BEFORE THE

CALIFORNIA STATE WATER RESOURCES CONTROL BOARD

CALIFORNIA WATERFIX WATER RIGHT CHANGE PETITION HEARING

JOE SERNA, JR. BUILDING

CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY

BYRON SHER AUDITORIUM

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until this matter is clarified by Miss McGinnis.

MR. O'LAUGHLIN: Okay. Thank you.

CO-HEARING OFFICER DODUC: Thank you.

MR. O'LAUGHLIN: Kevin, can you pull up DWR-10.

(Document displayed on screen.)

MR. O'LAUGHLIN: Yeah, there we go. Thank you.

Mr. Leahigh, Tim O'Laughlin, San Joaquin Tributaries Authority. I have questions about your rebuttal testimony.

I'd like to go into this in a little more detail than what we've previously done, so I'm going to refer -- This is the Primary Sources of Water for State Water Project Exports, Page 6 of your exhibit.

It says down in the legend, "Flood control releases and unstored flow."

Do you see that in the legend?

WITNESS LEAHIGH: Yes.

MR. O'LAUGHLIN: And then in the first Water Year, you have a Water Year depicted, which is 2011, and it says "(Wet)."

Do you see that?

WITNESS LEAHIGH: Yes.

MR. O'LAUGHLIN: And then above that, it appears that the legend is depicted in kind of a -- I'm color-blind so I'm going to say purple and it says

"3.61."

Do you see that on the exhibit?

WITNESS LEAHIGH: Yes.

MR. O'LAUGHLIN: Okay. So the first question I have is: The 3.61 is what?

WITNESS LEAHIGH: That's 3.61 million acre-feet.

MR. O'LAUGHLIN: Okay. And so this is -- In that year -- And these are Water Years; correct?

WITNESS LEAHIGH: That's correct. The tabling next to the year is -- depicts the Water Year type.

MR. O'LAUGHLIN: Okay. But what I first want to understand is: 2011 is a Water Year, not a Calendar Year; correct?

WITNESS LEAHIGH: I believe this analysis was done . . . I think it was done using calendar years.

MR. O'LAUGHLIN: Okay. Okay. Interesting.

So in the Calendar Year. Do you -- Well, let me ask a preliminary question.

When you make allocations to your contractors, are they made in a Calendar Year or in a Water Year?

WITNESS LEAHIGH: Allocations to our contractors are based on a Calendar Year.

MR. O'LAUGHLIN: Okay. So, in this, then, looking at 3.61 million, that would be the amount of

water in 2011 that was exported that was flood control releases and unstored flow; correct?

WITNESS LEAHIGH: Correct.

MR. O'LAUGHLIN: And that is -- Is that broken down by a month or is that just the total volume for the year?

WITNESS LEAHIGH: This is the total volume for the year.

MR. O'LAUGHLIN: Is there backup data depicting the amount of water that was diverted in 2011 by month?

WITNESS LEAHIGH: There's backup data depicting the amount by day, and those are the exhibits that were -- was part of the exhibit that was submitted yesterday.

MR. O'LAUGHLIN: Correct. Okay. Perfect. Okay.

And when it says "wet," is wet based on a San Joaquin River Basin Index, a Sac Valley Index? What indexes are you using for that depiction?

WITNESS LEAHIGH: That's the Sacramento Valley Index. Oftentimes they're the same, but in this particular case, it was -- it was based on the Sacramento Valley.

MR. O'LAUGHLIN: Now, in this document, I want to focus first on flood control releases.

So are the flood control releases depicted in the 3.61 million acre-feet only flood control releases from Oroville?

WITNESS LEAHIGH: I think the way the analysis was done, yes, I believe it's flood control releases from Lake Oroville.

MR. O'LAUGHLIN: Okay. So other operations, either at Shasta, at Yuba, on the American, New Melones, East Bay MUD, their flood control releases if they occurred in 2011 would not be depicted in this graph; is that correct?

WITNESS LEAHIGH: I believe that's correct.

MR. O'LAUGHLIN: All right. So the next phrase in the legend is "Unstored Flow."

What do you -- What do you mean by the term "unstored"?

WITNESS LEAHIGH: So, unstored flow would be flows that did not derive from Project storage releases. So the exception there is -- The flood control releases, if, for example, were encroached into flood control storage, we would have to release that storage for flood control purposes. And so -- so it's lumped in the same category as the unstored flow, which would be unregulated flows from elsewhere in the system.

MR. O'LAUGHLIN: Well, I -- That's confusing to

me, so -- Sorry.

So are flood control releases and unstored flow one and the same or are they different? Or does unstored flow subsume flood control releases?

WITNESS LEAHIGH: So flood control releases could be either stored releases or unstored releases. So they could be either.

The -- Right. So they could be either one of those. I think the key here -- And maybe I need to clarify that a little bit.

Essentially -- So most of the flows here are exported under excess conditions. So there's a number of different sources which would fall in this category, and those excess conditions, there's typically more unstored flow -- Well, there is more unstored flow than is necessary for meeting all of the Delta requirements, the in-basin uses, and then some of those are picked up by the Project facilities in the Delta.

MR. O'LAUGHLIN: Well, your terminology's kind of strange because -- and I'm trying to get a handle on this.

Earlier you talked about this flood control releases only being from Oroville. Now you're talking about other sources.

Are there other sources for flood control

releases and unstored flow other than Oroville in this chart, or is this just Oroville?

WITNESS LEAHIGH: Yes. You were -- I think, before, you were asking me specifically on the component there that -- of the two, which is flood control releases. That -- In the analysis, that component, I believe, was from Lake Oroville itself.

In the unstored flow component, that could include flood control that releases from other reservoirs.

MR. O'LAUGHLIN: Okay. So in regards to Oroville, you mentioned something that I find strange.

How is it, when you're in a flood control operation, that you're releasing stored water?

WITNESS LEAHIGH: So after, let's say, a big storm event, inflow into Oroville has exceeded the outflow, and so there's storage gains. And if those storage gains cause us to encroach into our flood control requirement that required vacant space, then we would be required to release that stored water that's encroached in the flood control space and release it downstream.

MR. O'LAUGHLIN: So when you use the term "storage," are you using the term "storage" based in a legal sense or just in a practical sense?

WITNESS LEAHIGH: I would say in a practical

sense.

MR. O'LAUGHLIN: Thank you.

And, in fact, you wouldn't know by looking at this chart whether or not the water had been stored in Oroville for 28 days and then released; is that correct?

WITNESS LEAHIGH: No, I wouldn't know the timing on that.

MR. O'LAUGHLIN: Okay. So let's go to what's been marked as 905 but when we get to it we'll identify the top of it.

(Document displayed on screen.)

MR. O'LAUGHLIN: And this has been identified as "Data for DWR Exhibits 850 and 851, 2015" and we'll just identify it as such and we will not use "905."

So let's go through this. This is a fascinating -- And thank you for providing this graph. I think it's a fascinating graph to look at.

Let's just go through kind of the headings so we understand what we're looking at.

So can you tell us -- And this may be redundant, but just so it's clear in the record, can you tell us the heading what "FRSA" means.

WITNESS LEAHIGH: Yeah. That's Feather River Service Area. So essentially the Feather River Settlement Contractors' deliveries at Thermalito

Afterbay.

MR. O'LAUGHLIN: Okay. Then the next overall heading is "Instream Requirements (Primary)."

Can you explain what that is.

WITNESS LEAHIGH: Yes. So, as -- as part of our FERC license and agreements with Department of Fish and Wildlife, we have year-round instream flow requirements for the Feather River.

MR. O'LAUGHLIN: And so you have to release those flow requirements under your FERC license to meet those requirements; is that correct?

WITNESS LEAHIGH: That's correct.

MR. O'LAUGHLIN: Now, in this -- Under that heading Instream Flow Requirements (Primary), there are two subsections. One is called "Balance Conditions."

Can you explain to us what balance conditions are.

WITNESS LEAHIGH: Yeah. So balance conditions are when the releases from the Project reservoirs plus any unregulated flows in the system downstream of the Project reservoirs are approximately equal to the needs for in-basin uses to meet the D-1641 requirements and the Project exports.

MR. O'LAUGHLIN: Okay. And also -- So then we get a further breakdown under balance conditions, and it

says "Exports (2nd)."

Can you tell us what that is.

WITNESS LEAHIGH: Yeah. So some of the instream requirements that -- the instream flows that are released, the primary purpose of the release is to meet those in-river requirements on the Feather River, but then there are -- there can be secondary use for that water.

And in this case, that "(2nd)" indicates the secondary use of those flows and, in this case, on that column, a secondary use would be exported at the SWP export facilities.

MR. O'LAUGHLIN: Okay. So looking at the second column, it says that on January 1st of 2015, it has a zero.

So under that scenario, would it be true that water that had been released to meet an instream flow requirement was not, in effect, exported on that day?

WITNESS LEAHIGH: That's correct. For the purposes of this accounting, it's not assumed to be exported.

MR. O'LAUGHLIN: Okay. Then if we went down to January 15th, 2015, it appears there's a number 900 in that column Exports (2nd) and that would tell you that 900 cfs of instream flow water that had been released at

Oroville was secondarily diverted at the export pumps; correct?

WITNESS LEAHIGH: Correct.

MR. O'LAUGHLIN: Now, is -- This data that is collected in this chart, is this post-processed data or is this done on a daily basis?

WITNESS LEAHIGH: No. This -- Well, this analysis was -- was post-processed. This analysis was done specifically for this proceeding, for this -- for this exhibit that was -- that we provided.

MR. O'LAUGHLIN: Okay. So -- So would that be also true -- Well, we'll go -- Sorry. I'm jumping ahead. Okay. Sorry. Got to slow down.

Balanced conditions. "In-Basin" is denoted in Balanced Conditions and it also has a paren and it says "(2nd)."

Can you tell us what that is.

WITNESS LEAHIGH: Yes. So numbers in that column, as they are in the Export column, they should only show up in those two -- in one of those two columns if the Delta condition is not in excess.

So, in other words, balanced, but the -- So, again, there's a secondary use for some of those instream flow requirements to the Feather River. And at times when we're in balanced conditions and all of the in-basin

uses are not being met by other natural flows in the system, the Projects are releasing supplemental flows to make up the difference.

And during any of those periods, you could see numbers in that column where a secondary use of the in-bay -- of the minimum flows at the Feather River could also serve the purpose of filling in that gap for in-basin use.

MR. O'LAUGHLIN: So in-basin use would be, like, Feather River contractors; correct? As an example.

Or is --

WITNESS LEAHIGH: Well --

MR. O'LAUGHLIN: -- this someone else?

WITNESS LEAHIGH: -- they would be -- they would be Feather River diverters downstream --

MR. O'LAUGHLIN: Okay.

WITNESS LEAHIGH: -- of Thermalito.

MR. O'LAUGHLIN: Such as a riparian right holder?

WITNESS LEAHIGH: Correct.

MR. O'LAUGHLIN: Okay. Right. So in this same column, there's --

WITNESS LEAHIGH: Well --

MR. O'LAUGHLIN: I'm sorry this is tedious but I just want to make sure we go through this.

Go ahead.

WITNESS LEAHIGH: Yeah. I guess I'd caution a little bit about that.

It's not in terms of identifying specifically who would be entitled to that water. That's not really part of the analysis. But it is making up a gap between natural flows and then the other in-basin uses and D-1641 requirements.

MR. O'LAUGHLIN: Now, is the in-basin use that's depicted there in (2nd), is that limited to the Feather River, the Sacramento River Basin, or the Delta, or all three?

WITNESS LEAHIGH: Yeah. It would -- could be making up a difference in any of those locations.

MR. O'LAUGHLIN: So if there was an in-basin condition in the Delta where there was supposedly a prior right, those people at a certain point in time may have picked up this water that had been released for other instream flow requirements and used it in the Basin; correct?

WITNESS LEAHIGH: Well, I -- We didn't look at that in-depth in terms of legal uses of water. We didn't assess -- We are not assessing that in part of this analysis.

MR. O'LAUGHLIN: It just means that somebody

downstream may have picked it up and used it in the mass balance basis and, therefore, it had to be accounted for; correct?

WITNESS LEAHIGH: That's right. In terms of -- Just in terms of the straight mass balance, that's -- that's really all that we're looking at here.

MR. O'LAUGHLIN: Right. And I'm not saying that anybody downstream had the legal entitlement to that water. I'm just saying, on a mass balance basis, some -- in some way, that water left the system and you accounted for it in the -- in the code by saying in-basin and in use --

WITNESS LEAHIGH: Yes.

MR. O'LAUGHLIN: -- right?

WITNESS LEAHIGH: Essentially, that's correct.

MR. O'LAUGHLIN: All right. Excess -- Under the Instream Requirements (Primary) still, you have "Excess Conditions."

Can you explain what that is.

WITNESS LEAHIGH: Yes. So that would be the other condition when we're -- When the Delta is not considered to be in balance, it would be considered in excess.

So this would be when the releases from the Project reservoirs plus any other unregulated flows into

the system exceed the -- all the in-basin uses, the D-1641 standards are all being met, and . . . Yeah, that's -- that's essentially what it is.

MR. O'LAUGHLIN: Okay. There's two components listed under "Excess Conditions," and I couldn't tell if they were under the Excess Conditions or just under the Instream Requirements (Primary).

So are the ag -- it says, A-G, Ag, and then Fish.

Are those specifically under the "Excess Conditions" or are they just generally under the heading "Instream Requirements"?

WITNESS LEAHIGH: Well, they're under both. So this would be instream flow requirements to the Feather River that are occurring in excess conditions.

And so, then, we're not -- In that case, we're not -- You know, we're still required to meet those minimum instream flows, but there's no secondary use of that water in terms of the Delta, so in terms of the exports or in filling the gap in the in-basin use.

So we've classified those minimum releases under Excess Conditions as -- for fish primarily because that is the required -- required flow.

The Ag component on there is just -- It's a -- It's a buffer that, because our requirement -- this

minimum flow requirement is -- we're required -- we're required to keep that all the way down to the -- well, essentially the mouth of the Feather River, but the Sacramento.

But, in practical terms, we just need to meet it between the Thermalito Afterbay outlet to the confluence with the Yuba because the Yuba is providing additional flows.

The -- So the Ag component is a buffer on top of the required fish flows to account for any diverters between Thermalito Afterbay outlet and the confluence with the Yuba River so that we could guarantee that the -- that the 900 cfs fish flow is -- is being kept all the way downstream.

MR. O'LAUGHLIN: In that regard, is there any analysis anywhere that -- It's kind of peculiar to me that we're releasing water for ag diversions in January about demand and use? I mean, that seems kind of strange that you'd have an ag use in the middle of January.

Or is it mainly a buffer?

WITNESS LEAHIGH: It --

MR. O'LAUGHLIN: See, what I'm trying to understand is --

WITNESS LEAHIGH: Yeah.

MR. O'LAUGHLIN: -- I get it if you were

releasing it in June, July and August, people downstream are diverting. But is this kind of just a buffer for the fish flows sure that what I would call carriage losses, whether it's trees, vines, whatever, water seeps out, but you've got to make sure you get your 900 down there.

WITNESS LEAHIGH: That would actually be a more accurate way to -- to label this --

MR. O'LAUGHLIN: Okay.

WITNESS LEAHIGH: -- particular column.

MR. O'LAUGHLIN: Okay. So moving on, "Release to Support."

Now, it says "Release to Support." So this is this a release from Oroville to support either flood or exports?

WITNESS LEAHIGH: Yes. This is -- This would be the release of stored water.

MR. O'LAUGHLIN: Okay. So this is -- This is actual --

WITNESS LEAHIGH: Well, I take that back.

MR. O'LAUGHLIN: Okay.

WITNESS LEAHIGH: I'm not sure if it's only stored water for the Flood column, but I think that is the case for the Export.

MR. O'LAUGHLIN: Okay. So -- Because you'd have to have control of the stored water to re-divert it

under your Permits at Clifton Court; correct?

WITNESS LEAHIGH: Well, this is just trying to break down the components of the releases and then the components of the sources of export for the purposes of developing those graphs. So that's what this is all about.

MR. O'LAUGHLIN: But do you understand that, if you do not control the water and/or divert it at Oroville under your Permits, do you understand if you have a right or don't have a right to re-divert that water at Clifton Court Forebay?

MR. BERLINER: Objection: Calls for a legal conclusion.

MR. O'LAUGHLIN: If he knows.

MR. BERLINER: That doesn't change the character of the question.

CO-HEARING OFFICER DODUC: Mr. O'Laughlin, I believe, is asking Mr. Leahigh that question with respect to his understanding as an Operator.

MR. O'LAUGHLIN: Um-hmm.

CO-HEARING OFFICER DODUC: So overruled.

Please answer.

WITNESS LEAHIGH: My understanding is, we need to meet our Permits, and that we are.

MR. O'LAUGHLIN: Okay. So -- And let's look

down on that column, then, real quickly.

On January 15th, again, it looks like, there is a number 64 in the Export column, and that would be 64 cfs of water was released from Oroville to support the exports that occurred; is that correct?

WITNESS LEAHIGH: Yes, essentially.

MR. O'LAUGHLIN: Essentially --

CO-HEARING OFFICER DODUC: Could you --

WITNESS LEAHIGH: Well, so this is --

CO-HEARING OFFICER DODUC: I'm sorry.

WITNESS LEAHIGH: Again, this is -- So that 64 is part of that column, which is a tally of releases from Oroville specifically for export purposes.

CO-HEARING OFFICER DODUC: How much additional time do you need to wrap this up, Mr. O'Laughlin?

MR. O'LAUGHLIN: I hope to be done by noon.

CO-HEARING OFFICER DODUC: Okay.

MR. O'LAUGHLIN: Because I'm assuming -- And I can look at Miss Spaletta. But I'm assuming a lot of the questions that I'm asking are preliminary foundational questions that somebody else would be asking. I'm sorry.

CO-HEARING OFFICER DODUC: No.

MR. O'LAUGHLIN: It's just, you're stuck with me. Sorry.

CO-HEARING OFFICER DODUC: It could be worse,

Mr. O'Laughlin.

(Laughter.)

MR. O'LAUGHLIN: Wow. I feel sorry for that person.

CO-HEARING OFFICER DODUC: Well, we'll go ahead and allow you to take till noon to wrap up.

Let me also take this opportunity to invite Mr. Herrick, since I see him suffering standing there straining to read the screen:

If you would like to -- If any of you would like to make use of these front desks and the screens there, please feel free to do so.

MR. O'LAUGHLIN: So back -- back to it.

So the 64 cfs is water released to support the diversions, and so if we went over -- I'm going to skip a little bit to ask this question.

That same day, it says SWP Exports are 4,927.

Do you see -- Do you see that, John? I'm sorry, Mr. Leahigh. I'm sorry.

WITNESS LEAHIGH: Yes, I see that.

MR. O'LAUGHLIN: Okay. So -- Now, is the 64 within the 4,927? In other words, is it an instantaneous accounting that's occurring or is there a time lag with this chart? Because clearly if you release water on January 15 at Oroville, you're not diverting it on the

same day; right?

WITNESS LEAHIGH: Yeah. So, this is -- this is not intended to be an absolute reflection of -- It doesn't take into account timing.

It's -- This is -- For the purpose that this data is intended, it -- it is in sufficient -- in my judgment in sufficient detail in order to capture the components that are shown in those graphs.

The -- One of the reasons I'm -- So, my staff prepared this. This -- This table was not intended to be an exhibit; right? We only provided this table at the request of one of the attorneys.

So the organization of this table is -- I'm not completely familiar with, so that's why I'm trying to work through this with you.

But the -- the point that is being made with this table, it is -- it is not intended to be a precise reflection of operations.

MR. O'LAUGHLIN: Oh, yeah. No. I mean --

WITNESS LEAHIGH: Just to be clear.

MR. O'LAUGHLIN: -- come on.

WITNESS LEAHIGH: Just to be clear.

MR. O'LAUGHLIN: That's like your measuring 64 cfs at Oroville and following it all the way down and picking it up. I mean --

WITNESS LEAHIGH: That's right.
MR. O'LAUGHLIN: Yeah.
WITNESS LEAHIGH: That's right.
MR. O'LAUGHLIN: So move back on the record, then.
So, to go to -- There's a requirement that says "In-Basin Requirement."
So what is that requirement for? That's different than In-Basin (2nd).
WITNESS LEAHIGH: Yes. So this would be -- Right. So this is also for the same purpose as that column that was under Instream Requirements as a secondary use.
But in this particular case, this would be the primary reason for the release from Lake Oroville is to meet those in-basin requirements.
So we're already releasing enough to meet that Feather River flow. This would be additional flow on top of that to meet some of those in-basin charges.
MR. O'LAUGHLIN: And whoever did -- graphed it did a good job because the total Oroville release is the sum of the 900 cfs depicted in their Exports (2nd) and Release to Support Exports 64 totals the total release from Oroville of 964 cfs; correct?
WITNESS LEAHIGH: Correct.

MR. O'LAUGHLIN: Okay. Then moving over. Now we get to the exports. So that's the release side. Now we get to the exports side.

So, on that day, 4,927 was diverted by the SWP; correct?

WITNESS LEAHIGH: Correct.

MR. O'LAUGHLIN: Okay. Then you -- you denote in the next column whether the Delta is in excess, yes or no. And if it's in, I'm assuming that's a no and the Y is a yes; correct?

WITNESS LEAHIGH: Correct.

MR. O'LAUGHLIN: And then you also are -- This is pretty helpful. It tells us if any flood releases on that, yes or no. And, once again, it's a no for that day, so there's no flood releases for that day.

Then you summed it up. It looks like somebody added something for the charts. It says "Exported Unstored Flow," which appears to me to be the SWP export number of 4,927 minus the total Oroville release of 964; is that correct?

I'm terrible at math.

WITNESS LEAHIGH: No. Well, let's see. Not necessarily.

Can you say --

MR. O'LAUGHLIN: It's 3,000 -- It ends up,

John, being 3,963 cfs of un -- exported unstored flows.

WITNESS LEAHIGH: I'm sorry. What -- That's in the column -- last column on the right.

MR. O'LAUGHLIN: Yes.

WITNESS LEAHIGH: Yes.

MR. O'LAUGHLIN: Yes. Right.

So now we have 964 cfs being released from Oroville, and if I understand the charts right, 900 is for fishery flows. You were able to pick that up at the exports. You're able to pick up the 64 cfs at the exports.

And the difference is, all this other water being released from either the Sacramento, the American, the Yuba, the Mokelumne, the New Melones, that shows up in the Delta and you're able to pump; correct?

WITNESS LEAHIGH: Right. So in this entire period, there was sufficient unstored flows to meet all the in-basin requirements and that's why you see only zeros in those two columns for in-basin requirements, and there was additional unstored flow that was available for export. Some of that occurred in balanced conditions and some of that occurred in excess conditions.

But, for the entire period, there was additional unstored flow available for export and that's what's reflected in that column.

MR. O'LAUGHLIN: Now, do you -- As you sit here today, do you still have a memory of 2015, or did you try to wipe that out in your mind?

WITNESS LEAHIGH: I think it's completely gone.

MR. O'LAUGHLIN: I wouldn't blame you.

WITNESS LEAHIGH: 2017 wiped that out pretty fast.

MR. O'LAUGHLIN: That's probably true.

Okay. Can we scroll down a little bit. Let's look at July and August of this year 2015.

(Scrolling down document.)

MR. O'LAUGHLIN: Now, I know we don't have the columns. We're still looking at the same exhibit.

But in this -- We're having releases that are occurring.

What I find interesting about this -- Oh, shoot, I lost my -- Can you scroll back up real quick? I lost one heading. I'm sorry.

(Scrolling up document.)

MR. O'LAUGHLIN: Okay. You can scroll back down to the July.

(Scrolling up document.)

MR. O'LAUGHLIN: So the second column in is from -- If you look at this -- Let's pick a date. Let's just use the one at the bottom of this, 21-July-15.

And if we start -- I'm going to start at the right-hand side, and I want to focus on the 2,960. That's the amount of release being -- being made, is that correct, from Oroville on that day?

WITNESS LEAHIGH: I don't remember the headings.

So it's either that column or the one to the left. I forget which.

MR. O'LAUGHLIN: Okay. Actually, it's the one to the -- I believe it is the one to the left. It's 2,210 is being released.

Can you scroll -- God, I hate these charts.

Scroll back up. Sorry. I'll get this one.

(Scrolling up document.)

MR. O'LAUGHLIN: Total Oroville release is the second. It's SWP, and then we go to Delta in Excess.

John, just to focus -- I just want to focus on the Oroville release and the Oroville exports. So the second column in where it says "Delta in Excess" would be the total Oroville release and then the SWP exports.

You see that?

WITNESS LEAHIGH: Yeah.

MR. O'LAUGHLIN: Let's scroll down again to July. Sorry about that. We'll get through this.

(Scrolling down document.)

MR. O'LAUGHLIN: Thank you very much.

So now we're back down here again.

So the total Oroville release now, which is the second column in from where it says "N," says 2,960 cfs as being released.

You see that?

WITNESS LEAHIGH: 2960 cfs.

MR. O'LAUGHLIN: Yes.

WITNESS LEAHIGH: Yeah.

MR. O'LAUGHLIN: Okay. Then it says that -- And these are the things I didn't understand.

It says exports are minus 12. Can you explain to me what that is?

And minus -- I mean, there's a whole column of them there in July. What's going on there? How do you divert negative numbers?

WITNESS LEAHIGH: I don't know for sure what the -- what the reason is here in this particular case.

Sometimes, because of the way that SWP export -- Well, it depends -- This is . . .

I don't know offhand why that is. I'd have to -- I'd have to check with the person who prepared this.

WITNESS NADER-TEHRANI: It looks like it matches the number in the third column from left.

MR. O'LAUGHLIN: Yes, it does, so --

WITNESS NADER-TEHRANI: So now the question is, what is the -- Can you scroll back up?

MR. O'LAUGHLIN: Yeah. Can you scroll back up real quick, Kevin?

(Scrolling up document.)

MR. O'LAUGHLIN: Yes. So that would be Export (2nd), which doesn't make any sense how you come up with a negative number on exports.

So going down to the time period in July. This chart last night just confused me no end. Sorry. Because I thought I understood it until I got to July.

If you could scroll back down again.

(Scrolling down document.)

MR. O'LAUGHLIN: July 21. There we go. July 21.

So if we move it over, there's also these add numbers. So it says that at the exports you picked up 247 cfs of water at the exports that was unregulated, and yet you pumped minus 12.

So let's focus on the 247. Where -- Where's that this 247 number coming from in that year and in that month?

WITNESS LEAHIGH: I don't know offhand.

MR. O'LAUGHLIN: Would that be part of your --

Is that part of your unstored water releases? It says unstored flows.

WITNESS LEAHIGH: No. This would -- Well, this would be -- For that column, it should be unstored flows . . . in the system, but I don't know exactly where they're -- It's not -- It doesn't specify where.

MR. O'LAUGHLIN: Right. So that's one of my questions.

So when you did the graph -- And I'm looking at this time period because it's a critical time period in the system, 2015. Water's tight, reservoirs are dropping, we're in the middle of a drought.

So can you tell today where that water's coming from? And you know what -- Let's ask that question first.

Can you tell where it's coming from?

WITNESS LEAHIGH: No.

MR. O'LAUGHLIN: Okay. Is it possible as you sit here today that, of the 247, some of that water is San Joaquin River flow?

WITNESS LEAHIGH: In 2015?

MR. O'LAUGHLIN: Um-hmm.

WITNESS LEAHIGH: Yeah. I wouldn't know.

MR. O'LAUGHLIN: Okay.

WITNESS LEAHIGH: I'd have to do -- use one of

Dr. Nader-Tehrani's DSM-2 modeling.

MR. O'LAUGHLIN: Okay. Can we go to April or -- Let's go to April of 2015, if we could real quick.

I'm almost done. Any day in April would be great, Kevin.

(Document displayed on screen.)

MR. O'LAUGHLIN: Ah, perfect.

All right. So, once again in this chart, it appears that -- Let's pick a date. Let's go to April 30th. Seems like a good time period, because it's right at the bottom and --

(Line on chart highlighted.)

MR. O'LAUGHLIN: Thank you. That's very helpful. Thank you.

So we're not releasing flood flows. The Delta is not -- not in excess, and the CVP -- the SWP -- sorry -- is exporting 996 cfs of water. Okay?

And it says on the chart that none of that is unstored flow.

Do you see that?

WITNESS LEAHIGH: Yes.

MR. O'LAUGHLIN: Okay. So how is it that you're -- that -- So 805 is being used in the basin, I understand that, under in-basin requirement.

The total release is 1800. So if I subtract

that 805, I'm assuming that's being consumed, so that gets me down to a thousand.

And then how is it that -- Given those numbers, do you -- is it the addition of the 246 that gets you up a thousand that allows you to export the 996, John?

WITNESS LEAHIGH: Yeah, looks like that's the difference.

MR. O'LAUGHLIN: Okay. So if I'm looking at this chart, then, what this kind of tells me during this critical time period is that you're -- in this condition, you're releasing the instream requirements under Primary in a balanced condition and there's 750 cfs being released, and that's meeting a fishery flow requirement somewhere in the system, and then you release an additional 246 of stored water, it appears, to actually divert 996.

And it's really close. That's roughly a thousand cfs; correct?

WITNESS LEAHIGH: Yeah. So -- Right.

So that -- The 996 is coming from -- It's stored water releases in either case. It's just that part of that water served the primary purpose of instream flow first before it was exported.

MR. O'LAUGHLIN: So would you know on this date whether or not the instream release requirement of 750

cfs on April 15th was stored water or bypass flows at Oroville?

WITNESS LEAHIGH: Yeah. I'm not sure.

MR. O'LAUGHLIN: Okay. Thank you.

Do you --

WITNESS LEAHIGH: But I'm sure it's -- Yeah. I mean, just sitting here, I couldn't tell you. I'd have to examine it some more.

MR. O'LAUGHLIN: Right. Because you'd have to actually look at what inflow was coming into Oroville and what demands were being made on Oroville to understand whether or not that was actually stored water or water that was bypass flows at that period of time; correct?

WITNESS LEAHIGH: Well . . . Yeah. I'm just trying to see if it would be fundamental to the spreadsheet that you would be able to tell but I just personally can't decipher that --

MR. O'LAUGHLIN: Okay.

WITNESS LEAHIGH: -- without examining this spreadsheet a little closer.

MR. O'LAUGHLIN: Now, when you pick up under this instream flow requirements, and you talk about instream flow requirements, is embedded within the instream flow requirements -- is X-2 included within that heading? To meet X-2?

WITNESS LEAHIGH: If it's set up -- A release for an in-basin use? Well, no, it's not distinguishing between which Delta requirement, but the X-2 is considered one of the Delta requirements.

MR. O'LAUGHLIN: Right. So you would have -- In looking at this chart, it's hard to tell, because you could be making a fish release -- Are the fish releases only for the Feather River, or embedded within the fish release, are there other Sacramento River and Delta components of D-1641 or the OCAP RPAs or your FERC license that are embedded in those, or is it just Feather River fish flow releases?

WITNESS LEAHIGH: No, it's just Feather -- Feather River fish flows.

And, actually, now, your previous question I think I have the answer to that.

MR. O'LAUGHLIN: Oh, good.

WITNESS LEAHIGH: Yeah. So it would be stored releases from Oroville. I think that was your question as far as the 750?

MR. O'LAUGHLIN: Yes.

WITNESS LEAHIGH: Yeah, it would be. And the way I know that is, if there's -- if the right column is indicating no unstored flow for export, then -- then it means that the exports were from stored -- stored

releases.

MR. O'LAUGHLIN: Okay. So, then, if I looked at that and used that logic as I went through here and looked at July and August, then the component would be that releases to -- if they showed zero in that column, you could have the releases add up and still have exports, even though it's not shown in the Release to Support export column; correct? It would still be stored water.

WITNESS LEAHIGH: I'm sorry. Are you talking about July now?

MR. O'LAUGHLIN: Yeah. July or August or any month after that.

WITNESS LEAHIGH: Sorry. Can you repeat the question?

MR. O'LAUGHLIN: Sure.

What I'm trying to do is get the general understanding based on what you just said, that if you add up the 246 and the 750, you get to a thousand, and clearly it's showing that the in-basin demand for releases -- in-basin -- Is it zero? I think it's zero. You get -- Sorry. Strike all that.

Okay. I've got two other questions in regards to this.

Is -- So, when you're doing this accounting

methodology and you're looking at stored versus non-stored, this chart isn't talking about stored water under your Permits subject to re-diversion at Clifton Court. It's a shorthand way to let you know what water's being released; is that correct?

WITNESS LEAHIGH: It was a -- This -- This analysis . . .

Well, this is the analysis that supports the exhibits that were presented in terms of the stacked bar charts. And so the purpose was to provide a breakdown of -- in the -- in the case of the exports, the source of the water that was exported.

For the purposes of releases from Lake Oroville, it was to establish what the primary purpose of each component of the release was, and that's what this is.

MR. O'LAUGHLIN: Can -- Can you scroll down once more, Kevin? Let's go to August.

(Scrolling down document.)

MR. O'LAUGHLIN: Perfect. Okay.

So in August of that year, I'm looking at this chart, and it says Release to Support exports in 2015 is zero.

Do you see that?

WITNESS LEAHIGH: I'm sorry. August what?

MR. O'LAUGHLIN: Well, they're all zeros in August so far.

WITNESS LEAHIGH: Yeah. Okay.

MR. O'LAUGHLIN: So it says Release to Support exports, zero.

I'm trying to get a handle on how I use this chart.

So the State Water Project contractors filed a complaint against the Delta diverters and said that they were -- the Delta diverters were picking up stored water that had been released from Oroville for export.

But in looking at this chart, if I looked at it, this chart says no water's being released to support exports in the month of August of 2015.

Can I use this chart for that or should I reconcile that in a different manner?

MS. McGINNIS: Objection: This goes beyond the scope of what this data was provided for.

Mr. Leahigh just explained the chart and how this data supports it and now we have veered off on how Mr. O'Laughlin should use this chart in the future.

MR. O'LAUGHLIN: Well, here -- This is the fundamental point. I've never veered from this from Day 1 in these proceedings, which is trying to understand how water is colored as it moves through the Delta.

Because understanding the fundamental premise of whether or not this is stored water has a huge impact on whether or not people downstream are entitled to divert it or not.

Because -- Let -- I'll just say this because I've said it before. If stored water is being released subject to re-diversion, I'm perfectly fine with that. But if water isn't being released from stored water meet an export, then the whole question on the left-hand side is, what is the color of that water to meet other water requirements in the basin?

MS. McGINNIS: And we've gone through every column in the table and Mr. Leahigh has explained how it relates to the chart. So I don't see why we continue talking about different dates and different purposes.

MR. O'LAUGHLIN: Well, the problem is, you may not, but I get to make my record. And unless you can say -- state an objection under the law, then that objection has absolutely no basis. That's --

CO-HEARING OFFICER DODUC: Enough. Enough. Enough.

Mr. O'Laughlin --

MR. O'LAUGHLIN: Yes.

CO-HEARING OFFICER DODUC: -- you've actually been quite artful, and you've laid out what the table is

and what it shows. It's obvious the data is what's available here.

You've made your point. It's in the record. We will move on from here.

Miss McGinnis, your objection is sustained.

And I believe you said you were wrapping up your questions, anyway. So you have established what you wanted to establish, Mr. O'Laughlin, for the record, so can we wrap this up?

There is no need in my opinion to link this back to what might or might not happen in 2015 with respect to any complaint that was filed at that time. I'm going to bring this back to the Petition that is before us.

MR. O'LAUGHLIN: No. I -- And I agree with that. That's -- Maybe I shouldn't have -- I was trying to be helpful to the witness and maybe that's my downfall.

I can ask it a different way, but -- but really the question is -- to everybody in this proceeding is, can I use this chart to understand what water is showing up in the Delta as stored water subject to re-diversion versus water into the Delta to meet other requirements? That's --

CO-HEARING OFFICER DODUC: And that's a fair

question.

MR. O'LAUGHLIN: Oh, I got one.

CO-HEARING OFFICER DODUC: Answer that question, please.

WITNESS LEAHIGH: You should be able to get that information from this chart, correct.

MR. O'LAUGHLIN: Okay. And how would I do that, John? Sorry. Mr. Leahigh.

WITNESS LEAHIGH: Well, we just walked through every single column.

MR. O'LAUGHLIN: Yeah.

WITNESS LEAHIGH: You want to walk through them again --

MR. O'LAUGHLIN: No, no, no.

So basically the explanation that you gave us previously, we can use those explanations for the columns and add or subtract as we want to come up with what water is subject to either diversion or re-diversion by the SWP at its facilities; correct?

WITNESS LEAHIGH: I think the table speaks for itself.

MR. O'LAUGHLIN: Okay. And so the -- the only thing we wouldn't understand by your testimony is where these other sources of unstored flows come from; correct? Because you can't tell by this chart what the source of

that water is.

WITNESS LEAHIGH: Yes, I think that's correct.

MR. O'LAUGHLIN: Okay. So I've got two quick questions.

CO-HEARING OFFICER DODUC: Hold on, Mr. O'Laughlin. There are people still standing up.

Are you standing up for a reason? Ah, just to see.

MR. O'LAUGHLIN: So this is for Armin or for you, Mr. Leahigh.

So if I'm looking at this column of unstored flow, if the San Joaquin River flows depicted in the modeling show that D-1641 is being met when, in fact, they aren't, would that impact the amount of water that was available for export from unstored flows?

Either one of you.

WITNESS LEAHIGH: I'm sorry. Can you repeat that question, please?

MR. O'LAUGHLIN: Sure.

If -- If the modeling done -- If, and I realize it's an if.

If the modeling done for this exercise has D-1641 being met when, in fact, it can't be or it wasn't, does that impact the amount of exported unstored flows that may be available in this chart?

WITNESS LEAHIGH: I would have to check back to see exactly how -- the fact that we had filed a TUCP in this particular year and the -- so the operative standards were different than what's in D-1641. I'd have to look to see exactly how that was handled in here.

MR. O'LAUGHLIN: Okay. And then if we wanted to, we could ask Mr. Tehrani to do a DSM-2 modeling to ascertain that amount; correct?

MR. BERLINER: Objection.

MR. O'LAUGHLIN: Or the fate of the water in San Joaquin if it hadn't been there.

CO-HEARING OFFICER DODUC: What is your objection, Mr. Berliner?

MR. BERLINER: If Mr. O'Laughlin is seeking to ask Dr. Nader-Tehrani to do runs for him to help his questions --

MR. O'LAUGHLIN: No. I'm just saying if we wanted to do that, it could be done.

CO-HEARING OFFICER DODUC: Are you asking if the model is capable of doing that and providing that information?

MR. O'LAUGHLIN: Okay. I'll ask it that way.

WITNESS NADER-TEHRANI: So now you have to repeat the question, please.

MR. O'LAUGHLIN: If -- If the D-1641 flow

requirements were shown as being met when, in fact, they could not have been met or were not met, could you run a DSM-2 model to ascertain the fate of how much San Joaquin River flow water was being exported in that time period?

WITNESS NADER-TEHRANI: That would not be a very straightforward run. It would require an iterative run, you know, making assumptions and changing, you know, the flows in order to meet those requirements.

MR. O'LAUGHLIN: I have one last question.

WITNESS NADER-TEHRANI: It would not be straightforward.

MR. O'LAUGHLIN: Okay. I have one last question. This is for Armin.

If -- If the modeling at Vernalis was done predicated on meeting D-1641 when, in fact, D-1641 has not been met, if there is a deficit there -- if there is a deficit there, where would that deficit be made up in your -- in the California WaterFix proposal for meeting in-Delta requirements or exports?

WITNESS MUNÉVAR: Yes. So that's an if. It's a conditional question.

MR. O'LAUGHLIN: Huge if.

WITNESS MUNÉVAR: So, just to point out what I think I lost in some of this questioning is that the No-Action and the WaterFix have identical operations on