

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

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
1001 I STREET
SECOND FLOOR
SACRAMENTO CALIFORNIA
PART 1 REBUTTAL

Friday, May 12, 2017
9:30 A.M.

VOLUME 44
Pages 1 - 220

Reported By: Deborah Fuqua, CSR No. 1248

Computerized Transcription by ProCAT

1 true the petitioners' own modeling without any bias
2 correction shows that SRFEs are modeled to occur at a
3 higher probability than your low estimate of 1.4 SRFEs
4 per year based on historical data?

5 WITNESS NADER-TEHRANI: That would be correct.
6 But still, when the numbers are that different, that
7 does say something about the analysis.

8 So I'm not necessarily saying that the
9 uncorrected DSM-2 is correct. What I testified
10 yesterday, my testimony was that certainly what I can
11 say clearly is that the bias-corrected DSM-2 shows an
12 extremely -- gives an extremely high estimate with
13 respect to the observed data. I'm not making any
14 claims that the uncorrected DSM-2 necessarily predicts
15 SRFEs at a correct rate.

16 MR. SALMON: Thank you. I have no further
17 questions.

18 CO-HEARING OFFICER DODUC: Thank you,
19 Mr. Salmon.

20 Next up is the Group No. 18, the San Joaquin
21 Tributaries Authority.

22 RECROSS-EXAMINATION BY MR. WASIEWSKI

23 MR. WASIEWSKI: Good morning. Tim Wasiewski
24 for the San Joaquin Tributaries Authority. These
25 questions will be for Mr. Leahigh, and this has to do

1 with the negative SWP export numbers and DWR-905.

2 So, Mr. Baker, if you could please pull up
3 DWR-850 and DWR-905. That should be all we need.

4 Let's go to 905 first, please. If you could
5 scroll down to July, the months of July in 905, which I
6 think is on the second page.

7 Mr. Leahigh, yesterday you testified on
8 redirect that the negative numbers shown in the SWP
9 export column -- and you can't tell what it is exactly
10 from here, but just for point of reference, it's the
11 one right next to -- it's the one right to the left of
12 the end, the column with all of the N's.

13 You told us yesterday on redirect that the SWP
14 export number is negative in these columns in July
15 because it was reduced to account for a water transfer;
16 is that -- is that correct?

17 WITNESS LEAHIGH: Yes. What I testified was
18 that these numbers are erroneous, and that was part of
19 the reason that these are negative.

20 MR. WASIEWSKI: Okay. I don't know if I heard
21 your whole testimony correct.

22 But if we could scroll down to August of that
23 same graph -- I don't know if we need to scroll down or
24 not.

25 But there are also negative numbers in August.

1 For instance, on August 2nd, there's a negative number.
2 Is that -- and I thought I heard you say that it was
3 for July, but did you also mean for August that there
4 was a water transfer and that was the reason for the
5 reduction that resulted in the negative?

6 WITNESS LEAHIGH: Yes. If I did, I believe I
7 testified it was the entire summer. So yes, it
8 included August as well.

9 MR. WASIEWSKI: Well, I've also noticed that
10 there's -- there are negative numbers in the month of
11 October, for instance, October 21st.

12 MR. OCHENDUSZKO: Mr. Wasiewski, do you mind
13 if we just pause for one second?

14 MR. WASIEWSKI: Yes.

15 MR. OCHENDUSZKO: We're trying to bring up
16 this exhibit while showing the columns at the top as
17 well.

18 MR. WASIEWSKI: Okay. That would be helpful.
19 Thank you.

20 Are we set up? Okay. We'll go with that.

21 So if we look at -- I think October 21st, but
22 there actually may be several days before that also
23 where there are negative numbers in the SWP export
24 column.

25 Is your explanation the same for those

1 negative numbers in October, that they were the result
2 of a water transfer?

3 WITNESS LEAHIGH: Yes, I believe so. There
4 was no movement in water transfer in October, but there
5 was water being released as part of a transfer.

6 But bottom line is the -- the totaled number
7 of -- the error in the -- in the total in the sum of
8 that column is 24,000 acre-feet, which was equivalent
9 to the Yuba Court C1 water. So that matches up --
10 taking into account carriage water reductions.

11 So that matches up with what was known to be a
12 transfer that was occurring that year, and it was
13 erroneously affecting that export, those export
14 numbers.

15 MR. WASIEWSKI: Okay. So in any occasion
16 where there's a negative number listed in the SWP
17 export column, it was erroneously listed as negative to
18 account for that transfer? Is that --

19 WITNESS LEAHIGH: Yeah. It was
20 inappropriately accounting for the transfer, and that's
21 why it's an error.

22 MR. WASIEWSKI: Okay.

23 WITNESS LEAHIGH: Yeah.

24 MR. WASIEWSKI: If we were to correct it,
25 would we turn it into a positive number, or would we

1 just make it zero or some other?

2 WITNESS LEAHIGH: No. It would be a positive
3 number. So the total export column, the sum of that,
4 if your go to the very bottom, is 24,000 acre-feet less
5 than it should be. So if you compare the sum for that
6 column with the total on the stacked bar chart on
7 Exhibit 850, it's 24,000 acre-feet short of what's
8 presented in that stacked bar chart.

9 MR. WASIEWSKI: Okay. So that accounts for
10 every negative in that year.

11 So are you saying, then, that if you flip
12 those numbers to positive -- well, let me just ask this
13 question because this may set it up better.

14 If you could pull up DWR-850, please.

15 So I see in the 2015 year -- that's the third
16 one on the right, the smallest one -- it says that
17 total exports were 0.81 million acre-feet, right?

18 WITNESS LEAHIGH: Correct.

19 MR. WASIEWSKI: So if we went back to DWR-905,
20 is there a column in here which you would just simply
21 add up to reach that 0.81-million acre-feet number, or
22 is it more complicated than that?

23 WITNESS LEAHIGH: Yeah. There are three
24 columns that add up to that number.

25 MR. WASIEWSKI: Which columns are those?

1 WITNESS LEAHIGH: Okay. So that would be the
2 third column from the left.

3 MR. WASIEWSKI: Can you give us the title?

4 WITNESS LEAHIGH: Yeah. The title would be --
5 it's under the "Instream Requirements" and "Exports."

6 MR. WASIEWSKI: So "Exports (2nd)"?

7 WITNESS LEAHIGH: "(2nd)," right.

8 MR. WASIEWSKI: All right.

9 WITNESS LEAHIGH: And it would also be, then,
10 the -- let's see. One, two, three, four, five, six,
11 seven, eight -- eighth column from the left, which is
12 the "Release To Support" exports.

13 MR. WASIEWSKI: Okay.

14 WITNESS LEAHIGH: And then the column on the
15 far right which is "Exported Unstored Flow."

16 MR. WASIEWSKI: Okay. So when I try to
17 interpret this graph or this table, at least in certain
18 years, if you add up the three columns that you just
19 referenced, that gives you the number in the SWP export
20 column; is that right?

21 WITNESS LEAHIGH: That's right. It gives --
22 in this particular year, it gives you that .81-million
23 acre-feet.

24 MR. WASIEWSKI: Okay. So then if just -- if
25 you just added the entire column of SWP export, you

1 would get the .81-million acre-feet?

2 WITNESS LEAHIGH: So, yeah. So the three that
3 we just discussed, if you add those three together, you
4 get the 0.81. If the -- the column that had the
5 negatives in that we were discussing previously is
6 24,000 acre-feet short of that number.

7 MR. WASIEWSKI: Okay. So the way to get to
8 the .81-million acre-feet is to add together the three
9 columns that you referenced -- "Exports (2nd),"
10 "Releases to Support, Export," and "Exported Unstored
11 Flow" -- and that will get you the 0.81?

12 WITNESS LEAHIGH: Correct.

13 MR. WASIEWSKI: Okay. I guess, then, I need a
14 little bit of a further explanation, then.

15 If we could go down to July, really any day in
16 July, I think.

17 So it looks like the numbers in the
18 "Exports (2nd)" column are exactly the same as the
19 numbers in the SWP export column. In other words,
20 they're both negative and the values are the same.
21 So --

22 WITNESS LEAHIGH: Yeah. So the other effect
23 of this error is that it's showing 24,000 acre-feet --
24 it's short on the column third from the left, which is
25 the export of in-stream flows, and it's also

1 erroneously showing -- it's 24,000 acre-feet too high
2 for the export of unstored flow, the far right-hand
3 column. So those two are incorrectly shown in the
4 stacked bar chart in Exhibit 850. There's a -- there
5 should be a shift of 24,000 acre-feet between those two
6 sources of the water.

7 But as I testified, that 24,000 acre-feet out
8 of well over 800,000 acre-feet is not significant in
9 terms of the results of that.

10 MR. WASIEWSKI: Okay. I understand that part.
11 I want to understand how you got to -- what the error
12 is, I guess.

13 So is the -- you may have already said this.
14 Is the .81-million acre-feet too high by 24,000
15 acre-feet or too low?

16 WITNESS LEAHIGH: No. The .81-million
17 acre-feet is correct. The column that has just SWP
18 export separately on this table is 24,000 acre-feet too
19 low. But the part that's incorrect on the Exhibit 850
20 is there's 24,000 acre-feet of what is listed as
21 unstored flow should be in the category of export of
22 in-stream flow.

23 MR. WASIEWSKI: Okay. So then, in order to
24 get the .81-million acre-feet, if you add the export
25 second column -- these are the three that you just told

1 me: the "Exports (2nd)" column, the "Releases to
2 Support, Export," and the "Exported Unstored Flow" --
3 you'll get the 0.81 number; is that right?

4 WITNESS LEAHIGH: Yes.

5 MR. WASIEWSKI: Okay. But if you simply sum
6 up everything in the SWP export column, it's off by
7 24,000 acre-feet, right?

8 WITNESS LEAHIGH: Correct.

9 MR. WASIEWSKI: Okay. So --

10 CO-HEARING OFFICER DODUC: I think that was a
11 total of 20 minutes so far, right?

12 MR. WASIEWSKI: I might just need five or ten.

13 CO-HEARING OFFICER DODUC: All right. Just
14 give him another five to finish up, please.

15 MR. WASIEWSKI: The other day when you were
16 being cross-examined I think by Ms. Spaletta, she asked
17 you which of these columns were measured values and
18 which of the columns were calculated values.

19 And I don't have the transcript, but I have in
20 my notes -- so you can correct me if I'm wrong -- that
21 the measured values were the "FRSA Deliveries" column
22 which is the first, the "SWP Export" column, and the
23 "Total Oroville Releases" column.

24 Is that still your testimony after you had a
25 chance to go back and look at these -- look at the

1 error that occurred from the negative numbers?

2 MS. MCGINNIS: Objection. Now we're talking
3 about Spaletta's cross-exam, not Mr. Leahigh's
4 redirect.

5 MR. WASIEWSKI: I'm -- well, I'm --

6 CO-HEARING OFFICER DODUC: Hold on.

7 The question was whether or not, as part of
8 the correction that Mr. Leahigh has made to his
9 testimony with respect to this table, if there were any
10 other errors. Overruled.

11 WITNESS LEAHIGH: Yes. So my recollection was
12 incorrect. So the SWP export is a calculation, and
13 that's why it -- that error propagated into that
14 column.

15 MR. WASIEWSKI: Okay. So then there's two
16 ways to look at this. It's either that those -- it's
17 either that everything flows into the export -- the SWP
18 export column or it flows out of that column.

19 So you're saying to me that the SWP export
20 column is calculated from the other columns and not the
21 other way around?

22 WITNESS LEAHIGH: It -- that SWP export column
23 is calculated. Right, is a calculated number.

24 MR. WASIEWSKI: Okay. So now I'm not entirely
25 sure how you applied the reduction.

1 So do you know if there are any days in this
2 table in which you would have applied a reduction for a
3 water transfer but then the net result didn't cause a
4 negative to show up in the "SWP Export" column because
5 maybe the SWP export was still in the positive and so
6 we can't necessarily see it? Are there any instances
7 of that? I don't know if that was clear or not.

8 WITNESS LEAHIGH: That wasn't -- that wasn't
9 clear to me, what the question is. Yeah.

10 MR. WASIEWSKI: Okay. I can try it again.
11 So --

12 CO-HEARING OFFICER DODUC: I'm sorry. Are you
13 trying to ascertain whether the numbers in the "SWP
14 Export" column have any similar errors with respect to
15 water transfer that is not reflected by the currently
16 negative numbers?

17 MR. WASIEWSKI: Right. So it may be there,
18 it's just not visible because of the math in the end,
19 it was -- the export number was still positive?

20 WITNESS LEAHIGH: So the -- so as we just
21 reviewed, the three columns that should add up to equal
22 that "SWP Export" column, they do not, in this
23 particular year. And there's that difference of 24,000
24 acre-feet.

25 If you go to the other two years that were

1 analyzed and you add up those same three columns, they
2 do match exactly to that "SWP Export" column. So I
3 believe this is the only year that had this particular
4 error.

5 MR. WASIEWSKI: Well, okay. But does -- but
6 are there unseen errors here that are not apparent
7 because the number in the "SWP Export" column did not
8 dip into the negative when you made the reduction to
9 account for the water transfer? Or if you don't know
10 whether or not, that's fine also.

11 WITNESS LEAHIGH: Well, so part of the problem
12 with -- there were a number of approaches that were
13 going to be pursued in analyzing this data, and one of
14 those approaches attempted to remove the water
15 transfers. That approach was abandoned.

16 And so the approach -- the final approach just
17 took the straight SWP export because it was more
18 straightforward. It would show additional export of
19 unstored flow that wasn't really occurring, but it was
20 felt to be a more streamlined way to look at the data.

21 And unfortunately, when that more streamlined
22 approach was used, this one year still had the other
23 approach that was abandoned as part of the data set
24 where it was attempting to remove a water transfer.

25 And we -- because of the complications

1 involved in that other approach, we rejected that
2 approach and just went more with a straightforward --
3 just accounted all SWP exports as -- as -- regardless
4 of whether they were water transfers or not, as
5 counting as part of this calculation.

6 Now, that was conservative because it actually
7 shows more -- it would end up showing more SWP export
8 as from stored water when in reality some of that
9 export from stored water was really a water transfer.

10 So the problem here was there was a couple of
11 different approaches that were initially pursued, and
12 we went with the more streamlined approach.
13 Unfortunately, some of the old approach found its way
14 into this one particular year, and that's what went on
15 here.

16 CO-HEARING OFFICER DODUC: So in some way,
17 Mr. Leahigh, how confident are you that the currently
18 positive numbers in the "SWP Export" column are
19 correct?

20 WITNESS LEAHIGH: I'm very confident because I
21 compared those columns with just a straight, measured
22 SWP export column, and they match for the other years.

23 MR. WASIEWSKI: Okay. I guess I -- I have one
24 just one last question. It's sort of an example, if
25 you could explain it to me.

1 If we go to July 1 real quick, you have a
2 negative here for SWP export of negative 206. And you
3 have an exported unstored flow of 394.

4 How much did the State Water Project export on
5 that day?

6 WITNESS LEAHIGH: It will be the combination
7 -- it should be the combination of the three columns
8 that we were discussing before.

9 MR. WASIEWSKI: Okay. That's all I have.
10 Thank you.

11 CO-HEARING OFFICER DODUC: Thank you for
12 ruining spreadsheets for me for the rest of my life.

13 Ms. Meserve did not get her recross yesterday.
14 So, Mr. Herrick, we're now up to you. Perhaps you
15 might restore my love for spreadsheets.

16 And Mr. Herrick had estimated ten minutes
17 yesterday.

18 MR. HERRICK: Yes. Thank you, Madam Chairs,
19 Board Member.

20 REXCROSS-EXAMINATION BY MR. HERRICK

21 MR. HERRICK: John Herrick for South Delta
22 Water Agency, et al. I don't have that many questions,
23 but it's going to be a string of questions that deals
24 with Mr. Berliner's recross of the reliability aspects
25 of DSM-2 under -- or the uses of the reliability.