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REPORTER'S TRANSCRIPT OF ZOOM PROCEEDING

FRIDAY, FEBRUARY 19, 2021

9:00 A.M.

OROVILLE DAM CITIZENS ADVISORY

COMMISSION MEETING

HOSTED BY THE CALIFORNIA NATURAL RESOURCES AGENCY

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Reported by: ANN R. LEITZ, CSR NO. 9149

ROLL CALL

- 1
- 2 Supervisor Connelly
- 3 Lieutenant Collins
- 4 Sergeant Starkey
- 5 Supervisor Flores
- 6 Supervisor Fuhrer
- 7 Assemblyman Gallagher
- 8 Supervisor Kimmelshue
- 9 Deputy Licon
- 10 Captain Million
- 11 Director Nemeth
- 12 Senator Nielsen
- 13 Councilmember Pittman
- 14 Superintendent Teague
- 15 Supervisor Vasquez
- 16 Genoa Widener

17

18 ALSO PRESENT:

- 19 Nick Saffold, Kearns & West
- 20 Wade Crowfoot, Secretary, California Natural Resources Agency

21

- 22 Dave Duval (DWR); John Leahigh, (DWR); Gary Lippner (DWR);
- 23 John James (Yuba County Water Agency)

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AGENDA

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- Item 1: Welcome and Introductions
- Item 2: Commission Updates & Reporting
- Item 3: DWR Fire Modernization Program
- Item 4: Winter Operations Update
- Item 5: Downstream Flood Safety Partnership
- Item 6: Public Comment
- Item 7: Adjourn

1 PROCEEDINGS

2 February 19, 2021, 9:00 a.m.

3 ---oOo---

4 (Court Reporter's access to Zoom Hearing begins.)

5 NICK SAFFOLD: -- will be muted and in listen-only
6 mode until we reach the public comment period. I'm now going
7 to discuss the ways to make public comment. I'm going to also
8 repeat these instructions at the beginning of the public
9 comment period.

10 So for the members of the public joining us by Zoom,
11 there are two ways to ask a question or make a comment.

12 You can raise your hand on the Zoom platform to
13 indicate that you would like to provide public comment. To do
14 so, you click the hand icon which should be located at the
15 bottom of your screen.

16 If you do that, the webinar host, James, will call on
17 you and unmute you so you can speak.

18 If you wish to submit a written question or comment to
19 be read for you, you may also do that with the Q&A icon.

20 WEBINAR HOST: Sorry, the Q&A feature actually didn't
21 get enabled before the meeting started; I'm sorry.

22 NICK SAFFOLD: That's okay. We'll roll with that.

23 For folks who do want to make public comment, it
24 sounds like because that Q&A function is disabled, we're just
25 going to have to do it verbally. And we'll do that again, I

1 guess, before the public comment period.

2 But if you're participating by phone instead of Zoom,
3 you're going to need to press "#2" to raise your hand to speak
4 during the public comment period. And then you also may have
5 to manually unmute your phone line as well if you're on a
6 mobile device.

7 Each speaker will have three minutes, and your time
8 will be shown on a timer on the screen. And if you're on by
9 phone, James will let you know when your three minutes is
10 coming to a close.

11 Just a note, this meeting is being recorded and a
12 transcript will be posted at a later date to the Citizens
13 Advisory Commission webpage.

14 Commissioners, I would ask if you would unmute
15 yourselves now, I'm going to quickly do a roll call in the
16 order that it appears on the screen. And because we have a
17 few new Commissioners today, I'm just going to ask you all to
18 just do a quick introduction of yourself, your name, and kind
19 of the county and organization that you represent.

20 So, James, if you would go to the next slide, the roll
21 call slide. If everyone, again, would just unmute themselves,
22 we're just going to roll through these.

23 Lieutenant Collins?

24 LIEUTENANT COLLINS: Lieutenant Collins, Butte County
25 Sheriff's Office. I'm over Emergency Management for the

1 sheriff's office.

2 NICK SAFFOLD: Great, thank you.

3 Supervisor Connelly? Supervisor Connelly, are you
4 there? I saw you a minute ago. We'll keep going. I think he
5 might be having technical difficulties.

6 Supervisor Conant, are you on? Supervisor Conant?

7 Secretary Crowfoot?

8 SECRETARY CROWFOOT: I'm here. And, Nick, I might
9 suggest at the end of the roll call circling back to them in
10 case they're having challenges with their mute button.

11 I'm Wade Crowfoot, I lead the Natural Resources
12 Agency. Our agency includes the Department of Water Resources
13 which, of course, runs the State Water Project, and Oroville
14 is the largest reservoir in our State Water Project system, so
15 I'm glad to be here and glad to show the Commission.

16 NICK SAFFOLD: Thank you, Secretary.

17 Deputy Director Curry, are you on?

18 UNIDENTIFIED SPEAKER: This is Chief Fire Marshal
19 CalOES Fire & Rescue. Deputy Director Curry will be on around
20 9:30.

21 NICK SAFFOLD: Great. Thank you for that update.

22 Assistant Chief Dowling, are you on?

23 Looks like we have something in the Chat? Got it.

24 SECRETARY CROWFOOT: Nick, just by way of roll call, I
25 believe that Sergeant Larry Starkey from CHP is here on behalf

1 of CHP, and Chief Dowling is retired, so really the permanent
2 member of the Commission would be Lieutenant Stokes.

3 NICK SAFFOLD: Yes, we'll make a note of that in our
4 roll call for the meeting summary. Okay, great.

5 Supervisor Flores, are you with us?

6 SUPERVISOR FLORES: Yes, I'm here. Can you hear me?

7 NICK SAFFOLD: Yes, thank you.

8 SUPERVISOR FLORES: Great. I am present and I
9 represent the second district of Sutter County. Thank you.

10 NICK SAFFOLD: And then Supervisor Fuhrer, am I
11 pronouncing that correctly?

12 SUPERVISOR FUHRER: Yep, yep, that's your
13 newly-elected Yuba County Supervisor.

14 NICK SAFFOLD: Great. Thank you for joining us.
15 Welcome.

16 Assemblyman Gallagher, are you on? Assemblyman, are
17 you on? All right.

18 Supervisor Kimmelshue, are you on?

19 SUPERVISOR KIMMELSHUE: Yeah, thank you, Nick. This
20 is Tod Kimmelshue. I represent the fourth district of Butte
21 County, newly-elected, thank you.

22 NICK SAFFOLD: You're welcome. Thank you.

23 Deputy Licon, are you on?

24 DEPUTY LICON: I am, sir. Deputy Andre Licon, Sutter
25 County Sheriff's Office.

1 NICK SAFFOLD: Great. Good morning, thank you.
2 Lieutenant Million?

3 LIEUTENANT MILLION: Joe Million. New title.
4 Actually, I recently promoted to Captain, so I'm the
5 Operations Commander for Yuba County Sheriff's Department.

6 NICK SAFFOLD: Perfect, thank you. Welcome.
7 Director Nemeth, are you on?

8 DIRECTOR NEMETH: I am. Good morning. I'm DWR
9 Director Karla Nemeth. As the secretary mentioned, the
10 Oroville Dam and Reservoir is part of the State Water Project.
11 We operate it for water supply, also power generation, but
12 also flood control, and a lot of our flood control activities
13 are done in partnership with local districts in the area. So
14 it's great to be here. Thank you.

15 NICK SAFFOLD: Thank you, Director.
16 Senator Nielsen, are you on?

17 SENATOR NIELSEN: I am indeed, and I very much
18 appreciate this opportunity and all of you. I'm kind of the
19 Daddy of this thing.

20 It dates back, actually, to the eighties,
21 mid-eighties, when I authored something called Senate Bill
22 1086 which created the Sacramento River Conservation Forum,
23 which is still around. And the purpose of that was to get
24 people at state, government and federal levels that would be
25 communicating with each other regularly about the matters

1 related to the Sacramento River and this watershed. And then
2 as we transferred to current, the difficulty we had at the
3 Oroville Dam prompted the need for this particular body that
4 you are all a part of. This is about you and the people that
5 you represent and, of course, the governmental agencies.

6 I want to thank the administration, the past one and
7 the current one, for the active personal participation,
8 particularly Secretary Crowfoot and the Deputy Director
9 Nemeth. They have been very, very, very supportive of this
10 effort, and I am sure that the citizens that you represent or
11 the agencies that you represent are really appreciative of
12 this opportunity. And I am very much appreciative of you
13 participating. So thank you very much.

14 NICK SAFFOLD: Great. Thank you, Senator.

15 Councilmember Pittman?

16 COUNCILMEMBER PITTMAN: Here, present. And I
17 represent the City of Oroville. I'm a third-term
18 Councilmember and retired fire chief and long-term, born and
19 raised, Oroville resident and looking forward to today's
20 presentation.

21 NICK SAFFOLD: Great. Thank you.

22 Mayor Reynolds, are you with us?

23 COUNCILMEMBER PITTMAN: I believe he's in the ill
24 category right now, so he probably won't be here today.

25 NICK SAFFOLD: Superintendent Teague?

1 SUPERINTENDENT TEAGUE: Good morning. Matt Teague,
2 District Superintendent for Northern Butte's District and
3 Parks. (Background noise). I represent Director Armondo
4 Contero (phonetic) on this Commission.

5 We oversee nine counties in Northern California within
6 our district, Lake Oroville being by far the largest in our
7 district and one of the largest in the state, state parks --
8 (background noise)

9 NICK SAFFOLD: Can you please mute yourself if you're
10 not speaking currently?

11 SECRETARY CROWFOOT: Supervisor Kimmelshue, it sounds
12 like you may not be on mute? We'll just ask you to mute
13 yourself as we go through the roll call. Thank you.

14 NICK SAFFOLD: Supervisor Vasquez? Welcome.

15 SUPERVISOR VASQUEZ: It's "Vas-kwez," Americanized
16 mix.

17 NICK SAFFOLD: Apologies.

18 SUPERVISOR VASQUEZ: I represent the District 1 in
19 Yuba County and the Yuba County Water Agency.

20 NICK SAFFOLD: Welcome. Thank you for joining us.

21 Genoa Widener, are you on?

22 GENOA WIDENER: I am. Is my audio working this time?

23 NICK SAFFOLD: Yes, we can hear you.

24 GENOA WIDENER: I'm Genoa Widener, and I was appointed
25 by the supervisors of Butte County. I don't have a title and

1 I'm actually kind of proud that I am the only member of this
2 Commission that is not involved in the government in any way.

3 SECRETARY CROWFOOT: We're hugely thankful, Genoa, for
4 your participation. It's a critical perspective, so thank
5 you.

6 GENOA WIDENER: I'm very appreciative, very
7 appreciative to be a part of this Commission, thank you.

8 NICK SAFFOLD: Let's go back. Assemblyman Gallagher,
9 are you on?

10 WEBINAR HOST: I'm having to re-send the link.

11 ASSEMBLYMAN GALLAGHER: Yes, I am on. I had some
12 problems with the unique link. I am here, but I think it says
13 Joe Zansi (phonetic), but it's actually me.

14 NICK SAFFOLD: James will fix that.

15 WEBINAR HOST: Renaming now.

16 NICK SAFFOLD: Thank you. Supervisor Conant?

17 SUPERVISOR CONNELLY: Connelly?

18 NICK SAFFOLD: Yes, thank you, we'll go to you, then,
19 Supervisor Connelly.

20 SUPERVISOR CONNELLY: Irish name. Happy Patty's day.

21 Anyway, I'm 16-years elected supervisor, District 1.
22 My district encompasses most all the lake. There's a little
23 after bay and so forth out in Supervisor Kimmelshue's
24 district.

25 I grew up here and I have a perspective of the impasse

1 and the dam that are well-rounded with my reading of the
2 history of what was proposed to the community and what was
3 actually done, and I'm a little bit cynical in the sense that
4 I keep coming back to the same people that built the spillway
5 built the entire dam, and we know all the problems are there.

6 And I urge caution in any jump to conclusions as to
7 how safe we are or how long this dam is going to last being
8 operated the way it is. I have very deep concerns about
9 spillway gates. Comments like, You only got one in 500 year
10 chance of an earthquake, so we don't need to worry about that.
11 It might schlep the right side of the dam down facing it.

12 I can't build your house that way. I can't tell you
13 that you can take the risk on of an earthquake in your house
14 and I can't ignore all the holddowns in your house.

