#### STATE OF CALIFORNIA

# CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY STATE WATER RESOURCES CONTROL BOARD

JOE SERNA JR./CalEPA BUILDING

1001 I STREET

COASTAL HEARING ROOM

SACRAMENTO, CALIFORNIA

VOLUME II

THURSDAY, JULY 22, 2010

9:01 A.M.

LINDA KAY RIGEL, CSR CERTIFIED SHORTHAND REPORTER LICENSE NUMBER 13196

# A P P E A R A N C E S

CO-HEARING OFFICERS

Tam M. Doduc

Charles R. Hoppin, Chairperson

#### HEARING TEAM:

Erin Mahaney, Senior Staff Counsel Paul Murphey, Engineering Geologist Jean McCue, Water Resource Control Engineer Charles (Larry) Lindsay, Hearings Unit Chief

#### APPEARANCES

#### US BUREAU OF RECLAMATION

United States Department of the Interior Office of the Solicitor
BY: Stephen R. Palmer
Rod Smith
2800 Cottage Way, Room E-1712
Sacramento, CA 95825
916.978.5683
stephen.palmer@sol.doi.gov

#### CALIFORNIA DEPARTMENT OF WATER RESOURCES

Office of the Chief Counsel BY: Erick D. Soderlund 1416 Ninth Street, Room 1118 Sacramento, CA 95814 916.653.8826 esoderlu@water.ca.gov

#### TRUCKEE MEADOWS WATER AUTHORITY

Woodburn and Wedge
BY: Gordon H. DePaoli
6100 Neil Road, #500
Reno, NV 89511
775.688.3000
gdepaoli@woodburnandwedge.com
dferguson@woodburnandwedge.com
jill.willis@bbklaw.com
stefanie.hedlund@bbklaw.com

#### WASHOE COUNTY WATER CONSERVATION DISTRICT

McDonald Carano Wilson
By: Michael A.T. Pagni
100 West Liberty Street, 10th Floor
Reno, NV 89501
775.788.2000
mpagni@mcdonaldcarano.com

#### APPEARANCES - continued

#### TRUCKEE CARSON IRRIGATION DISTRICT and CHURCHILL COUNTY

Hanson Bridgett LLP
BY: Michael J. Van Zandt
 Nathan Metcalf
425 Market Street, 26th Floor
San Francisco, CA 94015
415.777.3200
mvanzandt@hansonbridgett.com

#### CITY OF FALLON

Mackedon, McCormick & King BY: Michael F. Mackedon 179 South Laverne Street Fallon, NV 89407 775.423.2106 falonlaw@phonewave.net

#### CITY OF FERNLEY

Taggart & Taggart, Ltd.
BY: Paul G. Taggart
108 North Minnesota Street
Carson City, NV 89703
775.882.9900
paul@legaltnt.com

### PYRAMID LAKE PAIUTE TRIBE

Wolf, Rifkin, Shapiro, Schulman & Rabkin LLP
BY: Don Springmeyer
Christopher W. Mixson
3556 E. Russell Road, 2nd Floor
Las Vegas, NV 89120
702.341.5200
dspringmeyer@wrslawyers.com
cmixson@wrslawyers.com

# INDEX OF PROCEEDINGS

--000--

	Page
Call to Order; Continuation of cases-in-chief	283
Topic 5	283
Topic 6	356
Topic 7	463
Adjournment	589
Certificate of Reporter	590

--000--

# INDEX OF EXAMINATION

--000--

# WITNESSES CALLED FOR TOPIC 5:

WIINDOOD CHEED TON TOTTO J.	Page
ALI SHAHROODY CHET BUCHANAN	283 301
DIRECT EXAMINATION BY MR. PALMER DIRECT EXAMINATION BY MR. PALMER CROSS-EXAMINATION BY MR. VAN ZANDT CROSS-EXAMINATION BY MR. MACKEDON REDIRECT EXAMINATION BY MR. PALMER RECROSS-EXAMINATION BY MR. VAN ZANDT RECROSS-EXAMINATION BY MR. MACKEDON	283 301 303 338 346 352 355
WITNESSES CALLED FOR TOPIC 6:	Page
THOMAS A. STREKAL STEVEN L. CAICCO CHESTER C. BUCHANAN	356 365 378
DIRECT EXAMINATION BY MR. PALMER DIRECT EXAMINATION BY MR. PALMER DIRECT EXAMINATION BY MR. PALMER	356 365 378
CROSS-EXAMINATION BY MR. VAN ZANDT CROSS-EXAMINATION BY MR. MACKEDON REDIRECT EXAMINATION BY MR. PALMER RECROSS-EXAMINATION BY MR. VAN ZANDT RECROSS-EXAMINATION BY MR. MACKEDON QUESTIONS FROM BOARD and BOARD STAFF	394 418 433 444 454 456

# INDEX OF EXAMINATION - continued

WITNESSES CALLED FOR TOPIC 7 (part 1):	Dago
	Page
KENNETH PARR GREG EVANGELATOS	463 466
	100
DIRECT EXAMINATION BY MR. PALMER DIRECT EXAMINATION BY MR. TAGGART QUESTIONS FROM BOARD and BOARD STAFF CROSS-EXAMINATION BY MR. VAN ZANDT CROSS-EXAMINATION BY MR. MACKEDON	463 466 471 473 486
WITNESSES CALLED FOR TOPIC 7 (part 2):	
	Page
JANET CARSON PHILLIPS	490
JOHN ERWIN	508
DIRECT EXAMINATION BY MR. DePAOLI QUESTIONS FROM BOARD and BOARD STAFF DIRECT EXAMINATION BY MR. DePAOLI CROSS-EXAMINATION BY MR. VAN ZANDT CROSS-EXAMINATION BY MR. MACKEDON REDIRECT EXAMINATION BY MR. DePAOLI	490 503 508 514 541 546
WITNESSES CALLED FOR TOPIC 7 (part 3):	
	Page
ALI SHAHROODY DONALD A. MAHIN JOHN E. SARNA	548 561 574
DIRECT EXAMINATION BY MR. PALMER DIRECT EXAMINATION BY MR. DePAOLI QUESTIONS FROM BOARD and BOARD STAFF DIRECT EXAMINATION BY MR. SODERLUND QUESTIONS FROM BOARD and BOARD STAFF	548 561 570 574 583

1	PROCEEDINGS
2	000
3	CO-HEARING OFFICER DODUC: It looks like
4	everyone's here. We're ready to begin. Mr. Palmer, are
5	you ready to bring up your witnesses for Topic No. 5?
6	MR. PALMER: Yes.
7	CO-HEARING OFFICER DODUC: Please do so.
8	This is a continuation of yesterday's hearing,
9	so all the rules and procedures of yesterday apply, and
10	the oath that was taken yesterday also remains in effect
11	today.
12	For attorneys who are directing your witnesses
13	today and subsequent days, please confirm at the start
14	that your witnesses have taken the oath.
15	Any time you're ready.
16	000
17	ALI SHAHROODY
18	Called by APPLICANT AND PETITIONERS
19	DIRECT EXAMINATION BY MR. PALMER
20	000
21	MR. PALMER: The next witness we're going to
22	call is Mr. Ali Shahroody.
23	And Mr. Shahroody, you testified yesterday so
24	you understand that you are still under oath today?

MR. SHAHROODY: I do.

- 1 MR. PALMER: You presented your written direct
- 2 testimony. We identified that yesterday as USBR 7, and
- 3 you'll be referring to that again today; is that
- 4 correct?
- 5 MR. SHAHROODY: That's correct.
- 6 MR. PALMER: I would ask Mr. Shahroody, since
- 7 we've done the preliminaries yesterday, just go ahead
- 8 and summarize your testimony for this panel.
- 9 MR. SHAHROODY: Thank you. Good morning.
- The purpose of my testimony today is to present
- 11 the results of water availability analysis requested by
- 12 the State Board in May of 2007 for Stampede and Prosser
- 13 Creek Reservoirs.
- 14 First I started with Stampede Reservoir
- 15 Application 31487. This application supplements permit,
- 16 existing Permit 11605, and seeks to increase the maximum
- 17 annual diversion to storage from 126,000 acre feet to
- 18 226,500 acre feet.
- 19 The original application filed back in
- 20 January 7, 1954 referred to a reservoir with a capacity
- 21 of 126,000 acre feet, but subsequently under that Washoe
- 22 Project authorization from the Congress, the United
- 23 States Reclamation constructed the Stampede Reservoir
- 24 with a capacity of 226,500.
- 25 Storage began on August 1st of 1969, and so far

- 1 the primary use of Stampede Reservoir has been to store
- 2 water for threatened and endangered species fishes of
- 3 Pyramid Lake. And then of course there is the flood
- 4 control they have to abide by.
- 5 I'm going to show you the next slide which is
- 6 actually storage hydrograph for Stampede Reservoir for
- 7 the period 1970. Those are water years 1970 through
- 8 2006. That's 37 years of record, actual record.
- 9 The storage hydrograph shows the Stampede
- 10 Reservoir filled to its capacity of 226,500 acre feet in
- 11 ten years over the base period of 37 years of record.
- I interpret this by itself shows that water's
- 13 available for storage of up to 226,500 acre feet
- 14 statistically at least one year out of four years,
- 15 meaning of course those are wet years.
- What you have in front of you is the storage in
- 17 Stampede Reservoir based on the USGS record for the
- 18 period 1970 through 2006, 37 years.
- MR. PALMER: Mr. Shahroody, just for the Board,
- 20 I just wanted to show you the exhibit and let them know
- 21 where this chart shows up in our exhibits.
- You did the water availability study. We've
- 23 marked that as USBR Exhibit 20. And I'll show you --
- 24 it's on -- there's figure 3, just identify --
- MR. SHAHROODY: That is correct.

- 1 MR. PALMER: Please continue.
- MR. SHAHROODY: Thank you.
- 3 Looking at this history of the storage in the
- 4 Stampede Reservoir for the 37 hydrologic years, notice
- 5 that after the 1976-77 drought -- which was pretty
- 6 extreme drought, of course, and it was same thing in
- 7 California as well as Nevada -- storage dropped down to
- 8 about 35,000 acre feet.
- 9 Then we had another drought in early 1990s, and
- 10 the last year of drought was 1994 which was pretty
- 11 extreme. And Stampede Reservoir was tapped into for the
- 12 purpose of instream flows.
- Following that, 1995 was a big year. Sc
- 14 Stampede was then filled up and filled up and store
- 15 with -- the carryover storage was 70,000 acre feet, but
- 16 in that year Stampede was able to divert about 150,000
- 17 acre feet into storage. That's shown on the hydrograph.
- We touched upon unappropriated water yesterday
- 19 as part of questioning. As I said, I will cover that
- 20 today.
- 21 Again, this is derived from PL 101-618.
- 22 Consistent with a provision in the Settlement Act,
- 23 Pyramid Lake and the State of Nevada signed MOU back in
- 24 1993 to proceed on the Tribe's claims of the remaining
- 25 waters of Truckee River, but the Tribe agreed with the

- 1 State of Nevada to proceed seeking those claims and
- 2 applications under the Nevada state law.
- 3 Those would be of course the remaining waters
- 4 of the Truckee River which are not subject of the vested
- 5 or perfected rights.
- 6 After extensive hearings during the mid 1990s
- 7 which took a long proceeding in front of Nevada State
- 8 Engineer, and finally in 1998 Nevada State Engineer
- 9 issued its unappropriated water decision approving the
- 10 Tribe's application that appropriated remaining waters
- 11 of the Truckee River.
- 12 The proceeding -- then following that, of
- 13 course, the Nevada State Engineer's approval of the
- 14 Tribe's application and issuance of the permit for the
- 15 remaining waters of the Truckee River which also as part
- 16 of its order -- his order -- State Engineer declared
- 17 that Truckee River in Nevada fully appropriated.
- But in the meantime, there was a competing
- 19 application by TCID. And that application of course was
- 20 rejected by -- I shouldn't use the word "of course".
- 21 It was rejected after being heard by the Nevada
- 22 State Engineer. And of course that has been appealed,
- 23 now has been remanded back to the Nevada State Engineer
- 24 for hearing, and I think the hearing is coming up some
- 25 time middle of this coming October.

