STATE OF CALIFORNIA

STATE WATER RESOURCES CONTROL BOARD WATER RIGHT APPLICATIONS 30358A AND 30358B FILED BY THE WOODLAND-DAVIS WATER AGENCY

JOE SERNA, JR., CALEPA BUILDING

1001 I STREET

2ND FLOOR

COASTAL HEARING ROOM

SACRAMENTO, CALIFORNIA

WEDNESDAY, JANUARY 19, 2011

9:05 A.M.

TIFFANY C. KRAFT, CSR CERTIFIED SHORTHAND REPORTER LICENSE NUMBER 12277

APPEARANCES

BOARD MEMBERS

- Mr. Charlie Hoppin, Chair
- Ms. Frances Spivy-Weber, Vice Chair
- Ms. Tam M. Doduc
- Mr. Dwight P. Russell

STAFF

- Mr. Thomas Howard
- Mr. Jonathan Bishop, Chief Deputy
- Ms. Caren Trgovcich, Chief Deputy
- Mr. Michael A.M. Lauffer, Chief Counsel
- Ms. Jane Farwell, Environmental Scientist
- Ms. Kathleen Groody, Environmental Scientist
- Mr. Nathan Jacobsen, Staff Counsel

ALSO PRESENT

- Mr. John Herrick, South Delta Water Agency
- Mr. Michael Jackson, California Sportfishing Protection Alliance
- Mr. Bill Jennings
- Mr. Alan Lilly, Woodland-Davis Clean Water Agency
- Mr. Chris Shutes

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EXHIBITS

CSPA	Marked for identification	Received into evidence
CS & BJ exhibit	s	64
CS 19		92
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PROCEEDINGS

- 2 VICE CHAIRPERSON SPIVY-WEBER: This is a
- 3 continuation of the Board meeting that we started
- 4 yesterday. Everyone took the oath who is testifying for
- 5 this hearing, but it will be helpful if you state that
- 6 when you make your statements on the record.
- We are now moving to the second -- to the case in
- 8 chief being presented by California Sportsfishing
- 9 Alliance.
- 10 I want to make sure you know who our staff is,
- 11 which is the same as yesterday. Larry Lindsay, Nathan
- 12 Jacobsen, who is our attorney, Kathleen Groody, and Jane
- 13 Farwell. And I think that takes care of all the staff.
- 14 So, Michael, I will turn it over to you for
- 15 opening statement.
- 16 MR. JACKSON: Thank you very much.
- 17 CSPA filed a protest for this application in
- 18 1994. We did it based upon two grounds: The
- 19 over-appropriation of the Sacramento River and the delta
- 20 watershed and the condition in 1994 of the fisheries as
- 21 they have been revealed in a series of hearings that took
- 22 place before the State Water Board in the years 1991 and
- 23 1992. It resulted in a draft order 1630 which was later
- 24 not finalized.
- 25 But the information that was available in those

- 1 days was much like the information that you recently
- 2 reviewed when the Legislature gave you the duty of
- 3 responding to them about what kind of water flow would be
- 4 necessary in order to recover the delta. The results of
- 5 that flow decision were relatively consistent with what
- 6 people knew in 1991 and 1992 reflected in the draft
- 7 decision 1630.
- 8 The testimony didn't change between then and now.
- 9 What changed was that we went from millions of salmon to,
- 10 at the time of the review that you did, a situation in
- 11 which there were well under 100,000 salmon of all races.
- 12 And it was clear that folks couldn't have a commercial
- 13 fishery and that our sports fishermen were not going to be
- 14 allowed to fish, even though there is a constitutional
- 15 right in the California Constitution giving us the right
- 16 to fish. It was pretty clear that there were just too
- 17 many problems with the fishery to continue business as
- 18 usual.
- 19 The question of how that relates to new water
- 20 rights has been important in California, as you will find
- 21 from Mr. Jennings' testimony, since approximately 1934.
- 22 When they were beginning to build the projects, it was --
- 23 as an example, there were letters between the Department
- 24 of Interior and the Water Project Authority of California
- 25 that a judicial determination of existing water rights on

- 1 the Sacramento and San Joaquin Rivers is necessary in
- 2 order to operate the Central Valley Project efficiently
- 3 and successfully. And such determination should be
- 4 effected before the project is placed in operation. That
- 5 was never done.
- 6 In 1942, Henry Holsinger, who was a well-known
- 7 water rights attorney, and later became Chairperson of
- 8 this Board's predecessor, indicated that it is -- it has
- 9 in fact long been widely recognized that full adjustments
- 10 of water rights should proceed not only project operation
- 11 but also project construction. It was not done in the
- 12 40s.
- 13 In the 50s, it was relatively clear in the
- 14 discussions about Burns border and in the discussions
- 15 about the Central Valley Project Congressman Clair Ingle,
- 16 "We felt in state government" -- excuse me -- Governor
- 17 Earl Warren -- "We have felt in state government for many
- 18 years there should be a complete adjudication of the water
- 19 rights on the Sacramento River, and we believe that it
- 20 should be done before the Central Valley Project was
- 21 completed and in operation."
- 22 I'm pointing this out, because this is not a new
- 23 problem. This is a problem that, however, has a much
- 24 greater weight today than it did at any time that folks
- 25 were talking about it. We have a situation in which the

- 1 fisheries are in substantial decline. And our position is
- 2 that at some point -- and that point ought to be before
- 3 granting this right -- the State Board ought to analyze
- 4 whether or not there is water available for appropriation.
- 5 Continuing to give out water rights and have people build
- 6 expectations and build into their bonding and financial
- 7 systems the idea that they're going to have a certain
- 8 water supply in the face of what we think you know and
- 9 what we're going to try to tell you again today is
- 10 damaging to everyone.
- 11 Davis and Woodland are not going to build this
- 12 project until 2016. By 2016, you will -- on your present
- 13 schedule, you will have determined what the flow is going
- 14 to be, who is going to donate it to recover the fishery,
- 15 how the priority system is going to work in that regard.
- 16 And we will have some answers as to whether or not there
- 17 is water available in conditions that we know are
- 18 happening today and you are going to try to come to grips
- 19 within the near future.
- 20 Davis and Woodland have a water supply. They can
- 21 clean that water supply. That water supply -- present
- 22 water supply does not affect fisheries, nor does it change
- 23 priorities or the balance that you are to do in regard to
- 24 public trust in regard to the Sacramento River and the
- 25 delta.

- 1 It is simply a matter of cost. Everyone who is
- 2 on groundwater could shift to surface water. It would be
- 3 less possibly because you don't have to purchase the
- 4 surface water. There's a pumping cost. But basically,
- 5 the water is much cleaner and it makes it much easier to
- 6 meet the standards.
- 7 So what we're going to try to do today is to show
- 8 you in the testimony that there is likely not water
- 9 available for appropriation during these time periods and
- 10 that you would be much better off in terms of -- by
- 11 delaying the approval of this application until you know
- 12 what the system is going to be. Thank you.
- 13 VICE CHAIRPERSON SPIVY-WEBER: I assume you'll
- 14 move directly into your panel.
- 15 MR. JACKSON: Yes.
- 16 DIRECT EXAMINATION
- 17 MR. JACKSON: Mr. Jennings, have you been
- 18 previously sworn?
- 19 MR. JENNINGS: Yes, I have.
- 20 MR. JACKSON: Have you presented testimony in
- 21 writing for this hearing?
- 22 MR. JENNINGS: I did.
- MR. JACKSON: Mr. Shutes, have you been
- 24 previously sworn?
- MR. SHUTES: I have.

- MR. JACKSON: Have you prepared testimony for
- 2 this hearing?
- 3 MR. SHUTES: I have.
- 4 BY MR. JACKSON:
- 5 Q Mr. Jennings, would you summarize your testimony,
- 6 please, for the Board?
- 7 A Yes. Briefly. The pelagic fisheries in the Central
- 8 Valley are in serious decline. The causes are multiple,
- 9 including significant reduction in delta outflow and
- 10 inflow that result in the loss and degradation of habitat,
- 11 massive changes in the historical hydrograph, effects of
- 12 export operations, contaminants, invasive species, and
- 13 others.
- 14 Sacramento River inflows to the delta between
- 15 April and June over the last 18 to 22 years have been
- 16 about 50 percent on average compared to unimpaired
- 17 conditions. And delta outflows near the 86-05 period have
- 18 been reduced by some 48 percent compared to unimpaired
- 19 conditions.
- 20 And the State Board's recent delta flow report
- 21 found delta flows are insufficient to support native delta
- 22 fisheries and recommended substantially greater inflows
- 23 and outflows.
- 24 Clearly, the various iterations of water quality
- 25 control plans, the water rights decisions implementing

- 1 those plans, the terms and conditions and permits like
- 2 Term 91, and a string of biological opinions have
- 3 cumulatively failed to protect the public trust resources
- 4 of the Central Valley fisheries.
- 5 Any additional upstream diversion will
- 6 inescapably exacerbate to some degree already degraded
- 7 habitat in fisheries. The Sacramento River delta estuary
- 8 identified as impaired, incapable of supporting beneficial
- 9 uses because of numerous contaminants.
- 10 The many water quality impairments identified in
- 11 the recently adopted 303(d) list represent only the tip of
- 12 the iceberg, because a number of unidentified impairments
- 13 are caused by constituents for which there are no water
- 14 quality criteria. Water quality criteria have not been
- 15 developed for the majority of chemicals used in national
- 16 commerce and discharged to our waterways. Promulgating
- 17 criteria do not consider multiple stressors, additive or
- 18 synergistic affects, degradents or sublethal impacts.
- 19 Alterations of flow alter assimilative capacity
- 20 change the fate and transport of contaminants. For
- 21 example, upstream diversions increase the residence time
- 22 and concentrations of downstream pollutants. Any new
- 23 upstream diversion will exacerbate in some degree the
- 24 impacts of downstream pollutants and already degraded
- 25 water

- Water in the Sacramento basin is seriously
- 2 over-appropriated. As Michael said, staff within the
- 3 Department of Interior, the old State Water Rights Board
- 4 in the 30s and 40s, and the Chair of the State Water
- 5 Rights Board, the Governor of California in the early 50s
- 6 who I'm certain sufficient water was available for the
- 7 Central Valley Project and believed that adjudication
- 8 should proceed project operation.
- 9 When the formal findings of the 1951 Engle
- 10 Congressional Committee investigated water availability in
- 11 the Central Valley including the finding that -- and I
- 12 quote -- "for all practical purposes, the developed water
- 13 supplies of the Sacramento River are overcommitted and
- 14 oversubscribed." And this was before approval of the
- 15 State Water Project.
- 16 Similar concerns were voiced during the 1960
- 17 Porter hearings during the State Water Project. And I
- 18 know the Department of Water Resources Bulletin 76 delta
- 19 water facilities in 1958 observed that after 1981
- 20 operation of the State Water Project would necessitate
- 21 importation of about five million acre feet from north
- 22 coast streams.
- 23 MR. JENNINGS: The State Water Board staff's 2008
- 24 letter to the Delta Vision Blue Ribbon Task Force
- 25 identified the mean annual unimpaired flow in the delta

- 1 watershed as 29 million acre feet. Staff observed that
- 2 the total value/face value of the approximately 6300
- 3 active water rights permits within the delta was about 345
- 4 million acre feet. Face value did not include pre-14 and
- 5 riparian rights. The total face value of the unassigned
- 6 portion of the State filing for consumptive use -- I
- 7 mention consumptive use -- is approximately 60 million
- 8 acre feet.
- 9 Staff acknowledged a number of reasons why face
- 10 value is greater than actual diversion, insufficient
- 11 supply, bass bypass conditions, nonconsumptive uses, those
- 12 were mentioned and discussed yesterday.
- 13 Conceptually, actual use might be a better metric
- 14 than face value. However, staff admitted that the State
- 15 Board has, and I quote, "limited information on actual
- 16 use" and "comprehensive review of the State Water Board's
- 17 paper filled would provide only a crude estimate of actual
- 18 historic and current use because of gaps in reporting and
- 19 the unreliability of the data already collected."
- Notwithstanding, it remains a fact that the State
- 21 Water Board does not know how much water is actually being
- 22 used. The State Water Board does not know the extent of
- 23 senior riparian or pre-1914 water rights in the basin.
- 24 For example, CSPA holds senior riparian rights that it's
- 25 not used.

- 1 The State Board does not know the full extent of
- 2 consumptive water rights and permits that are not
- 3 presently being used but may be legally exercised in the
- 4 future. One example is the pending petitions for time
- 5 extensions of the Bureau of DWR that amount to about 19
- 6 million acre feet of consumptive rights. If the unused
- 7 portion of the consumptive water rights in the 1927 State
- 8 filings -- the unused portion of the consumptive water
- 9 rights in the 1927 State filings is more than twice the
- 10 average unimpaired flow in the entire delta watershed.
- 11 All of these rights are senior to the applications of
- 12 Davis and Woodland. David and Woodland could have applied
- 13 to the State Board for assignment for a portion of the
- 14 State filings, but they didn't.
- 15 Further compounding the problem is the likelihood
- 16 that basin runoff will be reduced in the future because of
- 17 global warming. And I reference the work of PG&E's chief
- 18 hydrologist Gary Freeman. The additional cold water
- 19 storage that will likely be necessary to meet temperature
- 20 requirements for dams. And I reference the comments by
- 21 numerous experts in the delta flow process, including Fish
- 22 and Wildlife and NMFS.
- 23 The additional amounts of water that will be
- 24 required to protect fisheries and public trust resources,
- 25 whatever that amount ultimately is, it is likely to be

- 1 substantial.
- Now, since the State filing for consumptive
- 3 rights, the unknown or uncounted riparian pre-14 rights
- 4 and the unused portion of the already approved appropriate
- 5 rights, many of which may be used north of delta, are
- 6 greater than the total unimpaired flow in the basin, there
- 7 cannot be water available for additional diversion, even
- 8 without considering the effects of the global warming,
- 9 increased cold water storage, and additional flows.
- 10 The applicants base their entire assumption of
- 11 water availability on several CalSim-II model runs. Now,
- 12 CalSim-II is like a Latin's lamb. It gives what you wish
- 13 for. The State contractors in the delta in the aftermath
- 14 of the delta proceedings painted a dyer picture that
- 15 implementation of the flow criteria would end life as we
- 16 know it in the Central Valley. David and Woodland using
- 17 CalSim-II saying, even if you implemented those flow
- 18 recommendations, there would be water available. It can't
- 19 be both.
- 20 In my testimony, I noted that the peer review of
- 21 CalSim-II was highly critical and detailed numerous
- 22 inadequacies. The latest version has not been peer
- 23 reviewed. The UCD technical survey that was peer reviewed
- 24 and funded by the Cal Fed science program identified a
- 25 litany of serious deficiencies in the model. The State

- 1 Board staff can't run the model, therefore can't
- 2 independently verify the accuracy of assumptions or
- 3 output. The model ignores global warming. It fails to
- 4 account for senior riparian, pre-14, and appropriative
- 5 rights that exist or have been approved but have yet to be
- 6 exercised.
- 7 So in closing, I believe there is no remaining
- 8 water available for appropriation in the Central Valley.
- 9 Approval of the application could result in significant
- 10 adverse impacts to water quality, the environment, public
- 11 trust resources. Project impacts are substantial and
- 12 cannot be avoided or mitigated. And consequently, the
- 13 proposed projects are not in the public interest and would
- 14 suggest that the Board exercise caution in finding that
- 15 water is available in issuing new permits, because it
- 16 would be foolhardy to discard 150 years of law and legal
- 17 precedent.
- 18 That concludes my testimony.
- 19 MR. JACKSON: Mr. Shutes.
- 20 MR. SHUTES: The overarching issue presented by
- 21 these applications is whether water is available for
- 22 appropriation. This is inseparable from considering how
- 23 much water is available for diversion overall from the
- 24 Sacramento-San Joaquin system if sufficient water is
- 25 devoted to protecting, maintaining, and restoring the

- 1 public trust resources of the Sacramento and San Joaquin
- 2 River system.
- 3 The applicants that presented water availability
- 4 analyses that are based on existing constraints on that
- 5 system, they've gone to voluminous length to show that if
- 6 you accept the existing constraints, there is plenty of
- 7 water for the permits. As modeled by the applicants,
- 8 future conditions maintain those constraints. They've
- 9 attempted to address -- they have not attempted to address
- 10 the larger question of the adequacy of those constraints.
- 11 Their underlying assumption is thus; that existing
- 12 requirements or something close to them devote adequate
- 13 flow from protection of public trust resources in the
- 14 Sacramento-San Joaquin River system.
- 15 The State Board's delta flow criteria report says
- 16 otherwise, according to modeling done by MBK, the same
- 17 folks that did the modeling for Davis and Woodland. The
- 18 requirements of the delta flow criteria report means that
- 19 on average about 5.5 million acre feet of additional delta
- 20 outflow are needed to protect, maintain, and restore delta
- 21 fisheries over and above the current required amounts of
- 22 flow.
- 23 When CSPA says Sacramento-San Joaquin River is
- 24 over-appropriated, we mean in the first instance. What
- 25 the delta flow criteria report says, we're 5.5 million

- 1 acre feet a year short. The first law of holes is to stop
- 2 digging. If we're five-and-a-half million acre feet a
- 3 year short, where are we going to find 45,000 acre feet to
- 4 service the permits of David and Woodland? Yes, Davis and
- 5 Woodland might be able to scratch out a few thousand acre
- 6 feet during winter floods. Floods are the last refuge of
- 7 prospective diverters from a grossly over-appropriated
- 8 system. Montgomery Watson Harza's earlier analysis was
- 9 that Davis and Woodland don't need much water in those
- 10 months. That's CSPA, CS 10 exhibit number. It's about 20
- 11 percent of their overall need.
- 12 We've put together a rebuttal exhibit that shows
- 13 that according to the modeling done by Mr. Bourez, the
- 14 average annual diversion under delta flow criteria
- 15 standards that would be available to Davis and Woodland
- 16 would be about 2,356 acre feet a year to service these
- 17 permits.
- 18 Permit terms and area of origin statutes don't
- 19 make up for water quality there's not there. Term 91 is
- 20 part of the base line condition. It hasn't protected the
- 21 delta. The idea that the magnitude of delta flow
- 22 shortfall can be addressed on a permit by permit basis
- 23 according to Terms 80 and 90 is simply not credible. Even
- 24 if the storage were two million or three million acre
- 25 feet, to have hearings on each permit to go through

- 1 whether or not they ought to shorten them seasonally or in
- 2 any given season is just not a reasonable way to address
- 3 the magnitude of the problem. And area of origin
- 4 protections up until now have protected diversions. They
- 5 have not protected aquatic ecosystems. There is no
- 6 mechanism to reduce exports on a basis that is equivalent
- 7 to new in-basin diversions, let alone a mechanism to scale
- 8 back exports to grant in-basin priority for existing
- 9 diversions on a widespread scale.
- 10 The suggestion by the Assistant Deputy Director
- 11 of Water Rights in standard permit terms, an area of
- 12 origin protections will address our concerns with these
- 13 proposed permits simply kicks the can down the road.
- 14 We've already kicked the can down the road with Term 91 in
- 15 the early 80s and its subsequent broader application in
- 16 the late 80s and with permit Terms 80 and 90.
- 17 The delta flow criteria report said we need to
- 18 increase delta flow. You can't do that if you increase
- 19 diversions. MBK itself says and I quote, "Under existing
- 20 laws and regulations and given the recent hydrology of
- 21 1986 to 2005, a rough estimate of the combined annual
- 22 average consumptive use and exports is eight million acre
- 23 feet. The proposed delta flow criteria will cut this by
- 24 five-and-a-half million acre feet on an average annual
- 25 basis, a 69 percent reduction. This is very significant."