15 So I may have a little bit different perspective than
16 some people, but I think it's based on a wide-read, evasive
17 knowledge and a little bit of cynicism.

18 But I am grateful that we're here talking to each
19 other, because I don't think anything will get resolved unless
20 we're really honest with each other and we have our own
21 perspectives. So thank you.

22 NICK SAFFOLD: Thank you for joining us, Supervisor.
23 I think that's it.

24 Secretary, I'm going to turn it over to you. And,
25 James, you can go to the next slide.

1 SECRETARY CROWFOOT: Thanks, Nick. Again, for those
2 of you who are new to the Commission as Commissioners or
3 members of the community or public tuning in, Nick is part of
4 the consulting firm that we use to help organize ourselves and
5 our Commission.

6 And we're really thankful, Nick, to you and your team
7 for helping us move to this virtual format.

8 This is actually the sixth meeting of the Commission,
9 and as Senator Nielsen pointed out, this is a Commission
10 created by law thanks to Senator Nielsen and Assemblyman
11 Gallagher's leadership. And so, within state law, we formed
12 this Commission as an important venue, as Supervisor Connelly
13 pointed out, to show perspectives, to make sure that
14 information coming from the operator of the dam and reservoir,
15 the state agencies, is clear and available to the public but
16 then, also, to understand the perspective of local elected
17 officials, public health, public safety, leaders and members
18 of the community.

19 Obviously, this Commission was developed in the wake
20 of the 2017 spillway incident and the emergency that created.
21 And so, since this Commission has been up and running, we've
22 been focused on creating a venue for, again, that information
23 sharing and candid direct conversations with each other.

24 So I feel encouraged with the work that we've done.
25 It's not ideal to have to meet in this virtual way. I think

1 we all can relate to that if we work for government. I think
2 we're all getting pretty weary of these Zoom meetings. But,
3 that being said, there's certainly a light at the end of the
4 tunnel as it relates to the pandemic and vaccines. So I'm
5 hoping later in the year we're going to be together at these
6 Commission meetings actually up in the Oroville community.

7 We have a two-hour meeting today, and we'll aim to
8 conclude around 11:00 a.m., to respect everybody's time and
9 busy schedules.

10 We agendized different topics for different meetings
11 so that we can go deep on certain topics in each discussion.
12 So in just a little bit we'll talk about the agenda.

13 And, Nick, I want to make sure that we highlight our
14 preview agendas or topics for future meetings, including, I
15 think in May, a deeper dive specifically on dam safety.

16 First of all, let me welcome the three new supervisors
17 we have on this Commission, Supervisor Kimmelshue from Butte
18 County, Supervisor Fuhrer and Supervisor Vasquez from Yuba
19 County. Really excited to have you on the Commission.

20 If you want an orientation or an on-boarding to the
21 work of the Commission or any information on past meetings,
22 you should just reach out to my office and the agency or
23 Department of Water Resources or Nick. I want to make sure
24 you are well-equipped to serve on the Commission.

25 Big thanks in absentia to three supervisors who have

1 cycled off, Butte County Supervisor Steve Lambert, Yuba County
2 Supervisor Gary Bradford and Yuba County Supervisor Doug
3 Lofton.

4 This Commission works best when we actually have
5 active involvement from everybody that fills the role that was
6 envisioned by the law that created the Commission. So active
7 engagement from the County supervisors is critical.

8 Today our agenda is going to tackle a few topics.
9 We'll first have a brief overview on what we're calling the
10 Commission Action Items Tracker.

11 So one point of feedback in an earlier meeting is, you
12 know, we talked about some helpful topics at this Commission,
13 but how are we ensuring accountability that we're actually
14 following up on questions or following up on to-dos. We
15 really want to make this a more action-oriented Commission
16 than some others.

17 So Nick and his team have helped us develop this
18 tracker to understand what action items have been raised in
19 the Commission and how we're following up. And then we'll
20 have that overview and roadmap of future meeting topics and
21 then a refresher on our Commission reporting obligations as a
22 public body.

23 We'll next receive an update from DWR on the Fire
24 Modernization Program. You all know that the North County
25 complex actually burned down to the lake this past summer with

1 major damage, and so, there's obviously a focus on
2 understanding how we protect Oroville given the growing
3 wildfire challenges.

4 Then we'll have an update on Winter Operations,
5 important in terms of understanding how the reservoir is being
6 operated and what the hydrology looks like and how it impacts
7 everything, including operations and safety.

8 And then, most of the discussion today will be
9 dedicated to receiving a presentation from the Yuba County
10 Water Agency, specifically John James, on the flood safety
11 partnership that exists that Yuba County is helping to lead.

12 And then, of course, as always, and maybe, you know,
13 as important or more important than anything else, we'll have
14 a public comment period when members of the community or those
15 watching can tune in.

16 Again, if you're joining by phone, you're going to be
17 able to provide public comment. And if you're joining by
18 computer, you'll also be able to provide public comment. And
19 our tech team will share exactly how to do that right before
20 we get into public comment.

21 Just before we jump into the agenda, I want to provide
22 a quick update on news related to FEMA funding for the recent
23 work at Oroville.

24 If you recall, a lot of the dam safety work and the
25 spillway reconstruction has been quite expensive, and so, the

1 state has made the case to FEMA under the Federal Stafford
2 (phonetic) Act for federal cost share for those improvements.

3 Obviously, the state water contractors that benefit
4 from the project are paying for a lot of that. But also under
5 FEMA and federal law, there's an ability to seek that cost
6 share.

7 So good news, we received notification recently that
8 FEMA released an additional \$308 million in requested funds
9 for the spillway reconstruction and emergency response. That
10 over 300 million was in addition to another 260 million that
11 FEMA had already committed to repairs for the lower portion of
12 the main spillway and other work conducted in response to that
13 emergency.

14 FEMA also informed our state and specifically
15 Department of Water Resources and Cal OES, essentially our
16 state FEMA, the Office of Emergency Services, that its initial
17 determination is that the work on Oroville Dam's emergency
18 spillway is not eligible for funding under FEMA's hazard
19 mitigation grant program. Our state agencies are working to
20 develop an appeal to this determination.

21 So, suffice it to say, we're making sure that we, at
22 California, given our contribution into the tax base of our
23 federal government, can fully avail ourselves of the
24 reimbursement program to emergencies and specifically to the
25 spillway emergency. So that work is ongoing, but good

1 progress as it relates to a federal reimbursement.

2 As always, before we jump into items, I lastly would
3 like to ask either Senator Nielsen or Assemblymember Gallagher
4 if they have any updates or thoughts they want to share in
5 order to frame up our discussion here today.

6 So, Senator or Assemblymember, if you have any
7 thoughts, please feel free to share them. Maybe we'll just --
8 I see Assemblyman Gallagher, so let's first go to Assemblyman
9 Gallagher and then Senator Nielsen.

10 ASSEMBLYMAN GALLAGHER: I have nothing here at the
11 outset. Definitely looking forward to the presentations today
12 and definitely have some questions on a few of those items.

13 But, again, just glad to have everybody back here.
14 This is an important body, important work that we're doing
15 here. And, again, just appreciate everybody's time, and we'll
16 be talking more as we get further into the presentation.

17 SECRETARY CROWFOOT: Thank you so much. Senator
18 Nielsen?

19 SENATOR NIELSEN: I just want to add to my former
20 introductory remarks again how much I appreciate all of your
21 involvement. Again, it is about you and the folks that you
22 represent or the agencies that you represent. And, again, I
23 so much appreciate the administration's very in-depth
24 involvement under Secretary Crowfoot and Director Nemeth. All
25 on board, moving ahead.

1 SECRETARY CROWFOOT: Thanks so much. So let's dive
2 into our presentation.

3 I'm going to turn it back over to Nick from Kearns &
4 West to move us into the first discussion.

5 NICK SAFFOLD: Great. Thank you, Secretary.
6 James, can we go to the next slide.

7 So before we dive in, I just wanted to raise one
8 housekeeping item. We need a volunteer from the Commission to
9 review and approve public meeting summaries, so the summary
10 that would come out after this meeting. Currently,
11 Commissioner Flores also reviews these summaries, but this is
12 an opportunity to ensure the summaries are accurate and that
13 they reflect the meeting and capture the key takeaways.

14 Is anyone willing to volunteer for that on the
15 Commission?

16 SECRETARY CROWFOOT: Nick, also, better yet, if you're
17 a public official, you can volunteer your staff -- that's
18 probably tuning in to the Commission -- to do most of the
19 work.

20 SUPERVISOR FLORES: This is Supervisor Flores. I
21 would recommend Seth Fuhrer, Supervisor Fuhrer, if you would
22 be able to take Supervisor Bradford's place, that would be
23 really helpful.

24 SUPERVISOR FUHRER: Thank you, Supervisor Flores, I
25 really appreciate you involving --

1 SUPERVISOR VASQUEZ: A Davis graduate; thank you very
2 much.

3 SUPERVISOR FLORES: That's right. You've got some
4 good skills, Supervisor Fuhrer. We could use them, your help
5 on that.

6 SUPERVISOR FUHRER: Thank you so much. I will look
7 forward to finding the appropriate niches for you in the
8 future.

9 (Laughter/background chatter)

10 SUPERVISOR FLORES: Yeah, probably will be, but, you
11 know, I enjoy working with you, too, so that's great.

12 SECRETARY CROWFOOT: Thanks to both of you. Again, we
13 don't mean to put work on you, we just want to make sure the
14 minutes that our state staff is putting together are accurate
15 from the perspective of the Commissioner, so it's just a check
16 to make sure that we're accurately capturing the meeting.

17 SUPERVISOR VASQUEZ: Nothing better than a Davis
18 graduate.

19 NICK SAFFOLD: All right. Well, thank you, Guys.
20 Let's go to the next slide, James.

21 So I'm now going to briefly provide a few updates with
22 the goal of helping keep the Commission even better organized
23 and on-track.

24 So this is our Action Item Tracker which is intended
25 to help provide greater transparency and ensure the Commission

1 is getting regular updates on projects, maintenance and other
2 issues that have come up at previous meetings. Like the
3 Secretary said, this is an ask that came out of, I think, our
4 last meeting in November.

5 This tracking tool will be made available on the
6 Citizens Advisory webpage. It's going to be a living document
7 and we're going to update it quarterly.

8 Just as a reminder, the full transcripts from each
9 meeting and the meeting summary notes are both posted online.

10 So now I'm going to quickly walk through each of these
11 items. As I go through the tracker, I'm going to be
12 referencing some upcoming quarterly public meetings for the
13 Commission in 2021, and I'll explain that in greater detail
14 after we get through these next two slides. So I'm just going
15 to jump in and move through these pretty quickly.

16 Number 1 is the Tour of Joint Operations Center
17 (State-Federal Flood Operations Center in Sacramento). You
18 can see that item on the left-hand column. The Meeting
19 column, I'm not really going to get into, but this is kind of
20 generally when the item came up at the previous meeting. So
21 on this item, we're still planning to do this, but just
22 because of COVID-19 this is currently on hold.

23 Item Number 2, so this is a report-out on how
24 instrumentation performed and was managed during the Winter
25 Operations. So this item is actually on track, and DWR will

1 be giving a presentation on this and including it in their
2 update at the Q2 Commission meeting on safety in May.

3 On Item No. 3, Invite State Water Contractors to
4 future meetings. So this item is also on track. State Water
5 Contractors will be invited to the Commission's Q3 meeting.

6 And then moving down to Item No. 4, Schedule regular
7 updates from DWR on Forecast-Informed Reservoir Operations as
8 well as Oroville and New Bullards Bar Water Control Manual
9 process. This item is on track. We're planning on an update
10 on this at the Commission's Q4 meeting later this year.

11 And then, Item No. 5, coordinate with U.S. Army Corps
12 of Engineers about point of contact for Feather River project
13 updates. This item is completed and then we're just doing
14 general ongoing coordination with U.S. Army Corps.

15 James, we can go to the next slide.

16 Item No. 6, Follow-up on the status of the Federal
17 Energy Regulatory Commission relicensing. This item is
18 ongoing and we anticipate an update for the Commission in kind
19 of early 2022.

20 Item 7, Follow-up on the status of Federal Emergency
21 Management Agency reimbursement, so the FEMA reimbursement.
22 This is an ongoing item. Obviously, the Secretary just
23 provided the latest update there.

24 Item 8, Discussion to help state agencies and local
25 partners address homelessness concern around Feather River.

1 We're holding on this item for now, but it's certainly an item
2 for future Commission consideration and discussion.

3 On Item No. 9, Cal OES to follow up with CalTrans on
4 the status of their post-fire mitigation along County
5 highways. So we know that CalOES has followed up with
6 CalTrans. We got a status update from CalTrans that the
7 post-fire mitigation work is expected to be completed by
8 April 1st. So we'll keep you posted there.

9 Item No. 10, DWR update on debris and storm inflows.
10 DWR is continuing to monitor this and they'll notify the
11 Commission as needed.

12 And then, Item 11, DWR follow-up regarding the Hyatt
13 Power Plant. This item is on track and there will be an
14 update on this at the Commission's Q2 meeting on safety.

15 So if there are any kind of action items that the
16 Commissioners think now or -- you know, we can do this
17 offline, too. Please feel free to reach out if you think
18 we've missed something from previous meetings or you think
19 something needs to be included in the tracker. Like I said,
20 we'll keep this updated.

21 So, James, could you go to the next slide.

22 So I was obviously talking about the Q2, Q3 and Q4
23 meetings. So we just kind of developed a roadmap for 2021
24 Commission meeting topics so that the Commission and the
25 public kind of have a greater insight essentially into

1 upcoming topics that will be covered. These topics aren't
2 really set in stone, but -- and they're kind of subject to
3 change based on the feedback from the Commission. But this is
4 just intended to be a helpful guide and provide some structure
5 for future meetings so that people can prepare and plan.

6 As you can see, each meeting has kind of key
7 presentation topics outlined on the left-hand side, while the
8 status on right-hand side are just kind of intended to be
9 brief five-to-fifteen minute updates for the Commission.

10 So, as you can see, the May 28th meeting will be on
11 Safety, the August 27th meeting will be on Infrastructure, and
12 the December 3rd meeting will be on Operations.

13 So at the May 28th meeting on Safety, the Commission
14 would essentially get a presentation from DWR on the State
15 Water Project's Dam Safety Program for the Oroville facilities
16 as well as discussion of activities occurring within that
17 program. The Commission will also invite a local Flood
18 Management Agency to present on their role in providing
19 downstream public safety.

20 And then moving to the August 27th meeting on
21 Infrastructure, DWR will present on how the State Water
22 Projects Asset Management Program is used to help prioritize
23 work activities. DWR will also present on major activities
24 that are planned at the Oroville facilities for the upcoming
25 year and the Commission will invite one of the Public Water

1 Agencies that contracts with the State Water Project for water
2 supply to kind of discuss their role in providing water to
3 California residents and farmland.

4 At the December 3rd meeting on Operations, DWR will
5 provide a comprehensive look at the planned operations for the
6 Oroville office for the upcoming winter. DWR will provide the
7 Commission with an update on FIRO and the Water Control Manual
8 Updates for both Oroville and New Bullards Bar.

9 And then the Commission will invite the U.S. Army
10 Corps of Engineers to provide their perspective on their Water
11 Control Manual Update process. If you'll recall, we've
12 previously had Joe Flores (phonetic) at U.S. Army Corps join
13 us.

14 James, if you can go to the next slide, please.
15 Great.

16 So the next topic I want to briefly touch on is the
17 Commission Report. As you may already be aware, under Senate
18 Bill 955, Senator Nielsen's bill, the Commission is
19 legislatively mandated to publish a report every three years.
20 This means we'll be driving towards a first report from the
21 Commission sometime before the end of 2022 following the
22 conclusion of about three years' worth of Commission Meetings.

23 So we'll be discussing this at length during future
24 Commission Meetings to kind of get organized, organize the
25 structure and solicit input from the Commissioners. But

1 today, I just want to put this on everyone's radar for
2 everyone to kind of just start thinking about within the
3 context of the bill and what they may want to include in this
4 report.

5 So as you can see here in the slide, we're just
6 outlining kind of what's in the bill. SB 955 states the
7 Commission will publish a report once every three years, and
8 it essentially provides these four bullets: An overview of
9 ongoing maintenance and improvements, a register of
10 communications received from the State, a notice of upcoming
11 plans made by the State Agencies for the Dam and Dam Complex,
12 and an overview of flood management projects on the Feather
13 River affecting public safety and flood risk.

14 So like I said, again, we'll have future conversations
15 to discuss various elements of this such as the report scope,
16 kind of establishing a schedule and a cadence for drafting the
17 report and whether or not to create kind of a subcommittee to
18 help drive this forward.

19 So if there are questions, happy to answer them. But
20 I think that's it for me on this section.

21 Secretary, I can turn it back over to you.

22 SECRETARY CROWFOOT: Thanks, Nick. I want to provide
23 Commissioners an opportunity to ask any questions or provide
24 input.

25 I have one, which is, James, if you can toggle back to

1 that schedule for the upcoming meetings. So for the next
2 meeting on May 28th, I want to make sure that we provide some
3 space for those that are not part of the state agencies that
4 have had input on safety to be able to share their
5 perspective. I know I've been contacted a couple times over
6 the last few months around folks that want to make sure they
7 have got a perspective on the comprehensive needs analysis and
8 operation related to safety.

9 So let's figure out a way to make sure we have time to
10 build in an opportunity for everybody to share a perspective
11 not just the State And Federal agencies.

12 NICK SAFFOLD: Yeah, absolutely. We'll work that into
13 the agenda for the May 28th.

14 ASSEMBLYMAN GALLAGHER: Can I make a suggestion,
15 Secretary? I was thinking the same thing, so I appreciate
16 that.

17 SECRETARY CROWFOOT: That's great, we'll do that.

18 SUPERVISOR CONNELLY: Supervisor Connelly. Thank you
19 for that. It's a blessing to see the forecast-based
20 operations coming forward. I think that's something the
21 community really looks forward to. I want to give you a
22 compliment on working on that. Thank you. And the
23 coordination with the other facilities is so important. Thank
24 you.

25 SECRETARY CROWFOOT: Thank you, Supervisor.

1 Other question and points of clarification input?

2 SUPERVISOR KIMMELSHUE: Yeah, real quick, this is Tod
3 Kimmelshue, Supervisor Butte County.

4 Has the first three-year report been done or is that
5 still on the table?

6 SECRETARY CROWFOOT: Still on the table.

7 We started our Commission meetings last year, and so,
8 Nick, I think the goal is to have the report done next year in
9 2022 that will then report on those sort of the first three
10 years of the Commission. Is that right, Nick?

11 NICK SAFFOLD: That's exactly right, Secretary.

12 SECRETARY CROWFOOT: All right, Nick, let's move on to
13 the next presentation. Bear with us.

14 NICK SAFFOLD: Dave, are you on? Dave Duval?

15 DAVE DUVAL: Good morning, yes.

16 SECRETARY CROWFOOT: Dave comes from the Department of
17 Water Resources, of course, the State Agency, and you are
18 going to talk to us about what is the Fire Modernization
19 Program and why is it -- how is it relevant to this group.

20 DAVE DUVAL: Thank you, Secretary. Thank you very
21 much. Good morning, Secretary and Commissioners.

22 My name is David Duval. I'm with the Department of
23 Water Resources, I'm the Chief of the Division of Operation
24 and Maintenance for the State Water Project. And wanted to
25 thank you for letting me share our State Water Project Fire

1 Modernization.

2 So, as in 2012, we had a fire that -- where we lost
3 the Thermalito Power Plant in the Oroville Field Division. As
4 a result of that, we hired the expert consultants and also
5 worked with the State Fire Marshal and systemically went
6 through the State Water Project, every plant and facility, did
7 inspections and evaluated the current status of all of our
8 fire systems and came up with a program to go statewide. And
9 so today I would like to present a little bit of that to you.
10 So, please, next line.

11 So the goals of the State Water Project Fire
12 Modernization were Life Safety, Property Protection, Business
13 Interruption and Environmental Impact.

14 As it relates to Life Safety, we want to establish
15 Life Safety as the most important part of the Fire and Life
16 Safety goals and it involves protecting people that worked in
17 and around our facilities and first responders.

18 Property Protection focusing on containing any fires
19 and minimizing its spread within our facilities and/or spread
20 outside of the facilities.

21 Another goal was Business Interruption, which is the
22 period of time necessary to restore DWR's capacity to move
23 water through its facility and/or do the functions of that
24 facility. In case of an Oroville Dam safety is critical,
25 also. So what we wanted to ensure that we did not jeopardize

1 safety of the public and/or because of any dam safety as a
2 result of fires. And then, as it relates to the rest of State
3 Water Project and/or other facilities is, you know, can we
4 restore 25 percent of the facility within 30 days, 50 days or
5 100 percent.

6 And Environmental Impact was a critical goal, also.
7 So included in the design parameters and in evaluation of risk
8 was to minimize impact or contain any runoff caused by any of
9 our fire suppression systems and minimizing any damages to the
10 environment.

11 Next slide, please.

12 So what we did is we took the experts that we had
13 hired plus with the State Fire Marshal, who assisted us and
14 went through and evaluated risk, did a risk assessment. So we
15 did a numerical scoring to identify risk to the different
16 areas, Life Safety, Property, Environment for each of the
17 facilities. And then, as anyone that has done risk
18 assessments, the higher the number, the greater the risk, and
19 the risk was just -- with the probability of something
20 happening and some of the consequences if it did happen.

21 And then, we also did Business Interruption and scores
22 independently to evaluate what a fire would do in a particular
23 area facility. We totaled those all up and the sum of it was
24 our Risk Score.

25 Next slide, please. So we did that statewide for all

1 the State Water Project and then we prioritized based on the
2 risk that we evaluated. And as it says on the screen, Edward
3 Hyatt Powerplant, which is the powerplant down in Oroville
4 Dam, in the bottom of the dam, was the number one priority in
5 the state for us for fire and life safety. It's critical --
6 Hyatt Powerplant is critical for dam safety. It's how we move
7 water through in non-flood events and how we control the lake
8 throughout year, and so it rose to the top.

9 It also included the area control center right at the
10 base of the dam next to Hyatt Powerplant. When we looked at
11 each of the type of risks, it was number one in the state for
12 Life Safety, number one in the state for Property Protection
13 and number one in the state for Business Interruption.

14 So that was the first facility we did. We have
15 completed the modernization there. It was a little under
16 \$40 million in upgrades for that.

17 Thermalito Powerplant, the one that we lost. While we
18 were restoring Thermalito Powerplant, we went ahead and did
19 all the modernization and completed that. That was
20 approximately about \$16 million in fire and life safety
21 upgrades and it has been completed.

22 By the way, last -- third quarter last year,
23 Thermalito Powerplant is back fully functionally and
24 commercially operating, has been restored.

25 Within Oroville Field Division, the other facilities

1 that we already -- that we finished, also, Thermalito
2 Diversion Dam Powerplant, our Operations & Maintenance Center,
3 and then all of our flood control facilities, the Spillway
4 Control Structure, Diversion Dam Control Structure, Feather
5 River Outlet Control Structure, also. Those were about
6 \$5 million in upgrades.

7 Next slide, please. Some of the things that were
8 upgraded, so we upgraded the Early Detection and Alarm
9 Systems. So we put in all our facilities heat, smoke,
10 infrared and air sampling sensors to modern standards. Fully
11 integrated all the alarm systems and speakers and strobes.
12 And those alarm systems are within the plant but also given --
13 sent to our control centers, and so that we can -- no matter
14 where we're at, we know instantly if we have an alarm and
15 detected indoor system that's been set off.

16 The Fire Suppression System -- let's go to the next
17 line and we'll talk a little bit more about what types of
18 systems. So what we put in for any areas that we have high --
19 let me back up.

20 For high-voltage systems like our transformers, our
21 generators, the best systems for that are CO2 or carbon
22 dioxide systems, and so we maintain those. Anywhere where we
23 have staff or ability -- have people that patrol around, we
24 need a different system, so we put in high-pressure water mist
25 systems to protect areas that staff are in like our oil

1 processing centers within the plants.

2 We also, in critical areas that we would have staffing
3 involved, we put in inert gas suppression systems, and those
4 are areas like our air control centers and our spillway
5 control rooms where we have computers and different types of
6 systems that's important to have suppression, but we also have
7 staff in that.

8 At Hyatt Power Plant, what we determined was we needed
9 to put in throughout the power plant water systems to protect
10 from zero loss or so that there's no interruption to the Hyatt
11 Powerplant. So we have the inert gas systems as well as the
12 CO2 systems as well as the mist systems and all the
13 modernization to the detection.

14 Next slide, please. This slide I just wanted to throw
15 out and show. Within the power plant, one of the critical
16 things for both staff protection as well as first responders
17 was we needed to upgrade the buildings to modern standards for
18 eight-hour egress. So this -- so that fire protection for
19 eight hours so staff can get out and move through around the
20 plant in case there's a fire and/or the protecting of the
21 first responders. So that was a big key to our modernization.

22 Any questions?

23 SENATOR NIELSEN: Senator Nielsen. Allow me a
24 reflection here in context again.

25 One of the things that has been significant here is,

1 in fact, the inclusion and the concerns about fire safety in
2 matters related to the dam. The average person would not
3 think that that would be a problem. Well, it immediately
4 became a problem. It became a problem because of decades of
5 neglect of managing our forest and wildlands and those
6 encroachments on even urban communities now. And, of course,
7 our Oroville Dam came to be visited by fires.

8 The leadership here has been anticipating those
9 eventualities and the wisdom is already affirmed by the
10 numbers of fires that we continue to have.

11 The summary point, though, this area is also being
12 attended to. For decades, Forest and Wildland Management was
13 not a part of our plans. In California, those plans were just
14 to be locked up, left alone and, if you will, forgotten. Now
15 we're paying the price for these cataclysmic fires.

16 However, over the last few years, the agencies and the
17 governors and the legislature have been putting money into the
18 budget for the resource management of the forest and the
19 wildlands. That does not only help where the fires go, but it
20 helps preserve other things that certainly directly relate to
21 the Oroville Dam. That is, for example, erosion and runoff.

22 And so, I'm very comforted to know that the State is
23 paying attention to this area as well, the significant area
24 that does affect the Oroville Dam and everybody else. Thank
25 you.

1 SECRETARY CROWFOOT: Thanks, Senator.

2 I would just underscore that, you know, there's been
3 really strong bipartisan leadership in the legislature and
4 with the governor on making these investments and, as you say,
5 not only responding to the fires, but, you know, reducing the
6 threat of these catastrophic fires.

7 Good example of the reservoir is the work that was
8 done around Morford Creek Campground in the last few years to
9 essentially get in there and manage some of those fuels and
10 vegetation and do prescribed fire. And there's at least some
11 anecdotal information that that slowed down the North Complex
12 Fire as it was bearing down on that part of the reservoir
13 toward Lake Bidwell Marina and that part of Oroville.

14 So, you know, we haven't done enough historically.
15 It's a work in progress. But I appreciate you bringing that
16 out, because there will be a lot of investments in forest
17 management around the reservoir and around the communities
18 nearby the reservoir that I think are going to improve fire
19 safety.

20 DAVE DUVAL: Secretary, thank you for bringing that
21 up. I was remiss in bringing that up.

22 The Oroville Field Division has an active -- each year
23 works with the CCC and Cal Fire and stuff to go through the
24 facilities and the lands and state lands around Oroville -- as
25 you pointed out, at the recreation facility, but also around

1 the dam and our facilities -- to reduce vegetation and brush.
2 So that's an active program that we do each year. And I'm
3 remiss for not bringing that up. I thank you for bringing
4 that up.

5 SENATOR NIELSEN: Let me add to that as well. A
6 couple of years ago, we were able to achieve the budget money
7 for the opening of a CCC Camp in Butte County. Now inmates'
8 labor for our fires is not much available or reliable and
9 therefore we needed to have some substitution, and the CCC
10 Camp is helpful in that regard in Butte County.

11 SECRETARY CROWFOOT: Thanks so much, Senator. I see
12 hands from Director Nemeth and Councilmember Pittman. Why
13 don't we go to Director Nemeth and Councilmember Pittman.

14 DIRECTOR NEMETH: Thank you, Secretary.

15 I wanted to add specifically as we're thinking about
16 ensuring that the powerplant at Oroville is safe and operable,
17 it has taken on a new dimension because of its role and
18 reliability of the overall energy grid.

19 So that is, you know -- again, as we turn and face the
20 future, I think we're all starting to really understand the
21 inter-connected nature of all of these facilities. And when
22 we think about public safety and we think about the role of
23 Oroville in public safety from flood, we are also starting to,
24 you know, plan for Oroville and its power generation as also
25 having a public safety component. Because we know in the

1 state experience, you know, overload, rolling blackouts. That
2 lack of energy reliability also has a public safety dimension
3 and I think that's important to the community around Oroville
4 as well.

5 SECRETARY CROWFOOT: Really good point. Thank you for
6 bringing that up.

7 Councilmember Pittman?

8 COUNCILMEMBER PITTMAN: Thank you very much. I
9 appreciate the presentation and the upgrades and the
10 technology of the fire protection systems. Certainly, we're
11 the effort to do.

12 As a first responder, though, I have two questions
13 that I would like to ask.

14 One is the difficulty that we've always had going to
15 that facility, as it's underground, and the communication link
16 between first responders, DWR staff pretty much goes away when
17 you go underground. So have you put any new systems in place
18 to operate either the radio, cell phones or whatever in terms
19 of communication inside when you go underground? Because
20 that's a very difficult thing and it's a large facility, and
21 you all know, I've been there many, many times.

22 The other question I'll ask real quick here is, have
23 you put an address to the powerplant? And the reason I ask
24 that question is a real specific issue. Because the day of
25 the injury in the valve room, I happened to be walking on top

1 of the dam and the ambulance responded to the Oroville Dam,
2 and I stopped them and I said, "What are you guys doing here?"
3 He said, "Well, we're supposed to be at the powerplant." They
4 didn't have an address to respond to and they had no knowledge
5 of where the powerplant was. So I'm on top of the dam giving
6 them directions on how to get down there.

7 So we are kind of an address-specific world nowadays,
8 and I know you put an address to the top of the dam, but it
9 might be necessary to put an address to the actual powerplant
10 so that other responders like ambulance companies and others
11 can locate and go to the right location.

12 SECRETARY CROWFOOT: Great questions from a former
13 Fire Chief. Dave, do you want to answer those?

14 DAVE DUVAL: Yes, sir.

15 So, yes, we work closely with Cal Fire. And I'm not
16 sure of the exact system that was put in Hyatt, but the fire
17 -- Cal Fire and the State Fire Marshal looks at all of our
18 plans and approved it, and one of the systems was the
19 communication system so that they can talk to their first
20 responders that are down in Hyatt. So I forget the system. I
21 don't know if it's radio-based or phone-based, but it's what
22 currently the State Fire Marshal requires.

23 The other part to what you're saying is we work with
24 each of our field divisions, and in Oroville specifically, we
25 bring on Cal Fire, we bring them into the facilities and show

1 them the facilities and even sometimes stage different
2 practices going into the powerplants. They are very unique.

3 Cal Fire is very concerned about putting their staff
4 in there, so they want to be familiar, they want to go through
5 it. So we do that yearly and have different exercises. And,
6 also, it helps with responding. Currently it is GPS.

7 I think the address, that is a good suggestion to look
8 at. They do have it -- we have within -- when we call in, we
9 have a GPS coordinates that we give them to come, and then we
10 stage our staff out at the roads to help them bring them in
11 because it doesn't currently have an address. That is a good
12 suggestion. Thank you.

13 SECRETARY CROWFOOT: Dave, thanks so much. It's
14 obviously important not only Cal Fire has a really good
15 understanding of that facility and how to access it, but local
16 first responders as well.

17 So, Nick, can we add to the Commission Tracker just
18 response on both of those points? Just a little bit more
19 detail on the communication equipment to the extent we can
20 provide that publicly. And, then, also just to follow up on
21 the good suggestion, maybe the belt-and-suspenders approach of
22 getting an address as well.

23 Excellent. Then, let's move on.

24 Supervisor Vasquez just points out that there's good
25 amount of forest restoration projects that are being funded by

1 -- I think by Yuba Water Agency among others. So there's a
2 lot of good vegetation management, wildfire resilience work
3 happening. I could spend a lot of time talking about this,
4 but part of this is developing kind of regional priorities in
5 coordination with counties and resource conservation
6 districts.

7 So I anticipate that if the Governor's proposed budget
8 is supported in part or full by the legislature this season
9 there will be more funding for the wildfire safety around the
10 reservoir.

11 If we can, I don't see any other hands. So let's move
12 to John Leahigh, who has joined us several times in the past
13 for Winter Operations.

14 John, if you're talking, you are on mute.

15 JOHN LEAHIGH: Good morning, Secretary Crowfoot.
16 Again, my name is John Leahigh. I'm Lead Water Operations
17 Manager for the State Water Project. I'll be providing just a
18 short update on hydrology and Lake Oroville operations.

19 Next slide, please.

20 So to understand the current operations, we need some
21 background on current hydrology. So here's a reminder of what
22 we experienced last Water Year 2020. Precipitation in
23 Northern California was about 50 to 70 percent of normal in
24 most areas of Northern California. It was the tenth driest
25 year on record.

1 Next slide, please.

2 Unfortunately, now we're two-thirds of the way through
3 Water Year 2021, and we're not doing any better. For the
4 first four months of this Water Year, October through January,
5 was the eighth driest start to a Water Year. The
6 precipitation today and over the past week has not
7 significantly changed that pattern.

8 Next slide, please.

9 So here's another look at the cumulative precipitation
10 in the context of recent years. This is bracketed by the
11 wettest year on record 2017, you can see there in green; the
12 second driest year on record, which is 1977, there in black at
13 the bottom of the graph year. The shaded cyan color in the
14 background, that's the average accumulated pattern over the
15 historical record.

16 So you can see for this Water Year depicted in the
17 bold blue color on the graph, we are currently running near
18 the cumulative total for last year, which is in pink, and the
19 only -- and only slightly better than 2014, which is in red on
20 the graph. We have added a little over an inch since this
21 chart was put together, so we're just approaching about
22 18 inches for the year.

23 Next slide, please.

24 So here's where we stand with the snowpack. Again,
25 depicted with recent years, bracketed with the largest

1 snowpack year, which was 1983 in red, and the lowest snowpack
2 years of 2014 and then 2015, where we had almost nonexistent
3 snowpack by the time we got to April 1st.

4 You can see that we are running slightly better than
5 last year's total, but significantly better than those recent
6 drought years in terms of snowpack. Similar content is doing
7 -- the recent storms that we did get this year were colder
8 than average, so although precipitation to date has been
9 running about 50 percent of average, the snowpack is closer to
10 70 percent of average. But what that has also meant is the
11 direct runoff and inflow into the lake has been extremely low,
12 which has been running closer to 30 percent of average in
13 terms of Lake Oroville inflow.

14 Next slide, please.

15 So all this translates to very low Oroville storages
16 for this time of year. We're a little over a third of the
17 capacity of the lake and 54 percent of historical average.
18 We're now running below both 2014 and 2015 in terms of surface
19 storage for Lake Oroville for this time of year, but we do
20 have -- as I noted in the previous slides, we do have a higher
21 percentage of our storage is in the snowpack than we had in
22 those other two devastatingly dry years.

23 Next slide, please.

24 So the operations this winter are driven by the need
25 to conserve as much water as possible to support beneficial

1 uses later in the spring and the summer.

2 Flood operations will not come into play this year at
3 all. As you can see from this graph, that we have almost two-
4 million acre feet for 150 vertical feet of vacant space in the
5 lake below the flood pool requirements.

6 So the challenge this year is certainly not too much
7 water is not enough in terms of the water management picture.

8 Next slide, please.

9 And, unfortunately, our best indicators are for
10 longer-term, drier-than-normal conditions are being forecasted
11 for the remaining third of the rainy season, which remains.

12 Next slide.

13 I believe that's the last slide. So I'm hoping to
14 have questions, if we have time for that?

15 SECRETARY CROWFOOT: John, thanks so much. As I said
16 before, if anybody wants to ask a question, please feel free
17 to raise your hand. Commissioners, using the raised hand
18 button or simply unmute and ask a question.