- 1 Having said that, and I said that yesterday,
- 2 the Tribe gives its consent to Reclamation to store
- 3 water from the Little Truckee River and Stampede
- 4 Reservoir that would otherwise flow to Pyramid Lake
- 5 under its existing permits from the State of Nevada.
- 6 Water availability analysis performed. I'm
- 7 going to go through the underpinnings used in the
- 8 analysis to make sure that this water is not affecting
- 9 anybody else's rights and this water is available for
- 10 that appropriation.
- To do that, again, I use the long record of
- 12 1970-2006. These are actual data for 37 years.
- 13 Amount of water available is calculated only
- 14 for years with high water flows in the Truckee River.
- 15 There is no -- I mean to spend the time and go through
- 16 the calculation. For years that are below average or
- 17 dry, we know that Stampede is the lowest in priority
- 18 before, of course, Prosser to store water.
- 19 So therefore, the calculations are concentrated
- 20 on high flow years. That was one of the things done
- 21 right from the outset.
- The available amounts of water calculated for
- 23 periods when the storage of such water would not
- 24 interfere with any downstream water rights. Therefore,
- 25 the water would have otherwise flowed to Pyramid Lake if

- 1 not stored in Stampede Reservoir.
- 2 That was the test I used to see if this water
- 3 is not stored in the Stampede where is it going to go?
- 4 This water would be going to Pyramid Lake over and above
- 5 which is -- which I will discuss about that, over and
- 6 above the requirements for the fish flow regimes.
- 7 The storage of water sought herein would not
- 8 interfere with Nevada water rights because it will only
- 9 be stored after all of Nevada rights are satisfied.
- 10 The same thing is true also about the
- 11 California rights. In Little Truckee, water is natural
- 12 flow reaching -- I have to emphasize that -- natural
- 13 flow reaching the Stampede Reservoir. That is the water
- 14 after its -- it has satisfied the rights upstream,
- 15 particularly as Mr. Blanchard mentioned, the 60 cfs by
- 16 the Sierra Valley further upstream.
- 17 The diversion requirements at Derby Dam was
- 18 also important to make sure those diversions are not
- 19 going to be interfered.
- 20 And one of the easiest things for me to do was,
- 21 since I was using the historical record, I looked at the
- 22 historical diversions under the OCAP at Derby Dam to
- 23 Truckee Canal.
- 24 Although the rules under OCAP have been
- 25 tightened up over the years since 1970, I said as a part

- 1 of the analysis I would leave those numbers even in the
- 2 '70s or '80s that are higher than the 1997 final
- 3 adjusted OCAP, I said I would leave those numbers to be
- 4 and not to satisfy those for the purpose of this
- 5 calculation. So therefore, this is a conservative
- 6 calculation.
- 7 Also for the purpose of this analysis, the
- 8 water that would be going to Pyramid Lake, I wanted to
- 9 make sure that it meets the highest amount of water
- 10 needed under the flow regime for the fish in the Lower
- 11 Truckee River.
- 12 Between the Pyramid Tribe and US Fish and
- 13 Wildlife service in Nevada, over the last I would say in
- 14 early 2000, 2002, based on both joint efforts, the flow
- 15 regimes were developed, the six flow regimes, depending
- 16 on the hydrologic conditions.
- 17 The flow regime number one is the highest flow
- 18 regime for the maintenance of habitat, also for
- 19 spawning. So for the purpose of this analysis, I made
- 20 sure that flow regime number 1 which is the highest flow
- 21 rate is satisfied before any water would be available
- 22 for storage in the Stampede.
- 23 Results of analysis. Based on hydrologic
- 24 period, again the 37 years, I have the table to show you
- 25 next that shows the years during that hydrologic period

- 1 and the amounts of water would be available for storage
- 2 in Stampede Reservoir and also would give you the type
- 3 of year when the Stampede would be storing those waters.
- 4 Here's the tables. The table is available
- 5 water for storage in Stampede Reservoir for hydrologic
- 6 period 1970 through 2006.
- 7 And this -- those years, and also the amounts
- 8 of the water would be available those years for
- 9 appropriation.
- 10 And most importantly, the last column shows all
- 11 of those years, most all of those years, are either wet
- 12 or above average.
- 13 That concludes my presentation.
- MR. PALMER: Mr. Shahroody, I just wanted to
- 15 identify, the table you were speaking about is also
- 16 contained in USBR Exhibit 20 which is your water
- 17 availability analysis, and it's on page 15. I'll just
- 18 have you verify that.
- MR. SHAHROODY: Yes, it is.
- MR. PALMER: If you could move to Prosser next.
- 21 I would like to identify that exhibit and let you go
- 22 ahead.
- So I'd like to identify USBR Exhibit 21. I'll
- 24 show it to the witness, and please identify that for the
- 25 record, Mr. Shahroody.

- 1 MR. SHAHROODY: That is correct.
- I concluded my presentation of the Stampede,
- 3 but Prosser is the next one of course.
- 4 Prosser is the same process. Application 31488
- 5 on Prosser Creek Reservoir is asking to supplement
- 6 License 10180 to increase the maximum annual withdrawal
- 7 above 20,000 acre feet. 20,162.
- 8 Prosser Creek Reservoir was constructed back in
- 9 1962 by Bureau of Reclamation, again under the Washoe
- 10 Project Act, and the capacity is about 30,000 acre feet,
- 11 but there is a requirement for carryover of about 10,000
- 12 acre feet. That's one of the reasons withdrawal is
- 13 limited to 20,000 acre feet.
- 14 So also that 20,000 acre feet has to be
- 15 withdrawn by November 10th in order to create and open
- 16 up the space for flood control.
- 17 So what we're asking here is to increase that
- 18 withdrawal from 20,000 to a number higher. That's what
- 19 the application is for.
- 20 And also change in the period of storage,
- 21 diversion of storage. The way it is right now is from
- 22 April 10 to August 10. This application asking to
- 23 expand that period of storage to -- from October 1 to
- 24 August 10.
- 25 Again, this is a similar hydrograph I'm showing

- 1 here for storage of water in Prosser Creek Reservoir.
- 2 And this is a little bit longer period because Prosser
- 3 Creek was stored -- I mean constructed earlier than
- 4 Stampede. And the hydrograph is for the period 1964
- 5 through 2006.
- 6 Again notice this -- the hydrograph based on
- 7 the USGS record, and back in the 1976-77 drought, if you
- 8 notice all of the Prosser water was used. And there
- 9 must have been a waive grant to do that so the storage
- 10 was drawn down all the way to zero and at least over
- 11 more than one year, probably two years.
- 12 So again, the reservoir is relatively small
- 13 compared to the watershed size. It's pretty robust. It
- 14 pretty much comes up most years and fills up, so that's
- 15 what the hydrograph shows.
- MR. PALMER: Mr. Shahroody, I just want you to
- 17 identify that that hydrograph is also in your water
- 18 availability report, Prosser Exhibit 21. And I have
- 19 that as figure 3.
- MR. SHAHROODY: That's what it is, yes.
- MR. PALMER: Thank you.
- MR. SHAHROODY: For Prosser Creek, water
- 23 availability analysis was performed based on again
- 24 hydrologic period of 37 years which I did for Stampede.
- The conditions and underpinnings of analysis

- 1 for Prosser Creek Reservoir are the same as Stampede
- 2 Reservoir as summarized earlier.
- 3 Next slide, again like I did for Stampede,
- 4 shows years and amount of water available for storage in
- 5 Prosser Creek Reservoir. It also shows the type of
- 6 years those -- that appropriated water would be
- 7 available for appropriation in Prosser Creek Reservoir.
- 8 Here's a table. This is available water for
- 9 storage in Prosser Creek Reservoir for years 1970
- 10 through 2006. Again, it shows the years that the water
- 11 is available for storage and the amounts of it.
- 12 Again also most importantly, it shows those
- 13 years are -- most all of those years are wet or
- 14 above-average-type years.
- And generally in those type of years, all of
- 16 the water rights are satisfied. This is excess water
- 17 primarily. That's just the nature of the type of year
- 18 you're dealing with. There -- some wet years are flood
- 19 flows, and some years aren't. But they're excess water
- 20 available in the system, and the water rights are
- 21 generally satisfied, and that's basically my
- 22 quantification that water would be available for
- 23 storage.
- MR. PALMER: Would you just quickly identify
- 25 that I have as Table 6 out of your water availability

- 1 study for Prosser?
- 2 MR. SHAHROODY: That is correct.
- 3 MR. PALMER: Thank you. Did you have any
- 4 further direct to summarize?
- 5 MR. SHAHROODY: No, this concludes my
- 6 testimony.
- 7 MR. PALMER: Thank you.
- 8 CO-HEARING OFFICER DODUC: Hold on a second,
- 9 Mr. Palmer.
- 10 WATER RESOURCE CONTROL ENGINEER McCUE: I just
- 11 had one question. I thought somebody mentioned
- 12 yesterday -- and I'm not sure which reservoir --
- 13 something about project water.
- Is all the water stored in Prosser and
- 15 Stampede, was that just rainwater? Or was there any
- 16 other water stored there?
- MR. SHAHROODY: That's a good question. All
- 18 the water stored in Stampede and Prosser are the natural
- 19 runoff coming in, except in the case of Stampede.
- To the extent there is space, TMWA has been
- 21 able to store its pre-1914 water through an exchange
- 22 from Independence and also from Donner. That's under
- 23 the interim storage contract.
- And also Boca, since it's senior to Stampede,
- 25 stores water in Stampede Reservoir. This is what the

- 1 Federal Water Master does because of convenience,
- 2 because to accommodate the fish flows below Stampede,
- 3 and there is no water right requirement for that.
- 4 But for the purpose of making sure the reach
- 5 between Stampede and Boca is kept with 40 cfs flows year
- 6 around for the purpose of fish.
- 7 So what the arrangement generally is two-fold.
- 8 One is a portion of Boca, like 10,000 acre feet out of
- 9 40,000, has instead of Stampede to pass through to Boca,
- 10 will hold and gradually release to meet that 40 cfs.
- 11 And at that time, once that's done, then of
- 12 course Stampede begins to release its water to meet that
- 13 flow requirement and, my terminology, park it in Boca
- 14 because later would be asked for it to be released as
- 15 Stampede water to go into the lower river.
- 16 So to answer your question, there are those
- 17 kind of waters in Stampede.
- In Prosser, there is project water, what we
- 19 refer to as, and also referred yesterday to some extent
- 20 as uncommitted water. But also part of the project
- 21 water is used for the purpose of Tahoe-Prosser Exchange
- 22 because Tahoe does not have to make release to meet the
- 23 flows for fish at Tahoe City area.
- 24 So Tahoe makes -- like right now, Tahoe is
- 25 making 70 -- well, not right now. Just about three

- 1 weeks ago. Was making 70 cfs. Right now, of course,
- 2 now increased the flows for the Floriston rate and keep
- 3 the rafters happy too.
- What releases the 70 cfs, since it doesn't have
- 5 to, then according to the agreement for the
- 6 Tahoe-Prosser Exchange, a certain amount of the project
- 7 water in Prosser is carved to be what we call the
- 8 committed water, becomes the rate water.
- 9 And also if the inflows are coming into
- 10 Prosser, if they have to be passed through, then that
- 11 water could also count for that.
- 12 WATER RESOURCE CONTROL ENGINEER McCUE: So did
- 13 you take that into consideration in your analysis?
- 14 You're not double-counting any water when you say water
- 15 is available?
- 16 MR. SHAHROODY: No. Because if you go through
- 17 the analysis, because those waters that being released,
- 18 those are excess water, and pretty extensive spreadsheet
- 19 and those water would be after passing all of the needs
- 20 that are requirements, including Derby Dam.
- 21 If you look at the last gage in the system
- 22 which is the gage, what's referred to USGS gage at
- 23 Nixon, that's before the Pyramid Lake. Before entering
- 24 the Pyramid Lake. Took that and compared with
- 25 everything else.

- 1 WATER RESOURCE CONTROL ENGINEER McCUE: Thank
- 2 you.
- 3 CO-HEARING OFFICER DODUC: Chair Hoppin?
- 4 CO-HEARING OFFICER HOPPIN: Mr. Shahroody, I
- 5 have a couple questions for you.
- 6 You mentioned in your analysis of Stampede that
- 7 the upstream uses for Sierra Valley were 60 cfs. Is
- 8 that a seasonal use, or is it a year-round number?
- 9 MR. SHAHROODY: Mr. Chairman, that is seasonal
- 10 use for irrigation purposes.
- 11 CO-HEARING OFFICER HOPPIN: And then when that
- 12 number is reduced during the nonirrigation system, in
- 13 that system, in that drainage, do you actually have
- 14 increased flows or, because of the snowpack and what
- 15 have you, do you have decreased flows?
- MR. SHAHROODY: Well --
- 17 CO-HEARING OFFICER HOPPIN: Or is there a
- 18 consistent answer you can give me?
- 19 MR. SHAHROODY: It's pretty interesting. Like
- 20 for instance this year, we were experiencing -- they
- 21 just don't go to 60 cfs right away.
- This spring, as you go into the summertime, the
- 23 flows were coming down. There was snowmelt coming, part
- 24 of the snowmelt.
- 25 But then Sierra Valley decided actually to

- 1 fully go to 60 cfs, and you could see the amount of
- 2 water coming to Stampede gets reduced.
- But then of course at the end of season, they
- 4 would shut off. But at the same time at that time,
- 5 there is not much water in the system because already
- 6 most of the snowmelt is gone. Mostly groundwater and
- 7 spring flows.
- 8 CO-HEARING OFFICER HOPPIN: But there's no
- 9 diversion to upstream storage with any of that component
- 10 of water?
- 11 MR. SHAHROODY: Not that I know of of the
- 12 Sierra Valley. They use it in the Feather River Basin.
- 13 And they use it for -- there's an irrigation system
- 14 there. They use it for irrigation.
- 15 CO-HEARING OFFICER HOPPIN: Okay. And then
- 16 when you were talking about your permit for storage,
- 17 that it does not allow you to store currently from
- 18 October until I believe April -- correct me on the dates
- 19 if I'm wrong there.
- 20 MR. SHAHROODY: On the Prosser Creek Reservoir,
- 21 the permit for storage is from April 10 to August 10.
- 22 Because prior to that, you can't store anyway because of
- 23 flood control limitation.
- 24 CO-HEARING OFFICER HOPPIN: Okay.
- MR. SHAHROODY: And by August 10, I would say

- 1 most of the water is gone. I assume that was the logic.
- 2 But now if you're asking possibly in some wet
- 3 years, like we did experience in 1997, for instance,
- 4 1983, it could go beyond August. I'm sorry. It could
- 5 start early, for instance. And 1997, for instance, we
- 6 had good flows in January.
- 7 So it says if you actually did draw down the
- 8 reservoir below that 10,000 carryover, if you go down to
- 9 5,000, so you may want to -- and the flood control is
- 10 out of 20,000 acre feet empty space.
- 11 So we'll have the opportunity, if you want, to
- 12 store that 5,000 let's say in January. So therefore it
- 13 says now to expand that from October 1 to next year to
- 14 April 10.
- 15 CO-HEARING OFFICER HOPPIN: Without affecting
- 16 your flood control margin?
- 17 MR. SHAHROODY: That's correct. Because the
- 18 flood control is from 10,000 to 30,000.
- 19 CO-HEARING OFFICER HOPPIN: Thank you for your
- 20 explanation.
- 21 CO-HEARING OFFICER DODUC: Ms. Mahaney?
- 22 SENIOR STAFF COUNSEL MAHANEY: Mr. Shahroody, I
- 23 have a couple questions on Prosser.
- 24 License 10180 provides the maximum diversion of
- 25 30,000 acre feet to storage. My understanding is the

- 1 application does not propose to change the maximum
- 2 diversion limit; is that correct?
- 3 MR. SHAHROODY: No, it does not. It's a
- 4 withdrawal.
- 5 SENIOR STAFF COUNSEL MAHANEY: All right. So
- 6 the withdrawal and the season.
- 7 MR. SHAHROODY: That's correct.
- 8 SENIOR STAFF COUNSEL MAHANEY: Now, with
- 9 Stampede, you said that the Pyramid Lake Paiute Tribe
- 10 gave consent to Reclamation to store water in Stampede
- 11 that would otherwise flow to Pyramid Lake.
- 12 Is there a similar consent to the supplemental
- 13 application on Prosser?
- 14 MR. SHAHROODY: Yes, there is. I'm sorry I
- 15 missed that.
- 16 SENIOR STAFF COUNSEL MAHANEY: Thank you.
- 17 CO-HEARING OFFICER DODUC: Thank you.
- 18 Mr. Palmer, you may continue.
- MR. PALMER: Next witness is Chet Buchanan.
- --000--
- 21 CHET BUCHANAN
- 22 Called by APPLICANT AND PETITIONERS
- DIRECT EXAMINATION BY MR. PALMER
- --000--
- MR. PALMER: Mr. Buchanan, you were here

- 1 yesterday, and you were sworn in, and you are still
- 2 under oath.
- 3 MR. BUCHANAN: Yes.
- 4 MR. PALMER: Since you've given the
- 5 preliminaries, why don't you go ahead and summarize your
- 6 testimony for this panel, please.
- 7 MR. BUCHANAN: Okay.
- As I mentioned in my written testimony,
- 9 approval of the applications would increase the amount
- 10 of fish water or project water and fish credit water in
- 11 Stampede and Prosser with the limits in Prosser, of
- 12 course, thereby leading to additional environmental and
- 13 recreational benefits.
- 14 Obviously, increasing storage would benefit
- 15 recreational opportunities in the reservoirs, but timely
- 16 releases of the storage would also enhance downstream
- 17 riverine environment.
- I would like now to list just a few of those
- 19 aquatic benefits and their related TROA sections.
- Improved spawning conditions for Cui-ui and
- 21 Lahontan Cutthroat Trout in the Lower Truckee River and
- 22 improved spawning habitat in Independence Creek upstream
- 23 of Independence Lake.
- Please take note in TROA of Sections 5.B.6,
- 25 5.B.7(h), 5.B.8, 7.C.5.

- 1 Increased opportunities to maintain or enhance
- 2 minimum releases from Lake Tahoe and Prosser Creek
- 3 Reservoir, noting section 5.B.6 in TROA.
- 4 Increased opportunities to enhance bypass flows
- 5 around the four hydroelectric diversions on the Truckee
- 6 River. And if you will note Section 9.E.2.
- 7 And lastly, increased amount of fish credit
- 8 water available to be converted to Joint Program Fish
- 9 Credit Water. And again, please note Section 7.C.6.
- 10 That concludes mine.
- 11 MR. PALMER: That concludes our direct for this
- 12 panel.
- 13 CO-HEARING OFFICER DODUC: Any questions?
- 14 Please join your witnesses, and if I can ask
- 15 Mr. Van Zandt and Mr. Mackedon to come up.
- You may begin when you're ready, Mr. Van Zandt.
- 17 -- 000--
- 18 CROSS-EXAMINATION BY MR. VAN ZANDT
- 19 FOR TRUCKEE CARSON IRRIGATION DISTRICT
- --000--
- MR. VAN ZANDT: Good morning, Mr. Shahroody.
- 22 How are you?
- MR. SHAHROODY: Good morning, Mr. Van Zandt.
- MR. VAN ZANDT: Mr. Shahroody, do you -- have
- 25 you quantified the amount of diversions that Sierra

- 1 Valley has above Stampede Reservoir?
- 2 MR. SHAHROODY: I have not quantified the acre
- 3 feet.
- 4 MR. VAN ZANDT: Do you know the approximate
- 5 time period during which they divert?
- 6 MR. SHAHROODY: They divert under the Sierra
- 7 Valley Agreement. Again, I don't have it in front of
- 8 me. Primarily they do it during irrigation season.
- 9 MR. VAN ZANDT: Did you take any kind of --
- 10 well, let me confirm this.
- Is there a gage upstream of Stampede that
- 12 measures flows into Stampede Reservoir?
- MR. SHAHROODY: No. There's no gage upstream
- 14 of Stampede to measure flows, measure inflows into
- 15 Stampede.
- MR. VAN ZANDT: But there is a gage in the
- 17 reservoir itself?
- MR. SHAHROODY: There is a gage in the
- 19 reservoir. That's what I used for the purpose of my
- 20 presentation.
- MR. VAN ZANDT: Okay. So -- and you didn't
- 22 take any stream flow measurements on the Little Truckee;
- 23 is that right?
- MR. SHAHROODY: No, I did not.
- 25 CO-HEARING OFFICER DODUC: Mr. Shahroody, could

- 1 you move the microphone closer to you?
- 2 MR. SHAHROODY: Thank you.
- 3 CO-HEARING OFFICER DODUC: Thank you.
- 4 MR. VAN ZANDT: So in terms of Sierra Valley
- 5 diversions, if Sierra Valley during the time period that
- 6 you put in your Table 3 of your report had taken less
- 7 water than they were entitled to under the agreement,
- 8 you wouldn't have accounted for that, would you?
- 9 MR. SHAHROODY: As I said, that's the
- 10 hydrologic period 1970 through 2006. It is what it is
- 11 as far as the record goes. So to answer your question,
- 12 no.
- MR. VAN ZANDT: Okay. But you would agree that
- 14 Sierra Valley is entitled to take up to the amount
- 15 that's in that agreement, right?
- MR. SHAHROODY: Up to 60 cfs, correct.
- 17 MR. VAN ZANDT: In your figure 3 in your report
- 18 which is USBR 7 -- I'm sorry. That's your testimony.
- I think it's -- 20 is actually your report,
- 20 isn't it? Yeah. 20. Figure 3 of USBR 20.
- 21 This is the one that shows the historical
- 22 storage in Stampede Reservoir.
- MR. SHAHROODY: I have it in front of me.
- 24 MR. VAN ZANDT: Thank you. So this depicts as
- 25 you indicated 37 years, right? Of record?

- 1 MR. SHAHROODY: That is correct.
- MR. VAN ZANDT: And 28 years of that record,
- 3 storage in Stampede Reservoir exceeded 126,000 acre
- 4 feet. Would you agree?
- 5 MR. SHAHROODY: I haven't counted, but I take
- 6 your word. It seems to.
- 7 MR. VAN ZANDT: I counted it, so I'll represent
- 8 to you that's correct. 28 years of the 37.
- 9 The question, Mr. Shahroody, is: The 126,000
- 10 acre feet, is that the max that can be stored or is that
- 11 the max that can be diverted to storage into Stampede?
- MR. SHAHROODY: The latter.
- MR. VAN ZANDT: The max that can be diverted
- 14 into storage?
- MR. SHAHROODY: Yes.
- 16 MR. VAN ZANDT: So then anything above the 126
- 17 that's shown on your figure 3, that's not water in
- 18 storage, right?
- MR. SHAHROODY: That's the amount of water that
- 20 you can -- the 120,000 acre feet is the maximum amount
- 21 you're allowed under permit to divert every year.
- Now to the extent that you have the larger
- 23 capacity reservoir, then you'll have also opportunity to
- 24 do so next year if you have space.
- 25 MR. VAN ZANDT: But you would agree that the

- 1 permit limits 126,000 that you can divert for storage.
- MR. SHAHROODY: I do agree.
- 3 MR. VAN ZANDT: The water that is not stored in
- 4 Stampede -- excuse me. I think you make a statement on
- 5 page 11 of your statement here which is USBR 7. Water
- 6 not stored in -- will not be stored in Stampede unless
- 7 OCAP allowable diversions at Derby are satisfied. Is
- 8 that right?
- 9 MR. SHAHROODY: That's correct. Because Derby
- 10 Dam's rights are senior to the extent OCAP allows, of
- 11 course, senior to storage of water in Stampede
- 12 Reservoir. Or diversion of water to storage in Stampede
- 13 Reservoir.
- 14 MR. VAN ZANDT: And I just want to make sure I
- 15 get the reference here. It's on page 11 of USBR 7, and
- 16 it's point number 5 on that page, right?
- 17 MR. SHAHROODY: That is correct.
- MR. VAN ZANDT: You understand that the Truckee
- 19 Canal is now limited to 350 cfs?
- MR. SHAHROODY: Today it is, yes.
- MR. VAN ZANDT: That's not an OCAP limitation,
- 22 right?
- MR. SHAHROODY: That's not an OCAP limitation.
- 24 That's correct.
- MR. VAN ZANDT: Isn't it true, Mr. Shahroody,

- 1 that storage in Stampede is occurring with the water
- 2 that can't be diverted at Derby now physically because
- 3 of the limitation of the canal, not because of OCAP?
- 4 MR. SHAHROODY: The answer is yes, but it's not
- 5 part of my analysis.
- 6 My analysis is limited for the period 1970
- 7 through 2006. And the limitation because of the breach
- 8 in Truckee Canal occurred in January 5th of 2008. So
- 9 it's not part of my analysis. But the answer is yes.
- 10 MR. VAN ZANDT: So you're saying if these
- 11 permits go into effect for this new appropriation that
- 12 you would not be storing the water that cannot now be
- 13 diverted into the canal because of the physical
- 14 limitation?
- MR. SHAHROODY: I'm not saying that.
- 16 I'm saying that in fact if the condition
- 17 continues there would be more water available than my
- 18 calculations showed.
- 19 MR. VAN ZANDT: What happens to the water that
- 20 is being stored that otherwise would have been diverted
- 21 into the Newlands Project that's stored at Stampede?
- MR. SHAHROODY: To the extent -- well, can you
- 23 tell me specifically, are you talking about last couple
- 24 of years or generally?
- 25 MR. VAN ZANDT: You indicated that you might do

- 1 it in the future as well, so the last couple of years
- 2 and into the future.
- 3 MR. SHAHROODY: That water would be then
- 4 available for storage.
- 5 MR. VAN ZANDT: And released for fish purposes,
- 6 I assume?
- 7 MR. SHAHROODY: Assume release for fish
- 8 purposes or could be -- yeah. I mean, it could be spill
- 9 of course, evaporated too.
- 10 MR. VAN ZANDT: In the future, will it become
- 11 part of the 100,000 acre foot appropriation that the
- 12 United States is seeking here?
- MR. SHAHROODY: To the extent it happens, yes.
- 14 But as I showed in my table, there is water available.
- MR. VAN ZANDT: Now Mr. Shahroody, I'd like you
- 16 to take a look at TCID Exhibit 211 and 212.
- 17 And Mr. Shahroody, do you recognize this as the
- 18 permit from the State of Nevada issued by the Nevada
- 19 State Engineer to appropriate water with the Pyramid
- 20 Lake Paiute Tribe being the applicant? The source is
- 21 the Truckee River. For recreational purposes
- 22 year-round. And there is a statement -- well, let me
- 23 ask you that.
- Do you recognize this as the permit?
- MR. SHAHROODY: Looking from here, from shape

- 1 of it, yes.
- 2 (Laughter)
- 3 MR. PALMER: Would you like to see an actual
- 4 copy of it, Mr. Shahroody, or can you do it from here?
- 5 MR. SHAHROODY: I can do that from the shape of
- 6 it.
- 7 MR. VAN ZANDT: We can show you the actual
- 8 document if you'd like.
- 9 CO-HEARING OFFICER DODUC: Mr. Van Zandt, would
- 10 you please share with the witness an actual copy.
- 11 CO-HEARING OFFICER HOPPIN: You went down the
- 12 plank when you trusted him on his graph. Now he's going
- 13 to try you every chance he gets.
- MR. VAN ZANDT: Trust but verify.
- 15 CO-HEARING OFFICER DODUC: Verification by
- 16 shape alone is probably not good.
- 17 (Laughter)
- MR. SHAHROODY: Yes.
- MR. VAN ZANDT: Yes, this is one of the permits
- 20 for the two applications the Tribe filed for
- 21 unappropriated water of the Truckee River, correct?
- MR. SHAHROODY: That's correct. Both permits
- 23 are here.
- 24 MR. VAN ZANDT: So 211 is the one that
- 25 requested the 477,000. And then 212, I believe, was

- 1 one -- well, I'm not sure which is which. But one of
- 2 them asked for all the unappropriated water and one
- 3 asked for a specific quantity.
- Both were approved, however, isn't it true,
- 5 Mr. Shahroody, for the 477,851 acre feet, right?
- 6 MR. SHAHROODY: Correct.
- 7 MR. VAN ZANDT: Okay.
- 8 So what I want to direct your attention to is
- 9 on that first page, the second paragraph. Says:
- 10 This permit is issued for all the
- 11 unappropriated water of the Truckee River
- and its tributaries junior in priority --
- 13 And so forth.
- So Mr. Shahroody, you would agree from these
- 15 two permits that the State Engineer considers the
- 16 Truckee River and its tributaries to be fully
- 17 appropriated. Isn't that right?
- MR. SHAHROODY: That's correct.
- MR. VAN ZANDT: And isn't it true that one of
- 20 the tributaries to the Truckee River is the Little
- 21 Truckee River?
- MR. SHAHROODY: That is correct.
- Do you want me to read this paragraph?
- 24 MR. VAN ZANDT: No. That was sufficient, thank
- 25 you.

- 1 Directing your attention to your Table 3 in
- 2 USBR 20, this is the table in which you did the water
- 3 availability analysis, correct?
- 4 MR. SHAHROODY: That is correct.
- 5 MR. VAN ZANDT: For Stampede Reservoir?
- 6 MR. SHAHROODY: Correct.
- 7 MR. VAN ZANDT: So from this, we should be able
- 8 to tell how much water is available in addition to all
- 9 the other rights that are on the Truckee River and its
- 10 tributaries?
- MR. SHAHROODY: Should.
- MR. VAN ZANDT: Okay. Well, you've already
- 13 told me that for purposes of Sierra Valley you did not
- 14 actually calculate, I believe, the 60 cfs. Is that
- 15 right?
- MR. SHAHROODY: Well, what I said, it is the
- 17 historical amounts that they have taken from the natural
- 18 flow, and the amount of water reaching to Stampede
- 19 Reservoir already includes their diversions.
- 20 MR. VAN ZANDT: What they took historically but
- 21 not their entitlement?
- MR. SHAHROODY: Well, I can't differentiate.
- 23 It is what they did. And most likely, they peaked their
- 24 60 cfs in summer months most every year.
- MR. VAN ZANDT: Now, isn't it true,

- 1 Mr. Shahroody, that you did not calculate any measured
- 2 inflows to Stampede Reservoir from the Little Truckee
- 3 River?
- 4 MR. SHAHROODY: You don't need to have the
- 5 measured inflow as a gage on the stream itself because
- 6 the inflow is actually determined by using two gages.
- 7 One is on the reservoir which determines the
- 8 change in storage, and one below the reservoir at
- 9 Stampede which determines discharge.
- 10 So -- and then of course you have the
- 11 climatological data in terms of rain and also
- 12 precipitation that are measured.
- So what we refer to as water balance, use the
- 14 method of water balance by having the measured data to
- 15 compute the inflow. So that's what was used here.
- MR. VAN ZANDT: So the answer is no, you didn't
- 17 measure the inflow?
- MR. SHAHROODY: I did not measure the --
- 19 directly the inflow on the stream itself.
- 20 MR. VAN ZANDT: That would apply to
- 21 Independence Creek as well, correct?
- MR. SHAHROODY: I didn't do anything on
- 23 Independence correct creek.
- 24 MR. VAN ZANDT: Now in your end-of-month
- 25 calculations that you include in your Table 3, you don't

- 1 actually separate out water that's coming from
- 2 Independence Lake, do you?
- 3 MR. SHAHROODY: No. This is based on the flow
- 4 actually coming into Stampede. And to the extent, of
- 5 course, Stampede making any releases to meet the
- 6 Floristan rates, those are included as part of the
- 7 calculation.
- 8 MR. VAN ZANDT: Okay. But you also don't
- 9 consider independently the Donner Lake water that
- 10 belongs to Truckee Meadows Water Authority that gets
- 11 Stampede, do you?
- MR. SHAHROODY: Well, I made a qualification at
- 13 the beginning. I did these calculation for the high
- 14 flow years, and Donner water does not get into the
- 15 months -- if you look at, those are primarily March,
- 16 April, May, and -- or even December.
- 17 Those months are not the months that the
- 18 Independence water or Stampede -- or Donner water being
- 19 moved to Stampede.
- Also in the case of this analysis, the period
- 21 that I used, 1970 to 2006, except for few years that may
- 22 have, but it is not happening as a part of the wet years
- 23 in terms of the Donner Lake.
- 24 MR. VAN ZANDT: You would agree, Mr. Shahroody,
- 25 that Donner Lake and Independence water moved into

- 1 Stampede Reservoir usually into the fall is still there
- 2 in the spring. Isn't that right?
- 3 MR. SHAHROODY: If the water moved from
- 4 Independence into Stampede, taking the years 1970 or
- 5 '80s, or even part of '90s, that water of course would
- 6 be part of Stampede if you want to say that.
- 7 But if you're referring to the amount of water
- 8 that would be coming from Independence or Donner, it's
- 9 very small amount, first of all.
- MR. VAN ZANDT: 3,000 acre feet for Donner most
- 11 years, isn't it?
- MR. SHAHROODY: That's correct.
- MR. VAN ZANDT: Now, in your calculations with
- 14 regard to flow regime 1, you don't actually account for
- 15 the entire 477,000 acre feet of water that is the
- 16 subject of the two permits that we just looked at, do
- 17 vou?
- MR. SHAHROODY: No. I strictly looked at flow
- 19 regime number 1 month-by-month, what's required for the
- 20 Cui-ui and LCT in the lower river and to make sure those
- 21 requirements are met.
- MR. VAN ZANDT: But under your permit in the
- 23 State of Nevada for the 477,000 acre feet, that is an
- 24 instream flow permit, isn't it?
- MR. SHAHROODY: That's -- that water could be

- 1 used for instream. Could be flood water. Could be all
- 2 sorts of water.
- 3 MR. VAN ZANDT: So shouldn't you really have in
- 4 your flow regime calculation included the entire 477,000
- 5 acre feet if it was available and taken that out of
- 6 available water for Stampede and Prosser?
- 7 MR. SHAHROODY: No. Because as I mentioned,
- 8 the flow regime were developed, six flow regimes.
- 9 Depending on the type of hydrologic year you would have,
- 10 you apply those flow regimes.
- 11 They were developed between the Pyramid Lake
- 12 fisheries and the Fish and Wildlife Service. And in
- 13 fact, the flow regime number 6 is much, much lower flows
- 14 compared to the flow regime number 1.
- So those are the flow regimes. They -- both
- 16 Fish and Wildlife Service and also Pyramid Lake Tribe's
- 17 fisheries felt that they would meet those and have the
- 18 water, the extra water, to be stored.
- 19 So therefore next year then, instead of going
- 20 to flow regime 6 which is a very low flow rate, rather
- 21 up it to flow regime 2. So therefore that is the
- 22 purpose.
- 23 And also have multipurpose use in the lower
- 24 river not only for Cui-ui but also LCT, for the
- 25 maintenance of year-around flows, and also for the