- That's in our CSPA Exhibit CS 9. In other words,
- 2 the system is over-appropriated according to MBK if flows
- 3 needed to restore the delta according to the State Board
- 4 are implemented. The State Water Project and the Central
- 5 Valley Project have petitioned to extend time on their
- 6 permits. DWR alone has not used 1.3 million acre feet a
- 7 year in consumptive storage rights than it has in Oregon.
- 8 The CVP petitions are jumbled together, but we estimate
- 9 that there is about six million acre feet of storage
- 10 rights available to CVP in the Sacramento River basin,
- 11 including the American River. The maximum amount of
- 12 annual use of these rights has fallen short of the
- 13 permitted amounts. We don't know by how much because in
- 14 the petitions the CVP doesn't tell us.
- The amounts of potential increased direct
- 16 diversion under these permits are much greater. And some
- 17 of these rights may well be used in basin, including for
- 18 delta flow requirements, which are considered to be
- 19 in-basin requirements, especially if more spring flow is
- 20 required. If more spring flow is required, then the time
- 21 periods in which Term 91 is in effect will be much
- 22 greater.
- 23 When we look at the water availability analysis
- 24 that was displayed yesterday -- and it's also in CSPA CS
- 25 Number 9, we see a very small number of months in which

- 1 Term 91 is in effect. But if you start increasing delta
- 2 flow and taking water out of the system and needing to
- 3 find that water, you're running out of water. And all of
- $4\,$ a sudden, in order to meet any water demands at all, the
- 5 projects are going to have to start releasing stored
- 6 water. And low and behold, Term 91 will be in effect.
- 7 Effectively, what you saw yesterday from Mr.
- 8 Bourez in Exhibit 104 was that Term 91 is in effect almost
- 9 all year if the delta flow criteria report standards were
- 10 to be implemented as regulatory standards. There are
- 11 State filings whose value amounts to 60 million acre feet
- 12 a year. Many of these are county of origin filings.
- 13 There's over a million acre feet of these in the American
- 14 River watershed alone. El Dorado Water and Power
- 15 Authority recently filed application for partial
- 16 assignment of these filings that may directly compete for
- 17 water with junior diverters.
- 18 I presented in my testimony letters from a group
- 19 of upstream diverters in the watershed. They express
- 20 concern about BDCP and in general about concern their
- 21 water rights were going to be effected. And we're seeing
- 22 this happening all over the state. People are
- 23 significantly concerned that they're going to lose water.
- Now, whatever Mr. Bourez's model might say, the
- 25 practical response on the part of dozens of water

- 1 purveyors has been to make sure that if someone loses
- 2 water, it's not going to be them. And, of course, there's
- 3 climate change, which has already reduced the amount of
- 4 water available in the Feather River by an average of
- 5 hundreds of thousands of acre feet a year.
- 6 All the water users in the state are in a scrum
- 7 to make the losers of water be someone else. If these
- 8 permits were to be granted, it would mean that there don't
- 9 need to be any losers among diverters who are senior to
- 10 Davis and Woodland. And the ultimate losers will be the
- 11 public trust resources and the Board itself, which will
- 12 have issued a delta flow criteria report that ends up
- 13 meaning nothing, nothing at all.
- 14 Before it considers granting any new permits, the
- 15 Board needs to show that there is water available for
- 16 appropriation if flows needed to restore the delta are
- 17 required, that senior existing diversions are sustainable,
- 18 and that new diversions will not injure senior diverters,
- 19 that senior diversions that have not been exercised yet
- 20 are also sustainable, that the Board can account for water
- 21 use throughout the San Joaquin and Sacramento River
- 22 systems, especially in the face of tightened operations of
- 23 that system that will come about with increased storage of
- 24 water, that the Board can grant these permits and still
- 25 defend the priority system, or else it has a legal and

- 1 workable modification of that system, and that the Board
- 2 has accounted for and has a plan to deal with county of
- 3 origin state filings.
- 4 That concludes my testimony. Thank you.
- 5 MR. JACKSON: That concludes our case in chief.
- 6 And at this point, I would offer our exhibits into
- 7 evidence.
- 8 VICE CHAIRPERSON SPIVY-WEBER: I'll take your
- 9 exhibits into evidence after we've completed all the
- 10 cross.
- 11 Tam has some questions now, so I'll have her go
- 12 and then Charlie does.
- 13 BOARD MEMBER DODUC: I'll direct the question at
- 14 Chris, but obviously I would welcome Mr. Jennings' input
- 15 as well.
- 16 Help me understand your concern. And this is
- 17 hypothetically should the Board at some future date after
- 18 the appropriate proceedings require the additional flows
- 19 that are required to protect beneficial uses and the
- 20 projects and all others that the Board indicate have
- 21 responsibility to release water to meet those objectives
- 22 do so, then Term 91 and other terms come in that would
- 23 prohibit the cities of Davis and Woodland and this project
- 24 from taking the service water because of their junior
- 25 rights and because of their agreement to Term 91

- 1 conditions, under that scenario, help me understand what
- 2 your concerns are.
- 3 So we have a situation where the Board requires
- 4 additional flows. Flows are being released to meet these
- 5 prior outflows and inflow objectives. Term 91 kicks in.
- 6 Davis and Woodland do not take the surface water, use
- 7 their alternatives supplies. So what is your concern
- 8 under that scenario?
- 9 MR. SHUTES: The concern is that once you
- 10 actually start looking at significant amounts of increased
- 11 delta outflow, the time periods in which Term 91 are going
- 12 to be in effect will effectively be always, except when
- 13 there is a huge amount of water in the system.
- 14 BOARD MEMBER DODUC: And, therefore, they will
- 15 not be diverting surface water when Term 91 kicks in. If
- 16 it kicks in all the time, they will not be diverting at
- 17 all.
- 18 MR. SHUTES: Okay. So then you need to ask
- 19 yourselves, is it in the public interest if there is only
- 20 a couple thousand acre feet a year actually available to
- 21 these folks for their permits. And these folks are going
- 22 to build all this infrastructure in order to make use of
- 23 those permits and in order -- they're going to make
- 24 decisions about their infrastructure, their wastewater
- 25 infrastructure based on the presumed availability of those

- 1 permits -- of water under those permits. And they end up
- 2 spending, according to what I heard yesterday, something
- 3 on the order of half a billion dollars.
- 4 And in effect, there's no water available to
- 5 service those permits most of the time. I would maintain
- 6 that there is not enough water to service the permits in
- 7 the first instance and the permit should not be granted.
- 8 In the letter from Delta Vision that was
- 9 referenced, it says if water is available in half the
- 10 years for agricultural purposes, then the Board may
- 11 consider granting a permit. Now, this is not for
- 12 agricultural purposes. This is for domestic use. And you
- 13 are asking these folks to spend a whole lot of money, a
- 14 whole lot of money and effort in order to build permits
- 15 they won't have.
- 16 What happens in reality when all of a sudden it's
- 17 found out that Term 91 is in effect all the time? Well,
- 18 what we've seen is that once people have the right, they
- 19 consider that basically almost a property right. I mean,
- 20 it's their water, especially if they've gone to huge
- 21 expense in order to make use of that water. And then it
- 22 comes back to you all to enforce stuff. And you haven't
- 23 always had a great record on that.
- 24 And moreover, it gets to the press and to public
- 25 debate. And you have debates over, well, this is our

- 1 water. And people -- you may understand and I might
- 2 understand that these rights are conditional. But what
- 3 happens in the real world, a lot of people don't
- 4 understand that. And then it becomes a political battle
- 5 over something that shouldn't have been done in the first
- 6 place.
- 7 MR. JENNINGS: If I could address that. We're
- 8 talking about municipal and industrial supply. They've
- 9 already indicated that they're going to be shutting some
- 10 wells down. I mean, they're not going to depend upon this
- 11 source of water in the integral. If they don't get it,
- 12 what are you going to do? They're going to make plans for
- 13 new subdivisions and possible future growth based upon
- 14 water that may not, in fact, be in existence. This is --
- 15 you're not going to take water away from babies once it's
- 16 approved.
- 17 And you have an obligation to make sure that
- 18 water is available before you grant a water right that
- 19 someone is going to issue bonds on, collect revenue on,
- 20 and go down a path. You know, you can't just have that as
- 21 a water that may or may not be available in the future.
- 22 You have to be pretty certain that it is available.
- 23 BOARD MEMBER DODUC: Well, Mr. Lilly, I hope
- 24 you're taking notes. I hope that in rebuttal we'll hear
- 25 from your witnesses with respect to the city's

- 1 understanding of the risk that they're taking.
- 2 Obviously, Chris, you said that the Board is
- 3 asking or requesting that the cities make these
- 4 investments and, in fact, we're not making that request.
- 5 They are. And I would assume that when they are making
- 6 that request they understand the risk that they are taking
- 7 and therefore that's why they are pursuing alternative
- 8 sources. But I will wait to hear from Mr. Lilly's
- 9 rebuttal on that matter.
- 10 I think that wraps up my question.
- 11 VICE CHAIRPERSON SPIVY-WEBER: Charlie has a
- 12 question and then Dwight has a question.
- 13 CHAIRPERSON HOPPIN: Actually, I have six
- 14 questions.
- 15 Bill, rather than to read them all off and say
- 16 what do you think, I know you have a computer for a mind,
- 17 but I think it's probably in the interest of what we're
- 18 doing here it's better if I go over them one at a time and
- 19 let you respond to them. If you want to pass it off to
- 20 Chris, that's fine.
- 21 You have articulated today your concerns about
- 22 the fishery, the health of the fishery, and I don't think
- 23 anybody's sitting here shaking their head saying, Bill,
- 24 you're putting something funny in your pipe. I think we
- 25 all realize those issues are very true.

- But when I look at what's before us, which as Tam
- 2 said, had been brought to us, it's not that we're
- 3 requiring them to do something. I see some advantages to
- 4 you and the things that you rightfully support. And I
- 5 would like you to comment on those. If you disagree with
- 6 me, I know you're not going to be bashful, and I'm not
- 7 going to take offense. I'm going to give you my opinion.
- 8 First of all, what is being proposed here will
- 9 reduce TDS and other components in two POTWs, which are
- 10 currently not in compliance. If the information we're
- 11 getting is correct and it seems reasonable so there is a
- 12 good expectation that both the discharge facilities of
- 13 Woodland and Davis when the plan is implemented would be
- 14 in compliance with their NPDES permit. So I would see
- 15 that certainly as an advantage to you and to water that
- 16 ultimately is going to be discharged; is that correct?
- 17 MR. JENNINGS: Well, you know that I've been
- 18 particularly concerned about the parts of waste discharge
- 19 permits issued throughout the Central Valley. And I think
- 20 I have 50 appeals pending before this Board right now.
- 21 CHAIRPERSON HOPPIN: It's 52.
- 22 MR. JENNINGS: And I agree. But at the end,
- 23 you're essentially blending water and removing water from
- 24 the ecosystem to blend it and to return. And you get a
- 25 benefit there. You know, but every --

- 1 CHAIRPERSON HOPPIN: You have a whole bunch of
- 2 these. I'm not saying it with fire in my eyes. I'm just
- 3 asking --
- 4 MR. JENNINGS: I understand. Is using scarce
- 5 water to dilute waste a beneficial use of water? That's
- 6 one question.
- 7 Second: Are there alternatives? I mean, you
- 8 know, POTWs all over the state are electing to go to
- 9 ground rather than discharge surface waters. And you have
- 10 a huge area, Conaway Ranch, right next door that they
- 11 could have blended a little bit and discharged surface
- 12 waters, and they wouldn't have to discharge to the
- 13 Sacramento River. They could have worked out an exchange
- 14 agreement with Conaway where they could apply their
- 15 wastewaters to irrigate crops, perhaps dilute it a bit so
- 16 you don't get into a salt problem, although the salt
- 17 coming out of the effluent is not all that much higher
- 18 than what south delta farmers have to irrigate with.
- 19 But the question is -- and that's what I'm
- 20 saying. Why -- I can't conceive of why they didn't
- 21 embrace a conjunctive use program with the neighboring
- 22 ranches to utilize their Sacramento water to augment or to
- 23 dilute the problems in their drinking water. Although I
- 24 must note, in all fairness, Charlie, the wells they closed
- 25 with the high nitrate levels are all in the urban service

- 1 area and are all getting worse. We have the issue of
- 2 failing to protect groundwater in these urban areas, which
- 3 is the cause of them having to look for additional sources
- 4 because they don't want to treat it.
- 5 But I do see that. Clearly, reducing 20 tons a
- 6 day of salt out of the Sacramento River is desirable. To
- 7 use -- to remove water from the Sacramento in order to do
- 8 that when there are other options available is not as
- 9 good.
- 10 CHAIRPERSON HOPPIN: Let's talk about number two,
- 11 the second option, assuming these communities are not
- 12 going to go away. And I don't see you as one of those
- 13 people that your agenda is just to get cities and towns to
- 14 go away. I think you're sincere about what you're
- 15 concerned about with the environment. And I would
- 16 acknowledge that.
- 17 But assuming these communities are not going to
- 18 go away, it's been stated in the common sense falls into
- 19 the fact that if we deny this permit, they will go to RO.
- 20 That I think in response to Mr. Jackson's question was the
- 21 next alternative. It was certainly more expensive. So if
- 22 they go to RO, where would you like them to put the brine
- 23 line? If they do that, when you come in for that hearing,
- 24 where is going to be the brine line discharge of choice
- 25 for CSPA?

- MR. JENNINGS: I don't know if it's either/or.
- First addressing the brine line. Maybe we're
- 3 looking at another Class 1 landfill and the proper
- 4 disposal of waste that don't necessarily have to dump it
- 5 back into the waters.
- 6 But that's assuming that they have no alternative
- 7 but to go to RO. And I'm saying -- and yesterday, they
- 8 were very open about their ability to purchase water. I
- 9 mean, this water right application is only to get free
- 10 water. I mean, they have demonstrated the ability to
- 11 purchase water. Or if they believe they can that will be
- 12 necessary for the operation of this project. I don't know
- 13 why they only arrange to purchase 10,000 acre feet of
- 14 water for Conaway. As the newspapers say, they're going
- 15 to ship 80,000 to Los Angeles. I mean, so I don't know.
- 16 I mean, I think there are other options that have not been
- 17 explored and not been discussed. And we couldn't because
- 18 the whole deal with Conaway came up after the close of
- 19 this hearing. But I'm saying I think there are other
- 20 options.
- Now, frankly, Charlie, I think we're about --
- 22 with respect to RO where we were with secondary to
- 23 tertiary treatment a few years ago, frankly, I suspect
- 24 that the next iteration or the iteration after this we're
- 25 going to be requiring a number of treatment plants to go

- 1 to RO simply because as the mass load of contaminants
- 2 increases, as we're beginning to address the
- 3 pharmaceuticals and the whole range, the chemical
- 4 universe, endocrine disrupters, it's not going to surprise
- 5 me to see RO become the standard or advanced treatment
- 6 become the standard for POTWs. But I admit that it's
- 7 costly. But I don't think this project adequately looked
- 8 and examined the potential alternatives of working in
- 9 conjunctive use with Conaway and other areas.
- 10 CHAIRPERSON HOPPIN: You mentioned the fact that
- 11 one of their alternatives could have been to have
- 12 purchased more water outright. I think it was pretty well
- 13 acknowledged that because of Term 91 and their senior
- 14 water right, there would be times they would need to do
- 15 that.
- 16 I guess the way I -- if I try to put myself in
- 17 your shoes, which I do more often than I think you
- 18 believe, but --
- 19 MR. JENNINGS: Have I ever criticized you?
- 20 CHAIRPERSON HOPPIN: No. You've been pretty
- 21 fair.
- 22 But I would look at it like this, Bill. Whether
- 23 you, in principle, like water transfers or not, assuming
- 24 like these communities are going to be here, the water
- 25 transfers are a viable tool in managing our water

- 1 resources in the state of California. I guess the way I
- 2 would look at that is additional surface water that would
- 3 be purchased would be purchased within the basin of
- 4 origin. And it would be used within the basin of origin.
- 5 And quite frankly, it would preclude that quantity of
- 6 water quite potentially from being transferred south of
- 7 the delta through the pumps which we've talked about at
- 8 length; is that not correct?
- 9 MR. JENNINGS: I think so. You certainly
- 10 understand my concern about transfers is that they may be
- 11 short-term solutions, but what we're seeing is serial
- 12 transfers without the benefit of environmental analysis,
- 13 CEQA analysis. And that I think transfers are a Band-Aid
- 14 because we haven't yet dealt with the over-appropriation of
- 15 water. I remember Secretary Salazar when he first came to
- 16 California discussing the adjudication in Colorado of the
- 17 very painful ten-year process. I remember him saying his
- 18 ranch, they lost some of their 1870 water rights. And
- 19 thank God they had some 1850 water rights that got them
- 20 through.
- 21 But after they went through that process, they
- 22 had adjusted what they had promised and with the amounts
- 23 of real water. And at some point, California is going to
- 24 have to do that. And I think transfers are Band-Aids
- 25 piled on top of Band-Aids trying to avoid addressing the

- 1 adjudication of water of assigning responsibility.
- 2 Obviously, they're going to have changing conditions and
- 3 things that are changing needs. But the Water Codes'
- 4 flexible in that. It's just that we haven't complied with
- 5 the requirements in the Water Code. So we've gotten this
- 6 huge imbalance. We've promised a universe of water that
- 7 doesn't exist. You can't base a rational water policy on
- 8 paper water.
- 9 CHAIRPERSON HOPPIN: The other thing -- I think
- 10 this is going to be the easiest one. We are talking about
- 11 eliminating a diversion point that was there before you
- 12 and I were preliminary in anyone's eye. I think you would
- 13 accurately categorize that point of diversion as a fish
- 14 grinder, would you not?
- 15 MR. JENNINGS: I would. And that's interesting.
- 16 And I was fascinated to hear the discussion yesterday,
- 17 because I noted in Dr. Hanson's testimony he talked about
- 18 the consolidation of the diversion as a possibility if
- 19 funds were available. And they seem to be more definite
- 20 on that. And I would appreciate if you all could clarify
- 21 what a consolidated diversion would be.
- 22 I would point out that that diversion, which will
- 23 increase the amount of water coming through, it will be
- 24 state-of-the-art screens for fish. And that's good. But
- 25 the mesh is not sufficient to screen eggs and larvae

- 1 stages of green sturgeon, which is a listed species,
- 2 splittail, which is California listed, and striped bass of
- 3 which the state is under -- there is a doubling mandate in
- 4 federal law.
- 5 So, you know, there's going to be a loss there.
- 6 And you've got to consider the cumulative --
- 7 CHAIRPERSON HOPPIN: Is it a loss? I don't mean
- 8 to interrupt you, but I don't see it. There is a loss
- 9 there, but it's an improvement over current conditions.
- 10 Because what's being talked about is not only a screen for
- 11 Woodland and Davis, but for the whole Conaway Ranch. And
- 12 so while in a perfect world the screen still is going to
- 13 take larvae and fry to one degree or another, it's going
- 14 to be a gross improvement over what is there today.
- 15 MR. JENNINGS: It's going to reduce the
- 16 entrainment to some degree of juvenile fish over 15
- 17 millimeters. It's going to have no effect on the larva
- 18 and eggs.
- 19 CHAIRPERSON HOPPIN: But the only way you do that
- 20 is to cease all diversions.
- 21 MR. JENNINGS: No. You could unrealistically
- 22 require a greater screening criteria. We're not going to
- 23 do that.
- 24 But what my concern is that as we're looking at
- 25 the likely addition -- you know, just down river will

- 1 be -- the peripheral canal there will being enormous
- 2 screens constructed. What's the cumulative impact?
- 3 But I agree with you that it would be an
- 4 improvement to have current technological screens at the
- 5 Conaway diversion.
- 6 VICE CHAIRPERSON SPIVY-WEBER: Okay.
- 7 CHAIRPERSON HOPPIN: Chris I think touched on
- 8 this more than you, but as Tam stated, we didn't go to
- 9 Woodland and Davis. They came to us. And I see the
- 10 people they've hired and the people they've been around
- 11 certainly have their eyes open as to the consequences of
- 12 having a junior water right. And I would assume that
- 13 their eyes are open wide enough to realize that in their
- 14 request there is a certain jeopardy that goes along with
- 15 this water right. To me, if they are still asking for it
- 16 under the terms and conditions that could potentially be
- 17 applied to this, then, you know, the points that Chris
- 18 brings out are a business decision they have to make
- 19 coming forward with that kind of a capital investment. I
- 20 mean, it's not like we are mandating something to them.
- 21 We could potentially mandate something to them if we don't
- 22 get these two POTWs in compliance and have a plan to do
- 23 so, as you well know, and would be right in the middle of
- 24 that. And rightly so.
- 25 MR. JENNINGS: But you are mandated to make a

- 1 determination, a factual finding, that water is available
- 2 before you can issue a new water right. In other words,
- 3 the application is on you to protect them from their own
- 4 devices, if anything else. I mean, because you know,
- 5 don't let them travel a path that will have horrible
- 6 consequences down the road.
- 7 And all we're saying is that at this point in
- 8 time, you know, with the backload of rights that have
- 9 already been granted by this Board, senior rights, we
- 10 don't believe water is available. They could have applied
- 11 for and asked you to release some of those 1927 rights.
- 12 But they didn't do that. And there's a reason for that.
- 13 But they could have gone down that path, but they chose
- 14 not to. They choose to come in as a very junior diverter.
- 15 CHAIRPERSON HOPPIN: And the last one, Bill. And
- 16 I probably could have combined it in my first question.
- 17 But to the selenium and boron and arsenic, the
- 18 system isn't like what you would be concerned about in the
- 19 San Joaquin Valley where it's the result of agricultural
- 20 land being irrigated and consequently drained. This is
- 21 the result of pulling naturally occurring products out of
- 22 the soil via the groundwater and then discharging that
- 23 into what has clearly been identified as a very sensitive
- 24 environmental area in the Yolo Bypass.
- 25 So, you know, by switching to groundwater absent

- 1 RO, if they go through some conjunctive use with Conaway
- 2 or something else, those naturally occurring constituents
- 3 in the soil are going to be pumped out and they're going
- 4 to be put into the drain water in the Yolo Bypass or
- 5 they're going to be incorporated into the soil of the Yolo
- 6 Bypass to be -- I'm not a chemist as you well know. But
- 7 instead of being at a thousand feet in the ground, they're
- 8 either going to be in the water or on the surface. And
- 9 that seems like that has positive environmental
- 10 consequences.
- 11 MR. JENNINGS: Well, I don't know what the
- 12 residual levels of selenium and boron are in the soils. I
- 13 don't know whether that was a geological artifact or
- 14 whatnot.
- 15 I mean, the nitrate is I think induced by human
- 16 activity. And to what degree those exist, I mean, that's
- 17 why recycling minerals through human activity and the
- 18 question is are there alternatives that could have been
- 19 employed that would have better minimized that and would
- 20 have necessitated to discharge to the river. I think that
- 21 there is -- and regardless of how, that's going to be a
- 22 problem regardless.
- 23 The question here is can you keep -- given an
- 24 estuary that's so severely impaired that is in need of
- 25 additional flow, can you keep promising or granting more

- 1 water when it doesn't exist. I mean, at some point, you
- 2 have to take stock and say the inn is full. I mean, God
- 3 told Mary that she couldn't come in the inn. She had to
- 4 go to the stable. At some point, you have to say the inn
- 5 is full. We don't have any room, unless you can bargain
- 6 and negotiate with somebody who has a reservation.
- 7 CHAIRPERSON HOPPIN: This is just a comment.
- 8 Chris, you talked about the delta flow report and
- 9 the implementation in gross numbers. You realize with the
- 10 public trust if we were to go down that road, it wouldn't
- 11 be the gross amount you're talking about, but it would be
- 12 factored by other water rights and existing needs. So I
- 13 just wanted to comment on that. You know, we throw out a
- 14 number as something that would be factored -- ultimately
- 15 be factored down a degree. I just want to mention that.
- 16 MR. SHUTES: I certainly understand that. But
- 17 what we have in terms -- if you're looking at water
- 18 availability, I think you need to look at a reasonable set
- 19 of scenarios of what that number might end up being. I
- 20 don't think we've done that. All we've looked at is
- 21 existing constraints and we've looked at what would happen
- 22 if the entire amount were required.
- 23 Part of the problem with the Board not having its
- 24 own independent modeling capability as far as CalSim goes
- 25 is that you folks aren't able to go in and say where's the

- 1 tipping point? Where is it that all of a sudden we don't
- 2 have water available in most months of the year? And you
- 3 just don't know that yet. All you've got is some boundary
- 4 conditions. And before you find water being available for
- 5 these permits, I think you need to do that kind of serious
- 6 technical analysis and find out. And if it's three
- 7 million, okay. If it's two million, whatever it is, once
- 8 you hit a certain point -- and I think we've heard this
- 9 from the different experts in these different proceedings,
- 10 you start having to not just reduce here and reduce there.
- 11 You start changing operations or you start making big
- 12 policy decisions. Like in the exhibit that we put
- 13 forward, the settlement contractors were shorted by a
- 14 million and a half acre feet. That's a big policy
- 15 decision you might end of having to make in order to meet
- 16 all these other things.
- 17 CHAIRPERSON HOPPIN: I understand. I want to
- 18 thank both of you and my colleagues for your indulgence in
- 19 my long line of questions.
- 20 MR. JENNINGS: It's always a pleasure to indulge
- 21 you, Charlie.
- 22 BOARD MEMBER RUSSELL: This question is for
- 23 either one of you.
- 24 Will you please share with the Board how much of
- 25 the water that's diverted would be returned as an effluent

- 1 discharge back to the system?
- 2 MR. JENNINGS: That's interesting. Off the top
- 3 of my head, I'm drawing a blank.
- 4 MR. SHUTES: I think what we heard yesterday was
- 5 that it may take a long time. Some of it -- a lot of it
- 6 may percolate into groundwater. Really depends on what
- 7 the ultimate resolution of the wastewater issue is and how
- 8 they decide to configure that. Some of it may get -- end
- 9 up getting returned into agricultural use or into the
- 10 lands in the bypass or along the edge of the toe drain or
- 11 the Tule Canal.
- 12 BOARD MEMBER RUSSELL: Do you know where they
- 13 discharge now? Where the point of discharge is for the
- 14 city of Davis and city of Woodland?
- 15 MR. SHUTES: The city of Woodland is north and
- 16 it's near the Tule Canal southeast of Woodland. The city
- 17 of Davis has a funny series of wetland kind of things that
- 18 it discharges water to that's just north of the Highway
- 19 80. And they've got a kind of unworkable settling kind of
- 20 setup there that's sort of at the south end of Conaway
- 21 Ranch. Davis, as I understand it from what was said
- 22 yesterday, is somewhere south in Putah Creek down there
- 23 by --
- 24 MR. JENNINGS: U.C. Davis.
- 25 MR. SHUTES: U.C. Davis, yes. Down by the Fish

- 1 and Game wildlife refuge.
- 2 BOARD MEMBER RUSSELL: One of the reasons I ask
- 3 the question is I hear from you the concern about water
- 4 diverted somehow taken out of the system never to be
- 5 returned again. But if most of this is going to M&I and
- 6 it's going to be treated at the wastewater treatment
- 7 plants and they're going to discharge that water, a good
- 8 portion of it may return back to the system. So the total
- 9 amount taken out wouldn't be necessarily the -- just the
- 10 amount that's diverted. In other words, some of it will
- 11 come back. In addition, if they do discharge better
- 12 quality water than what's being taken from the ground,
- 13 they're improving the water quality of the discharge and
- 14 put it back into the system, would you consider that a
- 15 benefit?
- 16 MR. JENNINGS: And you're certainly correct on
- 17 that. However, remember that when you use that water, a
- 18 few constituents will improve. But it will also pick up a
- 19 huge number of drugs and pharmaceuticals and industrial
- 20 chemicals that are also discharged and not have an effect
- 21 on that.
- 22 CHAIRPERSON HOPPIN: We can have potentially carp
- 23 on steroids, is that what you're saying, Bill.
- 24 MR. JENNINGS: The studies show the number of
- 25 feminatis (phonetic) fish in wastewater outfalls is up

- 1 around 70 percent.
- 2 MR. SHUTES: I'd also point out in terms of the
- 3 diversions, regardless of whether it eventually gets back
- 4 in the system, you are significantly changing the timing
- 5 of flow so that when most of the time when a flow is
- 6 actually going to get back into the delta is going to be
- 7 during winter. And most of the time when the flow is
- 8 going to be diverted is going to be diverted in the late
- 9 spring or summer.
- 10 BOARD MEMBER RUSSELL: I'd like to follow up on
- 11 that, please. How much residence time do you believe is
- 12 in the system before the diverted water is used in the
- 13 treatment plant and returned back? You say it's a long
- 14 time? Is it more than --
- 15 MR. SHUTES: What I heard yesterday was up to a
- 16 couple of years.
- 17 MR. JENNINGS: For the diversion to come to the
- 18 water treatment plant and then it goes to the surface area
- 19 and then the wastewater treatment plant. It's not a
- 20 long --
- 21 MR. SHUTES: Maybe I misunderstood the question.
- 22 I thought you were asking how much water -- after the
- 23 water is discharged, how long does it take to get back to
- 24 the Sacramento River.
- 25 BOARD MEMBER RUSSELL: The question was let's say

- 1 they discharge at 12:00 or they divert at 12:00. How much
- 2 time goes by before that water goes through the water
- 3 treatment plant and served to the users, collected in the
- 4 wastewater treatment plant and returned back to the
- 5 system? Not how long does it take after it reaches the
- 6 receiving water area does it get back into the Sacramento
- 7 River. I want to know how much resident time you think
- 8 that diverted water is in there, distribution and
- 9 collection system.
- 10 MR. JENNINGS: They testified yesterday that they
- 11 might hold it for a day or two and then it would cycle
- 12 through. It wouldn't be a lot.
- 13 MR. SHUTES: To me, the water quality question I
- 14 think would be how long would it take before it gets back
- 15 to the river.
- 16 BOARD MEMBER RUSSELL: Which adds to the next
- 17 question, if there was an improvement in their design
- 18 where they discharge their treated effluent directly into
- 19 the Sacramento River system, then there would be no minor
- 20 net loss due to consumptive use and the water would come
- 21 back into the system and be available for whatever the
- 22 needs downstream; is that right?
- 23 MR. JENNINGS: You're absolutely right. If they,
- 24 in fact, change the outfall system and go straight for the
- 25 wastewater treatment plant in the Sacramento River. But

- 1 again, if you go that route, you are increasing the
- 2 concentration of this other universe of chemicals that
- 3 we're not addressing directly into the river. And it's
- 4 not being ameliorated by going through a wetland treatment
- 5 or something like that that it would today.
- 6 BOARD MEMBER RUSSELL: I understand. Thank you.
- 7 You answered my question.
- 8 VICE CHAIRPERSON SPIVY-WEBER: Thank you, Board
- 9 members. We will have even more opportunity to ask
- 10 questions later.
- 11 And, Mr. Lilly, thank you for indulging us.
- 12 Now we will have Mr. Lilly's cross-examination of
- 13 the panel. And after that, it will be the staff will have
- 14 an opportunity to cross as well as Board members if you
- 15 have additional questions.
- 16 MR. LILLY: Ms. Spivy-Weber, before I start, I
- 17 have seven exhibits that I'm going to use on
- 18 cross-examination. And I will give them to Ms. Farwell to
- 19 distribute to you and of course give copies to Mr. Jackson
- 20 and Mr. Jennings.
- 21 CROSS-EXAMINATION
- 22 BY MR. LILLY:
- 23 Q Morning, Mr. Jennings.
- 24 As you know, I'm Alan Lilly, attorney for the
- 25 Woodland-Davis Clean Water Agency. And I do have some

- 1 cross-examination questions this morning.
- 2 First of all, I think you alluded to this in
- 3 response to one of your answers to Mr. Hoppin's questions.
- 4 But the California Sportfishing Protection Alliance has,
- 5 in fact, filed many petitions with the State Water
- 6 Resources Control Board for review of NPDES permits issued
- 7 by the Central Valley Regional Water Quality Control
- 8 Board; is that correct?
- 9 A Yes. We review and comment on most of the major
- 10 proposed NPDES permits in the Central Valley. And where
- 11 we find that the regulations aren't followed or complied
- 12 with in developing limits and requirements in those
- 13 permits, we field them to the State Water Board.
- 14 Q Just on Monday, I downloaded a list of the water
- 15 quality petitions that have been filed with the State
- 16 Board in recent years. And I labeled that as exhibit
- 17 WDCWA 400. I'm not going to ask you to review every
- 18 single entry in here. But I do notice numerous entries by
- 19 CSPA. I wonder if you can confirm those are a listing of
- 20 the petitions CSPA has filed.
- 21 A Yes. And actually I don't think they're all listed on
- 22 the electronic database.
- 23 Q Okay. I'll just go forward now to Exhibit WDCWA 401.
- 24 We may get it up on the screen here in a minute. But if
- 25 you could just briefly look at the first page and the last

- 1 page -- second to last page of this and just confirm that
- 2 this is, in fact, a petition that you signed on behalf of
- 3 CSPA asking the State Board to review waste discharge
- 4 requirements that the Regional Board had issued for the
- 5 city of Fresno and other entities?
- 6 A All the way back in 2006.
- 7 Q Okay. So this is, in fact, an accurate copy of a
- 8 petition you filed for CSPA?
- 9 A Yes.
- 10 Q And I highlighted a paragraph on page 12 of that, and
- 11 I'd just like you to take a look at that and just confirm
- 12 that this is, in fact, what you wrote.
- 13 On page 12, it says, "In order to reduce TDS
- 14 loadings to the WWTP, the discharger can also install well
- 15 head treatment for municipal water system or seek an
- 16 alternate water supply with lower TDS concentrations.
- 17 Since other treatment technology may still be employed to
- 18 reduce TDS, the discharger has not demonstrated that the
- 19 WWTP has implement BPTC." Did you, in fact, write that?
- 20 A Yes.
- 21 Q I know this area has a lot of jargon. Can you tell us
- 22 what WWTP means?
- 23 A Wastewater treatment plant.
- 24 Q And what does BPTC mean?
- 25 A Best professional treatment and control.

- 1 Q So, basically, you were asserting here that the
- 2 Regional Board should at least consider requiring the city
- 3 of Fresno and others to look into alternate water supplies
- 4 with lower TDS concentrations so as to reduce the TDS
- 5 concentrations of their discharges?
- 6 A Yes.
- 7 Q Let's go on to Exhibit WDCWA 402. And I have just
- 8 copied the cover page, pages 12 and 13 and then the
- 9 signature page. I realize this is not a copy of the
- 10 entire petition. But could you just briefly review that
- 11 and confirm this is, in fact, an excerpt of the petition
- 12 that you filed with the State Board for CSPA challenging
- 13 the Regional Water Quality Control Board's waste discharge
- 14 requirements and NPDES permit for Clear Creek Community
- 15 Services District?
- 16 A Another 2006 appeal.
- 17 Q Okay. And on page 12, which is the second page in the
- 18 exhibit I have here, I just want to confirm a couple of
- 19 things that I have highlighted here. And I understand
- 20 these were not highlighted when you filed the petition.
- 21 But the Section I on page 12 starts out the heading says,
- 22 "The order contains a flawed reasonable potential analysis
- 23 for electrical conductivity"; is that correct?
- 24 A Yes.
- 25 Q And, in fact, in the first paragraph you recite the

- 1 MCLs for EC are 900 micromhos per centimeter recommended
- 2 level; 1,600 upper level and 2,200 short-term maximum.
- 3 Just so we can clarify for the uninitiated here, what are
- 4 MCLs?
- 5 A MCLs are maximum contaminant levels. They're drinking
- 6 water standards.
- 7 Q And then down in a couple paragraphs down, you refer
- 8 to the Ayers and Westcot report that was done for the
- 9 organization of United Nations, and that's irrigation and
- 10 drainage paper number 29. And it recites that levels
- 11 of -- this is electrical conductivity above 700 micromhos
- 12 per centimeter will reduce crop yield for sensitive
- 13 plants; is that correct?
- 14 A Yes.
- 15 Q And then you also cite the next sentence that U.C.
- 16 Davis extension service paper that states there will not
- 17 be problems with crops as long as EC remains below 750; is
- 18 that correct?
- 19 A Yes.
- 20 Q Going on to the permit that's at issue here, the next
- 21 paragraph says that the waste charge EC level was
- 22 projected to be 1253 and you were asserting that that
- 23 clearly -- as the next sentence says, clearly the
- 24 discharge exceeds the MCLs for EC presenting a reasonable
- 25 potential to exceed the water quality objective; is that

- 1 correct?
- 2 A Yes.
- 3 Q Okay. And then just to wrap up this petition on the
- 4 next page, page 13, you wrote -- and again I've
- 5 highlighted it here, "failure to establish effluent limits
- 6 for EC that are protective of the chemical constituents
- 7 water quality objective blatantly violates the law." You
- 8 wrote that?
- 9 A I wrote that.
- 10 Q Let's go on to Exhibit WDCWA 403. And again, this is
- 11 just an excerpt. I was trying to save a little bit of
- 12 paper here. But please just look this over and confirm
- 13 this is, in fact, an excerpt of a petition that you filed
- 14 for CSPA with the State Board challenging the NPDES
- 15 permits and waste discharge requirements that the Regional
- 16 Water Board had issued for the Linda County Water
- 17 District.
- 18 A It's another 2006 appeal. And frankly, Alan, you
- 19 could have used the appeals we filed last year as well,
- 20 because we have consistently taken this position.
- 21 Q And if you could clarify, what is "this position"
- 22 regarding EC? You basically challenged many of the EC
- 23 limits in the NPDES permits issued by the Regional Board
- 24 for discharges in the Central Valley?
- 25 A Yes. Linda County was a fascinating story.

- 1 Q We probably don't have time to go into it. And we
- 2 have to try to keep this hearing focused, and my clock is
- 3 running here.
- 4 But on page 4 of this petition, you, in fact,
- 5 were -- one of your arguments the heading was, "The order
- 6 grants 100 percent of the Feather River's assimilative
- 7 capacity for EC contrary to the anti-degradation policy
- 8 and federal regulations"; is that correct?
- 9 A Yes. And the Board turned around and granted the same
- 10 assimilative capacity at Yuba City.
- 11 Q So the problem you had here in the highlighted
- 12 sentence of that paragraph, you said the proposed order
- 13 contains an EC effluent limitation of 780 micromhos per
- 14 centimeter for the Linda County Water District. And you
- 15 had a problem with that, because that basically was
- 16 granting Linda County Water District the entire remaining
- 17 assimilative capacity for EC on the Feather River?
- 18 A Right.
- 19 Q Okay. And I think you said later in the page the
- 20 problem you saw was that Marysville and Oroville were
- 21 going to be adding EC as well and therefore exceeding the
- 22 assimilative capacity for EC capacity in the Feather
- 23 River?
- 24 A Right.
- 25 Q Let's go onto the next exhibit. This is WDCWA 404.

- 1 Again, please just quickly review this and confirm that
- 2 this is an excerpt of a petition you signed and filed for
- 3 CSPA challenging the Regional Board's issue for the city
- 4 of Portola's waste discharge requirements NPDES permit; is
- 5 that correct?
- 6 A Right.
- 7 Q Okay. And, in fact, I notice the date on this one is,
- 8 in fact, 2009. So we're moving forward to the present.
- 9 And then on the second page of the exhibit, which
- 10 was page 216 of the petition, again there is a heading
- 11 where you basically were challenging the NPDES's permit
- 12 effluent limitation for electrical conductivity; is that
- 13 correct?
- 14 A Correct.
- 15 Q And the first sentence says that the permit has an
- 16 effluent limitation of 684 micromhos per centimeter; is
- 17 that correct?
- 18 A Yes, as a monthly average.
- 19 Q And then on the next page you said in the petition
- 20 that the volume of salt discharged by Portola will be seen
- 21 in downstream waters unless they are physically removed
- 22 and that a discharge of higher salt loads upstream will
- 23 contribute to the impairment of downstream water.
- 24 A Salt is a conservative constituent and remains in the
- 25 environment.

- 1 Q So basically if it's discharged, unless there is some
- 2 active process to remove it, it will remain there?
- 3 A Yes.
- 4 Q That's why the ocean is salty; is that correct?
- 5 A That's true.
- 6 Q The following paragraph you, in fact, confirm that the
- 7 beneficial uses of the receiving streams could be degraded
- 8 by the salt concentrations?
- 9 A Yes.
- 10 Q And then just to wrap that up at the end of that
- 11 paragraph, you said, "Therefore, the permits do not
- 12 protect the beneficial uses of the receiving stream and
- 13 then on down to the Sacramento River and therefore does
- 14 not comply with federal requirements or the California
- 15 Water Code"?
- 16 A That's correct.
- 17 Q Okay. Next exhibit I wanted to go through is WDCWA
- 18 405. Again, please just briefly review this and confirm
- 19 that this is a petition you filed with the State Water
- 20 Resources Control Board challenging that Regional Board's
- 21 NPDES permit for the University of California Davis, the
- 22 Center of Aquatic Biology and Aquaculture.
- 23 A Yes.
- 24 Q And on the second page of this exhibit, which is page
- 25 11 from the petition, you were asserting that the order

- 1 issued by the Regional Board did not contain an effluent
- 2 limitation for EC to protect an irrigated agricultural
- 3 beneficial use in the receiving stream?
- 4 A Correct.
- 5 Q That was in violation of the State waste laws and the
- 6 federal regulations?
- 7 A Correct.
- 8 Q And in the middle of that page, it's highlighted a
- 9 sentence that says, "The order has been changed from the
- 10 original 700 micromhos per centimeter to 800 micromhos per
- 11 centimeter." And you state there is no information in the
- 12 order which indicates that 800 microhmos is protective of
- 13 irrigated agriculture.
- 14 A That's true.
- 15 Q So you were basically asserting that they should not
- 16 have raised it from 700 to 800?
- 17 A Yeah. And I'm not recalling the exact permit. I
- 18 probably raised anti-deg issues and backsliding issues in
- 19 that as well.
- 20 Q You probably did.
- 21 And then down at the bottom of that page, the
- 22 other thing you raised, the other important argument here
- 23 is you argue that the combined source waters -- and this
- 24 is for the aquaculture facility at U.C. Davis, which get
- 25 water from the Solano project. The EC in those source

- 1 waters is well below the 700, in fact; right?
- 2 A I'm assuming -- and I don't recall exactly. I'm
- 3 assuming it was information contained in the draft permit.
- 4 Q So then on the next page you said, "Since the source
- 5 water is well below 700 and the solid waste is easily
- 6 controllable, the discharger has not excessively exceeded
- 7 700 and, therefore, the proposed 800 was not protective of
- 8 the beneficial uses and the 700 should be reestablished";
- 9 is that correct?
- 10 A That is correct. Oddly phrased, but correct.
- 11 Q We won't challenge your grammar. We realize you have
- 12 a lot of writing to do on your job.
- 13 The last exhibit I'd like to go through is
- 14 Exhibit WDCWA 406. Please just briefly review this and
- 15 confirm that this is an excerpt from the petition that you
- 16 signed and filed for CSPA challenging the Regional Water
- 17 Board's waste discharge requirements and NPDES permit for
- 18 the city of Davis.
- 19 A City of Davis in the October of last year.
- 20 Q Okay. And again, I'm trying to go through this fairly
- 21 quickly, because our time is limited. But Section H,
- 22 which is the second page of the exhibit, page 27 of the
- 23 petition, you had a section heading which basically
- 24 challenged the Regional Board's permit because it did not
- 25 contain an effluent limit for EC in violation of the

- 1 federal regulations.
- 2 And then just flipping forward on page 30, which
- 3 is a couple of pages later in that exhibit, you made some
- 4 statements to support your argument. I just highlighted a
- 5 couple here. One of them was that the beneficial uses of
- 6 the receiving streams -- this is the receiving streams
- 7 that receive water discharge by the city of Davis
- 8 wastewater treatment plant may be degraded by salt
- 9 concentrations in the wastewater discharges?
- 10 A Yes.
- 11 Q And down a little further on that page, you said that,
- 12 "The discharge of salt, whether measured as EC or TDS, may
- 13 be a designated waste as defined by the CWC" -- I assume
- 14 that means the Clean Water -- California Water Code.
- 15 Excuse me. As a non-hazardous waste that contains
- 16 pollutants that could be released in concentrations
- 17 exceeding applicable water quality objectives; is that
- 18 correct?
- 19 A Yes.
- 20 Q Okay. And then on the next page?
- 21 A Were we talking about -- go ahead.
- 22 Q And I realize that this is a fairly quick summary of
- 23 some complex documents, but I'm just trying to hit certain
- 24 points here. On the next page of that exhibit, you say
- 25 that because the discharge exceeds the MCLs for EC, there

- 1 is a reasonable potential for exceeding the water quality
- 2 objective?
- 3 A Correct.
- 4 Q And then you go on to say that, "The city's wastewater
- 5 discharges increases concentrations of EC, unacceptable
- 6 concentrations, adversely effecting the agricultural
- 7 beneficial use. And the wastewater discharge not only
- 8 presents a reasonable potential, but actually causes
- 9 violation of the chemical constituent water agency
- 10 objective in the basin plan"; is that correct?
- 11 A Correct.
- 12 Q And finally at the end of that paragraph you state,
- 13 "The failure to establish effluent limits for EC that are
- 14 protective of the chemical constituent water quality
- 15 objective blatantly violates the law"; is that correct?
- 16 A That's correct.
- 17 Q And then just to confirm on the last page of this, you
- 18 signed and filed this petition in October of 2010?
- 19 A 2010.
- 20 MR. LILLY: Ms. Spivy-Weber, I don't want to
- 21 forget, and I realize you may want to do this later, but I
- 22 do want to remember at some point to offer Exhibits 400
- 23 through 406 into evidence as part of the record.
- VICE CHAIRPERSON SPIVY-WEBER: We'll keep track.
- 25 MR. LILLY: Okay. Thank you.

- 1 BY MR. LILLY:
- 2 Q And the last thing for Mr. Shutes, I think you alluded
- 3 to this in response to a question I think it was from Mr.
- 4 Hoppin or one of the Board members. And there are times
- 5 when the Sacramento River system is in flood flows. And
- 6 under those circumstances, I think you agreed -- even you
- 7 would agree there is unappropriated water available for
- 8 the Davis-Woodland project under those conditions; is that
- 9 correct?
- 10 A Yes.
- 11 MR. LILLY: Thank you. I have no further
- 12 questions. I appreciate both of your attention this
- 13 morning.
- 14 MR. JENNINGS: Thank you, Alan.
- 15 VICE CHAIRPERSON SPIVY-WEBER: Staff, do you have
- 16 cross questions?
- 17 Identify yourself.
- 18 MS. GROODY: Mr. Jennings or Mr. Shutes, my name
- 19 is Katherine Groody. I'm on the hearing team.
- 20 I seem to recall that prior -- well, maybe
- 21 ten years ago, the Davis wastewater treatment facility
- 22 discharged to the Conaway Ranch.
- 23 MR. SHUTES: Is that a question?
- MS. GROODY: Yeah. My question is: Why is that
- 25 not possible currently?

- MR. JENNINGS: Davis went -- at the time they
- 2 established what they hope to be a wetland treatment, it
- 3 was a very attractive idea. Either through misoperation
- 4 or engineering or that they didn't properly size it or
- 5 something, it never quite worked out. And frankly,
- 6 wetland treatment has proved more difficult than
- 7 originally anticipated when it was started.
- 8 But yes, I think some of that was discharged to
- 9 Conaway Ranch. And we believe -- I believe that would be
- 10 a viable way of disposing. If you went through perhaps
- 11 wetland treatment and diluting with some water, I mean, I
- 12 think you could get the EC concentrations and boron
- 13 concentrations down to a level that you could irrigate
- 14 crops at Conaway without a problem.
- 15 MS. GROODY: Do you have any recollection as to
- 16 why that operation was -- why they don't do that
- 17 currently?
- 18 MR. JENNINGS: Well, I do know they were having
- 19 some problems with the wetland treatment. I'm going back
- 20 and I can't remember exactly right now, but it didn't
- 21 proceed as they had hoped, I think.
- MS. GROODY: Thank you.
- 23 VICE CHAIRPERSON SPIVY-WEBER: Does the Board
- 24 members have any additional questions?
- Then back to you, Michael. Do you have

- 1 additional statements that you'd like -- additional
- 2 testimony that you'd like to present?
- 3 MR. JACKSON: Somewhere last night in the time we
- 4 had, both of these gentlemen presented rebuttal testimony.
- 5 Are you calling --
- 6 VICE CHAIRPERSON SPIVY-WEBER: We'll get to that
- 7 later.
- 8 MR. JACKSON: We have no additional testimony at
- 9 this point. We would ask to move our exhibits into the
- 10 record.
- 11 VICE CHAIRPERSON SPIVY-WEBER: Without -- we will
- 12 accept those exhibits.
- 13 MR. LILLY: Wait. Excuse me. Do I get a chance
- 14 to object to some of his exhibits?
- 15 VICE CHAIRPERSON SPIVY-WEBER: You certainly may.
- 16 MR. LILLY: Excuse me. I'm sorry, but we do have
- 17 some objections to some of the CSPA exhibits. May I state
- 18 those now?
- 19 VICE CHAIRPERSON SPIVY-WEBER: You certainly may.
- 20 MR. LILLY: Okay. First of all, we object to
- 21 exhibits -- let me just make sure I have this right.
- 22 Exhibits BJ 10, BJ 12, and ES 3 and ES 5 on the grounds
- 23 that these appear to be draft documents that were prepared
- 24 by the State Board staff, but they were never adopted by
- 25 the State Board itself. And there is no supporting

- 1 evidence regarding who prepared them or why the State
- 2 Board did not adopt them. So we object on the basis that
- 3 there is not an adequate foundation and they're not
- 4 relevant to the proceeding. And they certainly do not
- 5 fall within the scope of an official notice exception
- 6 because they are not official acts of the State Board.
- 7 VICE CHAIRPERSON SPIVY-WEBER: And the ones that
- 8 you mentioned are 12 -- BJ 12 --
- 9 MR. LILLY: Yeah. BJ 10 was a pie chart prepared
- 10 for a draft strategic -- California Water Board strategic
- 11 plan update. And BJ 12 is the report allegedly from the
- 12 State Board staff to Delta Vision. But there is no
- 13 statement as to who wrote it at the State Board staff or
- 14 any clear indication it was from the State Board.
- 15 And then ES 3 is the State Board's draft water
- 16 right decision 1630, which as Mr. Jackson has said was
- 17 never adopted by the Board.
- 18 And then ES 5 is a draft State Water Resources
- 19 Control Board Water Quality Control Plan for salinity from
- 20 1988, which also was never adopted by the State Board.
- 21 So it would really open up a can of worms if we
- 22 had to start examining all the reasons why those exhibits
- 23 were prepared and then ultimately not adopted by the State
- 24 Board. And I don't think it's appropriate for them to be
- 25 submitted when they were never adopted.

- 1 VICE CHAIRPERSON SPIVY-WEBER: Nathan.
- 2 MR. JACKSON: Would you like me to be heard?
- 3 VICE CHAIRPERSON SPIVY-WEBER: Sure. Let's hear
- 4 a response, but then I'd like to come back to you, Nathan.
- 5 MR. JACKSON: First of all, the pie chart BJ 10
- 6 is actually in the final strategic plan update. It's the
- 7 same pie chart. And we believe that therefore it is not
- 8 any longer a draft document. It's a final document.
- 9 BJ 12 is -- we took off the Delta Vision website,
- 10 and they indicated that it came from the State Water
- 11 Resources Control Board as part of the original program,
- 12 their request during Delta Vision. And, therefore, we
- 13 believe it's an official record of the State of California
- 14 and therefore usable.
- 15 VICE CHAIRPERSON SPIVY-WEBER: Can you hold on
- 16 just a second? We're going to get that on the screen.
- 17 Okay.
- 18 Comments on ES 3 or 5?
- 19 MR. JACKSON: I'm still trying to figure out what
- 20 exactly those are. The B 1630 report was offered to
- 21 indicate there's been a long history of the State Board
- 22 trying to address the problems of the fisheries in the
- 23 delta. And their identification has been consistent
- 24 through the years of the need for additional freshwater
- 25 flow in order to restore the fisheries. That's the

- 1 purpose it was offered for. And we believe that it's
- 2 admissible for those purposes, not necessarily for the
- 3 truth of the matter asserted.
- 4 If Mr. Baggett was here, I'm sure he would be
- 5 pointing out that it's not the truth of it. It's the fact
- 6 that it was done because of the problems that were
- 7 identified in the early 90s.
- 8 VICE CHAIRPERSON SPIVY-WEBER: And ES 5?
- 9 MR. JACKSON: The 1988 Water Quality Control
- 10 Plan, which has been not finalized, and then probably more
- 11 into the 1994 Water Quality Control Plan, '95 Water
- 12 Quality Control Plan is again offered simply to indicate
- 13 that these problems have been known for years and that the
- 14 State Board has been grappling with this problem for
- 15 years, not necessarily for the truth of the matter
- 16 asserted within.
- 17 VICE CHAIRPERSON SPIVY-WEBER: So Nathan, I would
- 18 like your advise as to what we should do in response to
- 19 Mr. Lilly's objection to these.
- 20 MR. JACOBSEN: To go through them in order
- 21 starting with Exhibit BJ 10, I'm wondering if based on the
- 22 foundation that Mr. Jackson just laid for that document if
- 23 Mr. Lilly would agree to stipulate the inclusion of that
- 24 pie chart.
- 25 MR. LILLY: I'm sorry, but I'm not willing to do

- 1 that because Mr. Jackson has said that it was incorporated
- 2 into a final report, but he can't testify. He's not under
- 3 oath. And we don't have the final report. All we have
- 4 before us is a draft.
- 5 MR. JACOBSEN: Well, let me move on to -- come
- 6 back to that.
- Move on to BJ 12, which was pulled, according to
- 8 Mr. Jackson, from the Delta Vision website. I believe
- 9 that the Board could admit that evidence. And this
- 10 goes -- this rational applies to BJ 10 well. The
- 11 documents offered do not have to be officially adopted by
- 12 the Board for the Board to take notice of them and admit
- 13 them into evidence.
- 14 For ES 3, again, Mr. Jackson indicated that that
- 15 is not being offered in support of the truth of the matter
- 16 asserted in the document. It's just offered as evidence
- 17 that this document exists and the Board did evaluate it
- 18 and look at it. So I believe that that is also admissible
- 19 and subject to notice by the Board. And likewise for ES
- 20 5.
- 21 VICE CHAIRPERSON SPIVY-WEBER: What I would like
- 22 to do, because --
- 23 MR. JACOBSEN: I would like to add that, in
- 24 addition, those documents, if they were admitted by the
- 25 Board, would be admitted for a limited purpose. Again,

- 1 not for the truth of the propositions asserted in those
- 2 documents.
- 3 VICE CHAIRPERSON SPIVY-WEBER: Okay. Before I
- 4 make a decision on this, I'd like to take a few minutes
- 5 and think about it and talk with counsel. And we need to
- 6 take a break anyway. So if we could take a break for ten
- 7 minutes -- I'm sorry.
- 8 MR. LILLY: If I facilitate your process, if I
- 9 can say my other objections to exhibits and then you can
- 10 deliberate on all of them. Excuse me for interrupting.
- 11 VICE CHAIRPERSON SPIVY-WEBER: I didn't realize
- 12 that.
- 13 MR. LILLY: You thought you were done with me?
- 14 VICE CHAIRPERSON SPIVY-WEBER: I did.
- 15 MR. LILLY: CSPA has offered Exhibit ES Number 1,
- 16 which is the delta flow criteria report that was adopted
- 17 by this Board or accepted by this Board in August of 2010.
- 18 And certainly since the State Board has accepted that,
- 19 there is an official act by the State Board and I don't
- 20 object to it coming into the record.
- 21 However, the report itself states some numerous
- 22 limitations on its use, particularly on pages 1 through 4
- 23 and notes that the criteria that are in there are not
- 24 regulatory or water right requirements. So I would ask
- 25 that if the State Board accepts that into the record it be

- 1 subject to the limitations that the State Board itself
- 2 stated in the report.
- 3 VICE CHAIRPERSON SPIVY-WEBER: On that one I
- 4 can -- Michael, do you want --
- 5 MR. JACKSON: I think the report speaks for
- 6 itself, and we would expect you would read it in that
- 7 light.
- 8 VICE CHAIRPERSON SPIVY-WEBER: The report does
- 9 speak for itself, and I would accept Mr. Lilly's request
- 10 that we acknowledge the introductions as well as the body
- 11 of the report.
- 12 MR. LILLY: And then, finally, there are several
- 13 documents that are hearsay. And Mr. Jacobsen has already
- 14 correctly stated that the Board may accept hearsay
- 15 documents into the record but is subject to the
- 16 limitations on use. They're stated in Government Code
- 17 Section 11513, which is also referred to in the State
- 18 Board's regulations in Title 23 California Code of
- 19 Regulations Section 648.5.1.
- 20 And I don't object to the following exhibits
- 21 coming into the record, but I do object their being used
- 22 for the truth of the matter asserted therein and ask they
- 23 be admitted subject to the limitations in Government Code
- 24 Section 11513. And those exhibits are -- and there's
- 25 several of them here.

- In the CS series, it's CS 8, CS 9, CS 11, CS 12,
- 2 and CS 13.
- 3 In the BJ series, we've already talked about BJ 3
- 4 and 5. And I accept Mr. Jacobsen's ruling on that, which
- 5 I think is consistent with what I just stated.
- 6 We object on the hearsay grounds to BJ 6, 7, 8,
- 7 10 -- excuse me -- 10, 12, and 13. BJ 3 and 5 were not
- 8 subject to his prior ruling. BJ 10 and 13 -- so I object
- 9 additionally to BJ 3, 5, 6, 7, 8, and 13.
- 10 And then finally, on the same grounds as hearsay,
- 11 I object to ES 3, 5, and 9.
- 12 VICE CHAIRPERSON SPIVY-WEBER: We've already
- 13 spoke about 3 and 5. So do you want to comment?
- 14 MR. JACKSON: Yes. The comment is your rules are
- 15 as your rules are. And it seems that to have an
- 16 individual argument about each and every one of these may
- 17 take a particular amount of time.
- 18 We are offering these in general because they are
- 19 the kind of documents that are used by the Board regularly
- 20 in making its decisions. Clearly, there is evidence
- 21 within them which would qualify in court so you don't have
- 22 to bring everybody in. But your rules on hearsay are a
- 23 lot broader than the court rules. And in order to have
- 24 hearings like this in the time frame that you set, we try
- 25 to supply data that is the normal data that you consider

- 1 in the course of these things. I would suggest that you
- 2 give it the weight to which you believe it's worthy.
- 3 Otherwise, your hearings are going to go on for days and
- 4 days and days.
- 5 VICE CHAIRPERSON SPIVY-WEBER: And we don't want
- 6 that.
- 7 Let's take a break before we make a decision on
- 8 this and come back at 11:00. And the next -- once we
- 9 resolve the acceptance of the various documents, we'll
- 10 move to rebuttal and cross-examination and closing. We
- 11 should finish up by noon.
- 12 (Thereupon a recess was taken.)
- 13 VICE CHAIRPERSON SPIVY-WEBER: We are going to
- 14 reconvene the hearing.
- 15 As I've been advised by counsel, as was pointed
- 16 out by several that the State Board does have very, very
- 17 broad, very flexible procedures in terms of how much
- 18 weight we give to evidence.
- 19 So I'm going to let the evidence in, subject to
- 20 the limitations of Government Code 513, which was
- 21 discussed between you and Mr. Jackson. So I will be
- 22 letting the evidence in. But we will be using it
- 23 appropriately, not for the truth of the matter.
- 24 (Whereupon the above-referenced exhibits
- were admitted into evidence.)

- 1 MR. LILLY: Excuse me, Ms. Spivy-Weber. Before
- 2 we go on, I did offer WDCWA Exhibits 400 through 406. Is
- 3 now the time?
- 4 VICE CHAIRPERSON SPIVY-WEBER: Yes. I want to
- 5 accept into the record the evidence that has been
- 6 presented in your case in chief, Michael.
- 7 MR. JACKSON: Okay. And I have no objection to
- 8 the entering of the evidence that included excerpts of Mr.
- 9 Jennings' complaints.
- 10 VICE CHAIRPERSON SPIVY-WEBER: Thank you very
- 11 much. So you are submitting those documents into the
- 12 record. There's no objection. So those two are in the
- 13 record.
- 14 (Whereupon the above-referenced exhibits
- were admitted into evidence.)
- 16 VICE CHAIRPERSON SPIVY-WEBER: Any more
- 17 documents?
- 18 And I thank you both. And I thank counsel, too,
- 19 for helping me. As you know, I'm new to this. And I'm
- 20 learning every step of the way. Thank you for being
- 21 patient.
- 22 So now we're moving to rebuttal and
- 23 cross-examination in the same order that we've been
- 24 hearing presentations of the evidence in the past. First,
- 25 we'll do Woodland-Davis Clean Water Agency. And Alan, do

- 1 you have a rebuttal?
- MR. LILLY: Yes. I would ask Mr. Bourez and Mr.
- 3 Yost to come forward. I do have a few questions for them.
- 4 And I'll circulate. We have one exhibit for Mr. Bourez's
- 5 questioning, WDCWA 115, and I'll give that to staff to
- 6 circulate to all of you.
- 7 REBUTTAL
- 8 BY MR. LILLY:
- 9 Q Mr. Bourez, do you have a copy of Exhibit WDCWA 125 in
- 10 front of you?
- 11 A Yes, I do.
- 12 Q Please tell -- first of all, did you prepare this
- 13 exhibit?
- 14 A Yes, I did.
- 15 Q And just to begin with, could you please explain what
- 16 the columns are where it says average wet, above normal,
- 17 below normal, and so forth?
- 18 A Average column is the '82 year.
- 19 VICE CHAIRPERSON SPIVY-WEBER: Can you speak more
- 20 directly into your microphone?
- 21 MR. BOUREZ: The average column is the annual
- 22 average for the entire '82 year CalSim period in the
- 23 record. Wet and above normal, below normal, dry and
- 24 critical are averages for year types based on the 40, 30,
- 25 30 Sacramento River index.

- 1 BY MR. LILLY:
- 2 Q And then please explain what the different entries for
- 3 location mean.
- 4 A Those are different output locations in the model
- 5 around the delta.
- 6 Q And then please explain what the existing conditions
- 7 scenario is.
- 8 A The existing conditions is the existing condition
- 9 model simulation without project, and it does include the
- 10 depiction of the current operating criteria that we used
- 11 in our updated analysis.
- 12 Q And then what's the future condition without project
- 13 scenario?
- 14 A That's the cumulative condition modeling simulation.
- 15 Q And then what is change with project?
- 16 A That is the difference between the cumulative
- 17 condition and the cumulative condition without project.
- 18 Q Okay. And then, finally, what does cumulative change
- 19 compared to existing conditions mean?
- 20 A That is the cumulative condition, and that does
- 21 include the project compared to existing conditions.
- 22 Q So is it correct to say that cumulative change
- 23 compared to existing conditions is how much each of these
- 24 parameters would change if you went from existing
- 25 conditions to the future conditions with all the other

- 1 projects that are in the CalSim future conditions plus the
- 2 Davis-Woodland project?
- 3 A That's correct.
- 4 Q All right. And then for each of these locations, it
- 5 shows what the total change in the parameter would be with
- 6 all of those, the changes occurring between existing
- 7 condition and future condition with the project?
- 8 A That's correct.
- 9 Q Mr. Bourez, -- let me go on to Mr. Yost now.
- 10 Mr. Yost, some questions came up regarding the --
- 11 first of all, regarding the Davis wastewater treatment
- 12 plant. Could you please explain why Davis is being forced
- 13 to go from its current wetland disposal to a tertiary
- 14 treatment process?
- 15 BY MR. YOST:
- 16 A Actually, it's not that they're being forced to go
- 17 from the wetland to the tertiary treatment process. It's
- 18 that they're having to discharge their effluent at a
- 19 different location than to the wetland project area. And
- 20 the primary concern is the build-up of contaminants in
- 21 that wetland area, notably selenium.
- 22 Q Why is the selenium build-up -- there a problem?
- 23 A It's contributing to build-up of selenium in the eggs
- 24 from the birds that are using the area.
- 25 Q Now, there has been -- there was some discussion in

- 1 CSPA's case about could Davis or Woodland deliver its
- 2 effluent for irrigation to Conaway. What are the problems
- 3 with that?
- 4 A Well, interestingly enough, the city of Davis spent I
- 5 don't know how many years -- a number of years trying to
- 6 work out a reuse solution with Conaway Ranch. And the
- 7 bottom line is the ranch does not want to accept its
- 8 wastewater for reuse because it would not allow them to
- 9 grow rice. They just would not be able to market the rice
- 10 if it was grown with reused effluent.
- 11 Q There was also some discussion about could Davis and
- 12 Woodland discharge their treated wastewater into the
- 13 groundwater base in Yolo County basically through
- 14 injection wells? Is that possible?
- 15 A Actually, we looked at disposal of the brine from well
- 16 head treatment systems, and it is prohibited by ordinance
- 17 in Yolo County.
- 18 Q I assume that's because of the concerns about
- 19 groundwater quality?
- 20 A That's correct.
- 21 Q There was also some discussion about why did
- 22 Woodland-Davis limit the amount of water purchased from
- 23 Conaway to 10,000 acre feet per year? Why didn't they go
- 24 higher than 10,000?
- 25 A Well, in actuality, the time when the water that we

- 1 could purchase from Conaway would be useful to the project
- 2 is limited to pretty much the summer months, and that's
- 3 really the only practical level of sale they could make of
- 4 the water that they have available.
- 5 Q Are there also limitations in the EIR related to --
- 5 A There are limitations in the EIR. The EIR talks about
- 7 a sale of 10,000 acre feet, and the primary concern is the
- 8 additional pumping that Conaway would have to do to create
- 9 a groundwater substitution transfer.
- 10 Q And then Mr. Russell asked a couple of questions
- 11 basically -- and if I'm stating this incorrectly, I'm sure
- 12 he will correct me, because I don't have the engineering
- 13 expertise.
- 14 But I think the question was basically what is
- 15 the residence time from when water is diverted from the
- 16 Sacramento River to when it returns to the bay delta
- 17 system after going through the water treatment plant that
- 18 the pipe lines, the people's houses, the wastewater
- 19 treatment plant, and then the discharge back to the
- 20 system. If you could just give us some indication of what
- 21 that is.
- 22 A I can't tell you precisely, but it would be a matter
- 23 of days.
- 24 MR. LILLY: I don't have any further questions
- 25 for rebuttal evidence.

- BOARD MEMBER DODUC: I have a question for Mr.
- 2 Bourez. Looking at Exhibit 115, these are modeling
- 3 results that you performed?
- 4 MR. BOUREZ: That's correct.
- 5 BOARD MEMBER DODUC: I'm curious, what is your
- 6 level of confidence that this paper water actually
- 7 represents -- truly represent actual wet water that would
- 8 be available under these conditions?
- 9 MR. BOUREZ: Well, this table is not showing
- 10 water available. It's showing a change from existing
- 11 conditions, today conditions, to 2030 conditions.
- 12 BOARD MEMBER DODUC: So what is your level of
- 13 confidence in the model and in these results?
- MR. BOUREZ: I have a high level of confidence in
- 15 the models, primarily because the level of land use that
- 16 is represented upstream does show an increase in water
- 17 use. It does show conversions from ag to urban. It does
- 18 show changes in facilities that are reasonably
- 19 foreseeable, such as at the MC inter-tie. San Joaquin
- 20 River restoration is included in the future level. Model
- 21 run compared to the existing level. And that's one of the
- 22 reasons that you see greater flows coming in on the south
- 23 delta side is because we're trying to represent what the
- 24 future is.
- 25 And these studies are directly from the State

- 1 Water Project delivery reliability report and their
- 2 assumptions of the future and their best depiction of what
- 3 land use will be in the future and what facilities will be
- 4 in the future. So it is the best estimate from DWR and
- 5 the Bureau of Reclamation.
- 6 BOARD MEMBER DODUC: But what is your personal
- 7 level of confidence? Just look existing conditions. What
- 8 is your personal level of confidence that the existing
- 9 conditions outlined here truly reflect actual conditions?
- 10 MR. BOUREZ: That's a good question. And I've
- 11 done a lot of comparisons on the existing level CalSim
- 12 modeling with actual historical gauges. And the San
- 13 Joaquin River flow and salinity workshop a couple of weeks
- 14 ago, State Board staff put a comparison of Vernalis flow
- 15 and CalSim flow. And I developed most of the hydrology
- 16 for the San Joaquin River system. And it showed a very
- 17 good comparison between the model and the gauge flow for
- 18 current level.
- 19 I've done comparisons like that for most of the
- 20 tributaries that are in CalSim, the major tributaries.
- 21 And I've found that the model does a good job mimicking
- 22 recent operations. There are things that happen in
- 23 realtime operations that the model doesn't include,
- 24 certain closures, facility outages. And in keeping in
- 25 mind that actual operations are daily, and there is a lot

- 1 of decisions that go into that where the model use rules
- 2 that don't capture all the nuances and daily operations,
- 3 given that, I believe the model does a pretty darn good
- 4 job of depicting the way the system works.
- 5 BOARD MEMBER DODUC: Thank you.
- 6 VICE CHAIRPERSON SPIVY-WEBER: I have a -- oh,
- 7 Dwight, go ahead.
- 8 BOARD MEMBER RUSSELL: Actually, this is for
- 9 Walter.
- The CalSim model is a monthly time step, if I
- 11 remember correctly.
- 12 MR. BOUREZ: That's correct.
- 13 BOARD MEMBER RUSSELL: And my earlier question
- 14 regarding the residence time is one of the CalSim's -- I
- 15 want to say one of the reporting locations in CalSim or
- 16 even in input to the system is the discharge location for
- 17 the city of Davis and the city of Woodland.
- 18 MR. BOUREZ: Yeah. It enters into the toe drain
- 19 which enters Cache Slough and into the Yolo Bypass. And
- 20 it's depicted by an input to the delta near Rio Vista.
- 21 BOARD MEMBER RUSSELL: The amount of water is
- 22 pre-operated. Would you know that before you start
- 23 running the CalSim model how much is going to come in?
- MR. BOUREZ: Well, the Yolo County Bypass is
- 25 dynamic in the model.

- BOARD MEMBER RUSSELL: How much is your input
- 2 value? You already pre-operated the treatment plant
- 3 effluent. Do you know how much you're going to add to
- 4 that location?
- 5 MR. BOUREZ: Yes. The hydrology -- and let me
- 6 step back.
- 7 The way CalSim works, it has the demand
- 8 represented for Davis and Woodland. So in an existing
- 9 condition, that demand is met from groundwater, and that
- 10 return flow is shown in the model output. When you run
- 11 with alternative, you still have a same amount of effluent
- 12 discharge from the plants. But the diversion is now from
- 13 the Sacramento River rather than from groundwater. That's
- 14 why when you look at the changes in Sacramento River flow
- 15 that we're showing as impact of the project, you'll see a
- 16 change in Sacramento River flow below the diversion point.
- 17 But when you look at an increase in return flow from
- 18 Davis-Woodland, it would be the same as without project.
- 19 BOARD MEMBER RUSSELL: Thank you. That was my
- 20 question.
- 21 VICE CHAIRPERSON SPIVY-WEBER: My question is it
- 22 goes back to Tam's earlier question about confidence in
- 23 these numbers. Which, if any, of these calculations are
- 24 most affected by CalSim's mathematical insertion I guess
- 25 is what I'll call it of groundwater levels that aren't

- 1 based on actual groundwater? So that basically CalSim has
- 2 to have a balance so they just substitute the number that
- 3 would create the balance for groundwater? Does the lack
- 4 of actual information on groundwater effect any of these
- 5 numbers -- your confidence in any of these numbers?
- 6 MR. BOUREZ: CalSim doesn't dynamically operate
- 7 groundwater. The way it's represented in the model is
- 8 through surface water budgets. When we prepare a surface
- 9 water budget for the model, you will see that the effect
- 10 of groundwater in the surface water in that base line
- 11 model run.
- 12 When you look at an alternative that involves
- 13 groundwater, you would -- CalSim is not going to do a good
- 14 job of picking up that change in groundwater. We do look
- 15 at other analyses with groundwater, and there are
- 16 groundwater modeling tools to use for that.
- 17 For this project, we did not -- I did not
- 18 evaluate changes in groundwater levels. Jim probably
- 19 would be a better person to answer that question.
- 20 MR. YOST: What's the question for me?
- 21 VICE CHAIRPERSON SPIVY-WEBER: The question is:
- 22 Using the CalSim model, there are challenges with
- 23 incorporating groundwater -- CalSim incorporates
- 24 groundwater in a more mathematical way than an actual
- 25 measurement way. And so does that factor influence your

- 1 confidence in the numbers that are here in this exhibit?
- 2 MR. BOUREZ: It doesn't affect my confidence in
- 3 those numbers. What I read into your comment was how do
- 4 we deal with groundwater in our analysis and the changes
- 5 in groundwater pumping that would occur as a result of the
- 6 project and how that would influence these numbers.
- We didn't increase, say, groundwater levels which
- 8 if you increase groundwater levels, you may have a greater
- 9 contribution of groundwater to stream flow or less stream
- 10 contribution to groundwater as a result of a higher
- 11 groundwater table. We did not consider that in the
- 12 analysis. If we did, we'd likely see a slight decrease in
- 13 project impacts or influence on the system.
- 14 BOARD MEMBER RUSSELL: I have a follow-up
- 15 question.
- 16 Looking at your exhibit here, I think it's 115,
- 17 the numbers that we see and the difference, does that
- 18 represent groundwater storage since you had previously
- 19 taken out of groundwater and introduced it as a discharge
- 20 into the CalSim model? Now that you're not taking the
- 21 water out of the river system, do the numbers I see here
- 22 represent a change in storage in the groundwater, all else
- 23 being the same?
- MR. BOUREZ: All else being the same, if you're
- 25 pumping less groundwater and taking surface water, you

- 1 would expect that groundwater levels would increase.
- BOARD MEMBER RUSSELL: I'm not talking about the
- 3 levels. I'm talking about we have acre feet. So the
- 4 numbers I see here would represent greater groundwater
- 5 storage than would have been there under existing
- 6 conditions, because you're not taking water out of the
- 7 Sacramento system.
- 8 MR. BOUREZ: That's correct.
- 9 MR. YOST: I might just add to that. The two
- 10 cities now, as you well know, rely completely on
- 11 groundwater. They pump groundwater as their single source
- 12 of supply. In the future, they'll pump very little
- 13 groundwater. As it turns out, this groundwater basin
- 14 underlying the East Yolo County area has significant
- 15 releases to the Sacramento River. And what will happen
- 16 when the two cities quit pumping all that groundwater, the
- 17 groundwater basin is going to build up and these releases
- 18 will increase. So the net impact on the Sacramento River
- 19 will be there will be additional groundwater released into
- 20 the groundwater basin in the area of Woodland and Davis.
- 21 And then the second part of that discussion is
- 22 that the 60 or 70 percent of the surface water diverted
- 23 for use by the two cities will be returned as return flow.
- 24 And it may even be higher than that, because both cities
- 25 are embarking on a program to install the capability to

- 1 pump groundwater for landscape irrigation in their parks
- 2 and other places in the city, and they wouldn't use the
- 3 surface water.
- 4 BOARD MEMBER RUSSELL: If I understand you
- 5 correctly, you're saying about 40 percent of the diverted
- 6 water would be consumptively used?
- 7 MR. YOST: That's correct.
- 8 MR. BOUREZ: If I can add something as well. The
- 9 reason I didn't want to include groundwater in our
- 10 analysis, it would have been a little speculative and very
- 11 costly to do. And by not including that increased
- 12 groundwater contribution of stream flow, I would be
- 13 overpredicting potential influences or effects of this
- 14 project on the system. And I wanted to err on the side of
- 15 showing a greater impact to the system than not enough.
- 16 VICE CHAIRPERSON SPIVY-WEBER: So that is the end
- 17 of your rebuttal. And you have cross?
- 18 RECROSS-EXAMINATION
- 19 BY MR. JACKSON:
- 20 Q Mr. Bourez, calling your attention to the exhibit that
- 21 I believe is 115 that's on the screen, when you have a
- 22 minus number, what does that mean?
- 23 A It's a decrease. If it's a flow number, it would be a
- 24 decrease in flow.
- 25 Q All right. So your study indicates there will be a

- 1 decrease in net delta outflow as a result of this project?
- 2 A That's correct.
- 3 Q And it indicates that there will be a decrease in
- 4 total delta inflow as a result of this project?
- 5 A As a result of the project. But I'm comparing the
- 6 cumulative condition and cumulative without project,
- 7 that's correct.
- 8 MR. JACKSON: I think that's all my questions.
- 9 VICE CHAIRPERSON SPIVY-WEBER: Does staff have
- 10 additional questions?
- 11 MS. GROODY: Yes.
- 12 I'd like to ask a question again of Mr. Bourez.
- 13 Going back to the table in Exhibit 102, page 2, I think
- 14 we've kind of figured out that these values are based
- 15 on -- they're a projection using the model that's not
- 16 based on historical data.
- 17 MR. BOUREZ: That's correct.
- 18 MS. GROODY: And so that's how you project the
- 19 use of Term 91 all the way back to 1922 when Term 91
- 20 didn't, in fact, exist?
- 21 MR. BOUREZ: That's correct. It didn't come into
- 22 existence until 1984.
- 23 MS. GROODY: Okay. So this is actually -- Nathan
- 24 and I share this concern. If you look at the values for,
- 25 say, for example, March, the value is the same in the

- 1 critical years as -- they're exactly the same -- the
- 2 critical years and the wet years have the exact same value
- 3 for the month of March.
- 4 MR. BOUREZ: That's correct.
- 5 MS. GROODY: Can you please explain how the
- 6 model -- how the model projects that this is the water
- 7 that the city would be taking out; correct?
- 8 MR. BOUREZ: That's correct. And it's based on a
- 9 forecasted demand. And Jim knows more about the demand.
- 10 I'll explain how the demand is developed to a certain
- 11 degree. But if you want more details on how the demand is
- 12 calculated, Jim helped develop that.
- 13 I took the demand -- the forecasted demands and
- 14 those demands are on a typical curve. And this is very
- 15 common for most of the urban demands that are depicted in
- 16 CalSim and a lot of other models. As you pick a standard
- 17 kind of demand in the wintertime, the demands go very low.
- 18 And that's typically indoor urban demand. In the
- 19 summertime, the demand tends to increase because folks
- 20 water more plants on their porches and water their lawns.
- 21 So the demand pattern is very typical of an urban demand.
- 22 What we do is put that typical urban demand
- 23 pattern into CalSim, and we simulate the model to meet
- 24 that demand. So if it -- and it does meet the demand
- 25 unless Term 91 is in effect. And then the diversions

- 1 under this permit would be reduced to zero. That doesn't
- 2 mean the demand goes away. That just means the diversion
- 3 of this permit would be zero and an alternative source
- 4 would have to be used.
- 5 MS. GROODY: Then can you explain 1958 where
- 6 there's zero demand in March?
- 7 MR. BOUREZ: In 1958, in that year, CalSim
- 8 determined that there was supplemental water in the
- 9 system. And I know that the model -- the way supplemental
- 10 water is calculated is the same method that the State
- 11 Board uses. In fact, we took a spreadsheet we got from
- 12 the State Board and implemented that exact logic for Term
- 13 91 into our calculations.
- 14 But actual Term 91 is calculated on a daily basis
- 15 where the model is a monthly basis and it doesn't have the
- 16 dynamics that actual operations have. So in that
- 17 particular case, in 1958, in March, we calculated that
- 18 Term 91 would be in effect and the project would not be
- 19 able to divert under the permit.
- 20 MR. JACOBSEN: Just the clarify that point. So
- 21 is this chart -- does this chart contain the correlation
- 22 between the CalSim modeling and Term 91? In other words,
- 23 is the correlation exact?
- MR. BOUREZ: Okay. This is a model simulation.
- 25 When I compare when Term 91 is in effect from the

- 1 modeling, it doesn't compare identically to what happened
- 2 historically because we have different regulatory
- 3 environments. We have the biological opinions. We have a
- 4 monthly model with rules. So the timing of Term 91 is
- 5 similar to what has happened in recent historical period,
- 6 but it's not identical.
- We took the logic that's applied by the State
- 8 Board to determine when Term 91 is in effect and applied
- 9 that logic to the CalSim result. So we're using the same
- 10 methodology in our analysis as the State Board uses in
- 11 actual operations. And that's how we determine when Term
- 12 91 would be in effect in our model.
- 13 And keeping in mind that in the future I'll
- 14 guarantee that the historical precipitation and hydrology
- 15 will not replicate itself in the future. So Term 91 is
- 16 meant to be a dynamic way of curtailing post-1965 water
- 17 rights that were junior to the project. So it will be
- 18 different in the future. I guarantee.
- 19 VICE CHAIRPERSON SPIVY-WEBER: Any additional
- 20 questions from staff?
- 21 Then you have something to submit into the
- 22 record?
- MR. JACKSON: No objection.
- 24 MR. LILLY: Just for the record, we're offering
- 25 Exhibit WDWCA 115.

- 1 VICE CHAIRPERSON SPIVY-WEBER: Thank you. We
- 2 will accept that into the record.
- 3 (Whereupon the above-referenced exhibit
- 4 was admitted into evidence.)
- 5 VICE CHAIRPERSON SPIVY-WEBER: Michael, do you
- 6 have rebuttal?
- 7 MR. JACKSON: Very short.
- 8 BY MR. JENNINGS:
- 9 Q Mr. Jennings, did you stay up late last night working
- 10 on the rebuttal?
- 11 A Actually, no.
- 12 Q All right. This one is for Mr. Shutes.
- 13 Mr. Jennings, what rebuttal testimony do you have
- 14 to offer today?
- 15 MR. JENNINGS: Well, I would notice that Dr.
- 16 Hanson testified that the project fish screen will be 95
- 17 percent effective in effect of entrainment impingement of
- 18 larger fish. That was WDCWA 200, page 4 of number 17.
- 19 But that's eggs and larva of striped bass, American shad,
- 20 and other species will be vulnerable to be entrained into
- 21 the fish screen mesh. That was the same exhibit, Page
- 22 518.
- 23 I note that the EIR that was WDCWA-2093.622
- 24 admits that green sturgeon -- listed species eggs or larva
- 25 are present in the water column throughout the year. The

- 1 EIR at 3.616 through 27 acknowledges that sensitive life
- 2 stages of numerous other native and nonnative species are
- 3 present, including stripe bass, American shad, and
- 4 splittail.
- 5 I notice that the recent DFG 2010 fall midwater
- 6 trawl data indicates striped bass and splittail are at
- 7 lowest levels in history. There is a federal mandate to
- 8 double the population of striped bass.
- 9 And I can find no mitigation for the expected
- 10 five percent entrainment or the impingement of fish or
- 11 entrainment of eggs and larva other than the agreement
- 12 with the Department of Fish and Game, which is WDCWA 210,
- 13 page 8, number 15 and Appendix D for a proposed study of
- 14 general fishery conditions in the vicinity of the project,
- 15 but with no mandate to implement any mitigation. Here's a
- 16 project impact with no mitigation.
- 17 And Dr. Hanson testified about the potential
- 18 opportunity if funds are available to consolidate the
- 19 current fish screens. Now, I hope that they would clarify
- 20 that. I'm concerned that if funding might -- development
- 21 of funding might be a problem is, in fact, iron clad that
- 22 the consolidation of the fish screens will be an integral
- 23 part of the project and that the project won't go forward
- 24 without a consolidation of the fish screens. I think that
- 25 needs to be clarified.

- With respect to Mr. Yost's testimony, he
- 2 testified that some 16 wells in Davis and Woodland have
- 3 been shut down because of age, production, loss or high
- 4 contaminant levels and that was WDCWA 1-3, page 2, number
- 5 9, exhibits WDCWA 4 and WDCWA 5 reveal the various Davis
- 6 and Woodland wells have been abandoned because of high TDS
- 7 EC conductivity, nitrates, chromium, selenium, and
- 8 magnesium.
- 9 I note that the abandoned and historic wells
- 10 within the Davis and Woodland service area that's Yost
- 11 slide number twelve, nitrate levels and groundwater have
- 12 sharply increased over the last 20 years until they now
- 13 violate drinking water standards at Yost slide number
- 14 eleven. And it appears that Davis and Woodland have
- 15 failed to protect groundwater. And only after having
- 16 polluted their source of drinking water are now seeking a
- 17 new source in the Sacramento River.
- 18 Mr. Yost testified that a reason for the project
- 19 is the ability of Davis and Woodland to comply with
- 20 salinity, boron, and selenium requirements in the NPDES
- 21 permit and that reduction in the concentration of these
- 22 minerals will require very expensive reverse osmosis
- 23 process. I think that was WDCWA 1-3, page 3, number 11.
- 24 I note that the high concentration of pollutants
- 25 in the groundwater is at least partly a result of not

- 1 protecting groundwater. Reverse osmosis would address
- 2 numerous contaminants that pose a threat to public health
- 3 that aren't adequately treated by traditional treatment
- 4 processes. And that since Conaway Ranch apparently has
- 5 sufficient water rights to sell long-term transfers to Los
- 6 Angeles, they are at least potential sources of many
- 7 others and to potentially a conjunctive use project.
- 8 Just recently on rebuttal, Mr. Yost noted that
- 9 groundwater into the river would increase if there were
- 10 not pumping required -- groundwater pumping to provide
- 11 drinking water. So I'm presuming that that would also
- 12 increase the discharge of selenium and boron and whatever
- 13 other contaminants there are to the system as well, if
- 14 production increased.
- 15 And actually I think that's probably all I've got
- 16 to say.
- 17 BY MR. JACKSON:
- 18 Q Mr. Shutes, did you prepare a rebuttal Exhibit CS
- 19 number 19?
- 20 BY MR. SHUTES:
- 21 A Yes, I did.
- 22 Q Would you describe to the Board what you did.
- 23 A Yes. I started with a monthly average water demand
- 24 that was given in CSPA-CS 10, Montgomery Watson Harza memo
- 25 that was sent by the applicants to the State to the

- 1 Department of Fish and Game. And actually was
- 2 excerpted -- the relevant part was excerpted from the EIR,
- 3 the modeling section of it. And it gives in that the
- 4 average monthly demand in acre feet for the project.
- Now, that was when they were asking or
- 5 anticipating the demand for the project was 56,717 acre
- 7 feet. Now that they reduced that to 46,136 acre feet by
- 8 their -- then took a coefficient and reduced the amount of
- 9 demand on a monthly basis uniformly to get what the
- 10 average monthly demand would be according to the new
- 11 permit request.
- 12 Then I looked at Mr. Bourez's Exhibit Number 104
- 13 which gave the amount of time that water would be
- 14 available under -- to service the permits, the percent of
- 15 time in any given month that water would be available to
- 16 service the permits. And to simply get an average of how
- 17 much water is available, I multiplied the first -- the
- 18 second row by the third row, that is, the percent of time
- 19 by the monthly demand and came up with the average monthly
- 20 diversion that would be available under permits if the
- 21 State Board would adopt the delta flow criteria.
- Now, Mr. Bourez says in his written testimony
- 23 that water is available. What I'm showing here is, yes,
- 24 water is available, as Mr. Lilly asked me, during floods.
- 25 But what's available on average to service these permits,

- 1 if you were to institute the delta flow criteria's
- 2 regulatory requirements, would be 2,356 acre feet.
- 3 I'd also point out that the far number in the
- 4 right column of Mr. Bourez's Exhibit 104 had a 61 percent
- 5 number, which says -- which meant something different.
- 6 What that meant was that in 61 percent of years there
- 7 would be something available. But what I just looked at
- 8 is how much of the year overall water would be available.
- 9 It's about five percent.
- 10 Now, we've been through the discussion that,
- 11 well, maybe we're not going to reduce diversions or
- 12 increase delta outflow by 5.5 million acre feet. Right
- 13 now, all we have in terms of the water availability
- 14 analysis is the current conditions which were just the
- 15 current constraints, not conditions. So when Mr. Bourez
- 16 says, well, I looked at the future conditions, he's
- 17 looking at the future conditions, but he's still looking
- 18 at them with the existing constraints. And when we look
- 19 at that, we don't have anything in between the two. We
- 20 have no idea if we actually start to address the issues
- 21 that we're going to address over the next few years how
- 22 much water is going to be available. So far as I know, we
- 23 don't have any modeling analysis that gives us the answers
- 24 to that.
- 25 What I think this shows is that if you provide

- 1 sufficient water to protect public trust resources
- 2 according to what the flow report says, then the system is
- 3 over-appropriated and you have 2,356 acre feet to service
- 4 this permit. It's not in the public interest to grant a
- 5 permit to supply that much water.
- 6 I'd like to speak for a minute also to the
- 7 importance of the September 26th, 2008, letter, because a
- 8 lot was made about that. One of the most important things
- 9 that I think has been lost is that it expresses the fact
- 10 we don't have good accounting for water use in the system.
- 11 And so what we have instead is the model that sort of gets
- 12 at it, but you put a lot of assumptions in it. And the
- 13 Board hasn't taken upon itself as of this time to do a
- 14 good accounting. Part of what we think needs to happen
- 15 before you start granting more permits is you start
- 16 getting a handle on what kind of accounting needs to
- 17 happen. We think that's in the public interest.
- 18 Mr. Hanson, in point 25 of his testimony, said
- 19 that the permits will result only in small incremental
- 20 reductions in Sacramento River flows. And the biological
- 21 impacts on fisheries' resources in the Sacramento River
- 22 and delta from these changes were found to be less than
- 23 significant. Also, changes in river flows and delta
- 24 outflow and associated fishery habitat and quality
- 25 availability will be less than significant.

- 1 Mr. Hanson is addressing the wrong question.
- 2 It's not simply the increment between the existing and
- 3 future, but the question needs to be do the sum of
- 4 diversions senior to Davis and Woodland, which must be met
- 5 before Davis and Woodland can divert, have significant and
- 6 unsustainable impacts on Sacramento and delta fisheries
- 7 resources? And do the diversions senior to Davis and
- 8 Woodland, which must be met before Davis and Woodland can
- 9 divert, have significant and unsustainable impacts on
- 10 delta outflow and associated fishery habitat and delta
- 11 quality?
- 12 The applicants want to substitute an incremental
- 13 effects analysis for a cumulative effects analysis. And
- 14 we've seen pages, hundreds in the EIR and in the testimony
- 15 that gets to this point.
- 16 Mr. Yost said in his testimony that the project
- 17 anticipates future water quality requirements. I believe
- 18 some of the other folks from Davis and Woodland also
- 19 testified to this. Well, we think it's also in the public
- 20 interest to look not only at future water quality
- 21 requirements, but also to look at future water quantity
- 22 requirements such as requirements that are going to be
- 23 needed for delta flow.
- 24 Thank you.
- 25 MR. JACKSON: And that ends our rebuttal

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- 1 testimony. And we offer CSPA 19.
- 2 VICE CHAIRPERSON SPIVY-WEBER: Let me take that
- 3 in after we've had cross of the rebuttal. I see that
- 4 Dwight has a question.
- 5 BOARD MEMBER RUSSELL: This is regarding the new
- 6 exhibit you just shared with us. And after listening to
- 7 what I heard a few minutes ago about how much water would
- 8 be consumptively used by the city of Davis and the city of
- 9 Woodland, how much would that knowledge now change these
- 10 numbers if you know that at least 60 percent of the water
- 11 is returning to the system?
- 12 MR. SHUTES: It wouldn't change the numbers,
- 13 because it's a question of how much water is available to
- 14 divert. And Term 91 -- what the bottom line there means
- 15 is that Term 91 is in effect for six months of the year,
- 16 and except for two percent of the time in another month
- 17 and except for four percent of the time in another month.
- 18 And what that would mean would be that the cities of Davis
- 19 and Woodland would not be diverting. And so I don't know
- 20 that it would have -- whatever the return flow was
- 21 wouldn't be returning because it wouldn't be diverted in
- 22 the first place.
- 23 MR. JENNINGS: Return flows do, in fact, return
- 24 below the diversion point.
- 25 BOARD MEMBER RUSSELL: I understand that. I'll

- 1 pass on that one. I'm not sure I understood your answer.
- VICE CHAIRPERSON SPIVY-WEBER: Mr. Lilly?
- 3 MR. LILLY: We could go back and forth forever,
- 4 but I'm not going to. So I will not ask any further
- 5 questions of these witnesses.
- 6 VICE CHAIRPERSON SPIVY-WEBER: Does staff have
- 7 additional questions on rebuttal? Then now, Michael,
- 8 would you like to submit your exhibit and is there any
- 9 objection from Mr. Lilly?
- 10 MR. LILLY: I do not object to this exhibit.
- 11 VICE CHAIRPERSON SPIVY-WEBER: Okay. We will
- 12 accept Exhibit CSPA CS 19 into the record.
- 13 (Whereupon the above-referenced document
- 14 was admitted into evidence.)
- 15 VICE CHAIRPERSON SPIVY-WEBER: And I believe that
- 16 is the end of the rebuttal, and so we have closing and
- 17 we'll start with Mr. Lilly.
- 18 MR. LILLY: I have a couple of slides for my
- 19 closing statement. They are copies of exhibits that have
- 20 already been introduced into the record. And I'll ask
- 21 either Mr. Anderson or Mr. Lindsay to put that up on the
- 22 screen.
- 23 First of all, I do want to thank all of the
- 24 members of the State Board for scheduling this hearing and
- 25 for the attention during the hearing. Obviously, these

- 1 are very good questions from State Board members, and they
- 2 really show your dedication. And we greatly appreciate
- 3 that.
- 4 I do want to emphasize that this project is very
- 5 important to the Woodland-Davis Clean Water Agency that
- 6 the State Board promptly grant the pending applications
- 7 and issue these permits. As Mr. Yost testified, we need
- 8 the permits now to support financing, water rate
- 9 increases, the design build operate bid operations, and
- 10 processing of the numerous other permits that are required
- 11 for the project. The lead times for these actions require
- 12 that the permits be issued now so we can keep going and
- 13 get this project online by 2016 to meet the anticipated
- 14 new waste discharge requirements and NPDES permits.
- 15 Why should the State Board grant these
- 16 applications? Water Code Section 1253, we've talked about
- 17 it a lot, says the Board shall allow the appropriation for
- 18 beneficial uses of unappropriated water under terms and
- 19 conditions as this judgment will best develop, discern,
- 20 and utilize in the public interest the water sought to be
- 21 appropriated.
- 22 Mr. Bourez's analysis from the CalSim-II modeling
- 23 shows that there will be unappropriated water in the
- 24 system. Basically, there will be times when Term 91 is
- 25 not in effect in many months of all water year types.

- 1 Obviously, more months in the wet years and fewer months
- 2 in the dry years.
- 3 CSPA's arguments regarding unappropriated water
- 4 are incorrect for two reasons. First of all, to the
- 5 extent they're relying on the face values of water right
- 6 permits and licenses, we've demonstrated that's just not
- 7 an appropriate way to look at this, because the face
- 8 values of the permits far exceed the existing or future
- 9 use and certainly the consumptive use of water under those
- 10 permits.
- 11 Also, by looking just at the matter on an annual
- 12 basis and talking about how many million acre feet per
- 13 year of additional outflow may be ordered by the Board in
- 14 the future, ignores completely and incorrectly the large
- 15 month-to-month variations in supplies and demands. An
- 16 analysis of this issue must be done on an effort that
- 17 recognizes there's more water generally in the river
- 18 systems than there is in the summer, and their analysis
- 19 does not do that.
- 20 And when that analysis is done correctly, the
- 21 Board can understand why it's possible that higher delta
- 22 flow criteria will have significant impacts on the State
- 23 and federal projects, and yet still will allow there to be
- 24 times when unappropriated water is available for
- 25 appropriation by Davis and Woodland.

- Water Code Section 1257, I'll just paraphrase,
- 2 says the Board, in considering applications, is supposed
- 3 to look at the relative benefit to be derived from all
- 4 beneficial uses of the water involved.
- 5 Here, this project will have some very
- 6 significant benefits to Woodland and Davis and U.C. Davis.
- 7 We've talked about increased water supply reliability
- 8 rather than continuing to rely on aquifers of uncertain
- 9 long-term yields. We've talked about improved drinking
- 10 water quality, particularly regarding nitrates, chromium,
- 11 and arsenic. And I'll just add Mr. Jennings' arguments
- 12 about the nitrates incorrectly assume that the pollution
- 13 has come from the cities, when undoubtedly it has come
- 14 primarily from the neighboring agriculture.
- 15 The improved quality of the discharges -- I'll
- 16 just put up the slides here. Slide 15 shows the present
- 17 problems with the EC limits, the boron limits, and the
- 18 selenium limits in the city of Woodland's discharges and
- 19 the fact that those significantly exceed the future waste
- 20 discharge limits.
- 21 There's been discussion about other potential
- 22 alternatives. The reverse osmosis alternative is
- 23 discussed in Mr. Yost's written testimony. He really
- 24 didn't get a chance to summarize that in detail. It would
- 25 double the cost of the project. And another \$300 million

- 1 is real money for these cities. They're already looking
- 2 at doubling their water rates with the existing project.
- 3 Other possibilities, ponds -- evaporation ponds
- 4 are discussed and rejected because of the selenium
- 5 concerns about waterfowl. And for those of us who have
- 6 been in this business a while, we all remember Kesterton,
- 7 and we don't want a repeat of that.
- 8 Also, with the reverse osmosis, the discharge
- 9 brine would have to go somewhere. And I suspect CSPA
- 10 would be at the first of the line in the protest on
- 11 discharges of selenium into the Carquinez drains. And
- 12 there would be others, I'm sure.
- 13 This is the reason many cities, most cities in
- 14 the Central Valley that have been on groundwater supplies
- 15 have shifted to surface water and Davis and Woodland want
- 16 to do it for the same reason.
- Now, the adverse impacts on aquatic life, those
- 18 are analyzed. There have been some questions raised. But
- 19 I think the evidence is clear that the new fish screen
- 20 will improve the situation at the diversion and that there
- 21 also will be benefits -- that the primary issue is the
- 22 impacts in the delta.
- Now, on that, we agree with the State Board that
- 24 the declines in delta fish populations, which are
- 25 discussed in the State Board's 2010 report, are very

- 1 significant and that the Board will need to address those.
- 2 But those declines are not a reason for a moratorium on
- 3 all new pending water right applications in the Sacramento
- 4 Valley as CSPA has requested.
- 5 We have considered -- and I think Ms. Doduc hit
- 6 the nail on the head with her questions earlier today --
- 7 that the State Board may adopt substantially new delta
- 8 outflow requirements, but that the evidence shows that
- 9 even if it does so, there still will be sometimes when
- 10 there is unappropriated water. Even Mr. Shutes'
- 11 exhibit -- and we could quibble about maybe he didn't get
- 12 the winter numbers right and they would be higher. Even
- 13 his exhibit and even he's admitted there would be
- 14 unappropriated water. The cities would have to buy
- 15 substantially more water than is projected now. But even
- 16 that shows there would be unappropriated water. And
- 17 obviously if the State Board adopts any lower delta
- 18 outflow requirements than those in the report, then the
- 19 amounts of unappropriated water would go up. So the
- 20 situation is set up where there is unappropriated water
- 21 available in the system now and anticipated to be in the
- 22 future.
- 23 If we can flip forward a couple of slides, I'm
- 24 trying to blast through this. I just want to say -- I
- 25 don't have time to go through all the details, but your

- 1 staff in a letter that Mr. Kassel signed and submitted on
- 2 July 10th, 2010, that I put up here, really discusses how
- 3 these terms work. And he got it right. The highlighted
- 4 sentence here on page 1 says, "The inclusion of these
- 5 standard water right permit terms will address CSPA's
- 6 concerns regarding water availability for other water
- 7 right holders and the environment."
- 8 And then on page 2 of the letter the next slide,
- 9 "Therefore, the approval of these applications would not
- 10 effect the availability of water for senior water users or
- 11 meet delta water requirements."
- 12 CSPA has disputed these statements, but the
- 13 statements are correct. The problem with CSPA's arguments
- 14 is they improperly confuse Sacramento River and delta flow
- 15 requirements with these water right permit terms. The
- 16 flow requirements and the permit terms address different
- 17 things, which this Board certainly knows well. The flow
- 18 requirements that are discussed in the report, they may
- 19 need to be met in the future to address delta issues. We
- 20 know that.
- 21 In contrast, Terms 80, 90, and 91 were developed
- 22 to address implementation of whatever flow requirements
- 23 are in effect at any time and the allocation of
- 24 responsibilities for that implementation among the various
- 25 water right holders.

- 1 And they are not the cause of the problem. There
- 2 are many factors that have caused the problems in the
- 3 delta. Delta outflow requirements may or may not be one
- 4 of them. But these permit terms are not part of the
- 5 problem. And they will, in fact, automatically require
- 6 the project to adjust its diversions as necessary if new
- 7 requirements are met.
- 8 And getting to your question, Ms. Doduc, which I
- 9 think certainly hit right to the core of the entire issue,
- 10 Woodland-Davis Clean Water Agency recognizes that it, like
- 11 just about every other municipal supplier in California,
- 12 has risks. If the delta flow requirements go up, the
- 13 project can still go forward. There still will be
- 14 sometimes when water is available for diversion under
- 15 these permits. And then projects will have to buy more
- 16 supplemental water supplies. The EIR does analyze those
- 17 supplies. They are available. Just to put it in terms,
- 18 there probably are two to three million acre feet of water
- 19 in the Sacramento River under settlement contracts base
- 20 supplies that are potentially available through
- 21 groundwater substitution programs upstream of this project
- 22 in the Sacramento River. So for a price, the water is
- 23 there and can be obtained. Obviously, it would make the
- 24 cost of the project go up, but the project can go forward.
- 25 Finally, just on the cumulative impact issue and

- 1 the next slide, again, Mr. Kassel's letter summarizes the
- 2 concerns regarding cumulative impacts will be addressed by
- 3 these permit terms. And I won't repeat that because I
- 4 don't have the time.
- We did finish -- if we go to the next slide. Mr.
- 6 Bourez's analysis -- I asked Walter to prepare this
- 7 exhibit, which is an updated exhibit in the EIR. This is
- 8 the best available analysis of the future hydrology. And
- 9 it shows that this massive -- this concern about some
- 10 massive increase in State and federal project diversions
- 11 is not founded. These numbers show that cumulative
- 12 effects of this project and all other anticipated
- 13 activities going from today until 2030. As this exhibit
- 14 shows, this is Exhibit 115, the percentage impacts and the
- 15 actual changes in flows are very, very small. So we don't
- 16 have this concern about some major change in the system.
- 17 Finally, just regarding the permit terms and
- 18 conditions, we appreciate the staff's including draft
- 19 permit terms as exhibits to the notice. And we agree with
- 20 those terms. Frankly, the priority date and the other
- 21 terms will ensure that we will not infringe on senior
- 22 water right priorities and the terms from Fish and Game's
- 23 35-page protest dismissal agreement will ensure that we
- 24 will not have significant impacts.
- 25 Just a minor point. The California coordinates

- 1 and the draft permit term I think they pulled them from an
- 2 old map. They seem to refer to the existing Conaway
- 3 diversion, and we ask they be changed in the final permit
- 4 to those on the engineers map that we filed in November
- 5 which lists the coordinates of the new project. I think
- 6 they're about 150 feet apart, but we'd like to have the
- 7 new coordinates on that.
- 8 For project operations, there were a few
- 9 questions yesterday. Good questions about how that will
- 10 work. It's important to separate out physical operations
- 11 from water rights, because the two -- they require
- 12 different analyses. The physical operations we do have
- 13 technology so that from a remote control at the water
- 14 treatment plant the pumps can be turned on and off and the
- 15 variable speed pumps and they can be operated to provide
- 16 just the amount of water that the water treatment plant
- 17 needs to treat and then provide the water that the cities
- 18 and U.C. Davis will need. Mr. Yost explained this in
- 19 detail. We do not anticipate any massive spills or waste
- 20 of water. Obviously, we want to avoid that.
- 21 The water right accounting is a separate
- 22 question. And it's really not that complicated. What
- 23 will happen -- and, frankly, some of this can even be done
- 24 after the fact, although we can do it pretty close to
- 25 realtime. Diversions will be accounted for as under the

- 1 Davis-Woodland project while Term 91 is not in effect.
- 2 The day Term 91 goes into effect, the diversions will be
- 3 accounted for under the alternate water supplies that the
- 4 project will have. We've talked about the Conaway
- 5 agreement. There will be others as necessary to meet the
- 6 full supply.
- We don't have a full plan for this. We can only
- 8 do so much at one stage. And believe me, we are working
- 9 very hard on this project. We have five years to work
- 10 that out. And the bottom line is Term 6 in the draft
- 11 permits completely addresses this point. Staff got it
- 12 right. And we will comply with that. It requires us to
- 13 file a plan to show we have alternate supplies. And
- 14 certainly for municipal supplies, we're not going to
- 15 follow the cities and the houses. So we need to be able
- 16 to do that. And we accept that. And we do not believe
- 17 that any other permit terms are necessary.
- 18 So I know I went a little over my time and I
- 19 appreciate the Hearing Officer's patience. She's shown a
- 20 lot of that in the last two days.
- 21 But just in conclusion, for these reasons, the
- 22 Woodland-Davis Clean Water Agency requests that the State
- 23 Board dismiss the CSPA protest and issue these water right
- 24 permits promptly so that the project can go forward.
- 25 And I'll certainly be glad to answer any

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- 1 questions.
- VICE CHAIRPERSON SPIVY-WEBER: Charlie has one.
- 3 CHAIRPERSON HOPPIN: Alan, from a housekeeping
- 4 standpoint, please don't take my comment to indicate how I
- 5 may feel about this project. But I think it would be a
- 6 good idea for you to get together with staff after the
- 7 conclusion and talk about updating this map that's in the
- 8 draft permit. It's one of those things that could get
- 9 swept under the rug and forgotten. If you don't pick it
- 10 up, it does become an issue in the future, I think it's
- 11 better to have that clear right now, even though it's in
- 12 draft form and may never be used.
- 13 MR. LILLY: I will be glad to do that. I see
- 14 Ms. Farwell has the engineer's maps at the table. We will
- 15 be glad to just clarify that. It will only take a moment.
- 16 I'm not attributing any wrong to staff, because the draft
- 17 permit went out before they got the final map from us. I
- 18 don't think moving the POD by 150 feet is an issue, but we
- 19 want to get it right.
- 20 CHAIRPERSON HOPPIN: I think there's someone in
- 21 the back of the room from Mendocino County that might tell
- 22 you moving the map 150 feet could have enormous
- 23 consequences in the future.
- MR. LILLY: We'll try to get it right.
- 25 CHAIRPERSON HOPPIN: I respectfully disagree with

- 1 you.
- MR. LILLY: I appreciate your instruction.
- 3 VICE CHAIRPERSON SPIVY-WEBER: Thank you very
- 4 much.
- 5 Michael.
- 6 MR. JACKSON: On behalf of CSPA, we'd like to
- 7 thank you for the attention to this particular hearing.
- 8 We'd also like to make a couple of points.
- 9 The first is there's been an argument that face
- 10 value of water rights doesn't mean anything, which is a
- 11 little bit surprising to us since we are going to be
- 12 very -- if this project goes forward, we're going to be
- 13 very, very interested in whether or not it gets bonded at
- 14 46,000 acre feet or whether it gets bonded at some number
- 15 as low as 2,300-some-odd acre feet.
- 16 The point is that people who get water rights
- 17 assume that they have the face value. They base their
- 18 financial decisions on that. They base their rates on
- 19 that. And in this particular circumstance, it's just
- 20 clearly not going to be the case. I don't know how you
- 21 intend to deal with that, but if you establish the water
- 22 right at the amount that they've asked for, you are
- 23 basically taking a risk that we're not going to have paper
- 24 water. That can be solved maybe by them obeying Term 91
- 25 and Term 90 and Term 80 and the rest of the terms you have

- 1 in this thing. But it also could end up with sort of
- 2 paper loans in the sense that the loan structure is based
- 3 on an entitlement and it's figured out that way.
- 4 The real questions, which we decided to bring
- 5 this to you for, is knowing what you know now, when are
- 6 you going to decide that some incremental increase in the
- 7 amount of paper water rights should stop? If not now,
- 8 when? Three years down the road? Five years down the
- 9 road? Our evidence sort of showed that this was a nagging
- 10 problem from 1934 on.
- 11 And that every senior politician -- I don't live
- 12 in Red Bluff, but I grew up in Redding. And when I was a
- 13 kid, Clair Ingle was the Senator from the neighboring
- 14 town. And you can see from Mr. Jennings' testimony that
- 15 has now been admitted into the record that he was talking
- 16 about an adjudication. He was talking about not one drop
- 17 of surplus water will leave the drainage. People have
- 18 been talking about limits since the beginning of the
- 19 project. And yet, here we are in 2011, 70 to 80 years
- 20 later and we are still making arguments that there will be
- 21 some water available to margin.
- 22 It used to be that the arguments for additional
- 23 water rights were maybe not stated this way, but they were
- 24 basically, well, we'll take it from the environment. But
- 25 you've heard -- we know the results of that all over the

- 1 state. We are now trying to unravel projects to make them
- 2 fit with the real water, not the paper water.
- 3 And you've all set through, with the possible
- 4 exception of Dwight who's newer, the latest evidence in
- 5 regard to what the scientists and the experts all believed
- 6 would be necessary in terms of flow to protect the public
- 7 trust in the estuary, which was the question that came to
- 8 you from this in this flow here. And obviously it has not
- 9 been balanced yet. And I'm looking forward to that
- 10 particular hearing, because I believe that there are a lot
- 11 of water supplies outside of the delta that can satisfy a
- 12 number of the problems within this watershed. And I'm
- 13 looking forward to the opportunity. CSPA is looking
- 14 forward to the opportunity to show you how to do that
- 15 balance. We're spending a lot of time. We will spend a
- 16 lot of money, not that we have much. But for us, we will.
- 17 But the question in the mean time is we have a
- 18 face value of 46,000 acre feet in which a project is going
- 19 to be built that's going to cost \$500 million. And we
- 20 have evidence that very shortly we're going to be having
- 21 hearings on what's left of -- I don't know what order
- 22 you're going to do them in. But we put in the evidence on
- 23 the extension of time. These are rights that have been
- 24 reserved to the State and federal projects for use in the
- 25 Central Valley and State Water Project. They must be --

- 1 these extensions of time in the additional actual water
- 2 use must be what we're going to put into the peripheral
- 3 canal if, in fact, we build that. And at the same time,
- 4 we know that we have taken more water than the environment
- 5 can sustain.
- 6 So if not now, when are we going to begin to
- 7 match the real water with the paper that we've sent out in
- 8 terms of water rights? And when are we going to stop
- 9 sending a right that says on its face 46,000 acre feet,
- 10 knowing that we're probably at various times, important
- 11 times, times when the demand is up, not going to be able
- 12 to divert? When are we going to stop saying as a state
- 13 and is it in the public interest to say that we'll deal
- 14 with that later when the time comes in a circumstance in
- 15 which we have a history of never dealing with it?
- 16 Mr. Holsinger didn't get his adjudication. Mr.
- 17 Gleeson didn't get his adjudication. Earl Warren didn't
- 18 get his adjudication. The first Governor Brown didn't get
- 19 his adjudication. And on its face, it's clear that this
- 20 right, if there was an adjudication, would never exist in
- 21 reality.
- 22 And so we are here to make a public interest
- 23 argument that basically says it is inconvenient. These
- 24 are -- my daughter went to U.C. Davis. We love Davis. We
- 25 have friends in Davis. The president of our organization

- 1 lives in Woodland. So when we thought about finally
- 2 trying to get this issue in front of you so that you could
- 3 address it about this incremental stepping away from
- 4 reality that we see happening and the history tells us has
- 5 been happening for a long time, rather than pick on Los
- 6 Angeles or rather than pick on the face value of the CVP
- 7 right at Westlands, we decided that it was fairer to make
- 8 our public interest argument to you when you were asked
- 9 for a new right by people who are -- and I don't mean to
- 10 distinguish them out -- but we are not telling you that
- 11 these people aren't trying. We are telling you there is
- 12 not real water available.
- 13 And it's time. I mean, the signal needs to go
- 14 out that we need to get -- I don't know whether the State
- 15 and the federal government and their huge paper water
- 16 rights with the 1927 priority date, I don't know that
- 17 you're going to extend time for them to build projects
- 18 that aren't described. But the point is, they have a 1927
- 19 date. And until that's done, I think you've got to
- 20 calculate all that into whether or not you've got water
- 21 for these folks.
- 22 Thank you very much for the opportunity.
- 23 CHAIRPERSON HOPPIN: I'll remind you what we did
- 24 with water rights for the Auburn Dam that was just about
- 25 that old.

- 1 MR. JACKSON: Yes, sir. And my Congressman, Mr.
- 2 McClintock, is making it very clear that he considers that
- 3 a major problem. And it was a good thing. Follow the law
- 4 to the letter and may have resolved an ongoing problem in
- 5 a way that you could and the State could point to with
- 6 pride.
- 7 CHAIRPERSON HOPPIN: I thought I saw you and Tom
- 8 having lunch together. I wondered what you were talking
- 9 about.
- 10 MR. JACKSON: We were talking about trees.
- I vote a straight democratic ticket all my life,
- 12 but I like Republican people and I talk to them regularly.
- 13 CHAIRPERSON HOPPIN: I had to give him one of
- 14 those.
- 15 MR. JACKSON: And I understand that. And I will
- 16 not repeat who I saw you talking to the other day. Thank
- 17 you very much.
- 18 VICE CHAIRPERSON SPIVY-WEBER: Thank you,
- 19 Michael. Thank you, both parties. And thank you, staff.
- 20 Thank the Board for this.
- 21 The Board will now take this matter under
- 22 submission. The participants in this hearing will be sent
- 23 notice of the Board's proposed --
- 24 SUPERVISOR LINDSAY: Before we close, a couple of
- 25 housekeeping things I just want to make sure we're

- 1 straight on.
- 2 So the record is clear on the movement of the
- 3 point of diversion, I just want to be clear, my
- 4 understanding is the point of diversion the intended
- 5 location has never changed. We just have a map that has a
- 6 better more accurate description of it; is that correct?
- 7 MR. LILLY: That is correct. What we're showing
- 8 on the map is the same as what's in the EIR.
- 9 SUPERVISOR LINDSAY: Very good.
- 10 And I also heard the applicant's request for one
- 11 permit. I'm acknowledging we've heard that. Is that
- 12 still true? Assume the applications are approved.
- 13 MR. LILLY: That is correct. As long as it
- 14 doesn't delay the process, we would be more than happy to
- 15 have one permit issued solely to the Woodland-Davis Clean
- 16 Water Agency for the total amount that is in both draft
- 17 permits.
- 18 SUPERVISOR LINDSAY: And one last thing. For
- 19 both parties, the exhibits that have come in at the
- 20 hearing, if you would, please -- I know they passed
- 21 through the computer here and all. But just if you would
- 22 submit them to us electronically as a package to us and of
- 23 course to each other by 5:00 p.m. today. Would that be
- 24 okay? And please just PDFs. I know some of these are
- 25 Excel files. We would just like to have PDF.

- 1 MR. LILLY: I assume we should use just the same
- 2 website?
- 3 SUPERVISOR LINDSAY: Yes. Just like in the
- 4 hearing notice.
- 5 MR. LILLY: We would be glad to do that.
- 6 MR. SHUTES: Are we able the do this tomorrow so
- 7 I don't have to go home to do that? Is that acceptable?
- 8 SUPERVISOR LINDSAY: I have no problem with that.
- 9 MR. SHUTES: Or tonight?
- 10 SUPERVISOR LINDSAY: Or tonight. Just by
- 11 tomorrow morning. Thank you.
- 12 VICE CHAIRPERSON SPIVY-WEBER: Larry, you snuck
- 13 that one in on me. I didn't look that far. Okay.
- 14 Once again, the participants in this hearing will
- 15 be sent notice of the Board's proposed decision in this
- 16 matter and the day of the Board meeting at which the
- 17 decision will be considered. We anticipate issuing a
- 18 draft fairly soon, and we right now have been advised by
- 19 Larry Lindsay that a target date of February 15th is
- 20 likely. If it's any earlier, we will certainly let you
- 21 know. But right now, that looks like it will be the
- 22 target date.
- 23 After the Board adopts an order, any person who
- 24 believes that the order is in error will have 30 days to
- 25 submit a written petition for reconsideration of the order

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1 to the Board.
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             Thank you all for your interest, cooperation, and
   participation in this hearing. The hearing is now
   adjourned. And I will be turning the meeting over to
 5 Charlie, who will now pick up the regular Board meeting.
 6
            (Thereupon the California Water Board
 7
             adjourned at 12:18 a.m.)
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1	CERTIFICATE OF REPORTER
2	I, TIFFANY C. KRAFT, a Certified Shorthand
3	Reporter of the State of California, and Registered
4	Professional Reporter, do hereby certify:
5	That I am a disinterested person herein; that the
6	foregoing hearing was reported in shorthand by me,
7	Tiffany C. Kraft, a Certified Shorthand Reporter of the
8	State of California, and thereafter transcribed into
9	typewriting.
10	I further certify that I am not of counsel or
11	attorney for any of the parties to said hearing nor in any
12	way interested in the outcome of said hearing.
13	IN WITNESS WHEREOF, I have hereunto set my hand
14	this 2nd day of February, 2006.
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23	TIFFANY C. KRAFT, CSR
24	Certified Shorthand Reporter
25	License No. 12277