19 John, so pretty sobering report as it relates to, you
20 know, dry conditions. Second, you know, straight year of dry
21 conditions.

22 You know, we talk about multiple years developing
23 drought-like conditions, and that's -- obviously our agencies
24 are preparing for the possibility of an extended drought, as
25 we should.

1 But you said that one point of cautious optimism is,
2 despite Oroville Reservoir looking so low, we're going to see
3 more runoff than those, you know, recent drought years given
4 the snow -- right? -- as it melts. But your point is, it will
5 still be well below normal?

6 JOHN LEAHIGH: Yes, that's right. So it's relative,
7 you know, with respect to the snowpack. It's certainly
8 significantly better than what we had in 14/15, but even that
9 is below average snowpack. So we're close to 70 percent of
10 average on snowpack versus, you know, the extreme low snowpack
11 that we had those two years. So even though -- yeah.

12 SECRETARY CROWFOOT: I would say this, for just the
13 Commissioners. You know, much of our focus on this Commission
14 is obviously focused on Dam safety and the impacts both
15 positive and negative of the operations on local communities.
16 But this presentation sort of the makes the point that the
17 Oroville Reservoir, again, is the largest reservoir in the
18 State Water Project, and so, you know, obviously, flood safety
19 job number one, but water supply critical.

20 John, what does this mean for -- this report you just
21 gave us as it relates to the water that the State Water
22 Project is delivering to upwards of 27 million Californians
23 and different agriculture producers?

24 JOHN LEAHIGH: Yes, so because of the conditions both
25 last year and rolling into this year, yeah, we went out with

1 our initial allocation to our State Water Project contractors
2 for this year. That announcement went out September 1st,
3 which is 10 percent of their requested demands is all we can
4 meet this year.

5 And because of the continued dry conditions since
6 December, that allocation number has not changed. So we're
7 still at 10 percent. Regardless of weather conditions from
8 hereon out, it will remain a low allocation for those folks.

9 And, yeah, the other thing we know is that Lake
10 Oroville storages by the end of this year will -- it's highly
11 likely they will be lower than they were last fall coming into
12 this year.

13 So, looking ahead to 2022, just, we will be not even
14 as well-positioned coming into this year as we were -- you
15 know, going into 2022, we will not be as well-positioned as
16 coming into this year.

17 SECRETARY CROWFOOT: Thank you for that. Dr. Nemeth?

18 DIRECTOR NEMETH: Online is we need some precept.

19 But, John, can you also talk about the status of water
20 supplies to the rice growers is in the Feather Watershed that
21 are part of this community? Where are we with their supplies?

22 JOHN LEAHIGH: Yes, thanks, Karla.

23 So in addition to the allocation for the State Water
24 Project Water Supply contracts, you know, we have the
25 settlement contracts to the local rice growers, and we put out

1 our estimate based on the Bulletin 120 based on the snow
2 survey February 1st. And the criteria for a potential
3 shortage for the settlement contractors, we're right on the
4 threshold there.

5 So those estimates are going to be updated next month
6 based on the March 1st snow survey, and then the final
7 determination would be based on the April 1st snow survey in
8 terms of whether or not the shortage criteria would be met in
9 those settlement contracts.

10 DIRECTOR NEMETH: That means, John, that right now
11 those contractors would get 100 percent of their contracted
12 amount sort of irrespective of, you know, where we are with
13 conditions.

14 But what you're saying is that we're right on the
15 bubble, we're going to update the hydrology, and it is
16 possible that, per their contract, they would get a reduced
17 volume, but that volume still is -- it's a lot more robust per
18 terms of the contract, area of origin water rights, versus how
19 we're supplying water supplies to the rest of California?

20 JOHN LEAHIGH: That's right. Per the contract, the
21 minimum amount would be 50 percent. That would be -- well,
22 that would be the maximum reduction in their supplies would be
23 50 percent. As you say, currently, we're right on the bubble
24 for 100 percent.

25 SECRETARY CROWFOOT: Got it. Well, as we transition,

1 the one key takeaway I make from the discussion here today on
2 this next topic of flood safety is, we're getting nowhere near
3 the volume of water in the reservoir that requires, you know,
4 proactive flood management.

5 So let's do this, I don't see any other hands from
6 Commissioners, so let's move on to the next presentation and
7 invite Gary Lippner with Department of Water Resources and
8 John James with the Yuba County Water Agency to discuss this
9 partnership on Downstream Flood Safety.

10 Gary and John, welcome.

11 GARY LIPPNER: Thank you, Secretary Crowfoot,
12 Commission and Members of the Public. I am Gary Lippner,
13 Deputy Director of Flood Management and Flood Safety with DWR.

14 Thank you for the opportunity to discuss the flood
15 safety partnership for the Feather and Yuba Rivers today.

16 The Advisory Commission comes together as a
17 partnership to work on the issues related to the Oroville Dam
18 Facilities, and today we want to let you know more about what
19 the Flood Management Agencies do and how they come together in
20 partnership to deliver flood risk reduction projects to
21 prepare for floods emergencies, for the operation and
22 maintenance, and in flood planning, risk management planning.

23 Today's it is an honor to introduce John James --

24 (No video/audio for Mr. Lippner)

25 WEBINAR HOST: It looks like Gary may have dropped?

1 NICK SAFFOLD: Maybe he's having internet issues. I
2 think he was introducing John James right now anyways.

3 John, are you on, John James?

4 JOHN JAMES: Yes, I am.

5 GARY LIPPNER: (Video/audio returned) -- fish habitat
6 protection enhancement and recreation. They're one of our
7 great partners, and we want to introduce them to the
8 Commission.

9 So next slide, please.

10 I share the mic, hand the mic over to Mr. John James,
11 thank you.

12 JOHN JAMES: Thanks, Gary.

13 Thanks to the Commission for having me.

14 Next slide, please.

15 SECRETARY CROWFOOT: John, remind us, I think we don't
16 call it Yuba County Water Agency? You changed your name to
17 Yuba Water Agency?

18 JOHN JAMES: Yeah, we go by "Yuba Water Agency" now.

19 SECRETARY CROWFOOT: I just want to commend you guys
20 for all the work you're doing in the upper watershed as it
21 relates to forest management. I think that's one of the
22 reasons why you broadened that and recognized the watershed
23 goes beyond even the County lines.

24 JOHN JAMES: Great. Thank you, Secretary.

25 I am John James, I'm the Water Operations Project

1 Manager for Yuba Water Agency. My background is in
2 atmospheric science and hydroelectric operations and I manage
3 many of the agency's flood risk reduction projects including
4 Forecast-Informed Reservoir Operations and others we'll be
5 talking about today.

6 Next slide, please.

7 Yuba Water Agency was formed in 1959 with the primary
8 missions of reducing flood risk and improving water supply for
9 the people of Yuba County. In addition, we provide
10 hydroelectric power generation, environmental benefits to
11 downstream fisheries and recreation areas.

12 Constructed in 1970 as part of the Yuba River
13 Development Project, Bullards Bar Reservoir is the primary
14 asset of the agency. The reservoir is located along the north
15 fork of the Yuba River, one of the rivers three major
16 branches, at around 2000 feet in the watershed. This project
17 is adjacent to the Feather River and Lake Oroville, and during
18 flood events, the reservoir is operating coordination.

19 Next slide.

20 As I stated, Lake Oroville and New Bullards Bar
21 operating coordination to improve flow risk protection along
22 the Yuba-Feather River system. And following the 1997 floods,
23 studies were conducted and the recommended improvements in the
24 coordination of flood operations between the two reservoirs.
25 This led to the creation of the Yuba-Feather Forecast-

1 Coordinated Operations, or F-CO Program.

2 Since 2005, the F-CO program has been a highly
3 successful partnership in achieving its objectives of
4 enhancing communications and reporting for downstream flood
5 emergency needs, providing a common decision support system,
6 and operating the reservoirs in a coordinated fashion to
7 reduce flood risk.

8 This strong partnership between local, state and
9 federal agencies, including Yuba Water, DWR, the Army Corps Of
10 Engineers, the National Weather Service and others has made
11 the program highly collaborative and it's been key to its
12 success.

13 Next slide, please.

14 To enhance the strong partnerships and flow the
15 reduction efforts to the F-CO program, DWR and Yuba Water
16 Agency recently invested \$2 million into the new initiative
17 called Forecast-Informed Reservoir Operations, or FIRO.

18 What is FIRO? FIRO is broadly defined as a flexible
19 water management approach that uses data from watershed
20 monitoring and improved weather forecasting to help water
21 managers selectively retain or release water from reservoirs.
22 It supports decisions about how much water to keep during dry
23 periods or how much to release prior to storms.

24 The Yuba-Feather FIRO project is the third such
25 project within California and the first utilized FIRO in a

1 combined reservoir operating environment.

2 Sonoma Water Agency and Orange County Water District
3 also have FIRO projects currently in place. The primary
4 objective of Yuba-Feather FIRO is flood risk reduction with
5 potential for additional water supply benefits.

6 This FIRO program established a new partnership with
7 Scripps Institute of Oceanography Center For Western Weather
8 and Water Extremes, or CW3E. CW3E specializes in research
9 into atmospheric rivers, the main type of storm that causes
10 large flood events in our region.

11 Next slide, please.

12 So what is an atmospheric river and what do they have
13 to do with FIRO? It turns out in California and in our
14 region, being able to accurately predict atmospheric rivers is
15 the key to successfully implementing Forecast-Informed
16 Reservoir Operations.

17 Here is a brief video from Scripps that explains a bit
18 more about atmospheric rivers on the next slide.

19 (Video playing - youtu.be/NULrvr8pTBg)

20 "Imagine a river in the sky with more than twice the
21 water of the Amazon. It's called an Atmospheric River.

22 "Atmospheric Rivers are long narrow bands of
23 concentrated water vapor that produce major amounts of
24 rainfall.

25 "Atmospheric rivers begin in the warm waters of the

1 Pacific where water evaporates into the air. When this humid
2 air meets a Pacific storm, the water vapor is concentrated and
3 driven toward the coast, becoming a firehose of rainfall and
4 wind.

5 "Once the atmospheric river reaches the coastal
6 mountains and the inland Sierra, the collision squeezes
7 additional rain and snow from the system.

8 "Atmospheric rivers are responsible for up to half of
9 California's annual precipitation.

10 "Scientists at Scripps Institution of Oceanography
11 have developed a new system that rates atmospheric rivers on a
12 scale from one to five. The rating system helps identify
13 atmospheric rivers that are beneficial, such as those that
14 replenish reservoirs and ones that reduce hazards like
15 flooding.

16 "Understanding atmospheric rivers is key to improving
17 weather forecasts for better managing water resources and
18 predicting flood risk."

19 (End of video)

20 JOHN JAMES: Working closely with our partners at
21 Scripps, the Yuba-Feather FIRO project is focusing on proving
22 atmospheric river forecasts in several ways specific to our
23 area. These include installing new permanently-installed
24 weather stations, weather balloon launches during atmospheric
25 river events, and observation flights over the Pacific Ocean

1 by the United States Air Force and NOAA using sensors called
2 "dropsondes" to measure atmospheric rivers during their
3 development. All these observations are already being fed
4 into computer models and are improving the forecast in
5 realtime.

6 Additional research under the program includes soil
7 moisture conditions, watershed freezing level and rain on snow
8 in atmospheric river events.

9 The FIRO program focuses on how many complicated
10 variables impact runoff into reservoirs and how better to
11 forecast them.

12 Next slide, please.

13 The former Reservoir Flood Control Operating Rules for
14 Lake Oroville and New Bullards Bar fall under the U.S. Army
15 Corps Of Engineers water control manuals. Currently, the
16 Oroville and New Bullards Bar flood operating rules are
17 primarily based time on time of year and generally do not
18 include provisions to use specific forecast-informed releases.

19 To integrate FIRO into the Corps Reservoir Flood
20 Operations, Yuba Water Agency and DWR are working with the
21 Corps to support updating the manuals at New Bullards Bar and
22 Lake Oroville.

23 Along with integrating FIRO, the manuals are being
24 updated to be more adaptive and take advantage of improving
25 forecast now and into the future. The updates to the manuals

1 and the Yuba-Feather FIRO Initiative are being highly
2 coordinated and aligned as they progress together in parallel.

3 Next slide.

4 Improved atmospheric river forecasts and FIRO
5 Operating Rules are important process and technology upgrades
6 for the system. However, to achieve the full benefit of these
7 strategies, it requires the ability to release water ahead of
8 the storm events.

9 Currently, at New Bullards Bar, we only have one
10 primary spillway outlet that is situated relatively high in
11 the Dam. During storm events, the reservoir must fill up to
12 the current outlet before the water can be adequately
13 released.

14 Yuba Water Agency is planning a new secondary spillway
15 that will provide for an additional low-level outlet
16 infrastructure at New Bullards Bar. The gates will be 31 feet
17 lower in elevation, allowing for releases well ahead of storms
18 while the downstream river channel capacity is available. As
19 the storm progresses, the space in the reservoir created by
20 previously releasing water can be used to hold back flood
21 flows during the peak of the event.

22 Next slide, please.

23 The planned Secondary Spillway is currently estimated
24 to cost \$225 million. As I mentioned, the spillway will be an
25 additional outlet of New Bullards Bar that will be able to

1 pre-release water ahead of large storms. Initial analyses
2 indicate the spillway's potential to reduce down-stream water
3 levels by two to three feet during large storm events, and the
4 same studies indicate that when combined with FIRO, the
5 secondary spillway increases the level of protection by 100 to
6 300 years, and in some areas this doubles the level of
7 protection.

8 Next slide, please.

9 The planned spillway can reduce the magnitude and
10 duration of stressful flows in the system and significantly
11 reduce the frequency of flood flows reaching critical
12 thresholds.

13 As an example, this comparison shows the blue line,
14 the actual flow measured at the Feather River below the
15 confluence of the Yuba River during the 1997 flood.

16 And the red line, a preliminary simulation of a same
17 event with FIRO and secondary spillway under coordinated
18 Oroville and New Bullards Bar operation.

19 As you follow the red line, you will see the increased
20 amount of water released ahead of the main part of the storm
21 allowing for a decrease in the peak flows around January 2nd
22 and 3rd time frame when compared to historical event. There's
23 a potential to decrease the peak river levels by
24 two-and-a-half feet or nearly 60,000 cubic feet per second,
25 dramatically reducing the flood risk.

1 Next slide, please.

2 How is a secondary spillway important as it relates to
3 climate change? On average, California already has the most
4 variable climate in the United States. Climate change
5 forecast indicate periods of wet and dry extremes may increase
6 in magnitude and frequency, essentially, the wet periods will
7 be getting wetter and the dry periods will be getting ...

8 (Technical audio issue)

9 In addition, overall temperatures will likely become
10 warmer allowing for more precipitation to fall as rain versus
11 snow, especially in flood events. Rain and warm winds at
12 higher elevations during atmospheric rivers may contribute to
13 additional melting of snowpacks, further increasing the flood
14 potential.

15 By using FIRO and the latest technology in
16 forecasting, the secondary spillway can release water days
17 ahead of large flood events, thus minimizing the impacts to
18 downstream communities. The spillway acts as a climate
19 resiliency tool that when coupled with FIRO can help mitigate
20 the impacts of future flood events.

21 Next slide, please.

22 The F-CO program, regional partnerships and
23 coordinated reservoir operations have provided substantial
24 benefits, and in the future combined and coordinated FIRO
25 operations of Oroville and New Bullards Bar through the F-CO

1 decision support system will offer the optimal use of its
2 innovative water management strategy. Related efforts,
3 including the FIRO program, the Water Control Manual Updates
4 to Oroville and New Bullards Bar and the planned secondary
5 spillway way all act to enhance the F-CO program and
6 continuously improve the platform for decision-making and
7 reservoir coordination.

8 Next slide.

9 In summary, the Yuba-Feather FIRO program bridges
10 science and water operations to better manage storms and
11 reduce flood risk. It's a shining example of cooperation
12 between local, state and federal organizations and academia.

13 FIRO provides atmospheric river research and
14 operations to better understand current and future flood
15 potential, specific information to inform the updates to the
16 water control manuals at Oroville and New Bullards Bar and
17 future operations of the secondary spillway and continues and
18 enhances partnerships to further leverage collaboration, trust
19 and support systems with an overall result of improving flood
20 protection and public safety for the people of our region.

21 Again, I want to thank the Commission and DWR for the
22 opportunity to present today. With that, I'll pass it back
23 over to Gary.

24 GARY LIPPNER: Next slide, please. Thank you, John.

25 DWR supports the partnership on Forecast-Coordinated

1 Operations and Forecast-Informed Reservoir Operations as
2 you've laid out in that great presentation.

3 The flood partnerships are all about coordination and
4 collaboration, and we would like to highlight one of the
5 groups that focuses on this Commission's region, the
6 Yuba-Feather working group.

7 The purpose of this working group is to improve agency
8 coordination and enhance operational capacity to respond to
9 flood events in the region.

10 Participating agencies include, at the local agency
11 level, Levee District 1, Maintenance Areas 3, 7, 16,
12 Reclamation Districts 784, 817, 1001, 2103, and Yuba Water
13 Agency.

14 At the County level, partners include Butte County
15 OES, Sutter County OES and Yuba County OES.

16 At the State level, of course, the Department of Water
17 Resources as well as Cal OES.

18 And at the Federal level, partners include the
19 National Weather Service and the United States Army Corps Of
20 Engineers.

21 Next slide, please.

22 Another place where partnerships come together is
23 flood emergency response, and to aid the region's emergency
24 response capacity, the State has emergency response grant
25 programs.

1 There was a one-to-many relationship where agencies
2 work together to apply for State funds for a single project or
3 program. An example of this is the Yuba County Office of
4 Emergency Services received \$123,000 grant for hazard
5 mitigation plan updates, communication equipment, and funding
6 of an exercise. With this grant process, we get a chance to
7 better understand our partners' needs and opportunity to seek
8 federal FEMA funds.

9 Next slide, please.

10 In addition to the Flood Emergency Response Work that
11 we have worked with our partners on flood risk reduction
12 projects, these partners are the Marysville Levee Commission,
13 Sutter-Butte Flood Control Agency and Three Rivers Levee
14 Improvement Authority. Together we have built and improved
15 critical levees along the Feather, Yuba and Bear Rivers.

16 Collectively, over 900 million has been invested by
17 local agencies, the State and the United States Army Corps of
18 Engineers. Our collective work has improved flood protection
19 for over 147,000 current residents as well as reduced flood
20 risk for 8.4 billion in assets within the basins.

21 While these large-scale projects take years to
22 complete, the State, United States Army Corps Of Engineers and
23 our local partners are nearing the substantial completion of
24 construction of the flood risk reduction projects shown on
25 this slide. To date, the State has provided over 480 million

1 in direct support for these projects.

2 Next slide, please.

3 Coordination of public safety activities within the
4 Feather River occurs through a number of program activities,
5 many of which overlap.

6 First, some examples of partners that DWR interacts
7 with on a regular basis include local agencies, State,
8 Federal, multi-jurisdictional agencies, and tribal entities.
9 At the local level, various DWR programs interact with cities
10 and counties through their emergency managers, their public
11 works or project implementation teams or their flood planning
12 managers and planning departments.

13 Second, State Agencies coordinate both through
14 implementation of their normal program activities within the
15 Feather River basin as well as advancing the activities and
16 work groups and public forums. An example of a public forum
17 that serves as a coordination driver is the Central Valley
18 Flood Protection Board meeting and tech prep work between DWR,
19 the Central Valley Flood Protection Board and the United
20 States Army Corps Of Engineers prior to public board meetings.
21 This and other venues allow State agencies to align in their
22 implementation of public safety throughout the region.

23 Third, DWR's longstanding contractual agreements with
24 many federal agencies, some of whom provide regulatory
25 oversight of DWR's programs and others than lean in the DWR

1 staff to also provide regulatory oversight for compliance with
2 federal public safety requirements.

3 For example, DWR assists Cal OES in reviewing local
4 hazard mitigation plans for consistency with the State hazard
5 mitigation plan and FEMA's emergency planning requirements.
6 Another example is the coordination between the National
7 Weather Service, United States Army Corps of Engineers and DWR
8 in issuing weather advisories and river forecasts.

9 This coordination takes place both in public view and
10 through more specific interactions with local emergency
11 managers and levee agencies.

12 DWR works with many established joint power
13 authorities as well who have responsibilities that cut across
14 multiple jurisdictions. We have found these partnerships
15 invaluable in helping to connect the large number of local
16 state, federal, and tribal entities who have varying emergency
17 responsibilities.

18 Finally, we interact with tribal representatives on a
19 regular basis during our planning process such as planning for
20 the Central Valley Flood Protection Plan Update 2022, various
21 grant programs and during project development and
22 implementation.

23 Next slide, please.

24 Here are some examples of program activities that DWR
25 is one of many partners.

1 United States Army Corps of Engineers Levee Repairs.
2 Through Public Law 8499, we partnered to help provide direct
3 assistance and emergency rehabilitation on eligible levees.
4 Emergency levee repairs during emergency events, DWR can
5 directly respond to flood threats using the State's emergency
6 contracting authority.

7 Small Communities Flood Risk Reduction Program. DWR
8 has provided with this program 50 million in funding for
9 Central Valley communities to identify flood risk reduction
10 projects that protect small communities. A total of 35
11 feasibility studies and three design and implementation
12 projects have been fully funded under this program.

13 Cal OES Local Hazard Mitigation Planning Support.
14 Federal law requires communities to update their local hazard
15 mitigation plans at least once every five years. This is a
16 requirement for eligibility for FEMA hazard mitigation
17 assistance grants. Currently, DWR's Flood Plan Management
18 Team is working with Sutter County to update their local
19 hazard mitigation plan which will make the community eligible
20 for future FEMA funding opportunities.

21 FEMA's National Flood Insurance Program Communities
22 Assistance Program. Every year DWR is provided a list by FEMA
23 of around two dozen communities for the state's NFIP
24 coordinators to conduct a community assistance visit. These
25 visits include DWR staff physically meeting with local flood

1 plan administrators to discuss their current regulatory duties
2 and brief them on other relevant DWR activities within their
3 community.

4 State and Federal Levee Discussions. The Central
5 Valley Flood Protection Board frequently receives updates from
6 local agencies and the United States Army Corps Of Engineers
7 on the current status of the State Plan of Flood Control
8 Levees. These updates are part of the Board's monthly
9 meetings, and communities are encouraged to participate in
10 these meetings. This information is also shared with the
11 State Federal Flood Operations Center so that it can be used
12 to inform emergency responders during flood events.

13 Next slide, please.

14 So some final thoughts. We need to continue our
15 partnerships to improve and maintain the flood management
16 system and its operations along the Yuba-Feather Watershed,
17 constantly update our flood emergency preparedness and
18 response plans and continue to educate the public about the
19 flood risk in the region. Also need to continue to assess the
20 skill of our forecast and operating abilities to address
21 climate change within the Yuba-Feather River basin and sharing
22 the results with others such as the FIRO program that was
23 discussed here today.

24 Next slide, please.

25 Thank you again for the opportunity to share the

1 Feather River Public Safety Information. John and I welcome
2 any questions from the Commission members.

3 SECRETARY CROWFOOT: Thanks, Gary. Thanks, John.

4 As we've done on other items on the Agenda, please
5 press the "raise hand" button if you have input or a question
6 or simply unmute yourself and talk.

7 I wanted to ask a question.

8 Let's go to Assemblymember Gallagher.

9 ASSEMBLYMAN GALLAGHER: So this is kind of a follow-up
10 on that.

11 What are we kind of looking at, I guess -- you know,
12 for this year, it seems like, you know, levels are sort of low
13 right now. But are we seeing things, I guess, on the horizon
14 here in the next few months, you know? What are maybe some
15 things we're seeing there? And then in terms of where are we
16 with, like, the actual implementation of the -- I guess what's
17 the latest on the implementation of doing forecast-based
18 operations at Oroville?

19 SECRETARY CROWFOOT: Good questions. So what is the
20 outlook, Guys, for this year and coming months? Do we have
21 flood concerns? And then what's up with the effort to get
22 Forecast-Informed Reservoir Operations at Oroville? And I'll
23 add to that, give us a sense of what are the barriers and what
24 is the timing. And Karla or John or Gary or John, you can
25 feel free to take this on.

1 GARY LIPPNER: This is Gary. I'll take the flood
2 risk. In terms of this year and the next couple of months,
3 we've talked about that. We've tabled that. We feel we're in
4 pretty good shape when it comes to flood control storage. Not
5 just at Oroville, but we are seeing that across other
6 reservoirs and so forth. We're in a dry time. The concern is
7 how dry, not so much how much water.

8 But that said, we always need to maintain vigilance
9 and be prepared to respond to emergencies, especially in some
10 of the fire-burned, scarred areas downstream for debris flow.
11 So our emergency preparedness team is working with the locals,
12 coordinated, has supply stockpiled, ready to go. We're a
13 little more worried about those smaller interim local impacts
14 that might be due to the fire burn scars than overall
15 system-wide flooding concerns because of the dry hydrology
16 we've had this year as well as last year.

17 So, in terms of the next couple of months, I thought I
18 would just paint a little bit of a picture from a flood
19 management perspective where we're at with that. Thank you.

20 SECRETARY CROWFOOT: Thank you, Gary.

21 Karla, you're tracking this Forecast-Informed
22 Reservoir Operation effort really closely because it has the
23 promise to improve public safety, flood safety and create more
24 nimbleness around supply. What's your take, just candid take,
25 on where we're at with the FIRO effort on Oroville and what do

1 we need to get it done?

2 DIRECTOR NEMETH: So we are doing this great work
3 together with Yuba.

4 What it takes to really operationalize it is
5 significant engagement with the Corps, assemblymen. As you
6 know, we are working to update the Corps Flood Control Manual.
7 Where we have the royal lead, so to speak, have had progress
8 in this state in transitioning from some of the FIRO modeling
9 into actual implementation actually is in the Russian River
10 Watershed with Lake Mendocino, and that required giving a
11 pretty level-high level variance from the Corps, since they
12 have the obligation for safety, flood safety.

13 So maybe I'll ask Ted or John Leihigh to remind us of
14 our schedule, you know, where we are in the Flood Control
15 Manual.

16 And then, if you wouldn't mind, I was going to ask
17 Mr. James to talk about what we did in the last atmospheric
18 river. I know Yuba had released one of those balloons, you
19 know. Because we are -- we aren't missing opportunities as
20 these atmospheric rivers come in. We're collecting the data.
21 All that is going to help us work with the Corps to really
22 operationalize and achieve the benefits.

23 So maybe, John or Ted, just a quickie on where we are
24 with the Corps Manual?

25 JOHN LEAHIGH: This is John Leahigh. So I can update

1 folks on where DWR is for FIRO and Water Control Manual as it
2 relates to Lake Oroville.

3 As John James indicated, you know, this is definitely
4 a multi-agency process that we're going through here. And the
5 agency overlap is pretty significant in terms of the FIRO
6 process and the Water Control Manual Update. So, you know,
7 Yuba Water Agency, DWR. Scripps is a big partner there in
8 terms of the research, investment and research and forecast
9 improvements. And then, of course, the Corps' role would be
10 to operationalize or codify any changes that could take
11 advantage and leverage these improvements in the forecasting.

12 So where we are right now, as John James kind of
13 indicated is, we're aligning the two programs in terms of FIRO
14 and the Water Control Manual Update. And we feel like we'll
15 be in a position to hand over some -- kind of some candid
16 strategies to the Corps by the time we get to this coming
17 summer, at which time we'll begin a preliminary viability
18 assessment process, take about a year, and then a final
19 viability assessment the following year.

20 So we still have two, three years down the road before
21 we're -- I think before the Corps is in a position to start
22 finalizing some updates to the Water Control Manual. For both
23 reservoirs.

24 SECRETARY CROWFOOT: John, we're driving that as hard
25 as we can on the stateside?

1 JOHN LEAHIGH: Yes, we are. Yes, we're very
2 encouraged with the additional funding that has been allocated
3 for the Federal side of this partnership. And, yes, we
4 continue to move this process along as best we can. You know,
5 it's a brand new regime in terms of the approach, and so, we
6 want to make sure we get it right as we move forward.

7 SECRETARY CROWFOOT: That's helpful. And just given
8 Supervisor Connelly and other Commission members' interest in
9 this in staying up to speed, let's include, Nick, on the
10 Project Tracker, if we don't have it already, just a regular
11 update as we reach milestones in terms of developing out this,
12 you know, Forecast-Informed Reservoir Operations at Oroville.

13 NICK SAFFOLD: Yes, of course.

14 SECRETARY CROWFOOT: Other questions? Any questions,
15 input from Commissioners?

16 Look, Guys, this has been really helpful for me. I
17 kind of feel like I want to steal that video on the
18 Atmospheric Rivers, because I think more and more Californians
19 are understanding that. But this is a big, big deal, both our
20 water supply and flood operations. So I'm glad, Gary and
21 John, you provided that.

22 John, thanks for kind of the 101 on Atmospheric Rivers
23 and why it's important to do this stuff.

24 John James, I wanted to give you a chance to respond
25 to Karla -- I don't think you had an opportunity -- just on

1 the monitoring of the recent atmospheric river.

2 JOHN JAMES: Yeah, sure, I can address that on
3 eye-level.

4 There were a couple of weather balloon launches by
5 Scripps specifically in Marysville and Bodega Bay over the
6 course of the atmospheric river event in late January.

7 In addition to that, the Atmospheric River
8 Reconnaissance Program, which are the flights that are over
9 the Pacific Ocean, was initiated and a number of different
10 flights flew into the atmospheric river over the course of, I
11 think, five days, had almost ten flights, up to a hundred
12 different sensors dropped.

13 Again, the great part about that is all that
14 information goes into these global computer weather models and
15 it's improving the forecast, you know, in realtime. So we're
16 not waiting for something in the future. It's happening right
17 now.

18 SECRETARY CROWFOOT: Thanks so much.

19 SUPERVISOR VASQUEZ: Just a point that the Water
20 Agency will make available any of the videos that you would
21 like to have, and if you go on the Yuba Water Website, we have
22 any number of videos that are available for both that and
23 reforestation.

24 SECRETARY CROWFOOT: Thanks so much, Supervisor.
25 Thanks for all Yuba Water is doing. You guys are really

1 driving the conversation on atmospheric rivers as well as the
2 forest management and the upper watershed. So greatly
3 appreciate that.

4 I'm cognizant of time, and I want to make sure we can
5 move to public comments. I don't see any other hands. And,
6 again, as always, Commissioners, if they can't find the "raise
7 hand" button, can just unmute and talk.

8 Big thanks, Gary and John and John, for your updates.

9 We're going to move onto the final item of today,
10 which is the opportunity for community members and the public
11 to make public comment.

12 Nick, can you quickly go over the sort of parameters
13 of how folks can make comment?

14 NICK SAFFOLD: Sure. We'll be quick here, because we
15 are running a little bit behind, Secretary.

16 Again, for those on Zoom, you can raise your hand by
17 just clicking the "hand" icon to speak, and then for those on
18 the phone, if you press "#2" to indicate you would like to
19 speak. And then just if you're on a phone that needs to be
20 manually unmuted like a cell phone, do that as well, and then
21 our host James will be calling on you.

22 Please listen for your name or phone number and then,
23 again, just press the "raised hand" icon in the Zoom platform
24 or "#2."

25 SECRETARY CROWFOOT: Great. James, do you want to

1 call on people?

2 WEBINAR HOST: Yes, we have one hand raised by Ronald
3 Stork. Ronald, I'm allowing you to speak. Hold on a second.
4 You should be able to talk now.

5 SECRETARY CROWFOOT: Welcome, Ron.

6 RON STORK: Good to be here. Good to see all you
7 guys. Thinking hard and working, hard, too.

8 I just wanted to report that one of the Action Items
9 from the last Advisory Committee Meeting was that Director
10 Nemeth and I would have a conversation to discuss my concerns
11 about the CNA's lack of focus on the Flood Control Reservoir
12 Design flood meeting that effectively going forward in the
13 future and the other lack of a discussion or recognition of
14 issues associated with the problem of maximum flood and
15 facility improvements that might be necessary to meet that dam
16 safety hydrologic event.

17 We had about an hour, and Ted Craddock joined us and
18 was helpful in the discussion. And, you know, there's not
19 time to discuss the conversation in detail, but it was a
20 thorough one. And Director Nemeth said we should -- that she
21 had some homework to do, some further homework to do, and that
22 we would have further conversations and continue to try and
23 address these issues.

24 I don't know if Karla has any -- I'll seed the floor
25 to Karla, if she wants to add anything?

1 DIRECTOR NEMETH: I appreciate that report and the
2 onus is on the department. This is where we connect Gary's
3 shop, our flood folks, with our State Water Project folks so
4 that we know that we're addressing, you know, problem of
5 maximum flood both at the dam, but then in the downstream
6 levee system, which has been kind of a legacy challenge for
7 us, frankly, for lack of a better word, the mismatch and
8 design capacity that we have, you know, up at Oroville versus
9 in the downstream levee.

10 So it really does need to be an integrated approach at
11 the Department, and we'll get some time on our calendars with
12 Ron for the next click in that conversation. But I always
13 appreciate Ron's diligence.

14 SECRETARY CROWFOOT: And for those on the Commission
15 that don't know Ron, he works for Friends Of The River and
16 he's a real expert on managing the system both for human
17 benefit and also to protect the environment.

18 So, Ron, thanks for your partnership.

19 And, Karla, thanks for taking time to, you know, learn
20 and get Ron's insight.

21 Next, James.

22 WEBINAR HOST: There's currently no other hands
23 raised.

24 (Overtalk)

25 SUPERVISOR VASQUEZ: James, can I ask you a question?

1 This is Andy Vasquez.

2 WEBINAR HOST: Hold on one second, Andy. I'm sorry.
3 Go ahead, Andy.

4 SUPERVISOR VASQUEZ: What does a downstream effect
5 further down towards Sacramento and the Stockton area by this
6 system? Doesn't it affect there, too?

7 SECRETARY CROWFOOT: Thank you, Supervisor. There's a
8 bunch of folks named John and some people named James, so I
9 think you're referring the question for John James from Yuba
10 around the impact of these atmospheric rivers on the system
11 sort of down towards Sacramento; is that correct?

12 SUPERVISOR VASQUEZ: Yes.

13 JOHN JAMES: John James. There is impact at a high
14 level. It's less than what it is in our specific Yuba-Feather
15 system, but there is a bit of an impact down there as well.

16 DIRECTOR NEMETH: I was going to suggest that Gary
17 Lippner talk a little bit about the degree of coordination
18 that happens in the Joint Operation Center, which, hopefully,
19 once it's safe, we can go ahead and all the members can tour
20 that, because it's pretty incredible how we get connected
21 during flood season across the watershed.

22 So we do track. It is important that -- you know, the
23 Corps has worked on some significant improvements to Folsom,
24 not just because of that watershed, but just how these
25 watersheds get connected in intense storm events.

1 Gary, do you want to talk about that a little bit?

2 GARY LIPPNER: Yes, you bet. Thank you, Karla. This
3 is Gary Lippner. Good question, Supervisor.

4 With John James' short answer, there is a little more
5 impact on the Feather River than the response further
6 downstream on the Sacramento and the Delta. That's the short
7 answer. But, nonetheless, there is an impact, and we are
8 highly coordinated to understand those impacts. A lot of
9 where that coordination happens during high water events, in
10 particular, is at the Joint Operations Center and the Flood
11 Operations Center, where we're coordinating with the Army
12 Corps of Engineers and many other reservoir operators to
13 safely pass flood control and high water events through
14 systems within capacities in that.

15 So there's a high level of coordination during high
16 water events and a lot of planning that will happen for locals
17 to work with various operators to make sure that water is
18 metered through.

19 One event that comes to mind is the high water event
20 of 2017. This is the San Joaquin. But we were on a high
21 water event and our flood operations center was activated for
22 more than 150 days to get all of the flood flow high water
23 through the San Joaquin, which is a very narrow river. And we
24 coordinated daily with all of the operators and many of the
25 reclamation districts to make sure we were all on the same

1 page the best we could to manage the flows through that
2 system. That was managed through that Flood Operation Center,
3 again, for more than 150 days in the high water event of 2017.

4 So that's a core center where partnerships,
5 coordination and conversations happen to best pass flood flows
6 through the systems we have and where the downstream impacts
7 would be discussed and addressed from early releases in some
8 of the Yuba-Feather River system. Thank you.

9 SECRETARY CROWFOOT: Thanks, Gary. I want to call on
10 Senator Nielsen, who has his hand up.

11 SENATOR NIELSEN: Just a general observation, again,
12 as we conclude.

13 The success and your participation in this
14 particular committee has had some telling impact far beyond.
15 Other agencies with other problematic areas have taken some
16 note of what we together here have been able to accomplish,
17 and there is throughout other agencies and other localities a
18 lot better communication and participation by the trail we
19 blazed here, folks. So never discount the value of your
20 participation here. And I just want to suggest to you that it
21 has gone on far beyond in other agencies as the success of our
22 effort here has come to be known and recognized.

23 Also, some of what we have done here has become
24 manifested in the 2009 New State Water Plan and become a part
25 of State Water Policy in California. I'm very pleased to see

1 that impact as well.

2 So these efforts are not futile, they are very
3 significant, and we appreciate all of you being a part of it.

4 Genoa, we welcome you to this as a public person.
5 Everybody is important, and most assuredly it is the public
6 that we are interested in.

7 Thank you, Secretary Crowfoot and Director Karla
8 Nemeth. Again, how much I enjoy working with you. You remind
9 me of the pleasures that I've had in years past dealing with
10 then-Director Dave Kennedy of the Department of Water
11 Resource. Have a great day.

12 SECRETARY CROWFOOT: Senator, thanks so much for your
13 leadership. And we're here because you and Assemblyman
14 Gallagher and the legislature established us.

15 Those would be perfect final words, but I do note that
16 we have a couple of attendees that have raised their hand. I
17 want to make sure that we provide an opportunity for public
18 comment for Jerry first and then Matt.

19 So Jerry Antonetti, if you can unmute, we welcome your
20 comment.

21 WEBINAR HOST: Jerry, you should be able to unmute
22 yourself now.

23 MR. ANTONETTI: Can you hear me now?

24 WEBINAR HOST: Yes, we can.

25 SECRETARY CROWFOOT: We sure can.

1 MR. ANTONETTI: I appreciate you guys allowing this
2 opportunity, and I would like to direct this comment to Karla
3 Nemeth-Leetz (phonetic)

4 Karla, I'm kind of curious, having worked on the Water
5 Project from the inception, I note that down by Taft, Buena
6 Vista Pumping Plant, Wheeler Ridge Windgap, Tehachapi, all
7 within about of 40 miles one another, pumping waters 3,000
8 feet in the air to get it over the hill.

9 I know back in the day, at one time, they were talking
10 about building a nuclear powerplant and shunting power
11 directly to those four operations, basically providing their
12 own power. And I'm wondering if there's any thought in
13 revisiting that avenue, because those four powerplants, or
14 pumping plants I should say, consume multitudes of power, more
15 than what the whole State Water Project generates, and with
16 the increased population since then, reliance on, you know,
17 solar and wind and all this stuff -- we see what's going on in
18 Texas -- has there been any studies or any indication to
19 possibly build a nuclear power plant? I know that's a cruel
20 word now, but we have ships floating around every port in the
21 world now that have nuclear powerplants on them; nobody seems
22 to be worried about that. I'm wondering if it's a feasible
23 suggestion?

24 DIRECTOR NEMETH: Thank you for that question, and I
25 always appreciate folks who have a long history with the

1 department, because the learning never ends for me.

2 So just to be real direct about it, the State Water
3 Project is not considering nuclear energy. I think that's not
4 ultimately where the State is on new energy sources. However,
5 we are working on a very intensive effort to develop
6 alternative energy sources.

7 I do understand what you're saying around reliability
8 and wind and solar. The State Water Project is putting online
9 a couple of significant solar projects that are meant to serve
10 that part of our State Water Project service area.

11 I do think that the State Water Project will be -- is
12 and will continue to be, especially from a planning function,
13 more integrated into these overall grid reliability
14 discussions where we can shed load, shed the power that we
15 need during certain times of the day that make power available
16 for other important uses.

17 So, all of that, all of the work that we're doing on
18 the State Water Project and the project's reliability is
19 starting to integrate more fully energy grid reliability.

20 But just for clarity, for nuclear -- new nuclear
21 energy is not part of that picture.

22 SECRETARY CROWFOOT: Thanks so much, Karla.
23 Appreciate that. Let's turn to Matt Menting.

24 WEBINAR HOST: Matt, you should be able to unmute
25 yourself. Matt, needs to unmute himself and doesn't appear --

1 there you go, Matt.

2 MATT MENTING: Sorry about that. Shout-out to you,
3 Nick, for that great job on the recommendation log. I think
4 that's going to be a valuable tool going forward. It's going
5 to make these meetings much more productive.

6 I think shout-out for Lindsey and Rob from the
7 Senator's Office for moving towards a advanced agenda, allow
8 Commissioners and citizens alike to prepare questions,
9 suggested sub-topics on those meetings. Such as our next
10 meeting on safety, we could maybe suggest that we dive into
11 the Part 12, which I think according to -- is it Elizabeth
12 Whitmore? Information, that report should be public by now.
13 If not, very soon or in time for the next meeting.

14 So on those advanced agendas, I think, by putting
15 those out and if you listed on the website with possible
16 subcategories that fit into that, Commissioners could not only
17 prepare advanced questions that would help guide the
18 presentations -- today's presentation were full of valuable
19 knowledge, but I don't know if they were guided by what
20 Commissioners and citizens actually wanted to hear. So
21 advanced questions would maybe steer those a little bit
22 towards the Commission's interest.

23 Along with that, Action Item No. 9 from the last
24 meeting, was to provide suggestions to the California Natural
25 Resources on how to structure the CNA meetings to make them

1 more useful as possible, and then Secretary Crowfoot suggested
2 that DWR post background documents on the CAC website for easy
3 access to allow Commissioners to prepare in advance for those
4 meetings.

5 So if we go into safety in the next meeting and one of
6 the subtopics is Part 12, then maybe that is a document in
7 which we can post in advance, people can read up on that, gear
8 their questions specifically, and presentations would then be
9 geared towards it. I think we'd make our meetings more
10 productive. There would be more time at the end for public
11 comments on the ones that got missed. This is a pretty short
12 two-hour meeting in order to encompass everything that I think
13 we wanted.

14 So I don't know if, Nick, if you could work on one
15 other thing, is how do we direct future advanced questions or
16 how do we request future advanced material? Is that going to
17 be through Whitmore's email on advanced material? Is that
18 going to be on your email for advanced questions? Something
19 that we can report on. And, maybe, if we can send that out
20 prior to the next meeting instead of waiting until the next
21 meeting to figure out how to prepare for a meeting. So I
22 don't know what means of communication that might be. Email
23 to the attendees, posting on the website? (Alarm sounded.)
24 We're moving in the right direction. I see my time just
25 beeped.

1 Let me just let you digest that. I'm not asking for
2 responses right now. But let's work on that.

3 One comment on the Water Management. Excellent work
4 on advancing forecasts, early releases by the second spillway
5 up at Bullards. I hope Oroville also moves in that direction
6 so that we can drop those river stages more than 2.5 feet. I
7 was hoping something closer to four or five feet.

8 Having stood on those levees and watch freeboard lap
9 on top of the gravel road only to be followed by river
10 slouching on the inside from saturation and quick down-
11 ramping. I would like to hear more on river down-ramping.
12 Both the '86 and '97 collapse did not happen at peak close.
13 They happened two days after as the river naturally
14 down-ramped from the middle and the south fork of the Yuba.

15 Although, I think the operators kept their
16 down-ramping within regulations of 10,000 cubic feet every two
17 hours, the natural down-ramping that happened at Marysville
18 due to the south and middle fork dropped that levee so fast
19 that the saturated riverside started the initial levee
20 collapse. I don't think we reverse engineered the events of
21 '86 and '97 to include what can be done more to avoid the
22 natural down-ramping and river slouching that may occur in
23 future floods.

24 So there's three things that we can digest.
25 Appreciate the meeting today and look forward to some

1 responses on those.

2 SECRETARY CROWFOOT: Matt, Wade Crowfoot here. Thanks
3 so much. Appreciate your good suggestions to Nick about
4 ensuring that those items get tracked, but then, also, that
5 materials get shared before the meetings so that members of
6 the public and Commissioners that want to review them can.

7 So, Nick, there's a follow-up there. And then, let's
8 also be clear with folks that are following the work of the
9 Commissioner who they can contact with for suggestions, either
10 suggestions on, you know, future topics or questions about
11 specific information or specific materials.

12 And then, lastly, just for the team, Matt's last point
13 around lessons learned from '86 and '97, we should just figure
14 out a way to respond to that probably, you know, in the
15 context of a Commission meeting given that it's germane to the
16 topic that we cover.

17 So thanks so much.

18 James, I just want to confirm that we don't have any
19 new public commenters are wanting to join?

20 WEBINAR HOST: Nobody new.

21 SECRETARY CROWFOOT: Like I said, I think --

22 WEBINAR HOST: Jerry is trying to comment again, if
23 you would like to take Jerry again?

24 SECRETARY CROWFOOT: Jerry, I'm going to ask you to
25 keep it super short at this point, because we're a little bit

1 over time, but you can go ahead and unmute Jerry.

2 MR. ANTONETTI: Okay, real quick. Ted Craddock, I
3 know that you've got a real handle on this stuff up here and I
4 know the Thermalito Powerplant has been down for about eight
5 years, 150-megawatt capacity.

6 With the rolling blackouts that we're having in the
7 summertime, you know, 106 degrees and whatnot, and I know that
8 you have a balancing act between providing water and providing
9 power, and with the water situation in the lake drying up,
10 what are you using as a criteria to fire those powerplants up?
11 Because this last rolling blackout, you were just maintaining
12 minimum river outlets there from the underground powerplant
13 there in Oroville, and needless to say, Thermalito wasn't
14 running. I mean, it gets to a point where you either die from
15 thirst or you die from the heat.

16 SECRETARY CROWFOOT: Jerry, good question.

17 Let's turn to Ted real quick. Ted, any plans to get
18 Thermalito Powerplant up and running again? What's the
19 criteria?

20 TED CRADDOCK: Yeah, couple things, Secretary. And,
21 Jerry, thanks for the question. So, yeah, we worked very
22 closely last summer with Cal ESO to maximize generation at the
23 State Water Project and reduce pumping load throughout the
24 system to support the electric grid.

25 Specific at Thermalito, as Dave Duval mentioned

1 earlier today, the powerplant is now back and fully functional
2 on commercial operation, which is really good news. And then,
3 over the summer, what we did with the forecast for heat is
4 lower the water levels in the after-bay so that we could
5 maximize generation at both Hyatt and Thermalito Powerplant to
6 support the state's electric grid.

7 So we're in close coordination with Cal ESO during
8 those heat waves and continue to do that proactive planning as
9 we look to the future, Jerry.

10 SECRETARY CROWFOOT: Excellent. Ted, good response.
11 And you and Jerry can always take that offline if helpful.

12 I think Senator Nielsen had a really good final point,
13 so I'd just refer back to that. Huge thanks for everybody's
14 time on the Commission and those who are tuning in from the
15 community.

16 I say this is a work in progress. I think this has
17 been a really good Commission towards just getting topics,
18 issues, information out there and having a good discussion,
19 but there's always room for improvement. So we look forward
20 to continuing to refine the work we do together.

21 Big thanks to our tech guru James for helping us on
22 the meeting. And, Nick, all that you and the Kearns & West
23 team do.

24 We will be meeting back again in May for that Quarter
25 Two meeting, and I believe that we'll plan for a virtual

1 meeting, unless things change significantly.

2 Have a great week and stay safe out there. Thanks so
3 much.

4 (Zoom Meeting concluded at 11:07 a.m.)

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REPORTER'S CERTIFICATE

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I, ANN R. LEITZ, a Certified Shorthand Reporter of the State of California, do hereby certify:

That I am a disinterested person herein; that the virtual meeting was taken before me, in shorthand writing, and was thereafter transcribed, and is a true and correct transcript of my shorthand notes so taken.

I further certify that I am not of counsel for any of the parties to said meeting nor in any way interested in the outcome of said hearing.

I declare under the penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Dated this 5th day of March, 2021

/s:/Ann R. Leitz

ANN R. LEITZ, CSR NO. 9149