- 1 cottonwood recruitments.
- 2 So it is a more managed approach than losing
- 3 the water all in one season.
- 4 MR. VAN ZANDT: 477,000 acre feet that we're
- 5 talking about here, there is no storage right anywhere
- 6 in the system for that water; isn't that right?
- 7 MR. SHAHROODY: That is correct.
- 8 MR. VAN ZANDT: So technically, if there is
- 9 water that's available under that permit, it's supposed
- 10 to flow in the river to Pyramid Lake; isn't that
- 11 correct?
- MR. SHAHROODY: Well, that's what's happening
- 13 today.
- 14 MR. VAN ZANDT: But part of that water is being
- 15 stored in Stampede Reservoir; isn't it?
- MR. SHAHROODY: Being stored in Stampede
- 17 Reservoir under the Stampede Reservoir existing permit.
- MR. VAN ZANDT: But you know, Mr. Shahroody,
- 19 that the Pyramid Lake Tribe has told the State of
- 20 Nevada, both the State Engineer and a judge in the State
- 21 of Nevada, that they were not storing that water, the
- 22 477,000 acre feet. That it was flowing in the river.
- MR. SHAHROODY: That's the part related to
- 24 State Engineer's decision on unappropriated water.
- 25 But there is an existing permit in State of

- 1 California to capture that, and I believe in the
- 2 Stampede decision the judge clearly said that capture of
- 3 water in Stampede Reservoir is -- does not have to be
- 4 authorized necessarily by Nevada because this is
- 5 happening in California.
- 6 MR. VAN ZANDT: Mr. Shahroody, you also in your
- 7 calculations do not account for the 100,000 acre feet of
- 8 the Truckee-Carson Irrigation District's pending 9330
- 9 application; is that correct?
- MR. SHAHROODY: It does not.
- 11 The request from the State Board was to make a
- 12 determination of water availability, and I did my
- 13 calculation based on all of the rules and regulation and
- 14 requirements on the ground.
- And the State Board did not ask for what-if
- 16 analysis, so that's one of the reason I did not make the
- 17 analysis for the purpose of the pending application by
- 18 TCID which is, of course, now being remanded by court
- 19 for the State Engineer to hear it.
- MR. VAN ZANDT: And that Application 9330, that
- 21 has a priority date of 1931; isn't that right?
- MR. SHAHROODY: Correct.
- MR. VAN ZANDT: Now from your analysis, it
- 24 would appear that there's no intention to store water in
- 25 Stampede in dry years. Is that pretty safe to say?

- 1 MR. SHAHROODY: I basically said not in dry
- 2 years, but there is one average year, it looks like.
- 3 MR. VAN ZANDT: I was looking at the time
- 4 period between 1988 and 1994 which was mentioned
- 5 yesterday to the Board, that that was an extremely dry
- 6 period. Yet you have storage in 1993 I see.
- 7 MR. SHAHROODY: 1993 was sort of a jump in the
- 8 flow. It wasn't all informally dry from 1988 through
- 9 1994.
- 10 And then also you have to recognize there are
- 11 periods when the snowmelt would actually, depending on
- 12 temperature, would be intensively released, and you want
- 13 to take advantage of that.
- 14 And that has happened sometime even in average
- 15 or less-than-average year.
- MR. VAN ZANDT: Looking back at your figure 4
- 17 it shows storage in 1993 and significant releases in
- 18 1994.
- 19 It's true, isn't it, that that 1994 year was
- 20 a -- the farmers of the Newlands Project only received
- 21 28 percent of their allocation in the Truckee Division
- 22 and 57 percent in the Carson Division?
- MR. SHAHROODY: Could you repeat this?
- 24 MR. VAN ZANDT: Looking at that -- your figure
- 25 3 again.

- 1 MR. SHAHROODY: Figure 3.
- 2 MR. VAN ZANDT: USBR 20.
- 3 MR. SHAHROODY: Looking --
- 4 MR. VAN ZANDT: 1993.
- 5 MR. SHAHROODY: The hydrograph?
- 6 MR. VAN ZANDT: Yes, figure 3.
- 7 MR. SHAHROODY: This is actual -- the storage
- 8 hydrograph for Prosser for Stampede?
- 9 MR. VAN ZANDT: Stampede.
- MR. SHAHROODY: 1993 is actual hydrograph that
- 11 water was stored. So are you saying part of my
- 12 calculation or --
- MR. VAN ZANDT: No. I'm asking -- the water
- 14 went into storage during 1993 was released in 1994, and
- 15 I'm just getting you to acknowledge that 1994 was a
- 16 water-short year in the Newlands Project; isn't that
- 17 right?
- 18 MR. SHAHROODY: That's correct. That's the
- 19 very reason you do that. In a situation that you have
- 20 extra water available, you store it.
- 21 And the fish needs are no different than the
- 22 needs for the M&I uses or for irrigation uses. Because
- 23 that's when the fish needs the water most, during the
- 24 dry times for maintenance of the habitat.
- That's correct. It was released in 1994.

- 1 MR. VAN ZANDT: Now as I look across, going
- 2 back to your Table 3 in USBR 20, there is a calculation
- 3 of various waters that are available as we work our way
- 4 down the river all the way to below Derby, correct?
- 5 MR. SHAHROODY: Correct.
- 6 MR. VAN ZANDT: Now, you didn't actually
- 7 calculate the downstream entitlements in this table, did
- 8 you?
- 9 MR. SHAHROODY: I didn't need to because I
- 10 looked at the most downstream gage which is just before
- 11 entering the Pyramid Lake. That's the gage in Nixon.
- 12 And that's the water getting there that means all of the
- 13 entitlements, all the needs, were satisfied.
- 14 MR. VAN ZANDT: There of course may be
- 15 occasions when someone who has a water right doesn't use
- 16 their entire amount of water; isn't that right?
- MR. SHAHROODY: Could be, yes.
- MR. VAN ZANDT: So in fact there may be
- 19 additional demands on the river that are not included in
- 20 your calculation below the outlet of the Little Truckee,
- 21 right?
- MR. SHAHROODY: It could be. Again, as I said,
- 23 I took the -- made my calculation in the high flow
- 24 rates, the years with plenty of water. So I have to
- 25 make an assumption, which I did, and I think it's a

- 1 pretty safe assumption.
- 2 MR. VAN ZANDT: Now I want you to look at TCID
- 3 Exhibit 98. Please. I don't know if you can see it up
- 4 there on the screen.
- 5 MR. SHAHROODY: A little bit hard for me to see
- 6 from here.
- 7 MR. VAN ZANDT: It's the same shape as the
- 8 permit.
- 9 (Laughter)
- MR. SHAHROODY: Except the other one, I knew
- 11 the shape. I don't recognize this one. Okay.
- MR. VAN ZANDT: Do you recognize this document,
- 13 Mr. Shahroody?
- MR. SHAHROODY: Offhand, I don't.
- MR. VAN ZANDT: I'll represent to you it came
- 16 from the files of the State Water Resources Control
- 17 Board. And it's Exhibit 2 that was introduced at the
- 18 hearings on the Stampede Reservoir in 1958.
- And this is the calculation that was done by
- 20 the Bureau of Reclamation to support available water,
- 21 similar to the analysis that you've done, for the
- 22 original Stampede application.
- 23 You can tell that by the title there:
- 24 Estimated Surplus Flows, Stampede Reservoir Site, Little
- 25 Truckee River. Do you see that?

- 1 MR. SHAHROODY: That's what it says. And I
- 2 don't know what they used and what basis they used to
- 3 make calculations.
- 4 MR. VAN ZANDT: Well, I just want to get you to
- 5 acknowledge some things about this exhibit in contrast
- 6 to what you did.
- 7 MR. SHAHROODY: This certainly doesn't have the
- 8 detail of the spreadsheet that I have. And it's only a
- 9 result shows for three locations at Derby Dam, Boca, and
- 10 Stampede.
- MR. VAN ZANDT: What this -- they looked at a
- 12 record of some 24 years, from 1917 to 1950. Do you see
- 13 that?
- MR. SHAHROODY: They are for years 1917 through
- 15 1950.
- 16 MR. VAN ZANDT: And it's actually a 34-year
- 17 period, but they only picked out 24 years. Similar to
- 18 what you did, right?
- 19 MR. SHAHROODY: Yeah, they did. And they have
- 20 much, much bigger numbers. Like for instance, it shows
- 21 at Derby Dam 380,000, 597,000, 608,000, 527,000. I
- 22 don't have those numbers.
- MR. VAN ZANDT: All right.
- If you look at the table, the column on the
- 25 right there, available water at Stampede Reservoir, you

- 1 can see a range from zero, actually, up to 134,700 acre
- 2 feet, correct?
- 3 MR. SHAHROODY: I see those numbers, but I
- 4 think it just doesn't make -- what do I say? It doesn't
- 5 hold water.
- 6 MR. VAN ZANDT: In your Table 3, the average by
- 7 my calculation over the years is 139,221 acre feet.
- 8 Think that's pretty close?
- 9 MR. SHAHROODY: I did not make an average
- 10 because average is not relevant here. I cannot verify
- 11 it because I don't have an average number.
- MR. VAN ZANDT: Okay. Let's look at a couple
- 13 months in your Table 3 if we could. In USBR 20.
- MR. SHAHROODY: Okay.
- MR. VAN ZANDT: Take a look at June of 1974.
- MR. SHAHROODY: I have it.
- 17 MR. VAN ZANDT: So here you have end-of-month
- 18 of 224,467 acre feet, and you say the available
- 19 additional water is 23,068 acre feet.
- MR. SHAHROODY: The 23,000 is the amount of
- 21 water. This is available water in addition to stored
- 22 amount in Stampede Reservoir. And then when you add the
- 23 amount of 4,000 stored with it, it comes out to be
- 24 27,134.
- MR. VAN ZANDT: If you add those numbers

- 1 together, you get, just adding the 224 and the 23,
- 2 that's 247,000 acre feet, you're saying, of available
- 3 water?
- 4 MR. SHAHROODY: For June of '74?
- 5 MR. VAN ZANDT: June of '74.
- 6 MR. SHAHROODY: June of '74 itself is 27,134.
- 7 The sum of the other months comes out to be 155,000 acre
- 8 feet.
- 9 MR. VAN ZANDT: No, no. That's not what I'm
- 10 referring to.
- If there is 23,000 acre feet of available
- 12 additional water to put in storage, and there's already
- 13 224,000 in Stampede, you are putting 247,000 acre feet.
- 14 MR. SHAHROODY: I follow you. I follow you.
- 15 At the end of June of '74 there were 224,000
- 16 acre feet.
- 17 MR. VAN ZANDT: That's above the capacity of
- 18 the --
- 19 MR. SHAHROODY: That is correct. I was just
- 20 strictly making water availability analysis.
- 21 But using that hydrologic period, you can have
- 22 a situation of the repeat of the same hydrologic period
- 23 in terms of runoff. Stampede may not be at 224,000.
- So therefore, I was not locking the Stampede
- 25 storage at that moment in time, but I was rather relying

- 1 on the snowmelt and runoff availability, independent of
- 2 what the status is in Stampede at that time.
- 3 MR. VAN ZANDT: Okay. But you agree that the
- 4 physical capacity of Stampede cannot store 247,000 acre
- 5 feet, right?
- 6 MR. SHAHROODY: I agree.
- 7 MR. VAN ZANDT: So would it be fair to say in
- 8 constructing your Table 3 that you did not limit your
- 9 calculations of available water to the physical capacity
- 10 of the reservoir?
- MR. SHAHROODY: I didn't want to.
- I purposely wanted to show what's available
- 13 from the system after satisfying all the rights.
- 14 Because in future, Stampede could be at different
- 15 storage level. And at that time, of course, you have to
- 16 follow the permit requirements, whether you can store
- 17 it, whether you cannot store it, and depending when it
- 18 is, what the flood controls are.
- 19 MR. VAN ZANDT: Okay. But you would agree,
- 20 Mr. Shahroody, that that 20,000 -- actually about 21,000
- 21 of the water that you say is available for addition to
- 22 the storage of Stampede is in fact not available to be
- 23 stored in Stampede?
- MR. PALMER: I'm going to interject an
- 25 objection here. He's answered that at least twice, and

- 1 this is at least the third time.
- 2 CO-HEARING OFFICER DODUC: I will agree with
- 3 Mr. Palmer.
- 4 MR. VAN ZANDT: Well, I don't think he answered
- 5 that particular question, that it's not -- that cannot
- 6 be stored in -- he just --
- 7 CO-HEARING OFFICER DODUC: He has said -- he's
- 8 acknowledged the capacity of the reservoir. So please
- 9 move on, Mr. Van Zandt.
- 10 MR. VAN ZANDT: In doing your calculations,
- 11 Mr. Shahroody, you also did not limit your analysis
- 12 considering the flood capacity of the Stampede Reservoir
- 13 which is 204,500 acre feet before April 10, have you?
- MR. SHAHROODY: I did.
- MR. VAN ZANDT: You did --
- MR. SHAHROODY: Yes.
- 17 MR. VAN ZANDT: -- do that?
- MR. SHAHROODY: Because the fact of the matter,
- 19 given when you're in the season, like March, then the
- 20 flood capacity is already there.
- 21 For instance March 1974. Although the Stampede
- 22 could have been full to 226, but it can't because of
- 23 flood control, and the capacity shows to be 203,000 acre
- 24 feet. That's the flood control limit.
- 25 So basically the left-over water is calculated

- 1 which is coming down.
- 2 So again as I said before, I was making
- 3 hydrologic analysis. These are the amounts of water
- 4 available.
- Now when you then apply to store that water,
- 6 then you have to look at the permit condition, the flood
- 7 control condition.
- 8 True, the water's available. But in the
- 9 future, Stampede could be lower, could be at flood
- 10 control. Can you store? Or have to -- you have to let
- 11 it go?
- My only purpose here was to show the amount of
- 13 water available in the system.
- 14 MR. VAN ZANDT: Looking at March of '83 when
- 15 the flood control limit would be in place, the
- 16 end-of-month storage is 202,667. Do you see that?
- 17 MR. SHAHROODY: I see that.
- MR. VAN ZANDT: And you say that there's
- 19 available 22,616 acre feet for a total of 225. That
- 20 exceeds the flood control storage, right?
- 21 MR. PALMER: Objection; he's already answered
- 22 this question.
- 23 CO-HEARING OFFICER DODUC: Mr. Van Zandt, the
- 24 witness has several times now said that his analysis is
- 25 solely for the purpose of demonstrating availability of

- 1 water, and he makes no assertion about the operations of
- 2 the reservoirs and how that might be in the future.
- I would encourage you to move on to your next
- 4 line of questioning if it is -- if the questions that
- 5 you have next are still along that line because you'll
- 6 get the same answer from him is what I expect.
- 7 MR. VAN ZANDT: That's my last question on that
- 8 topic.
- 9 CO-HEARING OFFICER DODUC: Okay.
- 10 MR. VAN ZANDT: Thank you. I didn't want to
- 11 interrupt you.
- Mr. Shahroody, you indicate in your Table 3
- 13 there that this flow regime 1 water, the justification
- 14 for the 477,000 acre feet in the permits which are in
- 15 TCID Exhibit 211 and 212, isn't it true that part of the
- 16 justification for that was a 4,000 cfs flow in the river
- 17 to sustain I believe cottonwoods?
- MR. SHAHROODY: That was one of the permit
- 19 conditions, yes.
- 20 MR. VAN ZANDT: Yet the flow regime -- the
- 21 maximum flow regime that you have included does not
- 22 exceed 1,000 cfs.
- MR. SHAHROODY: That goes back again, this is a
- 24 matter of the management of the remaining waters
- 25 available to the Tribe under State Engineer's ruling.

- 1 And we know the system is quite variant. There are dry
- 2 years and wet years.
- 3 The Fish and Wildlife Service and the Tribe
- 4 have tailored those flow regimes so that to optimize
- 5 those for the system in terms of cottonwoods, LCT, and
- 6 Cui-ui and habitat, at the same time to have water in
- 7 storage in Stampede -- like this year, releases have to
- 8 be made from Stampede in June, in May, in order to
- 9 supplement the spawning for the Cui-ui.
- 10 So to answer your question, the flow regime 1,
- 11 the maximum demand of 1,000 cfs is much less than 4,000.
- 12 And the remainder, if there's opportunity, is to be
- 13 stored in Stampede Reservoir.
- 14 MR. VAN ZANDT: One of the other justifications
- 15 for the 477,000 was a requirement to flow about 410,000
- 16 acre feet into Pyramid Lake every year to sustain the
- 17 lake; is that right?
- MR. SHAHROODY: That's one of the
- 19 justifications, correct.
- 20 MR. VAN ZANDT: Okay. But again, your flow
- 21 regime 1, the maximum flow regime, only has about
- 22 252,000 acre feet; isn't that right?
- MR. SHAHROODY: It is correct.
- But 410,000 acre feet is an average number over
- 25 an average period. The lake goes up and down, but you

- 1 want to maintain the lake, and evaporation is about
- 2 410,000 acre feet.
- 3 The water then stored in Stampede over and
- 4 above the 1,000 cfs under the flow regime 1 still would
- 5 be released and would go to Stampede Reservoir -- I mean
- 6 to Pyramid Lake from Stampede Reservoir to then offset
- 7 the evaporation.
- 8 It's just a matter of timing, whether it's
- 9 going to be that month, next month, or next year.
- 10 MR. VAN ZANDT: So -- well, isn't it true,
- 11 Mr. Shahroody, with the justification for 410,000 and
- 12 you've been permitted to 477,000 to sustain the lake,
- 13 that water should be subtracted from the water that is
- 14 available for storage in Stampede, shouldn't it?
- MR. SHAHROODY: No. Because that water is
- 16 designated to go to Pyramid Lake. It's going to get
- 17 there. It's just a matter of changing the timing.
- MR. VAN ZANDT: Now, again looking at Table 3,
- 19 Mr. Shahroody, let's look at 1995.
- Here you begin your analysis with 80,983 acre
- 21 feet. Do you see that?
- MR. SHAHROODY: Correct.
- MR. VAN ZANDT: And end-of-month in March is
- 24 113,122, right?
- MR. SHAHROODY: Yes.

- 1 MR. VAN ZANDT: And you indicate there is a
- 2 small amount of water that can be added to that, 8 acre
- 3 feet, I believe, additional. Right?
- 4 MR. SHAHROODY: That's just a matter of Excel
- 5 spreadsheet does that.
- 6 MR. VAN ZANDT: But my question is the 80,983
- 7 and the 113,122, and if you add 8 to it, you're still
- 8 below the 126, right?
- 9 MR. SHAHROODY: Yes.
- 10 MR. VAN ZANDT: So that water's not available
- 11 for additional storage, is it?
- MR. SHAHROODY: Again, I'm doing the hydrologic
- 13 analysis as to the water available in the system.
- 14 And depending what happens in the future as far
- 15 as storage conditions, then the determination would be
- 16 made whether to store or can you store or not to store.
- 17 Again, these are hydrologic analysis on the
- 18 availability, independent of what's in storage, although
- 19 I've used the storage.
- MR. VAN ZANDT: But your column 19, Mr.
- 21 Shahroody, is available water in addition to stored
- 22 amount. Isn't that trying to reflect what the current
- 23 authority is to store?
- 24 MR. SHAHROODY: Well, the available amount of
- 25 water for -- if you look at March, available water in

- 1 addition to stored amount in Stampede is 3,283 acre
- 2 feet.
- 3 MR. VAN ZANDT: But you're still below the 126.
- 4 MR. SHAHROODY: I'm below 126, depending on,
- 5 again, history, what went on at that time. So I did not
- 6 go and actually diagnose what happened historically.
- 7 But that water -- again, it's not an exact
- 8 science. When you go through the test of the gages and
- 9 then there is a very small amount of water. The Excel
- 10 calculation and spreadsheet set up to do that, it does
- 11 yield 3,283 acre feet.
- 12 It should have been held back, but it was not
- 13 held back. Just a matter of operator, if they'd
- 14 released it or if there was, I would say, a message or
- 15 direction which may not have been followed.
- I did not go specifically every single month to
- 17 see the history what happened that month.
- MR. VAN ZANDT: One other example and I'll move
- 19 on. Looking at November of '81. Do you have that?
- MR. SHAHROODY: I do.
- MR. VAN ZANDT: There we start at 61,000,
- 22 didn't reach the permit storage capacity until January
- 23 of '82. But again, you calculated that there is
- 24 additional water to go into storage, right?
- 25 MR. SHAHROODY: That's correct.

- 1 There is a 3,223 acre feet which is again the
- 2 same thing as I explained before, and meets all of the
- 3 criteria as you go down the stream. In terms of flow
- 4 regime 1, in terms of satisfaction of rights, meeting
- 5 the Floriston rates, and the water available in last
- 6 gage on the Truckee River.
- 7 It's just a matter of whether I would do it
- 8 today. I may hold that water back. But then that's the
- 9 water that was passed down.
- 10 MR. VAN ZANDT: But that water that's part of
- 11 your calculation, that's not water that's available for
- 12 the Board to approve as a new appropriation, right?
- MR. SHAHROODY: Again, I said that.
- I made a hydrologic analysis, meeting all the
- 15 criteria, what is the amount of water available?
- 16 And again, in the future, the hydrologic
- 17 conditions would be different, and the reservoir storage
- 18 could be different.
- 19 MR. VAN ZANDT: Let's turn our attention to
- 20 Prosser for just a few minutes if we could.
- So I believe this one is table 8 in your water
- 22 availability analysis, right?
- MR. SHAHROODY: Correct.
- MR. VAN ZANDT: Also included in your
- 25 testimony.

- 1 CHIEF LINDSAY: Did we move to Exhibit 21?
- 2 MR. VAN ZANDT: Yes. USBR 21. Water
- 3 availability analysis for Prosser.
- 4 MR. SHAHROODY: Yes.
- 5 MR. VAN ZANDT: Thank you.
- So we won't have to go through these columns,
- 7 you'll acknowledge that again you did not consider the
- 8 physical capacity of Prosser in doing your hydrologic
- 9 calculations, right?
- MR. SHAHROODY: The same answer holds true,
- 11 correct.
- MR. VAN ZANDT: And also the same for the flood
- 13 control capacity, right?
- MR. SHAHROODY: Correct.
- MR. VAN ZANDT: Also in the Prosser
- 16 calculations, you do not account for the Tahoe exchange
- 17 water, do you?
- 18 MR. SHAHROODY: Tahoe exchange water is a part
- 19 of the storage. So when you look at the column 2 and
- 20 the month's storage, the Tahoe-Prosser Exchange is
- 21 there, so it's automatically accounted for.
- MR. VAN ZANDT: Is there a limitation on the
- 23 amount of Tahoe exchange water that can be put in
- 24 Prosser?
- MR. SHAHROODY: Well, it can't be any more than

- 1 what the storage actually is holding.
- 2 MR. VAN ZANDT: No more than the 30,000.
- 3 MR. SHAHROODY: No more than 30,000. But that
- 4 hasn't happened.
- 5 MR. VAN ZANDT: Okay. But it could happen that
- 6 there could be exchanged into Prosser Reservoir water
- 7 from Lake Tahoe that would consume the entire capacity
- 8 of Prosser?
- 9 MR. SHAHROODY: That could only happen in
- 10 extreme flood years where there's quite a bit of water
- 11 around and Tahoe is not required to make any releases to
- 12 support Floriston rates which is very extreme.
- I could see possibly in that extreme flood
- 14 conditions there could be some like that.
- MR. VAN ZANDT: And in that event, then there
- 16 wouldn't be any capacity in Prosser for additional
- 17 appropriation of water, right?
- MR. SHAHROODY: Again, I think you're repeating
- 19 the same thing.
- I did not take into account the capacity. I
- 21 took the hydrologic yield of the system, how much water
- 22 is available in the Prosser Creek watershed. Then in
- 23 the future, of course, you may not have that situation.
- 24 That could be situation that storage could be different.
- MR. VAN ZANDT: Just a minute, please.

- 1 CHIEF LINDSAY: While he's checking, I think I
- 2 heard a reference to Table 8. We're actually, I think,
- 3 discussing Table 3 in USBR 21. Is that correct?
- 4 MR. PALMER: That's correct. In USBR 21, it is
- 5 Table 3.
- 6 MR. VAN ZANDT: Thank you. I was looking at
- 7 his testimony.
- 8 MR. PALMER: That's the difference.
- 9 MR. VAN ZANDT: That's all the questions I
- 10 have, and I do not have any questions for Mr. Buchanan.
- 11 CO-HEARING OFFICER DODUC: Does that conclude
- 12 your cross?
- 13 At this time, I think this is a -- if you don't
- 14 mind, let's take a short break. And let's make it ten
- 15 minutes. We'll return at 10:35.
- 16 (Recess)
- 17 CO-HEARING OFFICER DODUC: If everyone would
- 18 please take your seats.
- Mr. Mackedon, you may begin your cross.
- 20 MR. MACKEDON: Thank you. I have a series of
- 21 questions for Mr. Shahroody.
- 22 CO-HEARING OFFICER DODUC: Please get closer to
- 23 the mic.
- MR. MACKEDON: Mostly for clarification, if you
- 25 please.

--000--1 2 CROSS-EXAMINATION BY MR. MACKEDON 3 FOR CITY OF FALLON --000--4 MR. MACKEDON: Mr. Shahroody, you opened your 5 6 testimony this morning and referred -- by referring to 7 testimony you gave yesterday, and that was -- concerned 8 the Tribe's appropriation of the remaining waters of the Truckee River pursuant to the Section 21082(b) of the Settlement Act. Do you remember that? 10 11 MR. SHAHROODY: I do. 12 MR. MACKEDON: I believe in your written 13 testimony you refer to that permit which is -- or permits -- 48061 and 48494 as the State Engineer's 14 15 unappropriated water decisions. 16 You make that -- you characterize it that way. 17 MR. SHAHROODY: I did. 18 MR. MACKEDON: Yes. Now, I'm going to use the 19 same characterization so I keep it clear what we're 20 talking about. I'm going to call that unappropriated 21 water which is now a permit, okay? 22 MR. SHAHROODY: The permits for the remaining waters of the Truckee River in Nevada. 23 24 MR. MACKEDON: Right, right. 2.5 My question is this: The State Engineer has

- 1 not granted a permit to the Tribe to store the waters
- 2 appropriated under those permits, correct?
- 3 MR. SHAHROODY: To store? I missed that part
- 4 of it.
- 5 MR. MACKEDON: The Nevada State Engineer has
- 6 not granted a permit to store the waters appropriated
- 7 under 48061 and/or 48494, correct?
- 8 MR. SHAHROODY: That is correct. I explained
- 9 that yesterday. The Tribe will be filing its
- 10 application for that change to store as part of this
- 11 process.
- MR. MACKEDON: And the Tribe must file that
- 13 application before the Nevada State Engineer, correct?
- MR. SHAHROODY: Correct.
- 15 MR. MACKEDON: It's also true then that the
- 16 Nevada State Engineer has not considered the
- 17 consequences of storage of the remaining waters of the
- 18 Truckee as of this time?
- 19 MR. PALMER: I object. I don't think this
- 20 witness can speculate as to what the Nevada State
- 21 Engineer may have considered or might consider.
- MR. MACKEDON: Let me then refer the Board to
- 23 TCID Exhibit No. 207 which is a transcript of a hearing
- 24 before Judge Maddox in Nevada.
- 25 And rather than taking a great deal of time

- 1 going through it, I'm going to make -- I would ask the
- 2 Board to look at page 36 of that exhibit, line 17
- 3 through 24 --
- 4 CO-HEARING OFFICER DODUC: Are you asking the
- 5 Board to do this in considering --
- 6 MR. MACKEDON: Yes.
- 7 CO-HEARING OFFICER DODUC: -- Mr. Palmer's
- 8 objection?
- 9 MR. MACKEDON: Yes.
- 10 CO-HEARING OFFICER DODUC: Okay.
- MR. MACKEDON: See also page 37.
- 12 CO-HEARING OFFICER DODUC: Hold on a second.
- 13 Let's give Mr. Lindsay some time to find these
- 14 documents.
- 15 CHIEF LINDSAY: And that's TCID 27?
- MR. MACKEDON: No, it's TCID No. 207. Forgive
- 17 me.
- 18 CHIEF LINDSAY: It goes from page 3 to page 39
- 19 here. Jumps to page 39.
- 20 MR. MACKEDON: Mine has 36, 37, and 38.
- 21 CO-HEARING OFFICER DODUC: I'm sure you'll make
- 22 it clear, Mr. Mackedon, but unless this transcript
- 23 somehow involves Mr. Shahroody, Mr. Palmer's objection
- 24 is based on the fact that Mr. Shahroody --
- MR. MACKEDON: Trying to get there.

- 1 CO-HEARING OFFICER DODUC: Okay.
- 2 MR. MACKEDON: Mr. Shahroody, you were at the
- 3 hearing when the State Engineer considered these
- 4 matters, were you not? And you testified.
- 5 MR. SHAHROODY: Which hearing are you referring
- 6 to?
- 7 MR. MACKEDON: I'm talking about the hearing
- 8 before the State Engineer on these permits.
- 9 MR. SHAHROODY: I testified --
- MR. MACKEDON: You testified.
- MR. SHAHROODY: -- in those hearings.
- MR. MACKEDON: And at that hearing, no evidence
- 13 was offered regarding storage under these permits?
- 14 MR. SHAHROODY: Wasn't intended to.
- MR. MACKEDON: The answer is none was offered.
- MR. SHAHROODY: That's correct.
- 17 MR. MACKEDON: So it necessarily follows that
- 18 the State Engineer did not consider the consequences of
- 19 storage if granted a permit for this and that's all.
- 20 MR. SHAHROODY: That is correct, and the Tribe
- 21 did not ask for.
- MR. MACKEDON: And when the Tribe comes back to
- 23 the Nevada State Engineer, the consequences of storage
- 24 of unappropriated water and its effect upon the public
- 25 interest or existing rights will have to be considered,

- 1 correct?
- 2 MR. SHAHROODY: Those will be part of the
- 3 process of State Engineer which I presume will be among
- 4 many other things.
- 5 MR. MACKEDON: Thank you.
- 6 MR. PALMER: Just for the record, he didn't
- 7 then refer to TCID Exhibit 207, so that's not any part
- 8 of that.
- 9 CO-HEARING OFFICER DODUC: That's correct.
- 10 MR. MACKEDON: I took -- thank you. I did take
- 11 it away from 207 because Mr. Shahroody wasn't directly
- 12 involved in that particular hearing.
- 13 CO-HEARING OFFICER DODUC: Okay.
- MR. MACKEDON: Have you read the transcript?
- MR. SHAHROODY: Of?
- MR. MACKEDON: That particular hearing, the one
- 17 of May 2nd, 2008.
- MR. SHAHROODY: No, I have not.
- 19 MR. MACKEDON: When did you commence your water
- 20 availability analysis?
- MR. SHAHROODY: I believe the letter was
- 22 provided from State Board, as I said, May of 2007, and I
- 23 believe sometime after that.
- MR. MACKEDON: Can you tell me when you
- 25 concluded your analysis?

- MR. SHAHROODY: I don't have it in my calendar,
- 2 or I cannot put my hands on it.
- 3 MR. MACKEDON: Would you have concluded it in
- 4 2007?
- 5 MR. SHAHROODY: Most likely could have been --
- 6 I have to guess because they were provided in parts.
- 7 One was done for Stampede, and then subsequently it was
- 8 done for Prosser, and there were two submittals.
- 9 MR. MACKEDON: Mr. Van Zandt reminds me,
- 10 looking at it here, I believe it would show, according
- 11 to what your written testimony is, it would be 9-28-07.
- 12 Does that sound about right?
- MR. SHAHROODY: Could be.
- 14 Again that could be for one of them. I know
- 15 distinctly there were two different submittals, two
- 16 different dates.
- MR. MACKEDON: Is your water analysis that you
- 18 relied on this morning contained in USBR Exhibit 20?
- MR. PALMER: I'll hand the witness Exhibit USBR
- 20 20 for convenience.
- MR. MACKEDON: Thank you.
- MR. SHAHROODY: That's correct.
- MR. MACKEDON: So you completed that analysis
- 24 before the hearing in front of Judge Maddox in May of
- 25 2008; is that correct?

- 1 MR. SHAHROODY: I was doing independent of what
- 2 was going on in Nevada. That was a request by
- 3 California. And the answer is yes.
- 4 MR. MACKEDON: So that was done for the Water
- 5 Board in California, not for the Pyramid Lake Tribe or
- 6 any of the applicants here today; is that right?
- 7 MR. SHAHROODY: It was done in cooperation with
- 8 the Bureau of Reclamation. I did finish my work and
- 9 submitted to the Bureau of Reclamation, and then of
- 10 course they filed it.
- MR. MACKEDON: And the work was paid for by the
- 12 Bureau of Reclamation?
- MR. SHAHROODY: No. Because this is the
- 14 Tribe's interest. It was paid by the Pyramid Lake
- 15 Tribe.
- MR. MACKEDON: Thank you.
- 17 Is it true that under TROA as you understand it
- 18 there would be more water stored than is historically
- 19 true in the upstream reservoirs?
- MR. SHAHROODY: To the extent space available,
- 21 meeting all the permit requirements, and also the flood
- 22 control, yes.
- MR. MACKEDON: Won't that create end-of-month
- 24 storage in excess of the historical levels?
- 25 MR. SHAHROODY: Which reservoir are you talking

- 1 about?
- 2 MR. MACKEDON: Talking about both combined, the
- 3 effect of this increased storage within those
- 4 reservoirs. Won't it increase the end-of-month storage
- 5 levels over historic levels?
- 6 MR. SHAHROODY: On average, it probably would.
- 7 MR. MACKEDON: If that's true, doesn't that
- 8 necessarily mean that less water is available than
- 9 historically true?
- 10 MR. SHAHROODY: Well, it's just a matter of how
- 11 you manage the reservoirs and its timing.
- 12 Again, my quantification of water availability
- 13 was done independent of the reservoir, is more of the
- 14 watershed yield in the Little Truckee or Prosser and
- 15 then satisfying all of the senior rights down the
- 16 stream, what's then available including meeting the flow
- 17 regime in the lower river what's available for storage.
- 18 That was my analysis.
- 19 MR. MACKEDON: So in doing this analysis, you
- 20 did not come to the conclusion that if there is more
- 21 storage over historical levels as a result of TROA there
- 22 isn't necessarily less water available. You haven't
- 23 done that?
- MR. SHAHROODY: I don't think they're
- 25 connected.

- 1 MR. MACKEDON: Okay. Thank you.
- 2 CO-HEARING OFFICER DODUC: Does that complete
- 3 your cross?
- 4 MR. MACKEDON: I have no more questions. Thank
- 5 you very much.
- 6 CO-HEARING OFFICER DODUC: Mr. Palmer, any
- 7 redirect?
- 8 MR. PALMER: Yes, I do, thank you.
- 9 ---00--
- 10 REDIRECT EXAMINATION BY MR. PALMER
- --000--
- MR. PALMER: Mr. Shahroody, I'd like to start
- 13 first with referring back to a couple of questions that
- 14 Mr. Van Zandt asked you regarding the Sierra Valley
- 15 diversion. Do you recall questions regarding that?
- MR. SHAHROODY: I do.
- 17 MR. PALMER: In looking at your analysis, if
- 18 Sierra Valley were in fact to take less than 60 cfs, how
- 19 would that affect your analysis?
- MR. SHAHROODY: It wouldn't change the result
- 21 of my analysis.
- MR. PALMER: So you've accounted for whatever
- 23 might have happened with Sierra Valley in your analysis?
- MR. SHAHROODY: That's correct.
- But also, the amount is very small compared to

- 1 the total amount of water available, will be available
- 2 for storage.
- 3 MR. PALMER: Are you aware of any evidence, any
- 4 data that would indicate that Sierra Valley has
- 5 consistently in the past diverted less than 60 cfs?
- 6 MR. SHAHROODY: I don't think so.
- 7 As I said, my experience, this month of June
- 8 and going to July, end of June, going to July, and they
- 9 were taking 60 cfs. And they will continue to do so to
- 10 the extent the water's available.
- MR. PALMER: So you're not aware of any data
- 12 record that you could look at that would show they've
- 13 taken less? Less than their right?
- 14 MR. SHAHROODY: Water Master would have data,
- 15 but I have not at least looked at those since back in
- 16 1994.
- 17 MR. PALMER: You're not aware of whether
- 18 there's data?
- MR. SHAHROODY: I'm not.
- 20 MR. PALMER: I want to ask you a question
- 21 regarding application 9330. And I think the discussion
- 22 was referring to the fact that the decision regarding
- 23 that application is on remand to the Nevada State
- 24 Engineer. Is that your understanding?
- MR. SHAHROODY: That's my understanding.

- 1 MR. PALMER: Does that indicate that the Nevada
- 2 State Engineer previously denied that application?
- 3 MR. SHAHROODY: Nevada State Engineer denied
- 4 it. That's one of the reasons it has gone through the
- 5 appeals and been remanded.
- 6 MR. PALMER: Do you recall what the basis for
- 7 that denial was by the Nevada State Engineer?
- 8 MR. SHAHROODY: I do.
- 9 MR. PALMER: Would you please tell us what your
- 10 recollection is?
- MR. SHAHROODY: My understanding of course is
- 12 first of all in --
- MR. VAN ZANDT: I'm going to object to this
- 14 line of questions. I think it's outside the scope of my
- 15 cross.
- 16 CO-HEARING OFFICER DODUC: Mr. Palmer.
- 17 MR. PALMER: You asked about Application 9330,
- 18 and the import of that and whether this witness took it
- 19 into account.
- I'm establishing some of the basis for which he
- 21 included or didn't include it, which is the Nevada State
- 22 Engineer's decision on that application as being
- 23 previously denied.
- 24 CO-HEARING OFFICER DODUC: Thank you. The
- 25 objection is overruled.

- 1 Please answer the question.
- 2 MR. SHAHROODY: First on the ground of public
- 3 interest. Second on the ground of beneficial use.
- 4 Third on the ground of not showing any means of being
- 5 able to take that water from the Truckee River. And
- 6 also not securing any consent of federal government if
- 7 the federal facilities would be used.
- 8 MR. PALMER: And I think "public interest" is
- 9 probably more of unique to Nevada in the way you are
- 10 referring to it. Could you explain what public interest
- 11 meant in that context? What was the basis for that?
- MR. SHAHROODY: Well, that's in terms of
- 13 interest of public in this situation, meaning that being
- 14 beneficial for wildlife in this situation as opposed to
- 15 having the water to be taken in a situation that may
- 16 cause substantial -- I'm now going to use the California
- 17 term "injury" or "impede" the recovery of fish in this
- 18 situation.
- 19 MR. PALMER: Then you mentioned "beneficial
- 20 use." Would you explain what you meant by beneficial
- 21 use.
- 22 MR. SHAHROODY: Beneficial use, that means the
- 23 water has to be applied for the benefit of raising, for
- 24 instance, in this situation crop where the beneficial
- 25 use for use of water, as we talked about yesterday, 3.5

- 1 for bottom land and 4.5 for bench land.
- Those are provided under Orr Ditch Decree.
- 3 They have to be satisfied. And did not see this water
- 4 to be applied on top of that because that would not
- 5 render to be beneficial use because the determination
- 6 were made to raise crops of economic -- crops of value.
- 7 That's what the courts have decided.
- 8 MR. PALMER: Next, I'd like to refer you to the
- 9 questions you -- from Mr. Van Zandt regarding TCID
- 10 Exhibit 98. And that was the one regarding the prior
- 11 1950 era Stampede surplus calculation.
- Do you recall that?
- MR. SHAHROODY: I do.
- 14 MR. PALMER: If you have to look at it you can,
- 15 but my question is fairly simple.
- You were referred to that exhibit, and do you
- 17 recall what the period of analysis was for that?
- 18 MR. SHAHROODY: It showed -- that exhibit
- 19 showed from 1917 to I believe 1954, if I recall.
- MR. PALMER: And --
- 21 MR. SHAHROODY: 1950.
- MR. PALMER: Was the OCAP in place during that
- 23 period of record?
- MR. SHAHROODY: No. They were not in place.
- MR. PALMER: This was prior to OCAP?

- 1 MR. SHAHROODY: That is correct.
- 2 MR. PALMER: Mr. Van Zandt asked you a question
- 3 regarding the Tahoe-Prosser Exchange Agreement. And
- 4 correct me if I don't get this right, that if Lake Tahoe
- 5 water filled up the space in Prosser, there wouldn't be
- 6 any space left for any water to be stored under this
- 7 permit application.
- At least, that's how I understood his question.
- 9 You answered that that was an extreme event.
- 10 My question is: Have your ever -- have you
- 11 seen that type of event in the historical record in your
- 12 analysis?
- MR. SHAHROODY: To my experience of reviewing
- 14 the record since the Tahoe-Prosser Exchange has been in
- 15 existence, the answer is no, I have not seen it. That
- 16 condition.
- MR. PALMER: Mr. Mackedon asked you a question
- 18 regarding your water availability analysis and who paid
- 19 for that analysis. And I believe your answer was the
- 20 Tribe; is that correct?
- MR. SHAHROODY: That's correct.
- MR. PALMER: Is the Tribe a party to TROA?
- MR. SHAHROODY: Yes, is a mandatory signatory
- 24 party.
- MR. PALMER: Is the Tribe appearing here today

- 1 as part of the joint case of Petitioners and Applicants?
- 2 MR. SHAHROODY: The Tribe is.
- 3 MR. PALMER: Thank you.
- 4 That's all the questions I have.
- 5 CO-HEARING OFFICER DODUC: Thank you. I'm
- 6 sorry, do you have redirect for your other witness?
- 7 MR. PALMER: No, he had no cross.
- 8 CO-HEARING OFFICER DODUC: Oh, that's true.
- 9 Mr. Van Zandt.
- 10 --000--
- 11 RECROSS-EXAMINATION BY MR. VAN ZANDT
- 12 --000--
- MR. VAN ZANDT: Mr. Shahroody, Mr. Palmer asked
- 14 you about Sierra Valley. Did you ever contact Sierra
- 15 Valley to ask them if they had any records for how much
- 16 water they had diverted over the time period that you
- 17 analyzed?
- MR. SHAHROODY: I have not, except my
- 19 conversation and review with the Water Master.
- 20 MR. VAN ZANDT: And then in response to
- 21 questions from Mr. Palmer about Application 9330 you
- 22 listed a number of reasons the State Engineer gave for
- 23 initially denying that application.
- But it is true, isn't it, Mr. Shahroody, that
- 25 that application is still a live application in the

- 1 State of Nevada, correct?
- 2 MR. SHAHROODY: To the extent being remanded
- 3 and front of the State Engineer for a hearing in mid
- 4 October, the answer is yes.
- 5 MR. VAN ZANDT: And you indicated that one of
- 6 the reasons you thought that the application had been
- 7 initially denied was because the State Engineer had made
- 8 a determination with regard to beneficial use; and I
- 9 wasn't quite sure I understood your answer, but it
- 10 sounded like you said that the beneficial use for crops
- 11 was deemed by the State Engineer not to be appropriate
- 12 for some reason.
- Is that what you said?
- MR. SHAHROODY: What I meant to say, as has
- 15 been discussed over the period here, that the OCAP and
- 16 Orr Ditch Decree is obligated to provide the maximum
- 17 amount of 3.5 for bottom land and 4.5 for bench land,
- 18 and the courts have determined those to be the
- 19 beneficial use.
- 20 And one of the purposes of this application, if
- 21 I understand right, 9330, is to take the water to
- 22 Newlands Project for irrigation.
- 23 And my point in terms of the beneficial use is
- 24 since the 3.5 and 4.5 are required to be provided under
- 25 the Orr Ditch Decree and Alpine Decree to those lands,

- 1 and I believe the State Engineer wanted to know how this
- 2 water would be used as beneficial.
- 3 MR. VAN ZANDT: But you would acknowledge that
- 4 not all the lands within the boundaries of the Newlands
- 5 Project are under irrigation right now, correct?
- 6 MR. SHAHROODY: That is correct. And I don't
- 7 know if the -- that is the reason because the water is
- 8 not being -- well, I would say that is not the reason
- 9 because the water is not being provided under 3.5 and
- 10 4.5. There are other issues that those lands are not
- 11 being irrigated.
- MR. VAN ZANDT: And isn't it true that the
- 13 application 9330 is for irrigation and also to provide a
- 14 domestic water supply?
- MR. SHAHROODY: I believe that's -- that's my
- 16 understanding. That's correct.
- MR. VAN ZANDT: Mr. Palmer asked you about the
- 18 Tahoe-Prosser Exchange, and you answered saying that the
- 19 lake had never been filled with water from Lake Tahoe in
- 20 the exchange.
- 21 But the reality is, Mr. Shahroody, that there
- 22 is no limitation, and in fact the entire amount of
- 23 Prosser Lake could be filled or a significant percentage
- 24 of it could be filled with change water; isn't that
- 25 right?

- 1 MR. SHAHROODY: As I said, it could. But on
- 2 the ground, like today for instance, the amount of
- 3 Tahoe-Prosser Exchange in the Prosser Reservoir is about
- 4 12,000 acre feet. So it generally hovers in that area.
- 5 So -- but it could.
- 6 MR. VAN ZANDT: About half.
- 7 MR. SHAHROODY: 11,000 -- could be about half
- 8 of the usable part, correct.
- 9 MR. VAN ZANDT: Thank you. That's all I have.
- 10 CO-HEARING OFFICER DODUC: Thank you.
- 11 Mr. Mackedon?
- MR. MACKEDON: Yes, thank you.
- --000--
- 14 RECROSS-EXAMINATION BY MR. MACKEDON
- 15 --000--
- 16 MR. MACKEDON: Did you make your water analysis
- 17 available to the Pyramid Lake Indian Tribe when you
- 18 completed it on September 28, 2007?
- 19 MR. PALMER: This seems to be beyond the scope
- 20 of the cross and redirect. I'd object on that basis.
- 21 CO-HEARING OFFICER DODUC: I would agree.
- MR. MACKEDON: I thought he opened his --
- 23 CO-HEARING OFFICER DODUC: He was --
- MR. MACKEDON: The question was -- the first
- 25 question he asked went to that very point.

- 1 CO-HEARING OFFICER DODUC: Please move on.
- 2 MR. MACKEDON: That's the only question.
- 3 CO-HEARING OFFICER DODUC: Thank you.
- 4 MR. MACKEDON: Thank you very much.
- 5 CO-HEARING OFFICER DODUC: Thank you to both
- 6 witnesses. Let's move on to Topic No. 6.
- 7 Just a quick housekeeping note from the Joint
- 8 Parties' estimates, the direct for this topic will take
- 9 about 40 minutes, so we'll take an early lunch break.
- 10 That way you can beat the crowd and get some lunch.
- So we'll expect to take a lunch break around
- 12 11:40, 11:45 today.
- --000--
- 14 THOMAS A. STREKAL
- 15 Called by APPLICANT AND PETITIONERS
- 16 DIRECT EXAMINATION BY MR. PALMER
- <u>--000--</u>
- MR. PALMER: Thank you. We're ready. First
- 19 witness in this part is Tom Strekal.
- 20 Mr. Strekal, you were here yesterday and were
- 21 under oath; is that correct?
- MR. STREKAL: That's correct.
- MR. PALMER: And you've already introduced your
- 24 qualifications and direct testimony, so please go ahead
- 25 and summarize your testimony for this part.

- 1 MR. STREKAL: The topic of our section is Water
- 2 Quality, