern is -- and I've seen it
6 in the past, is having the heavy rains come and then
7 losing the possibility of roads.

8 Is there any -- been thought about adding
9 hydroseeding or replanting efforts early on?

10 It may be too late for this winter season, but
11 the next season. Because in just Berry Creek alone, the
12 current inventory of tree removals is well over a
13 thousand trees, and it's a small lake a mile long. So
14 the replanting effort is something I'd like to suggest
15 we look at not just here but as a statewide policy.

16 Anybody have any information on that particular
17 idea?

18 (Indecipherable audio distortion.)

19 MS. WILLIAMSON: ...and perhaps noting that
20 it's -- the concern is the long roadways. And I'm not
21 sure if that would be specific to any of the
22 commissioners here, but we can certainly take that back
23 and see if we can look into that further to get you a
24 response.

25 COUNCILMEMBER PITTMAN: Well, I appreciate,

1 specifically the roadways above the lake and those
2 areas, because they are primarily the only way in and
3 out, once the winter snows come, for most of the
4 residents in the area to access their homes.

5 So we've had situations in the past where we
6 lost that highway before, and they became -- what do we
7 want to call it? -- bound and stuck up there. They
8 couldn't go out through the snow toward Bucks or come
9 out because the one slide occurred there at Canyon Creek
10 bridge.

11 So slide issues are important, and we ought to
12 be getting some reports from state engineers about the
13 condition of the roadways -- both Berry Creek, Feather
14 Falls, Concow, all those areas -- because that's our
15 problem that's going to probably creep up on us.

16 So I thank you and I appreciate the response.

17 DEPUTY DIRECTOR CURRY: Yeah. And, Lizzy, this
18 is Tina from Cal OES.

19 Councilmember, Cal OES can take that for action.
20 I know that Caltrans, to the extent that we're talking
21 about state right-of-way as part of these, you know,
22 kind of winter watershed assessment programs; so we can
23 follow up on that and get you more specific information.
24 We'll take that for action.

25 COUNCILMEMBER PITTMAN: Thank you. Appreciate

1 it.

2 SENATOR NIELSEN: Let me jump in here, if I may
3 just a moment. Jim Nielsen.

4 MS. WILLIAMSON: Yes, please, Senator.

5 SENATOR NIELSEN: The re-planning -- and I want
6 to thank the secretary, again, mentioned just a bit ago
7 more forest management. You know, that term was not
8 even used for many, many years, and now it's being
9 mentioned; but reforestation is going to be a part of
10 deal as we move ahead. And there is a necessity that
11 that happen. So I think we're going to see that being a
12 part of the future. You know, Councilman Pittman, I
13 believe that we're going to see that be a part of the
14 future.

15 Now, just -- this is not needed to be responded
16 to now, but OES have been working with Reggie over the
17 years on the 911 upgrade. That's been a complicated
18 issue. But we -- because of the COVID situation, we've
19 not had an update of the progress on 911 implementation.
20 And I'd like to get that through to Assemblyman
21 Gallagher and I, you know, in the near future. We can
22 do it remotely, but we were having regular updates. And
23 that is kind of important to all of this.

24 It's a statewide application, but I'd like to
25 get briefed on that again if we could from OES at your

1 convenience, but we should do another update to see how
2 we're doing.

3 Thank you.

4 DEPUTY DIRECTOR CURRY: Absolutely. Thank you,
5 Senator Nielsen, for the comment, and we will work with
6 you to get that set up as soon as possible.

7 SENATOR NIELSEN: Great.

8 MR. SAFFOLD: We'll agendize --

9 DEPUTY DIRECTOR CURRY: Great. Thank you.

10 MR. SAFFOLD: -- those items for the next
11 meeting certainly.

12 It looks like the secretary is still not with
13 us, but I think we should keep rolling.

14 The next up item is operations for John Leahigh
15 and Carolina with DWR are up next; so -- and if you want
16 to just --

17 UNIDENTIFIED SPEAKER: Nick, and I've rejoined.

18 SECRETARY CROWFOOT: Sorry, this is Wade
19 Crowfoot. I am back and --

20 MR. SAFFOLD: Oh, great.

21 SECRETARY CROWFOOT: -- apologies. In our
22 15-story building, we actually -- our entire Internet is
23 down today of all days. So as we move to John, I would
24 ask John -- winter operations are obviously important,
25 but let's move through this update efficiently so we can

1 delve into the CNA as soon as possible.

2 MR. LEAHIGH: Okay. Thank you, Secretary
3 Crowfoot. Good morning, and happy Friday the 13th to
4 OCAC commissioners. So, again, my name is John Leahigh.
5 I served DWR as the lead water operations manager for
6 state water project. I have presented to you in the
7 past on water-operations-related topics.

8 This morning Carolyn Roberts, the department's
9 lead of communication and outreach, and I will be
10 providing a short presentation on Lake Oroville's winter
11 operations.

12 Next slide, please.

13 So just a quick overview. Take a quick look at
14 2020 recap, hydrologic conditions. Talk about the flood
15 pool requirements including enhanced flood pool that
16 will be in effect this coming winter, and the hydrologic
17 outlook for 2021. And we'll wrap up -- Carolina will
18 wrap up with winter operations communications.

19 Next slide, please.

20 So here's a graph showing the precipitation that
21 occurred this past water year which ended
22 September 30th. As you can see, it was quite dry for
23 the northern half the state with precipitation totals as
24 low as 25 to 75 percent of average. This has lead to
25 severe drought conditions that are currently existing in

1 the northern half of the state that's resulted in lower
2 than average reservoir conditions and very dry soil
3 moisture content in the watersheds. The only saving
4 grace was basically that the previous year was a wet
5 year, water year 2019.

6 Next slide, please.

7 So here we are currently as far as the storage
8 in Lake Oroville. As you can see, the reservoir is --
9 in the lower left-hand corner there, is currently at
10 42 percent of capacity. That's about 69 percent of
11 average storage for this time of year.

12 If you look to the right there in that graph,
13 that shows you -- the shaded blue area shows where
14 that -- the average storage of the lake typically is as
15 we go through the year. The blue line on the graph
16 shows the current storage. And as you can see, we
17 continue to drop in storage due to the dry conditions
18 that we've experienced this fall. We had no appreciable
19 precipitation in October. We've started out November
20 quite dry. Fortunately it looks like we're seeing a
21 change to the pattern. We're welcoming the rain and
22 snow forecasted for this morning and into the afternoon.

23 You can also see in the graph comparison to
24 other years. So, for example, the previous year of
25 20 -- water year 2019, we were about 60 feet higher in

1 storage than we are today. That's about 600,000 acre
2 feet of more storage in the lake than we are right now.
3 You can also see the very wettest years and some of the
4 storages in the more recent drought years. So storage
5 is relatively low, but we're certainly doing better than
6 we have in more recent dry years.

7 Next slide, please.

8 So current requirements under the existing Corps
9 Water Control Manual requires that the department keep a
10 certain amount of vacant space in the reservoir during
11 the winter months prior to a storm event hitting the
12 feather basin. So this rather busy looking diagram from
13 the Corps manual shows the amount of vacant space that
14 is required for any given month as we go through the
15 winter, and that that amount of vacant storage is going
16 to vary depending on what's called wetness index. So
17 it's basically the wetter the upper watershed, the more
18 vacant space we require to leave in the lake.

19 And so this variable space, it varies from
20 11 percent to 22 percent of the total capacity of the
21 lake. Another way to think about that is the top 26 to
22 52 feet of the lake needs to be vacant or 375,000 acre
23 feet to 750,000 acre feet of the lake is required to be
24 vacant in advance of storm events. And so the reason
25 for that vacant space, of course, is to absorb the peak

1 inflows from large storms so they can be released at
2 much lower rates downstream to the river.

3 Next slide, please.

4 So in addition to the required amount under the
5 Corps manual, the department is also providing an
6 additional 13 -- up to 13 feet or an additional
7 170,000 acre feet of vacant space. So we've been
8 operating with this enhanced flood pool since the winter
9 of 2018.

10 Next slide, please.

11 So this graph just illustrates -- this is for
12 last water year, and it basically shows how the flood
13 pool requirement varies, as I had indicated, on a daily
14 basis depending on the wetness of the watershed; and
15 that's the solid red line there. The range of possible
16 vacant space requirements is -- would be anywhere in
17 that range of the dashed black line that you see on the
18 graph.

19 As you can see, it -- we never had -- were
20 required to provide the full amount of vacant space
21 because of the dry conditions that we saw in 2020. The
22 dark blue line is the actual storage; so you can see
23 that the flood reservation never really came into play
24 and never had any effect on our operations for 2020.

25 Next slide, please.

1 So this is the outlook for this coming year,
2 this coming winter. This is from NOAA's climate
3 prediction center, and this is -- on the left you see
4 the forecast for temperature for the months of November,
5 December, January. You can see that there's -- they're
6 forecasting a bias towards drier than normal -- sorry,
7 warmer than normal conditions. And on the right is a
8 precipitation forecast, and that's basically showing
9 dryer than normal conditions expected over the next
10 three months. This is updated -- this particular
11 product is updated monthly by NOAA's climate prediction
12 center.

13 Next slide, please.

14 Okay. So that wraps up my part. I will, at
15 this point, hand it over to Carolina Roberts on the
16 communications aspects of the winter operations.

17 MS. ROBERTS: Thank you, John, and good morning
18 to the commissioners. As John mentioned, I'm Carolina
19 Roberts, and I lead the communications and outreach
20 branch at DWR, and today I want to share with you about
21 our winter operations. But I also want to stress that
22 we want to hear from you to make sure how we're
23 communicating about winter operation works for the
24 community.

25 So to that end, we're actually going to be doing

1 our survey via our weekly community update with
2 SurveyMonkey; so there will be a link that will be
3 provided in the next few surveys for people who take
4 that so that we can always adjust and just make sure
5 that the information we're providing and how we're
6 proving is what everybody is looking for.

7 Next slide, please.

8 So when it comes to winter operations, we aim to
9 provide information on operational milestones, Feather
10 River and Lake Oroville conditions, weather forecasts,
11 and project developments. So these might include
12 updates on impacts due to fire, as people were asking
13 before.

14 Next slide, please.

15 Our main way of communicating is the Lake
16 Oroville community update. It is issued every Friday in
17 the late afternoons, and it is emailed directly to 1,000
18 subscribers. But it is also published in the Chico
19 Enterprise; so it reaches another 20,000 individuals in
20 the area.

21 Now, this update, during winter operations
22 specifically, you might see an increase in the amount of
23 times that it comes out. Especially when we need to
24 communicate project milestones or project updates, it
25 might come out twice or three times a week depending on

1 what the need is really. So if you haven't subscribed
2 to receive the update, please do so, and you can do that
3 by emailing oroville@water.ca.gov.

4 Okay. Next slide, please.

5 Also, it is good for people to follow our DWR
6 social media, specifically our Facebook page. After
7 doing some analysis, we saw that of the 40,000 followers
8 that we have on our Facebook page, over 60 percent of
9 those come from the Oroville area; so this is a tool
10 that we will utilize to make sure that we're getting
11 timely information out as we need. And, of course,
12 we're also on Twitter and on Instagram as well as
13 YouTube where we'll try to post more videos about our
14 winter operations as well too.

15 Next slide, please.

16 Another location to find information specific to
17 Oroville Dam reservoir is at the California Data
18 Exchange Center or CDAC at cdac.water.ca.gov. By
19 selecting "Reservoir" tab on the top of the page and
20 finding the interactive "Select reservoir Daily Graph"
21 for flood control as shown at the red arrows, you'll be
22 able to view current information on Oroville dam
23 reservoirs.

24 Next slide, please.

25 And, of course, our website also has a lot of

1 valuable information. Besides having news releases and
2 digital articles, this is where you will also find the
3 weekly community update posted as well or any other
4 updates that we have about operations; so I encourage
5 you to go to our website as well.

6 And next slide.

7 And, lastly, I encourage you to reach out to our
8 water resource public affairs and information officer
9 Liza Whitmore. She's located in the Oroville Field
10 Division. Right now she is teleworking; so the best way
11 to reach her is via her cell phone or at her email
12 address.

13 And, once again, I just want to remind people to
14 please sign up for the Oroville update at water.ca.gov
15 and help with providing feedback into how we're
16 providing information and type of information that we're
17 providing by taking the survey or asking questions now.

18 And that's it for my presentation.

19 SECRETARY CROWFOOT: Thanks so much. So between
20 the update on the hydrology we can expect, or at least
21 are beginning to expect as we enter into the winter year
22 and the great presentation on sort of outreach,
23 questions that commissioners have. And I would just say
24 rather than the kind of awkward, you know, digital raise
25 hands function, just feel free to unmute yourself and

1 ask questions or make suggestions. And then once that's
2 done, we'll move on to the discussion of the CNA.

3 (No verbal response.)

4 SECRETARY CROWFOOT: All right. Well, thanks to
5 you both for the presentation.

6 And let's move on then to the primary topic of
7 today's commission meeting which is the Comprehensive
8 Needs Assessment. We'll start the discussion of that
9 with Carla Nemeth, our director of DWR, providing a
10 high-level overview. But before that, the ad hoc
11 committee that was formed was an important aspect of
12 this whole process, and want to hear if Assembly
13 Gallagher or Senator Nielsen want to share thoughts on
14 the ad hoc committee process before we delve into the
15 CNA.

16 So, Assembly Member, do you want to share
17 anything on sort of a high-level, thoughts on the ad hoc
18 committee, before we move on to the CNA presentation?

19 ASSEMBLYMAN GALLAGHER: I think, you know, just
20 maybe more generally and on the higher level, I think
21 it's been a really productive process. You know, it's
22 obviously something that we have really asked for is
23 that, you know, in conducting, you know, this inquiry
24 that -- and going through the process of the
25 Comprehensive Needs Assessment, we understand that's a

1 very technical process. And certainly we had some very
2 talented and experienced people were working on that.

3 It was important that the community have
4 representatives who could, you know, ask questions and
5 kind of give responses and input as that process was
6 transpiring. And I really -- you know, I -- I think
7 that is what happened throughout this process, and I
8 think we brought -- the ad hoc brought a variety of
9 different perspectives and experience and knowledge to
10 the table. You know, I think we had some very in-depth
11 conversations throughout.

12 And, you know, I mean, overall I think the
13 process worked out very well. I mean, there -- you
14 know, there's -- as always, there's, you know, kind of
15 outstanding concerns. You can't always address
16 everything. And maybe there was even thing -- you know,
17 I mean, I think there were things that we would like to
18 see addressed further; but as I said, you know, at the
19 outset, I think this is a very substantial step in the
20 right direction.

21 In terms of identifying both early
22 implementation projects that need to be accomplished and
23 are really starting to move forward at Oroville but also
24 identifying areas that need further study, that need
25 further investigation, so that we can assure that the

1 infrastructure, you know, up there is safe and it's what
2 it should be. And also identifying maybe some longer
3 term infrastructure investments that will make the --
4 you know, make the dam operate more effectively and more
5 safely in the long-term, you know, for the community.

6 So, you know, I appreciate all the work that was
7 put into it; and I think, you know, we're going to hear
8 some of those details here shortly and definitely
9 looking, you know, for the commission to obviously
10 provide its input and thoughts.

11 And I -- the bigger thing here is this really is
12 kind of a -- you know, a first step. There's longer
13 term measures that need to be taken, and I think that's
14 really incumbent upon the commission to continue to be
15 that voice of the community, you know, working to bring
16 those changes about. This is really largely a planning
17 document; and so, you know, implementation, I think, is
18 going to be key. And I think we all play a big role in
19 ensuring that that happens.

20 So I think that's where I would leave it at the
21 more high level --

22 SECRETARY CROWFOOT: Great.

23 ASSEMBLYMAN GALLAGHER: -- and turn it back to
24 you.

25 SECRETARY CROWFOOT: Well -- and I agree with

1 you. I mean, I think the Citizens Advisory Commission
2 is going to be key to make sure that there's transparent
3 accountability and oversight on all this work going
4 forward and a forum for community members to monitor and
5 engage in.

6 Senator Nielsen --

7 SENATOR NIELSEN: I will say --

8 SECRETARY CROWFOOT: -- any thoughts you have as
9 we dig into the CNA and get different perspectives from
10 the independent review board and the ad hoc committee?

11 SENATOR NIELSEN: I'll not say much because we
12 want to get into the next section quickly because that's
13 very important. But let me just reiterate and emphasize
14 the points made by Assemblyman Gallagher. This
15 Comprehensive Needs Assessment and the involvement of
16 the citizens has been so critical, and this has been the
17 venue to give him that maximum opportunity for input. I
18 think it has worked very well, and I want to see this
19 seasoned into just an established part of our process.
20 I would say that it's been a success so far. Let's just
21 continue the good work.

22 SECRETARY CROWFOOT: Thanks so much.

23 Let's now turn to Director Nemeth to give us an
24 overview of the Comprehensive Needs Assessment to begin
25 the discussion on this topic here today.

1 DIRECTOR NEMETH: Sure. Thank you, Secretary.

2 I'm going to provide some opening comments, and
3 then I'm going to hand it over to John Yarbrough. John
4 is our risk and resiliency officer at the State Water
5 Project; so this really is his bailiwick.

6 I want to talk a little bit about -- and I think
7 about this as kind of a three-legged stool. And there's
8 DWR and the work that we do to keep the dam safe and
9 plan for the future, especially given changing hydrology
10 and changing future conditions. But what's also
11 important is the engagement of our independent review
12 board and the citizens ad hoc committee. So it's really
13 those three things that, you know, I hope the department
14 deliver on this Comprehensive Needs Assessment.

15 As Assemblyman Gallagher mentioned, it is
16 primarily a planning document. It's a highly technical
17 document, but it is fundamentally a planning document.
18 And that means it's a moment in time; right? So based
19 on the best available information and analysis of that
20 information, a review of that information by the
21 independent review board, and discussions with the ad
22 hoc committee, it's all of those things went into this
23 Comprehensive Needs Assessment that will identify some
24 near-term measures that the department needs to keep --
25 to complete to keep the dam safe.

1 But also, importantly, it identifies key areas
2 where we need to develop additional information. And
3 how we share that information, how we make decisions
4 based on that information, is going to be critical. And
5 it's going to be critical for the department to continue
6 its relationship with the community, with our
7 independent reviewers, as we move forward. And how that
8 takes shape in front of the Citizens Advisory Committee
9 is something I think we want to continue to discuss with
10 the members of this committee, how much information is
11 useful information, and at what cadence. Because as
12 you'll see, there's much more work to be done, because
13 the needs assessment really is a point in time.

14 So I do want to say, I think at the outset, you
15 know, going back to 2017, there was a lot of information
16 that came out of the analysis, the forensic report, onto
17 what happened with the spillway. The Comprehensive
18 Needs Assessment is part of how we address that.

19 But another part of how we address that, in
20 particular, were critiques made of the department and
21 the department's organizational culture, some critiques
22 around the department being overly siloed. And while
23 those aren't topics that necessarily fit into this needs
24 assessment, they are things that the department
25 leadership has taken to heart, is tracking, and has made

1 some, I think, important changes; one of which, of
2 course, is the dynamics with putting together this needs
3 assessment to begin with.

4 But a couple of other things. John Yarborough's
5 position is a new position for the department, this
6 officer of risk and resiliency for the State Water
7 Project. That's important, as we move forward, to have
8 a person within the State Water Project who's
9 accountable for those kind of farther reaching planning
10 parameters. So how do we look at hydrology coming in,
11 and how do we look at more extreme events into the
12 future?

13 The other -- a couple other things that I think
14 are worth mentioning is we do have -- we have refocused
15 our strategic plan for the State Water Project public
16 safety and risk mitigation associated with aging
17 infrastructure. So we do have explicit goals that help
18 us do that, and those goals actually help us integrate
19 with other parts of the department; so the State Water
20 Project, integrating more fully to achieve those goals
21 with other parts of the department that are in our flood
22 division.

23 I wanted to mention that explicitly just because
24 those kinds of cultural issues tend to be a little bit
25 softer, a little bit harder to understand; but it is

1 important to me as the director that we move forward
2 with those. And I want to reflect that today is an
3 important part of that, which is sharing up front our
4 plans and making commitments to share the additional
5 information and share our decision-making as we move
6 forward.

7 So with that, maybe I'll -- and where I started,
8 which is the Comprehensive Needs Assessment, is meant to
9 be a point in time based on the best information that we
10 have today. It's going to identify additional
11 information that we need to gather, and that will be our
12 collective work moving forward.

13 So with that, maybe I'll hand it over to
14 Mr. Yarbrough to get into the technical details a little
15 bit more.

16 MR. YARBROUGH: Well, thank you, Director, and
17 good morning everybody. And so at the outset here to
18 help us jump into the Comprehensive Needs Assessment, we
19 were going to take an approach that we used during all
20 of our meetings with the ad hoc group which was to start
21 with our independent review board. So we have Bruce
22 Muller here from -- who is the chair of our independent
23 review board, and so I'll asks Bruce to just give his
24 take on the process. Bruce can introduce himself.

25 Bruce is a long-time expert in the field of risk

1 assessments and did this role for the Bureau of
2 Reclamation for many years; so we were very fortunate to
3 have Bruce participate...

4 (Indecipherable audio distortion.)

5 MR. YARBROUGH: Bruce, if you are there, I will
6 hand it over to you.

7 MR. MULLER: All right. Thank you very much,
8 John. Good morning everybody. Let's just jump right
9 into the slides so that I don't take up too much of your
10 time and leave as much possible time for questions that
11 may arise.

12 So next slide.

13 So let's, first, go over who the IRB members
14 were.

15 Next slide.

16 First of all, we had Betty Andrews from
17 Environmental Science Associates, Dr. Lelio Mejia from
18 Geosyntec Consultants. Dr. Mejia was actually also on
19 the Park 12 Inspection Board; so he gave us a linkage to
20 that board. There was myself. I'll go over my
21 background in just a minute. And then we had Paul
22 Schweiger from Gannett Fleming, who was also on the
23 board for the spillway assessment and reconstruction; so
24 it gave us a linkage to all of that work. So it
25 provided us with a wide variety of perspectives.

1 Next slide.

2 As far as my background, I worked almost
3 40 years for the Bureau of Reclamation. The first
4 20 years I spent designing and assessing dams. The last
5 19, 20 years of my career I really spent in dam safety
6 and risk management for all of that time. And since
7 then, since retiring, I've been the technical advisor to
8 a group that does research regarding dam safety for dam
9 owners across -- actually worldwide. We have members
10 from Europe, down under, Canada, North America; so
11 really kind of trying to concentrate on helping dam
12 owners do the very best they can in terms of their dam
13 safety programs.

14 I've been involved in risk assessments for an
15 inventory of 252 high and significant hazard dams. At
16 Reclamation we modified nearly 100 dams during my career
17 per dam safety purposes to make them better, and then I
18 was also a part of developing the guidelines and
19 processes that we used at Reclamation for really
20 converting our dam safety program into a risk-based
21 process.

22 Next slide.

23 So what do we look for as an independent review
24 board in terms of dam safety for a dam? So first and
25 foremost is we want to see that the organization has an

1 understanding of the dam system. Certainly that's all
2 the different components of the dam; but even beyond
3 that, we want to know that they understand how that dam
4 fits into the environment around it.

5 In particular, in the case of Oroville Dam, the
6 largest low-level outlet for the dam -- which is kind of
7 a safety valve in terms of being able to drain the
8 reservoir, should that ever become necessary -- is the
9 Hyatt Power Plant. Well, when you have a power plant
10 for your primary low-level release, that means you are
11 completely dependent on being able to make releases by
12 generating power. So if anything goes wrong with the
13 power lines, if anything goes wrong with the switchyard,
14 you essentially take that low-level outlet out of
15 commission. And that's a -- kind of a unique thing for
16 Oroville Dam.

17 The second thing we look for is really a good
18 knowledge of the design and construction of the dam. We
19 look at what performance monitoring is being conducted.
20 How are you observing the behavior of the dam and what
21 is that information telling you? We also look for an
22 understanding of what could go wrong. Essentially this
23 is the risk management aspect. And it really ties in
24 with FERC's probabilistic or potential failure modes
25 analysis, and so that's a requirement of their process.

1 It aligns very good with risk management and in
2 understanding what risks there are at individual dams.

3 We also look for communication that allows
4 issues to surface. The director mentioned the -- the
5 aspect of silos and objections. And silos can be
6 extremely detrimental, and what we look for is what
7 communication avenues do people have to be able to raise
8 issues that they see and know that those issues are
9 going to get addressed.

10 And then, finally, this sounds -- you know, a
11 lot of people think this is a little bit of overkill,
12 but certainly the documentation of what the identified
13 issues are and what decisions were made. Because one of
14 the things I noticed throughout my career is that it was
15 very easy for people to just off-the-cuff give a
16 decision, but when they had to document that decision
17 and sign their name to it, they were far more thoughtful
18 about what that discussion was.

19 So those are the things that we look for.

20 So next slide.

21 So let's go over the recommendations that we
22 made throughout the process.

23 Next slide.

24 So during the process we made a total of 79
25 recommendations. And -- and so I think what's important

1 to note is that of all those recommendations we made,
2 there were five that we essentially put in the category
3 of "Not adopted." And quite honestly, we feel like even
4 those five are a little bit unique in the sense that,
5 you know, each of us as review board members has our own
6 unique perspective. And there are certain processes
7 that DWR uses, that the State of California uses, that
8 might be a little bit different from what we are all
9 accustomed to in working on the projects that we've seen
10 over the course of our careers.

11 So let's go to the next slide and really kind of
12 zero in on what were those five recommendations that
13 were not adopted.

14 So the first one was just wanting to have a
15 better basis of the 150,000 cfs flow constraint
16 downstream. When you're working in a more risk-based
17 approach, the notion of just an arbitrary -- the -- the
18 river has a channel capacity of 150,000 cfs doesn't
19 really fit that model really well.

20 It's probably more true that for some flow less
21 than 50,000 cfs, there's some slight chance of breaching
22 the levies; and there's probably a good chance that the
23 river could actually take more than 150,000 cfs. And so
24 from a true risk perspective, that's one area where the
25 study could potentially add additional information, but

1 we felt as a board that it wasn't necessary and that it
2 wasn't going to change the conclusions at the end of the
3 day.

4 Then the second one that we had was the analysis
5 of the flood control outlet for the 2018 PMF condition.
6 And actually these -- the middle three here are all
7 related to the flood control outlet. So we have the
8 2018 PMF condition, the unbalanced gate operations for
9 the flood control outlet, and then actually doing a
10 full-blown stress/strain analysis of the flood control
11 outlet, especially for earthquake loadings.

12 And so where we ended up on all of those is that
13 those things could not actually be completed within the
14 time frame of the analysis that was being done for the
15 CNA, and so there were a couple of ways to approach
16 that.

17 There is definitely a commitment by DWR, that we
18 saw, to do that. The work is actually currently
19 underway, but it's a very, very complex analysis. And
20 so we gave some guidance, gave some recommendations
21 relative to some of the information they're using to
22 help calibrate that analysis. But at the end of the
23 day, we thought it was a really good way that DWR went
24 about resolving that. And they actually put into the
25 recommendations for future work the possibility of

1 working on the flood control outlet with the assumption
2 that they may find some undesirable results from these
3 analyses that are being done. And so that is built in
4 to the recommendations that are currently in the CNA
5 report.

6 And then the last one was really just the
7 definition of direct and indirect costs. And at the end
8 of day, this is a difference between how California
9 looks at things, how the federal government looks at
10 things. And quite honestly, we didn't think it actually
11 would change the results or the recommendations coming
12 out of CNA.

13 So the way the IRB looks at it is that all of
14 these five issues have been resolved with us at this
15 point.

16 Next slide.

17 So let's go over kind of our final summary.

18 Next slide.

19 So in terms of recommendations, there were lots
20 of issues that we talked about with the team, but we
21 really limited our recommendations to those issues that
22 could potentially impact the conclusions and
23 recommendations and/or the credibility of the processes
24 or reports along the way.

25 We felt like DWR and the team were just highly

1 responsive to our recommendations. We were real happy
2 about that. There was no hesitation or -- I mean, we
3 had discussions. There was some pushback, but I think,
4 at the end of the day, everybody understood where
5 everybody was coming from; and in the end, all of our
6 concerns got addressed in the CNA report. And so as the
7 last bullet says, we consider all of the recommendations
8 to have been addressed at this point.

9 Next slide.

10 So in terms of the findings and conclusions in
11 the CNA, we agree that the risks are generally low at
12 Oroville Dam. We do believe there's opportunities to
13 reduce risk or increase reliability, but we don't think
14 that there's anything that is urgent that really you
15 ought to stop what you're doing and immediately begin
16 taking actions to reduce risk. And I'll give you a
17 little bit of a sense of what that looks like when you
18 do run across that, because I saw that several times at
19 Reclamation.

20 With respect to dam safety, we think the work of
21 DWR and their teams was thorough and exhaustive. This
22 was probably one of the best studies that we've seen,
23 probably one of the most comprehensive studies that I've
24 ever seen related to risk, probably outside of the work
25 that I did with the Corps for the hurricane protection

1 system for New Orleans following Hurricane Katrina.
2 That's probably been the biggest risk study that I've
3 ever seen in my time.

4 Finally, the integration of risk-based
5 approaches between dam safety and asset management, I
6 thought, was incredibly well done. And it really serves
7 as a model for consideration of others for the -- for
8 how you integrate different types of consequences. I
9 think they had a serious of about five different sets of
10 consequences that they were trying to consider as part
11 of this study, and the approach that they -- of
12 extending their asset management model to be able to
13 cover the very low probability, hi consequence events of
14 dam safety issues worked extremely well.

15 Next slide.

16 As far as the proposed actions. So the IRB
17 strongly supports the planned interim actions. This was
18 one of the things -- and actually it was one of our
19 recommendations is that we just saw that there were
20 certain actions that everybody seemed to agree on as
21 being the right thing to do. And our perspective was
22 that it would take DWR just as much money to study those
23 actions as it would to just implement them. And so
24 they'll talk with you a little bit about what those
25 actions are, and we just think they're great,

1 common-sense actions. None of them are high risk
2 reduction actions, but we think they're prudent actions
3 to be taking.

4 We also support the integration of this study's
5 results with similar studies being conducted for other
6 State Water Project facilities. We think that it's
7 important that, yes, everybody's attention is focused on
8 Oroville right now, but you have a number of other
9 facilities. And we would hate to see all of the
10 resources go to Oroville if there's other facilities
11 that potentially have very significant dam safety issues
12 that need to be addressed. And so balancing that to be
13 sure that there's an appropriate view of how you manage
14 risk across the entire State Water Project, we think, is
15 very important.

16 We also support the presentation of the full
17 suite of plans that was developed. One of the things
18 that I used to see a lot was engineers want to develop
19 the single plan that is the optimum plan in their mind,
20 and quite honestly I saw it more times than not that you
21 would start working down that path and something would
22 come up that would essentially make that plan
23 infeasible, and then you were back to the drawing board.
24 And so we thought it was best that they move forward and
25 present the full suite of plans they had developed. It

1 gives a more rich set of choices to decision-makers at
2 DWR, and it also provides a kind of Plan B, Plan C type
3 approach to where if something pops up that makes
4 something infeasible, you still have tentative paths
5 that you can follow.

6 Next slide.

7 As far as just some general comments, we
8 certainly commend DWR and their team for developing a
9 cutting-edge, risk-based planning study. We commend DWR
10 for putting together the public version of the report.
11 We feel like there was quite a bit of information shared
12 that allowed them to share the notion of how this study
13 was done without having to disclose critical energy
14 infrastructure information that would otherwise need to
15 be withheld. We also appreciate the team's consistent
16 attention given to addressing the issues that we raised
17 as recommendations.

18 Next slide.

19 So with the idea of unacceptable risk requiring
20 immediate action, I just wanted to give you a little bit
21 of a perspective of what that looks like. We had a dam
22 early at Reclamation, when we were just starting into
23 this risk analysis approach, called Keechelus Dam. We
24 had the team work on it. They came back. They told us
25 that the risk of that dam failing was one in ten; so

1 10 percent chance of that dam failing in any given year.
2 But it didn't make sense. That dam had been there for
3 over 90 years.

4 And so if you figure the probability of it
5 failing sometime during its life with a one chance in
6 ten in any given years, it was astronomically high. And
7 so we thought, okay, maybe the team just didn't do a
8 very good job, they were overly conservative with their
9 estimates; so we formed another team and had them go
10 through exactly the same study. And they came back with
11 exactly the same answer.

12 And so we thought something's going on here that
13 we need to look into further. So we put some
14 instruments in the dam, and as we were digging the
15 trench in the crest of the dam to connect those
16 instruments to the monitoring system, the trencher fell
17 into a cavity in the middle of the dam. And so the dam
18 was in the process of failing. We just hadn't seen the
19 evidence of it on the surface of the dam at that point.

20 And so, needless to say, the dam was immediately
21 drained, and we rebuilt the entire dam. And when we
22 went back to look at why was the probability coming out
23 so high, it turned out there were six dams constructed
24 with this type of construction. Four of the six had
25 already failed in their history. And so this was the

1 fifth one that would have failed, and the other one was
2 Clear Creek Dam in Northern California, which we went
3 back a couple years later and rebuilt it also. So
4 that's what it looks like when you get something that
5 has, quote/unquote, "Unacceptable risk."

6 I think the other thing is the director talked
7 about this is a snapshot in time, and I think that's a
8 great way to think about a dam, because a dam always has
9 an evolving body of information associated with it.
10 When you think about the foundation of a dam, we never
11 get to actually see and understand absolutely everything
12 about this -- the foundation.

13 The geologists and the engineers do their very
14 boast to sample it and put those samples together and
15 try to really paint a picture of what that foundation
16 looks like, but we never get to see every square inch or
17 even every square foot of what's inside that foundation.
18 And so it's through inference, by looking at evidence,
19 performance, and things like that, that we have a
20 constantly evolving set of information about that dam
21 that helps us understand how it behaves.

22 And then finally, I think there's a certain
23 element of learning how to balance the trade-offs that
24 are inherent in operating -- owning and operating a dam.
25 I mean, you -- if you wanted to be absolutely safe, you

1 could do away with all of the benefits and drain the
2 reservoir. But in a sense, in doing away with those
3 benefits, you now don't have the flood control safety
4 that was part of the reason the dam was constructed.

5 You could spend all the money in the world on
6 the dam, and you would -- the fact that you store water
7 would mean that you still have some sort of residual
8 risk associated with it. And so you kind of have a
9 three-legged stool there that you're looking for what's
10 the right balance between safety, cost, and benefits.
11 And that's a tough thing, and it's where lots of
12 communication is necessary.

13 And so with that, I think next slide is just
14 questions if I remember right.

15 So, John, I'll turn it back to you.

16 MR. YARBROUGH: Well, thank you, Bruce. I'll
17 pause here just in case any of the commissioners do have
18 a question for you, Bruce.

19 SENATOR NIELSEN: Jim Nielsen. Let me pipe in
20 here. And it's really not a question, but it is a very
21 significant thank you.

22 For decades I -- this process that you have gone
23 through has -- it has been frustrating to me that
24 agencies of state and federal government don't even talk
25 with each other within their own realms, and they

1 certainly don't cross-reference and discuss things
2 either. And one of the things that really jumped out at
3 me was the finding of this cavity, for example.

4 The process that you have now -- I think you're
5 institutionalizing, it's going to be so helpful for the
6 future. And it gives so much more confidence that I can
7 speak to that, and will, that we need to make this a
8 habit and institutionalize it and use the process that
9 you have utilized here in DWR and the resources agency
10 in other agencies totally unrelated to resources.

11 This is one of the great breakdowns in the
12 bureaucracy, and this unfortunate incident, the way that
13 we have all collectively handled it, and particularly
14 you folks in the front lines here, and then the
15 involvement of the public as well that's so integral in
16 those whole process, it just made such -- is making such
17 a difference in anticipating problems and ensuring that
18 we are doing the things the best all of the way through.

19 Again, my thank you. This is just a dream come
20 true for me to see what we've collectively accomplished
21 here, folks. And it's all for the good of the public.
22 And this is a story that will need to be recorded and
23 told for the future. So I thank you all.

24 SECRETARY CROWFOOT: Thanks so much, Senator.

25 I think we'll turn it back to you, John. But

1 just my own thanks to the independent review board.
2 It's a really powerful model, I think, and I know that
3 you all did do this work with a level of independence
4 needed; collaboration but independence. And the 79
5 recommendations that you made to improve DWR's analysis
6 and approach demonstrate just the independent expertise
7 you brought to this.

8 So big thanks and also great presentation
9 breaking down some real complex questions in ways that
10 we can understand them.

11 MR. SAFFOLD: And, Secretary, it looks like we
12 may have one or two more questions.

13 SECRETARY CROWFOOT: Great.

14 MR. SAFFOLD: Councilmember Pittman and
15 Mr. Conant.

16 SECRETARY CROWFOOT: Great. Let's go with the
17 council member first.

18 COUNCILMEMBER PITTMAN: Thank you,
19 Mr. Secretary. I appreciate that.

20 And it is a wonderful report, and it is a great
21 in-depth review of the activities, and I certainly
22 support the observation about having an additional water
23 outlet, because to put it simply, I think we have a
24 plumbing problem at the powerhouse that if we lose a
25 generator, we lose our ability to drop water at the low

1 level. And that would be a huge thing to have in the
2 future and plan for with a whole number of things,
3 either a -- there was discussion at the building of this
4 to have a second powerhouse. And that might be a
5 thought down the line. On the other mountainside on the
6 spillway, there's actually some concrete abutments that
7 were poured and put in place planning for a future
8 powerhouse. That was the discussion back in the '60s.
9 It might be a new discussion for the future.

10 As I read the CNA, I have one question that I
11 raised, and it was more because I was looking at so many
12 different issues, but we had a fire at the Robie
13 Thermalito Power Plant. And the components of that
14 powerhouse are the same components that are in the
15 existing Hyatt powerhouse. And has there been any
16 thought about whatever happened at that power plant and
17 then having maybe some remedial actions taken at the
18 Hyatt powerhouse with the components that -- and I don't
19 know what the failure was that caused the fire, but even
20 if there are components that are of question, there
21 might be some discussion or review about protecting the
22 components in the Hyatt powerhouse, because we certainly
23 don't want that to happen.

24 And this may have been already discussed and
25 there might be a report on it, but I have not seen it.

1 And I had some questions from constituents about could
2 the same thing happen at the Hyatt powerhouse in terms
3 of an incident.

4 And I just raise that question that it might
5 have been talked about and is just not in the public
6 report. So I appreciate your time and consideration.
7 And, again, wonderful report, and I echo Senator
8 Nielsen's words on this effort.

9 Thank you very much.

10 SECRETARY CROWFOOT: Thanks, Councilmember.

11 John, do you want to address this question --

12 MR. YARBROUGH: Sure.

13 SECRETARY CROWFOOT: -- around fire safety at
14 Hyatt and then also the additional outlet.

15 MR. YARBROUGH: Sure.

16 So the fire issue is one that definitely we've
17 had a lot of focus on. We actually have a -- called our
18 fire modernization program where we have been going
19 plant by plant to -- you know, looking at what happened
20 at the Robie plant to ensure that, you know, we really
21 minimize the risk of seeing that happen elsewhere.

22 So maybe a -- you know, I -- maybe a good
23 approach for that would be at a -- at our next meeting
24 in February we could give this commission a quick
25 overview of that, or we could follow-up with you

1 separately just to give you the quick outline of all the
2 work that's -- because it has been a substantial effort
3 across the water project to address that particular
4 concern.

5 With respect to --

6 SECRETARY CROWFOOT: John, I think it would be
7 helpful to do a brief update at our next meeting and
8 then with a focus on what that means for fire safety at
9 the Hyatt Power Plant.

10 MR. YARBROUGH: Absolutely. Would love to do
11 that.

12 The second is that with the low-level outlet.
13 And so that is in the -- in the presentation I kind of
14 get to a point where we got the -- our process for what
15 we're looking at right now, how that information feeds
16 into this decision about, you know, whether a low-level
17 outlet, whether that -- you know, whether we need to
18 move forward with looking more in-depth at that.

19 So, Secretary, if it would work, maybe I'll --
20 I'll try to answer that question more -- in more detail
21 through the presentation and then could answer any
22 follow-up questions about that.

23 SECRETARY CROWFOOT: Sounds good.

24 MR. YARBROUGH: Mm-hmm.

25 SECRETARY CROWFOOT: Nick, since you have the

1 benefit of seeing everyone, can you move us to the next
2 question or comment.

3 MR. SAFFOLD: Yeah. Mr. Conant.

4 SUPERVISOR CONANT: Yeah. Well, Supervisor
5 Conant here.

6 Dave Puttman [sic] asked -- one of the questions
7 kind of indirectly was I was wondering about alternate
8 spillway and/or increasing the capacity or a new
9 powerhouse on the other side.

10 And then the other is the piezometers. I know
11 that the -- they have addressed those. Maybe you could
12 go into more detail on that as well.

13 MR. YARBROUGH: Yeah.

14 SECRETARY CROWFOOT: Thank you, Supervisor.

15 And, John, if that's part of your presentation,
16 then I would recommend that we move on to your
17 presentation once we get questions.

18 But, Supervisor, I want to make sure --

19 MR. YARBROUGH: Supervisor gave me a great segue
20 here to --

21 SECRETARY CROWFOOT: Any other questions before
22 we move on of just the independent review board or their
23 role in this?

24 MR. SAFFOLD: Yeah. We had one question from --
25 that -- written in from Lieutenant Collins:

1 "Since this is a snapshot in time, how
2 frequently should the snapshots be taken?"

3 I think folks --

4 SECRETARY CROWFOOT: Good question.

5 MR. SAFFOLD: -- may be able to see that in the
6 chat as well.

7 MR. YARBROUGH: Sure. So, you know, I answer
8 that a couple of ways. So part of it is just -- is
9 ongoing, and so as we take this snapshot, we're -- it
10 identified a whole list of different specific studies;
11 so we're going to delve into those studies.

12 This sort of comprehensive look at the facility,
13 you know, FERC through their Part 12 process really has
14 a very similar effort that we're required to do five
15 years. So five years we get this -- you know, we look
16 at the whole facility.

17 You know, we did do a -- quite an extra in-depth
18 look here with the CNA; so, you know, in five years then
19 we'll do another look at the facility with an ongoing
20 analysis and work in the meantime.

21 SECRETARY CROWFOOT: John, that's helpful.
22 Let's move into your presentation.

23 MR. YARBROUGH: Absolutely.

24 So if we could go to the next slide.

25 And so, again, John Yarbrough, Assistant Deputy

1 Director at the State Water Project. Thank you,
2 Secretary. Thank you commissioners for the opportunity
3 to speak with y'all here again.

4 And so if we could go to the next slide.

5 I'm going try to move kind of quickly here to
6 get us a little bit caught up with time to leave time
7 for discussion. So if I'm going too fast, please
8 somebody tell me to slow down or speed up.

9 Wanted to start with so why do we do this
10 Comprehensive Needs Assessment? And it's really with
11 this idea that, you know, as we've talked -- as Bruce
12 talked a bit about before, that we never going to have
13 infrastructure that is free of risk. We're always going
14 to have risk with any public infrastructure. So our job
15 really is to do this continual assessment so that we're
16 understanding -- we know where risks are. We understand
17 them.

18 And then we have -- you know, we're able to
19 action where we see immediate problems, and we're also
20 able to start developing projects actions so that as the
21 risks change, we have measures that we're ready to
22 implement.

23 So this particular study was a planning study.
24 I really like the Assembly Member's characterization as
25 this is a step in this continuous process. And so what

1 we were looking to do at -- with this study is identify
2 what are the needs, what are the risks, and the needs at
3 the facility. Identify what are things we could do to
4 address those needs and then putting them together into
5 these plans.

6 So if we could go to the next slide here.

7 So the general approach that we took is we do a
8 risk assessment. So we go look at the facility to
9 understand what's its condition. Where do we have
10 risks? We're looking to see are there any immediate dam
11 safety concerns that we need to jump on right away. And
12 then we're also looking at are there areas that we
13 have -- we need to improve moving forward, areas for
14 further -- also areas for further investigation. Are
15 there things that we see that we don't see an immediate
16 risk but we can't really rule it out? Because there's
17 enough uncertainty, we need to investigate that further.

18 When we did the CNA, we had the benefit -- this
19 was very unusual. We had the benefit of this parallel
20 FERC process going on at the same time; so as we're
21 doing our assessment, this Level 2 risk assessment also
22 occurring; so it gave us an opportunity to compare our
23 results between the two of them. And then, as we've
24 talked about, we then identify what are different plans
25 that we could implement either to address any immediate

1 concern or plans that we could implement later to
2 further improve the reliability of the facility.

3 So if we could go to the next slide here.

4 I'd say one of the challenges we had going
5 through this effort is when we talk about failure modes,
6 when we do our failure mode analysis, one of the things
7 we're looking at is, you know, what could go wrong with
8 the dam. The challenge we have when we're working with
9 our community to do that is that is, in its very nature,
10 a sensitive information. Because, you know, that -- you
11 know, what -- what could go wrong at a dam that could
12 cause damage, that is the type of information that we
13 really don't want getting into hands of people that
14 would want to do harm.

15 So we -- it was a -- really had to strike a
16 balance there of we can't release sensitive information,
17 but we have to provide information in a way that, you
18 know, still people understand what we're doing. And so
19 we thought the ad hoc group was a good process for -- a
20 good opportunity for us to work on doing that.

21 One of the approaches we took was by having the
22 IRB there that could help review work and help respond
23 questions to the ad hoc community; also this public
24 report. So instead of having all of this technical
25 information that we'd be really sensitive about, we have

1 this parallel public report that we hope the community
2 can look at and get that understanding of how DWR is
3 looking at these risks here.

4 So as we get to the results, what the study
5 showed us is that there are no dam safety issues that --
6 where we need to have an immediate risk reduction. But
7 there were areas where there is some uncertainty and
8 that we really need to do some further investigation so
9 that we can rule out the -- these kinds of risks there.

10 This study provided us some of these projects
11 that, as Bruce mentioned, they just make sense to jump
12 on; so I want to talk about those that -- you know, at
13 some point the -- the effort of further study to rule
14 out whether or not you really need to do the measure, it
15 outweighs the benefit of just going and implementing the
16 measure. So in a very proactive way, we're able to
17 address risks at -- in some situations there. And then
18 we have this set of plans that we can take for the
19 long-term that we can then look at as we look across the
20 whole water project on what are the different needs.

21 And, again, to reiterate that this is what we
22 know right now based on the study. This is the snapshot
23 in time, and these, you know, are the conditions and
24 the -- as well as our understanding of things like
25 hydrology and seismology will change. And so this is

1 a -- you know, a step that needs to be followed on by
2 just a continual process of monitoring and
3 investigating.

4 And then one of the -- the things that is new
5 for DWR is, you know, as we're continually doing this,
6 it's this interaction here with the commission so that
7 we're communicating all of these different results so
8 there's some broader understanding of where we are with
9 the safety of the facility.

10 So if we could go to the next slide here.

11 So, again, in parallel -- so that was the
12 results of the CNA study. This is the FERC -- the
13 parallel FERC study. So, again, we had the Level 2 risk
14 assessment that then was used by the Part 12 independent
15 consultants. And the independent consults, the -- in
16 blue is their statement of their finding that, again,
17 the project is suitable for continued and safe reliable
18 operation.

19 The Part 12 independent consultants, using the
20 Level 2 risk assessment, they came up with a list of 39
21 different recommendations. And, yeah, I'd say this is a
22 pretty large list of recommendations, and -- and this is
23 something that DWR is starting to see FERC do across the
24 industry since the spillway incident as FERC really
25 seems to be asking owners to dig deeper. And so we're

1 seeing more recommendations coming out of the
2 independent consultant boards, you know, again, with
3 the -- really this focus on digging deeper and really
4 developing better understandings of facilities and
5 risks.

6 If we could go to the next slide.

7 So we have the results of the CNA. We have the
8 results of the Part 12. So what happens next? So we
9 have five different categories here that I want to talk
10 through with you all. So the first is there are these
11 handful of early implementation projects. This is, you
12 know, really the piezometers -- we'll talk about that --
13 identified and started implementing in the middle of the
14 CNA's process.

15 The second is these projects that just made
16 sense to start without really further study; so I'd like
17 to talk further about those. In parallel with the
18 CNA -- you know, these were projects planned before the
19 CNA completed, but there is a substantial body of work
20 that is planned and scheduled and occurring at Oroville,
21 and I want to talk about that.

22 And then the fourth part, talking about all of
23 the different investigations and studies. Where -- you
24 know, where are these areas that we're getting into
25 further to further understand, and that -- you know,

1 that ties in when we talked about low-level outlet,
2 where that comes out.

3 And then the fifth part, again, is we're
4 integrating all of these -- then these longer-term
5 measures into our planning process; so we'll talk a
6 little about what exactly that means.

7 So if we go to the next slide to talk about the
8 early implementation projects.

9 So the -- 12 of these have been completed. And
10 then five of these, we're -- right now we're working
11 with FERC as FERC has had some questions about the risks
12 of installing the piezometers in the grout and core
13 block, and so we're working with FERC to address their
14 concerns.

15 Through our ad hoc discussions, one thing that
16 folks had noted is -- you know, piezometers is -- are --
17 is a topic that have been coming up through the Part 12
18 previously. And so, you know, why didn't DWR implement
19 these back the first time it bought up? And I think
20 it's a good illustration of this process that -- how
21 this works with FERC and this ongoing nature of projects
22 like this investigation.

23 So with previously the -- we had recommendations
24 that, you know, DWR ought to consider implementing
25 piezometers or installing some new piezometers. And so

1 what we did is then we -- in considering that, we looked
2 at that. And we said, well, what is the value of the
3 data that we're going to get? What are the risks? And
4 at the time, it -- the value of the data didn't seem to
5 outweigh the risks.

6 As we continue to develop our seepage models, it
7 got to the point where within the CNA study we could
8 identify some particular uses for this data that was
9 helpful; so the value of the data came -- became
10 valuable enough that it made it worth the -- you know,
11 it outweighed the risk of implementing. And so we
12 proceeded. We with worked to FERC to -- proceeded
13 with -- been able to install 12 of them, and we're still
14 hoping to get approval here shortly for the remaining 5.

15 Go to the next slide.

16 One of the things that -- the questions that had
17 come up was under the flood control outlet, under the
18 gate structure, what does that contact look between that
19 concrete structure and the rock underneath? And we have
20 construction photos that we can look at, and it appears
21 to be good; but, you know, it's hard to really get a
22 good assessment from photos.

23 And so by installing these piezometers, we were
24 able to get some samples here in these locations. So
25 just showing some pictures of -- and we were happy with

1 what we saw there. We saw some nice irregular contacts
2 between the concrete and that very hard blue rock there.
3 And that's what you want to see. That means
4 that that -- there's a very good contact between that
5 structure and the underlying rock. And so it was a good
6 opportunity to get some direct observations about, you
7 know, a question that we'd had that we wanted to confirm
8 what we were observing in photos.

9 If we could go to the next slide.

10 So these three measures -- so, again, it's --
11 we're installing additional backup power and remote
12 starters at the radial gates. We're lining the Palermo
13 Canal above the Hyatt control center and the switchyard.
14 And we're raising the Parish Camp Saddle Dam by three
15 feet. And so we'll go into a little bit of detail on
16 each of those with the next slide here.

17 So the first -- let's see. If we have the next
18 slide.

19 Yeah. The first of these is installing the
20 additional -- the power. What this basically will let
21 us do is it will let us quickly bring in mobile
22 generators and to quickly hook them up to the gates.
23 And the -- and so right now, the gates have, you know,
24 quite a number of different redundant power sources.
25 But by providing yet an additional redundancy, it

1 further reduces that risk that you would have trouble
2 operating the gates because of inability to get power
3 there. And so this -- you know, we're looking to add
4 this further redundancy.

5 The schedule, it -- you know, you'll note it
6 takes some time there because we're looking at 25
7 different gates. And so it's -- you're limited in the
8 conditions on when you could actually go in and do this
9 work on the gates. So we're starting design here in the
10 next year. Take a couple of years. We should be ready
11 to start implementing the fixes, and it would take about
12 seven years to cycle through 25 gates, because we're not
13 just looking at the Oroville facility but also the
14 diversion dam and the third lido (phonetic) facility.

15 Go to the third -- the next slide here.

16 So Palermo Canal. So this is a canal that runs
17 up above the blue line in the figure that runs above the
18 Hyatt Power Plant. And so the question -- one of the
19 concerns -- the failure modes identified was, well, if
20 you had a lot of leakage and you could have some slide
21 down into the switchyard, that would -- could take out
22 the switchyard.

23 And so, you know, there's uncertainty on whether
24 that would really happen. So one approach is we could
25 do a lot of more geological studies there to understand

1 really how likely is that to happen, or alternatively
2 you could just go through and line the canal. And
3 lining the canal really is a -- you know, is a pretty
4 cost effective -- and this is a good example of where,
5 you know, additional studies would -- you know, it would
6 take you quite and bit. And the fix isn't that
7 expensive. So this is a good -- you know, good way for
8 DWR to proactively reduce some of these risks here that
9 we see. Even though they're small, it's a good way we
10 can effectively reduce them even further.

11 If we could go to the next slide.

12 So this is the third of these projects that
13 we're -- we're moving into our -- we're initiating
14 design in the permitting process. This is the raising
15 of the Parish Camp Saddle Dam. So this is one of the --
16 you know, compared to the Oroville Dam, it's a
17 relatively small embankment, although it is -- you know,
18 it is sizable in itself.

19 The reason we're doing this is -- one of the
20 larger risks that this whole risk assessment showed was
21 that in a very large storm -- and when we say "very
22 large," just to give some context, we -- you know,
23 typically a dam, you design for what's called the
24 probable maximum flood. You know, this is a flood that
25 you -- you know, on average -- you say it's a

1 1-in-20,000-year flood event. And that's typically how
2 you would design dams.

3 When we did the risk assessment, we said, well,
4 you know, if you had a flood even larger than that, one
5 that -- you know, maybe once every 1 in 40,000 years
6 here at the Parish Camp Saddle Dam.

7 So, again, we're talking very remote risk. But,
8 you know, there's enough uncertainty there that -- that
9 this -- and, you know, this, again, is a more -- you
10 know, a fairly reason -- or a fairly practical fix can
11 take this higher risk off the -- can mitigate -- help
12 mitigate this higher risk.

13 And so as we looked at this project, it just
14 makes sense to go ahead and proceed with it. It's a --
15 you know, it wouldn't -- it's not a substantial
16 undertaking to do this. It will require, still, a fair
17 bit of field work and permitting working with FERC; so
18 it is -- you know, I don't want to, you know, minimize
19 the significance of the project. But it is something we
20 can move forward with and get some risk reductions.

21 If we could move on to the next slide.

22 So, you know, the other large body of work here
23 that's ongoing is -- you know, in parallel to the CNA
24 being done, there's a lot of work that's just -- you
25 know, it's part of the continual, you know, maintenance,

1 replacement, refurbishment at the Oroville facility.
2 And so between 2020, 2025, we currently have on the
3 books about \$224 million worth of projects. This is
4 about 40 different projects all occurring at the
5 Oroville complex at different areas that are -- and all
6 of these have a link to improving the reliability of the
7 facility, the safety of the downstream community.

8 All of these projects at Oroville, this is part
9 of our just -- you know, our ongoing process. So as
10 we're completing work in 2020, we're -- we'll be
11 scheduling work out in 2026. So, you know, I -- this
12 isn't something that -- it's not a one-time plug of work
13 that's a -- you know, getting -- just washing out old --
14 you know, a backlog of maintenance. It's not that.
15 This is our continual process for where we're doing
16 work. So we look at the life cycle of all the different
17 components in the facility. We're replacing. We're
18 refurbishing. And so this is, you know, again, an
19 ongoing body of work. This is just, you know, what we
20 have on the books right now for the next five years.

21 If we go to the next slide.

22 So here, this is -- I believe this is about 17
23 here of the 40 just to give you a snapshot of some of
24 what we're talking about here. And, again, we -- you
25 know, a lot of work at the -- related to the river valve

1 outlet system, work related within -- at the components
2 within Hyatt. Because, again, as we're doing that
3 replacement, refurbishment, maintenance work within the
4 plant, that is ensuring that we have a reliable set of
5 outlets that we can use to operate the reservoir.

6 If we go to the next.

7 Wanted to just give a couple of, you know,
8 examples of what some of this work -- you know, what it
9 looks like. And so one of the projects that was just
10 completed in 2020 is this -- we replaced the stand-by
11 generator. So just, you know, one project that we've
12 completed.

13 If we go to the next one.

14 This is replacing the -- or doing a
15 rehabilitation of the river valve outlet system and --
16 so this is a much larger project. The schedule down
17 there in the bottom right corner. We're anticipating
18 starting construction next year occurring over a
19 two-year period.

20 One thing to note about this project is -- so
21 DWR has voluntarily decided to use a technical review
22 board. And so just, you know, as an example of, you
23 know, something that I've seen us using more and more at
24 DWR as -- is as we have large projects is bringing in
25 review boards as a way to really, you know, get in this

1 independent -- this outside expertise. That's, you
2 know, similar to how we brought in the IRB for this
3 Comprehensive Needs Assessment.

4 You say we're -- you know, we're using that
5 model of bringing in boards with outside experts at a
6 bunch of different levels both at our, you know,
7 Comprehensive Needs Assessment planning study but also,
8 you know, on more focused projects where we're bringing
9 in experts to help make sure that we're thinking through
10 all the different things we need to as we're
11 implementing projects.

12 If we go to the next slide.

13 This is -- you know, wanted to -- just to
14 highlight because it's been a very visible project for
15 anyone up at Oroville. So the -- you know, the fencing.
16 This is different security measures. So this is a
17 project that was started back in 2018. We should be
18 completing it here next year and really improving just
19 the physical security at the plant.

20 If we go to the next slide.

21 And then this is a fourth project that -- wanted
22 to highlight for this group. And so what this -- this
23 is a show and looking down on top of the -- the
24 spillway. And so you as -- folks are, I'm sure, very
25 aware that now when -- to access the spillway boat ramp,

1 when you have to cross over the gate structure,
2 there's -- you know, we have a lot more security. We're
3 having to stop and screen folks as they go across that
4 bridge.

5 This is a project that, when the water is lower,
6 the idea is that we had this construction road in place
7 when we were doing the spillway work. Turn that
8 construction road into a more permanent facility. And
9 so what this will let us do is drive -- you know, we can
10 route traffic around the gate structure.

11 So this helps us, you know, reduce risks
12 associated with having traffic go over the gate
13 structure and also lets us -- you know, it helps us not
14 have to pay for those security -- that security work.
15 It also lets folks access the boat ramp without having
16 to sit there and wait like they do right now. So it has
17 security benefits, some cost benefits, and then also I
18 think it improves the boating experience. So, you know,
19 another example of a project that we're implementing.

20 If we could go to the next slide.

21 So a lot of, you know, what the CNA does -- so
22 in addition to these projects that we're moving forward
23 with, projects occurring that, you know, outside --
24 developed before the CNA was completed is also these
25 different areas where we're doing further

1 investigations. We're going to do additional
2 monitoring. And so there was about 25 different studies
3 that came out of the CNA. There were the 39 different
4 recommendations for doing, you know, additional
5 investigation, study, monitoring, out of the Part 12.
6 Definitely some overlap between the two of those, but
7 quite a body of different work.

8 So, again, the idea that this is -- you know,
9 CNA's a snapshot in time. It's -- you know, the
10 facility is always going to have risks; so we can't say,
11 "Hey, we finished the report. We're good. We're going
12 to go off and do something else." It's where -- you
13 know, this is what -- you know, the next step is delving
14 into these areas further.

15 If we go to the next slide.

16 So one of the different specific efforts
17 mentioned is the completion of the forecast-informed
18 reservoir operations, which is something that we've
19 talked with this group about for -- before -- you know,
20 CNA differently identified that as one of the measures
21 that it recommends continuing to move forward and
22 implementing.

23 If we go to the next slide.

24 And so just, you know, a little bit of schedule
25 for what that means and where we are. So the different

1 box showing -- so we, you know, have the committee
2 formed over in the yellow box. We're in the light blue
3 box right now; so we're completing some of the
4 preliminary analysis.

5 And then we're going to be moving into the blue
6 phase where we're completing the technical studies, the
7 work being done next year, and really identifying what
8 are some specific alternatives for implementing
9 forecast-informed reservoir operations that we are then
10 moving into the Water Control Manual update.

11 And so my plan here is just in the -- in the --
12 watching the clock here. Since we have talked about
13 this before, I'm going to keep going; but if you have
14 questions, definitely feel free to ask.

15 If we go to the next slide.

16 You know, where there's been a lot of
17 interest -- one of the areas definitely flagged that
18 more information is needed is the flood control outlet.
19 Bruce had mentioned this as an area that the IRB had
20 said, "Hey, that's an area that" -- you know,
21 really the -- needs some detailed studies.

22 You know, couldn't complete those studies within
23 the CNA, but they are being done in parallel, being done
24 separately. So we're having a lot of the -- the -- you
25 know, this very in-detail, in-depth, nonlinear analysis

1 to assess how the facility would perform during an
2 earthquake.

3 That report, we're close to finalizing and
4 should have that, you know, done here very soon in the
5 beginning of next year. And so what that is going to do
6 is really help then give us the information we need to
7 start understanding what are different -- you know, what
8 are different -- oh, structural changes that could be
9 implemented that would be needed that would help address
10 what we're seeing from the seismic analysis.

11 So the picture on the left there showing this --
12 you know, it lets us model an earthquake and then see
13 how different members, how they perform. Over on the
14 right then -- you know, using the information from the
15 analysis, we're starting to scope out what could be
16 these, you know, different fixes -- or not fixes,
17 different measures to implement at the flood control
18 outlet.

19 So if we go to the next slide.

20 Just to talk a little bit more about, you know,
21 how that unfolds. So right now we're completing this
22 in-depth study; so that we're doing right now. Over
23 this next year, then we're taking the results of that
24 study and we're doing this preliminary design of what
25 some different structural upgrades could be. And we're

1 making sure that's feasible to actually address the --
2 you know, any issues we're seeing, make sure it's
3 feasible to address that through doing these upgrades.

4 And based on that, based on whether -- you know,
5 how feasible that is to really bolster the flood control
6 outlet, that's what we see as informing whether or
7 not -- having that more robust flood control outlet, is
8 that adequate for meeting all the outlet releases of the
9 dam between that and the river valve outlet, Hyatt? And
10 that's the top blue out arrow, and if -- you know, if
11 that's the case, then we move on to initiating design
12 and implementing those measures.

13 If that's not adequate, then we need to look at,
14 you know, what are the different -- some of these
15 different measures that were identified through the CNA
16 as alternatives; so either a -- you know, a new flood
17 control outlet structure either in parallel or adjacent
18 there. So a new structure is the beige arrow there. Or
19 the other alternative then is looking at a low-level
20 outlet.

21 So, you know, we've been asked, like, you know,
22 when are we going to really start diving into looking at
23 the feasibility of a low-level outlet. And the way we
24 see answering that is we need to get through
25 understanding -- you know, are we able to get all the

1 outlet -- meet all our outlet needs with the flood
2 control outlet and having that facility robust. You
3 know, we need to be able to answer that question.

4 And if it looks like, no, we can't do -- and
5 it's not feasible just to implement those measures. And
6 then that's the point here that we would then start
7 looking in more detail at what are the risks and
8 benefits associated with the low-level outlet, and what
9 are -- you know, similarly with an alternative Headworks
10 structure.

11 The last thing to note here in this slide is,
12 you know, this -- this work is all -- you know, as we're
13 looking at, you know, what are the dam safety related
14 needs of the outlet, the combined outlets facilities for
15 the facility, that's also ongoing and parallel with
16 we're also doing this -- working with corps to move
17 forward with this Water Control Manual update.

18 And so, you know, we have this couple of efforts
19 here going on at the same time that are, you know,
20 informing each other. So, you know, right now what
21 we're -- what we've preliminarily heard from the Corps
22 is they think the 150,000 cfs that -- of flood
23 control -- you know, that limiting flows downstream to
24 that amount, we're hearing, hey, they think that's
25 adequate.

1 But if -- through their process, if they want us
2 to look at alternatives of, you know, being able to
3 provide additional flood control benefit, then that
4 would inform -- you know, that would be information
5 coming from the water control manual update from
6 forming, you know, what we need to look at as far as the
7 plumbing for Hyatt or plumbing for the Oroville
8 facilities.

9 Similarly, if -- as we're going through, and if
10 we decide it makes sense to do additional flood control
11 outlet structure or additional low-level outlet, that
12 information, of course, then would feed into the water
13 control manual update too. So, again, that -- you know,
14 a handful of efforts going on here in parallel and
15 informing each other.

16 If we could go to the next slide. Oh, we had a
17 couple of -- yeah. There.

18 So this is, I believe, the last one talking
19 about these, you know, different areas for
20 investigation. This is what came out of the Part 12.
21 And so we had, again, the 39 different recommendations
22 really fell into -- you know, these fall into four
23 different buckets.

24 And so the first one is really around, you know,
25 reducing uncertainty. So we do this risk analysis and

1 we come up with, you know, here's what we think the risk
2 is. And these are areas where there's enough
3 uncertainty in that estimate that the independent
4 consultants have said, you know, "That's something that
5 DWR ought to look at," you know. "Let's do some studies
6 there to really understand that risk better, reduce that
7 uncertainty so we can know if we can really rule out
8 that as being a more significant risk or not." So
9 that's the top of the first bucket there.

10 The second is really around our monitoring, our
11 inspection, our surveillance practices; so a handful of
12 recommendations on ways to bolster that practice. The
13 third bucket is around how we operate and maintain the
14 facilities; so we had recommendations there. And then
15 the last one is related to the documentation and just
16 this, you know, body of information that we continue to
17 develop about the facility and just -- you know, it's --
18 how it -- yeah, about the facility.

19 So if we could go to the next slide.

20 And so this is -- the last part here of the
21 presentation is then -- so we have identified these
22 different measures, and so -- you know, these different
23 potential projects. So what happens to those?

24 And so we're basically just saying that we have
25 a whole host of different studies that we're doing here

1 to continue to reduce the uncertainty; to identify, you
2 know, where are -- where do we really need a measure?
3 Where -- as we reduce uncertainty, we might see that,
4 you know, the risk isn't as high as we thought it might
5 have been.

6 So, you know, that's the point of why we say we
7 do, you know, a study. It's not just to study
8 something. It's we're really focusing on answering
9 questions. Are projects needed? How badly are they
10 needed and where?

11 And so we are continuing to develop that
12 understanding. And then the last one, we're including
13 these in our long-term process for identifying which
14 projects to move forward to. So we had that list of --
15 you know, the \$224 million of projects that we're doing
16 over five years; so identifying as we, you know, start
17 planning for 2026, subsequent years, what projects make
18 the most sense to start implementing there.

19 If we could go to the next slide.

20 And so this is the list of different projects
21 here. And so -- and I believe you all will have the
22 presentation. This is also in the report there too.
23 But, again, just, you know, a couple of things to
24 highlight. There are -- you know, consider different
25 low-level outlets. Consider doing different things at

1 the emergency spillway to armor downstream or to, you
2 know, otherwise reduce erosion around the emergency
3 spillway and risks concerned with there. You know, just
4 a handful of -- these are the different measures that
5 were identified.

6 If we go to the next slide.

7 And so, again, what happens with those is -- so
8 we're doing this -- you know, it's this continual
9 process of evaluating. And so the first thing is if --
10 you know, if anything, if we see any -- through this
11 monitoring evaluation, this change -- as conditions
12 change, as soon as you see anything urgent, you
13 immediately address it. And, you know, that's outside
14 of our normal -- you know, we've planned the work out.
15 You know we jump on anything immediate immediately.

16 And then we're -- the next item is we're using
17 this risk-informed approach to decide which projects are
18 we going to do next. So as we look out at 2026, 2027,
19 we're using the information from this study showing
20 where are the greatest risks. We're using that to help
21 inform what projects are we doing there in the future.

22 And doing this not just at Oroville but then
23 doing this across -- yes, we have similar efforts that
24 we've been doing here now at other facilities. It lets
25 us look across the water project, also across different

1 infrastructure types. So not just looking at the dam
2 spillways, but also the pipelines, the aqueducts, all
3 the different facilities, and really gives us this risk
4 data to help us inform these decisions on which projects
5 to move forward with.

6 And -- and then the last part of this here that
7 is not on the slide -- but then -- you know, this is the
8 DWR process. And, again, one of the things that's new
9 for DWR is that we have this forum right here. So, you
10 know, our hope is that this is not something that we're
11 just saying, "And here's what we're going to do," and,
12 you know, "You need to trust us that we'll do it." Our
13 intent here is, you know, we'll be back at February at
14 the next meeting. We'll be meeting with this commission
15 regularly here through the years...

16 (Indecipherable audio distortion.)

17 MR. YARBROUGH: ...as we move forward here.

18 So with that, that is my last slide here, or I
19 think I have one more after that. But, again, thank you
20 very much and would love any questions that anybody
21 might have.

22 SECRETARY CROWFOOT: Thanks so much, John. Wade
23 Crowfoot here.

24 I want to do a bit of a time check. It's now
25 almost 11:15, and we're scheduled to go until noon.

1 There's obviously -- this is a -- you know, a big
2 priority for this commission to discuss the
3 comprehensive needs analysis; and there is also,
4 obviously, a lot of complexity to unpack with
5 commissioner questions.

6 I do want to make sure that community members,
7 members of the public, have an opportunity to provide
8 perspective. My sense is that we need to sort of
9 straddle this meeting -- straddle this topic into the
10 next meeting of the commission to really allow for the
11 level of discussion needed. I'm ambivalent to try to
12 shoehorn commissioner discussion and public comment and
13 complete the commission's discussion on the item, you
14 know, in the next 45 minutes.

15 So I think what I'd like to do is move to -- the
16 next 15 minutes of commissioner questions or
17 observations where if, you know, there are items to
18 further unpack, we can sort of put a pin in those for
19 the next meeting. And then around 11:30 move to public
20 comment so we can ensure that community members are able
21 to share their thoughts.

22 And, again, you know, my thought is that we
23 allow this discussion of the CNA to continue into the
24 next commission meeting here in the next few months.

25 So with that said, Nick, again, our Internet is

1 down at the resources headquarters, and I'm doing this
2 from my phone. So, Nick, I'll need your help to call on
3 those who you see who may have questions or comments.

4 MR. SAFFOLD: Sure. Sure. I'm just going to
5 run through the instructions again real quickly,
6 Secretary, and I know we do have one -- one person
7 already queued up. So, Secretary, I think if you can
8 help direct any of these questions to the appropriate
9 person or the appropriate staffer at DWR.

10 Again, for those on the Zoom platform, please
11 raise your hand by clicking the hand icon you see during
12 public comment; or if you'd like to have a written
13 question read aloud, please click into the Q & A icon
14 and then type your question.

15 For those on the phone, please press #2 to
16 indicate you'd like to speak; and then Justin, our host,
17 will call on you.

18 So I know we have Matt Mentink who had raised
19 his hand earlier, and I think he had an IRB question.
20 So let's see if we can allow him to speak.

21 Matt, can you hear us, and are you able to talk
22 to the commission?

23 MR. MENTINK: This is Matt. Can you hear me?

24 SECRETARY CROWFOOT: We sure can.

25 MR. SAFFOLD: Yeah, we can hear you.

1 MR. MENTINK: Yeah. I want to make sure that
2 the commissioners have their chance, and it's -- this is
3 their meeting. But going back to the -- on this one,
4 going back to the IRB comments. And this is directed to
5 all of the IRB members.

6 You know, after going back and reading the, you
7 know, 90-some recommendations, it became very clear the
8 impact that they had on this CNA process. An honor that
9 it must have been to be selected, and the contributions
10 that they made not just to our processes but to the dam
11 industry.

12 You know, their list of recommendations was a
13 valuable tool for DWR, and it could be to the advisory
14 commission, the public, and the dam industry as a large.
15 And what I would suggest is that the work of the IRB
16 team be included in the public report by making it's
17 recommendation log a part of the appendix.

18 SECRETARY CROWFOOT: Matt, thanks so much for
19 that suggestion.

20 John, thoughts?

21 MR. YARBROUGH: Yeah. Yeah, one -- and so a
22 couple of thoughts there. One is I believe we do have
23 the final IRB report in the public document there
24 included there. Additionally all of the IRB reports, we
25 have put on our website. And so for each of the

1 different meetings we had with the ad hoc group, ahead
2 of time we provided the IRB report with all of their
3 recommendations to the ad hoc group. And so that's on
4 that website.

5 So, you know, all that material we have there
6 available through the CNA website. And just to keep the
7 total volume of material down in the report itself, we
8 only appended the last IRB report. But, you know,
9 definitely that all material is available to everybody
10 to look at.

11 SECRETARY CROWFOOT: And, John, can you consider
12 making it very clear within the report where the reader
13 of the report can access the recommendations. I really
14 like the suggestion around making sure people understand
15 the suggestions or can see the suggestions that the IRB
16 made.

17 MR. YARBROUGH: Yeah. I think that's something
18 we could definitely do.

19 SECRETARY CROWFOOT: That would be helpful.

20 MR. MENTINK: John? John, am I still on here?

21 SECRETARY CROWFOOT: You sure are.

22 ASSEMBLYMAN GALLAGHER: Yep.

23 MR. MENTINK: Yeah. I was on DWR's website
24 today. I clicked on "Oroville CNA," and it was, like,
25 only -- what? -- Meeting 6 that came up. It looks like

1 a lot of it may be purged already.

2 So I know you guys do a lot of maintenance on
3 your website. But just simply taking not their reports
4 but the recommendation log, the status of the log, the
5 actions taken, and making that part of the appendix of
6 the report.

7 SECRETARY CROWFOOT: Got it. Matt, suggestion
8 duly noted, and we're going to try to figure out how to
9 make sure it's either part of the appendix or very
10 clearly, like, clickable or findable from somebody
11 that's actually reading the report. And get your point,
12 not just the final report but the specific
13 recommendations.

14 MR. MENTINK: Thanks, Wade. And along those
15 same lines, I would further suggest that the
16 commissioners and the faciliters [sic] of the advisory
17 commission adopt a similar process for the CAC process.

18 We've heard many promises today regarding fire,
19 run-off, groundwater, Hyatt Power Plant, and IRB
20 recommendation logs; but yet we don't have a means to
21 follow up on all these recommendations.

22 Some recommendations that I made a year ago have
23 yet to find their way into any sort of response or
24 anything. So let's work off of what IRB did and their
25 recommendation log and apply it to this commission.

1 SECRETARY CROWFOOT: Yeah, Matt. I -- you know,
2 I like the thrust of that suggestion. I mean, we want
3 the commission to be an accountability mechanism for
4 DWR's operation of the dam and the reservoir. And to
5 your point, you know, there's a lot that we discuss in
6 each meeting. We're obviously all busy. We have a
7 number of other things in our daily work and lives. And
8 so it's not like we track everything that was reported
9 on or committed to in the previous meeting.

10 So, Nick, something to discuss with you all as
11 an organizer in our agency, is there a way to track
12 essentially, you know, commitments made in these
13 meetings or actions reported on and then have that be
14 part of our public commission website?

15 That would be helpful probably for commissioners
16 just to make sure, you know, they're able to play their
17 role overseeing the work and, you know, providing input
18 on the operations and then also members of the public so
19 that they can understand, you know, what's actually
20 happened based on commission discussions.

21 MR. SAFFOLD: Yeah, absolutely. We can do that
22 and agendaize that for the next meeting and explain more
23 clearly how we can -- how we could do those follow-ups,
24 yeah.

25 MR. MENTINK: Thank you very much. I think it's

1 going to be a really useful tool. I'm going to turn it
2 back over to the commissioners, and if there's any time
3 at the end, I might have a couple of other questions.

4 Thank you.

5 SECRETARY CROWFOOT: Hey, Matt, thank you.
6 Those were really good suggestions.

7 Nick, let's turn it back to commissioners.

8 And if you're a commissioner that has a question
9 or a comment on John's presentation or back to the IRB,
10 you're welcome to just unmute yourself and ask your
11 question or comment.

12 MR. SAFFOLD: Secretary, I do know that we have
13 one other public comment, Ronald Stork, who would like
14 to ask --

15 SECRETARY CROWFOOT: Great.

16 MR. SAFFOLD: -- a question, but unless there
17 are questions from the commissioners at this time.

18 SECRETARY CROWFOOT: Well, let's move to Ron.
19 And there may be other public comment folks from the
20 community, but let's move to Ron's -- hear from Ron, and
21 then obviously commissioners can figure back in after
22 his question or comment.

23 MR. SAFFOLD: Ron, can you hear us? Are you
24 able to --

25 MR. STORK: I can hear you well. Can you hear

1 me.

2 MR. SAFFOLD: Yes, we can.

3 SECRETARY CROWFOOT: We sure can.

4 MR. STORK: Cool.

5 I served on the ad hoc group and enjoyed it
6 quite a bit. I started work on this in a Cal Fed
7 post-funded, post-1997 flood, Yuba River -- Yuba Feather
8 River working group that was chaired by Yuba County,
9 Water Agency. And a number of environmental groups and
10 Yuba County Water Agency and DWR met for quite a few
11 years to discuss these issues.

12 Ultimately, we -- one of the major concerns we
13 had was the unsuitability of the foundation conditions
14 downstream of the emergency spillway for planned flood
15 controller operations; not emergency operations, but
16 flood control operations where DWR is still managing to
17 keep river outflows to 150,000 cfs.

18 We didn't believe that the department would risk
19 that, and we thought there were more risks than the
20 department thought was going to happen if they ever used
21 it.

22 In 19 -- in 2017, obviously there was a
23 demonstration of the unsuitability of the foundation
24 conditions in that area as well as under the main
25 spillway; so we've -- "we," as in I and others from that

1 original task force, have been tracking this issue for a
2 long time.

3 I will be -- I -- I could be kind and -- because
4 there's a lot of kind things I could say about the
5 department's actions here. But I want to take perhaps a
6 more candid view, which is that it seems to me that the
7 department's perspective on its obligations to maintain
8 its existing flood management capabilities and its
9 existing obligations to pass the probable maximum flood,
10 as newly revised with a certain amount of freeboard, is
11 something that essentially wasn't considered to be a
12 planning objective in the CNA. And that's of
13 considerable significance to folks in the Feather River
14 Basin since that, at least, existing competence is
15 something that I think that they have the right to
16 expect from the department.

17 And the -- I was disturbed by John's -- John
18 Yarbrough's -- one of his responses to comments from
19 Matt that we got last night that essentially said the
20 department, you know, is doing risk-based stuff and
21 we're not -- we're not really looking at it, what we
22 called "a deterministic objectives" either for flood
23 control or for the spillway design flood, which is the
24 probable maximum flood.

25 And that's -- that's certainly a perspective

1 that the department has in the context of it's kind of
2 this -- the risk-based framework that Bruce discussed
3 and the asset management for the entire State Water
4 Project that was discussed by Bruce and by John.

5 And I -- that -- I guess that kind of makes
6 sense in the context of Reclamation's program westwide
7 where it has a lot of projects. It has an annual budget
8 for dam safety, and it has to decide where it's going to
9 spend its money this year on which projects.

10 But there's also in FERC license dams a -- an
11 expectation that the project works be sufficient to meet
12 the objectives of the project. And one of the
13 objectives of the project, of course, is to meet the
14 reservoir design flood. That's a Corps of Engineers
15 requirement for Oroville Dam and at least traditionally
16 spillway design floods.

17 And so that -- that did not appear to be a focus
18 of the CNA. There was really no discussions about that
19 in the CNA. We raised this in our last -- the final ad
20 hoc meeting. I expected to see perhaps some
21 modifications of the draft CNA that we reviewed. I
22 didn't see any to discuss these matters.

23 So I think as we -- as we walk forward into the
24 future, we have a clash between what I think is --
25 should be an obligation by the department to make sure

1 that it can meet its floodwater management standards as
2 well as being able to pass the revised spillway design
3 flood with the kind of freeboard that it had in the
4 past.

5 Now, if you'll notice that the -- kind of the
6 potential future projects, you'll see that -- that some
7 of them go to these issues without stating that they go
8 to these issues; in fact, using other words to say that
9 they we're looking at these things. And one would be to
10 raise the dam, and for that matter the Paris Saddle Dam,
11 three feet or so so that a spillway design flood is
12 increased and a larger PMF can be handled.

13 And some of these physical measures may make it
14 possible for the reservoir design flood to be passed
15 without surcharging the reservoir and causing a bunch of
16 chaos down the stream or to mitigate the chaos by
17 walling off the Hyatt plant so that it's not flooded by
18 backflows.

19 So -- but none of that -- none of the reasons
20 for that, at least in the context of what I've just
21 described, appear in the CNA. When asked about these
22 issues in the ad hoc committee, we got pretty evasive
23 answers or no answers. And one of the objectives that
24 the ad hoc group had was let's walk together and kind of
25 understand what the department's doing, what its

1 decision-making, and that way we could help explain to
2 various communities what the problems -- you know,
3 essentially why the department did what it did and
4 presumably to support them.

5 And I have to admit that -- and I told John and
6 the group last week that I don't believe that there was
7 enough candor in the ad hoc group as explained by --
8 that I just talked about, to actually make me
9 comfortable defending the department decision in the
10 CNA.

11 The other concern that I have, of course, is
12 that the department has -- by choosing an asset
13 management approach, it's in effect lobbying FERC not to
14 order it to make these modifications at Oroville so that
15 the reservoir design flood and spillway design flood can
16 indeed be accommodated. And that's understandable from
17 a department fiscal perspective, but it may not be
18 understandable for Feather River Basin folks.

19 So I put this issue on the table. I'd love to
20 have further discussions with Wade or Carla with as many
21 of the DWR staff as they want to bring and have some
22 better understanding of what -- the department's
23 perspectives and where it wants to go on these matters.

24 Thank you.

25 SECRETARY CROWFOOT: Ron, thank you for the

1 considerable time you've spent on the ad hoc committee
2 but really for probably the last couple of decades on
3 Feather River issues.

4 And so I'm just, you know, as a nonexpert on
5 these topics, trying to fully grasp your set of
6 questions; and here's how I would ask, you know, DWR to
7 respond.

8 So clearly the ad hoc committee, as the senator
9 and assembly member said, was formed to ensure that
10 community members and other stakeholders, including
11 groups, had transparency and visibility into the CNA
12 process and actually have direct access to DWR and
13 importantly the independent review board. And it sounds
14 like the process, you know, for the most part created a
15 level of dialogue.

16 I -- I hear what Ron is saying is what sounds
17 like a pretty fundamentally different approach he would
18 advocate DWR take as it relates to meeting obligations
19 at Oroville.

20 And I'm trying to kind of, in my own mind,
21 differentiate, you know, sort of the distinction -- or,
22 you know, identify the distinction he makes between
23 the -- sort of the risk-based approach that DWR has
24 taken versus an alternative approach.

25 I'll acknowledge that, you know, I don't think

1 the purpose of the ad hoc committee was to achieve
2 consensus on every item, and I want to acknowledge that
3 Ron has some outstanding concerns around, you know,
4 DWR's approach on its system and at Oroville in the CNA.

5 Ron, we'd be happy to figure out how we unpack
6 those with you and your organization more directly and
7 in a detailed -- in a more deep way.

8 But for the purposes of this discussion, just so
9 we can track it as commissioners, Carla or John or Ted,
10 how would you interpret sort of Ron's critique and
11 respond to it for the purposes of this discussion?

12 DIRECTOR NEMETH: So I'll start and then maybe
13 hand it over to Ted or john.

14 So I would also say, you know, Ron, I know
15 you've been around these issues for a really long time;
16 and I have both a respect and reverence for someone like
17 you and your persistence on some of these topics. So
18 just thank you for that.

19 I think that, one, I would just say as a general
20 proposition, we're certainly open to continuing the
21 dialogue on this set of issues that you raise. I, you
22 know, want to understand them better. I think that
23 there's, you know, probably a little bit of a
24 disagreement around the scope of what we were addressing
25 in the CNA.

1 And then I also think that there's, you know,
2 probably some integration of topics that were looking
3 out -- that are considerations of the CNA but aren't
4 driving that analysis. So some of which is, you know,
5 some of the things that we're looking at with the Corps
6 and the control manual and some of the ways in which,
7 even I think right now with our deeper flood pool that
8 we're holding in the reservoir, is part of our approach
9 to addressing the issues that you raised.

10 So I guess, you know, in my view, I would say
11 that I think we can address both things. What I'm
12 gathering from your comment is a disagreement on a
13 certain risk approach and frame that potentially, in
14 your mind -- and tell me if I'm mischaracterizing your
15 comment -- that -- you know, potentially in your mind,
16 it's that fundamental frame that, you know, if you --
17 you know, it's all about are you asking the right set of
18 questions.

19 And so with that frame, in your view, it leaves
20 out consideration of this other component. And, you
21 know, that may in fact be the case, but I don't think it
22 prevents the department from considering those issues
23 and articulating more fully how it is thinking about
24 those issues and where those issues get addressed.

25 That would be, you know, a goal that I would

1 have Secretary and -- sit down with -- with Ron and his
2 group. And I do want to continue the dialogue between
3 department leadership because I -- certainly it's not
4 our intention to come across as evasive in these
5 settings. And it's important to me when those kinds of
6 words are used because I don't believe that's the
7 intention of the department and would want to make sure
8 that, you know, our department leaders are part of the
9 dialogue.

10 But I'll stop there and John or --

11 SECRETARY CROWFOOT: You know, Carla --

12 DIRECTOR NEMETH: Yeah.

13 SECRETARY CROWFOOT: -- what -- Wade here. One
14 suggestion I have too is connecting with Ron, and then
15 either separate or together with Matt if he has
16 outstanding questions based on the responses --

17 DIRECTOR NEMETH: Sure your recollection.

18 SECRETARY CROWFOOT: -- off line before our next
19 commission meeting and then reporting back at the
20 commission meeting. That's not to say, you know, we'll
21 all necessarily agree; but I think this commission is
22 kind of the accountability mechanism going forward,
23 given the kind of conclusion of the CNA and the ad hoc.
24 And so I just think it's important for commission
25 members to understand how we're addressing kind of

1 ongoing concerns that ad hoc committee members have.

2 DIRECTOR NEMETH: Sure.

3 So Ted or John, you can correct what I didn't
4 get quite right if you've got other perspective that's
5 important here.

6 And thanks again, Ron.

7 MR. CRADDOCK: I'd just add, Carla, I think you
8 covered it well.

9 And, Ron, also thank you for the comments too.

10 I think early on in the first couple ad hoc
11 meetings, we did have a question on if the scope was
12 really a -- you know, little more focused on dam safety
13 and infrastructure review for the Compressive Needs
14 Assessment. And it...

15 (Indecipherable audio distortion.)

16 MR. CRADDOCK: ...because we've gone
17 through...

18 (Indecipherable audio distortion.)

19 MR. CRADDOCK: ...the water control
20 manual...

21 (Indecipherable audio distortion.)

22 MR. CRADDOCK: ...the flood...

23 (Indecipherable audio distortion.)

24 MR. CRADDOCK: ...I think...

25 (Indecipherable audio distortion.)

1 MR. CRADDOCK: ...would be a venue where we
2 can help.

3 (Indecipherable audio distortion.)

4 MR. CRADDOCK: ...additional questions you
5 raised...

6 (Indecipherable audio distortion.)

7 MR. CRADDOCK: ...points you raised...

8 (Indecipherable audio distortion.)

9 MR. CRADDOCK: ...John...

10 (Indecipherable audio distortion.)

11 MR. CRADDOCK: ...I don't know.

12 (Indecipherable audio distortion.)

13 MR. CRADDOCK: ...really look.

14 (Indecipherable audio distortion.)

15 MR. CRADDOCK: ...to talking with you more
16 and...

17 (Indecipherable audio distortion.)

18 MR. CRADDOCK: John, anything to add to
19 that?

20 MR. YARBROUGH: I -- you know, I think both of
21 you hit the main points there.

22 SECRETARY CROWFOOT: So, Nick, I want to make
23 sure -- let's pause and repeat for folks that may be
24 watching as members of the public how they can comment
25 or ask a question. I believe there's a Q & A button at

1 the bottom of their screen on the Zoom application, and
2 they can either put the question in writing or ask to be
3 called on.

4 MR. SAFFOLD: That's correct, yes. There's a
5 Q & A function and a "Raise your hand" icon that members
6 of public -- and we do have one written question that I
7 can read now --

8 SECRETARY CROWFOOT: Please do.

9 MR. SAFFOLD: -- for Bruce Muller with IRB.
10 So the question is:

11 "It was noted in Mr. Muller's presentation that
12 the Hyatt Power Plant was a potential restriction and
13 being able to drain the reservoir in emergency
14 situation, i.e., a turbine or two out of commission.
15 Can you please expand on that issue and explain how that
16 situation has been addressed.

17 MR. MULLER: So I think what I would simply say
18 there is that if I remember right, there's either five
19 or six turbines in the Hyatt Power Plant. And what you
20 have to make sure is -- after a major flood event is
21 that the Hyatt Power Plant is still going to be
22 operational.

23 I think there's lots of discussion in the CNA
24 report about that. The Team 4 report specifically -- we
25 worked with the team to be sure that they got that

1 discussion in there. And I -- essentially what we're
2 concerned about is water -- the -- when you release more
3 water from the spillways, it raises the tailwater
4 downstream at the dam. And there eventually comes a
5 point at which the Hyatt Power Plant has to be sealed
6 off in order to protect it.

7 And so I think that they have a lot of
8 provisions in place. They've also identified some
9 potential future actions that they could take in order
10 to make that a more positive seal. Because if the power
11 plant gets flooded, you're not going to be able to make
12 releases after the flood event.

13 So the other way that you could end up not being
14 able to make releases is if -- let's take the case of
15 wildfire. If wildfire takes out the transmission lines
16 that take the power from the dam and deliver it into the
17 grid, then you don't have a way to actually dissipate
18 the energy that is generated by the power plant. And
19 without the ability to use that energy, you cannot make
20 releases without having a runaway turbine.

21 SECRETARY CROWFOOT: That's helpful.

22 MR. MULLER: Yeah. Those are considerations
23 that need to be taken into account.

24 SECRETARY CROWFOOT: So that all speaks to how
25 the CNA and DWR would address that. And we're hearing

1 from John at the next meeting, and he'll come back and
2 talk about how to mitigate fire risk at the facility.
3 But then I think, Bruce, you're also -- there's also
4 some discussion around how to mitigate that
5 limitation -- right? -- with that potential low-level
6 outlet, et cetera?

7 MR. MULLER: Correct. And I think DWR did a
8 wonderful job. One of the ways that that's been thought
9 about in the industry is can you create some sort of a
10 heat sink there at the dam that could absorb the power,
11 you know, just by generating heat through, like, a short
12 circuit almost.

13 And DWR ran the numbers and said there was no
14 way that they could come up with something that could
15 dissipate that amount of heat that would be generated by
16 the generators.

17 SECRETARY CROWFOOT: Hmm. Okay.

18 Well, Ted, I would say at our next meeting when
19 you talk about the sort of fire mitigation or fire risk
20 reduction at the Hyatt plant, maybe we can just have a
21 little bit more of a holistic discussion around how
22 you're addressing that observation that IRB made, which
23 is, you know, connecting the outlet through the plant
24 does create some, you know, potential risks as it
25 relates to being able to release the reservoir.

1 MR. CRADDOCK: Yeah. We'd be happy to do that,
2 Secretary, and we can also describe a little bit more...

3 (Indecipherable audio distortion.)

4 MR. CRADDOCK: ...the river outlet...

5 (Indecipherable audio distortion.)

6 MR. CRADDOCK: ...how the system currently
7 operates.

8 SECRETARY CROWFOOT: Good. We'll look forward
9 to hearing a little bit more about that at our next
10 meeting.

11 Nick, other comments from community members or
12 members of the public here that are figuring in via the
13 Q & A button or the raised hands function?

14 MR. SAFFOLD: No, not at this time.

15 SECRETARY CROWFOOT: Okay. Thanks.

16 Let's turn it back to commissioners for
17 additional questions or comments. And, again, if you're
18 a commissioner and you'd like to share thoughts, simply
19 unmute yourself and begin talking.

20 MS. WIDENER: Hi. This is Genoa Widener. I did
21 have some, I guess, comments on the CNA process. I was
22 a member of the ad hoc committee. I joined late; so I
23 wasn't at the very first meetings of the ad hoc
24 committee, but I was able to watch them all online on
25 DWR's website, which I think they're still up if any

1 members of the public want to go back and watch those.

2 The CNA's risk analysis is, you know, a really
3 technical thing that the IRB went through. As a member
4 of the public, living underneath the dam, those risk
5 analysis are a little bit different. Acceptable risk is
6 different when you're the one that is in potential
7 danger.

8 And so, although I know that it's a technical
9 thing that they're doing, I do feel that the final CNA
10 summary of report that we got attempts to minimize the
11 perception of risk. The timeline for future actions
12 allows for the prioritization of delivery projects
13 versus safety.

14 And we've witnessed in the past that both FERC
15 and the Department of Safety of Dams exercise discretion
16 regarding the timely completion of their inspection
17 recommendations that have been made in the past. For
18 example, like we've talked about a million times, the
19 piezometers that have been recommended for over a decade
20 to be replaced and are now being labeled as early
21 implementation that they're finally done a decade later.

22 So I just want to really push to -- to these
23 commissioners here that this is -- this is our job going
24 forward is to keep an eye on these recommendations that
25 have been made in the CNA, to check up on them

1 continually to see where we are, in what stage those
2 recommendations are in, what's being implemented, why
3 things are being implemented, and why not as we go
4 forward. I just think that that's a really important
5 job for this commission and for these commissioners.

6 And there -- the CNA is a snapshot in time as
7 we've said several times today, but the FERC Part 12
8 studies are done every five years. The Department of
9 Safety of Dams, they do their inspections yearly. And
10 so there is a constant snapshot every year that is being
11 done of this dam. And it's really our job to see where
12 those recommendations are in those studies.

13 Because as someone who's read those studies --
14 or -- and those -- the -- as somebody who's read the
15 reports over the years, and I'm very familiar with them,
16 recommendations show up over and over and over again
17 without being implemented.

18 And when you look at risk assessments, risk
19 assessments were done before 2017. Independent reviews
20 were done before 2017 every five years by FERC, and we
21 still had a disaster at the Oroville Dam, you know, that
22 put tens of thousands of people in risk.

23 So these studies can miss things, and the risks
24 can sometimes not be reality. The risk assessments can
25 sometimes not be reality. And we've seen that

1 firsthand. So I just really want to impress on this
2 commission and our commissioners that it's our job to
3 check up on these things. And I think that Matt Mentink
4 made a really good point with the recommendation log so
5 that we can have some accountability to ourselves of
6 what we need to look for in future meetings.

7 That's it.

8 SECRETARY CROWFOOT: Well, thank you for those
9 comments. Again, Wade here. I concur, and I think
10 you've kind of helped to educate me over the last weeks
11 of, you know, this commission does serve that purpose as
12 sort of the community-driven oversight function of
13 the -- of the operations but also the efforts to reduce
14 risk. I really like your idea around, you know,
15 developing a log or something that we can track over
16 time, the implementation of these projects that have
17 been called for within this -- the CNA or by FERC or
18 anybody else. And then I think it's -- we should also,
19 you know, agendize on a periodic basis the sort of
20 discussion of the projects.

21 So you have my commitment that, you know, to
22 structure this commission in a way that we're keeping
23 our eyes focused on what's getting implemented that has
24 been, you know, committed to or identified as needed;
25 and I look forward to, you know, starting to demonstrate

1 the accountability mechanism we'll provide as early as
2 the next meeting.

3 MS. WIDENER: Thank you. You know, with this ad
4 hoc committee and now the CAC, I really am encouraged by
5 what we can do in the future as far as transparency from
6 DWR and the change in the culture to include the
7 community in what's going on, and I really appreciate
8 that.

9 Thank you.

10 SECRETARY CROWFOOT: Yeah. Well, thank you.
11 And truly thanks for all your engagement on the ad hoc
12 committee and beyond. And I'll just recognize that
13 community leaders like you, you know, have lives outside
14 of this work and responsibilities. And it's one thing
15 for us to be paying attention who work for the State
16 agencies, and we think that's important; but it's huge
17 that you guys are stepping up in the ways that you are
18 amidst all of your other demands. So really, I do thank
19 you for your engagement on this. And my commitment is
20 to make sure that the CAC is actually a meaningful
21 oversight body here in coming months and years.

22 SENATOR NIELSEN: Jim Nielsen. Let me just pipe
23 in here that based on a long experience of doing similar
24 things of what we're accomplishing here, that's why it
25 was my intent that this be statutorily created, and then

1 it doesn't go away. It's not a study group and we
2 forget about it and go on our merry way. But that's why
3 there's a statutory commitment to keep this thing alive
4 and going, including defining who's on it and the
5 mission, goals, and purposes of this group.

6 So understand that's -- gives it the staying
7 power. And then if we individually then will exert our
8 own efforts as best we can, then we can get there. But
9 we did need to have a statutory construct, and we do
10 have that.

11 SECRETARY CROWFOOT: Well put.

12 And I think this is -- this is, you know, almost
13 unique in the state for the -- kind of the statutory
14 requirement and the consistency and the breadth of
15 representation. So, you know, thank you, Senator,
16 because we're here, you know, because you all put this
17 into law and we'll stay here as a result of that; so
18 thank you.

19 Other comments from commissioners on the CNA or
20 the commission's process moving forward.

21 (No verbal response.)

22 SECRETARY CROWFOOT: I think we're in a pretty
23 good moment then to --

24 Nick, you would -- you'd interrupt me if there
25 was additional public comment. But let me maybe share

1 what could be concluding thoughts and then turn it back
2 over to Assembly Member Gallagher or Senator Nielsen for
3 the final, final word.

4 Look, we're on our fifth meeting of this
5 commission. I think it's been constructive to date. I
6 think we're still trying to understand, you know, how to
7 get detailed, substantive updates in, you know, two to
8 three hours. That continues to be a work in progress.
9 I think DWR populating our commission website with other
10 materials is really helpful.

11 I welcome suggestions that commissioners have
12 that they want to make off line if there are ways that
13 we can make the meetings, you know, even more
14 constructive or efficient. As always, we really look to
15 you in terms of what we agendize on these meetings.

16 I think we have some agenda items already built
17 for the next meeting, including a follow-up on the Hyatt
18 Power Plant. And then probably we should agendize a
19 discussion around how do we -- how are we sort of
20 logging, you know, commitments made in this meeting
21 moving forward.

22 And working Nick and his team, we'll have a
23 proposal around how we make sure the commission is that
24 accountability mechanism and actually records and tracks
25 commitments. But I'm encouraged, for what it's worth.

1 I mean, I really appreciate everybody spending time and
2 energy and being constructive on this. Thanks to DWR
3 for all the kind of background organization you're doing
4 on this. Thanks for also just -- you know, the work
5 you're doing at DWR and, you know, your commitment to a
6 candid, transparent discussion on this issues.

7 So with that, let me turn it back over to
8 Senator or Assembly Member for final thoughts.

9 SENATOR NIELSEN: I have nothing in addition. I
10 spoke my peace. I want to thank you all, though, for
11 your forbearance and persistence. It is having an
12 impact. It will continue to have a greater impact in
13 the future, and I thank you all for your participation.

14 SECRETARY CROWFOOT: Thank you.

15 If the assembly member has anything he wants to
16 add, he can pipe in now.

17 ASSEMBLYMAN GALLAGHER: Yeah. I think I would
18 just echo a lot of comments that have been made. And I,
19 you know, agree with Genoa and the secretary that I
20 think really this is where this body comes in is to
21 ensure the implementation of, you know, certainly the
22 things in the CNA; but just even broader than that, you
23 know, ensuring, you know, the concerns that people have
24 at the dam and the things that we've identified, that we
25 take substantive actions to address them.

1 And in the meantime, we're also reporting to the
2 community, letting them know, hey, what's going on, how
3 we're going to be operating, and getting positive, you
4 know, feedback from those who are most affected. And so
5 I -- you know, I think that's going to continue to be
6 the charge of this commission.

7 I think there's some real -- I mean, there's
8 some real positives to the CNA early implementation
9 projects. Getting the piezometers in, that's something
10 that we've always, you know, maintained that really --
11 you know, since the beginning that that's something that
12 should be done. That is happening now.

13 The continued investigation into the, you know,
14 Headworks. We actually got some, you know, good
15 preliminary information out of that in fact the rock
16 underneath the Headworks structure is sound rock. And
17 so that's a good sign. That's something that tells us
18 more than just the surface -- you know, than just a
19 surface glance at something. We're getting, you know,
20 that more in-depth information, and that's good. It's
21 good to know. It's good for the public to know.

22 You know, I think more longer-term maybe
23 there's -- you know, I always feel like we get into a
24 long conversation about some of the things that Ron has
25 brought up; but, you know, I really think what he's

1 getting at is that, hey, we initially -- when we built
2 this dam, we kind of anticipated we'd have Marysville
3 dam. And we don't, you know.

4 And so, you know, how -- what does that mean for
5 how we should operate this dam going forward? And I
6 think that is an ongoing discussion that we need to
7 figure out. You know, how do we ensure that -- you
8 know, if we don't have Marysville Dam, then we're sort
9 of assuming that we surcharge that water over the
10 emergency spillway, at least under the current
11 construction of what we have right now.

12 Now that emergency spillway is admittedly in a
13 much better shape than it was in 2017, and there's been
14 a lot of great work done on that. But what does it mean
15 in terms of a long-term view of this com...

16 (Audio distortion.)

17 ASSEMBLYMAN GALLAGHER: ...and are there some
18 additional infrastructure that we could add that
19 could -- you know, that could make this dam safer and
20 that really truly addresses that thing that I think Ron
21 and others have pointed out is missing.

22 And maybe that is a low-level outlet. I mean,
23 that's another thing this people have talked about, and
24 there's at least -- out of the CNA, that's something
25 that is going to be looked into. And so that's another

1 positive. You know, it's -- you know, and as this
2 commission moves forward, we may ultimately identify
3 that as a project that needs to move forward. And, you
4 know, again, that's where I think we will play a
5 critical voice.

6 So a lot of -- I mean, really, I think a lot of
7 positives things here. Obviously not everything is, you
8 know, completely concluded and summed up by the CNA. I
9 think we all admit there's more work -- you know, much
10 more work to be done. But I am encouraged by the
11 progress that we're making, and I think it's going
12 to have -- the success is going to be and the building
13 of trust is going to be through the work of this
14 commission. And I look forward to being involved with
15 that not only today but for the long-term.

16 SECRETARY CROWFOOT: Thanks so much. Those are
17 perfect words to end on.

18 Thanks commissioners. Thanks members of the
19 public for joining. We will be back in touch about the
20 meeting in the first quarter of next year. And all the
21 best, and please stay healthy and safe until then.

22 Thank you so much.

23

24

25

1 STATE OF CALIFORNIA)
) ss.
2 COUNTY OF ALAMEDA)

3 I, Michael Hensley, Certified Shorthand
4 Reporter, Registered Diplomate Reporter, in and for the
5 State of California, Certificate No. 14114,
6 do hereby certify that I reported in shorthand the
7 proceedings had in the above-entitled matter and that
8 the foregoing is a true, correct, and complete
9 transcript of my shorthand notes so taken as aforesaid.

10 IN TESTIMONY WHEREOF I have hereunto set my hand
11 on this 25th of November, 2020.

12
13 

14 Michael Hensley, CSR NO. 14114

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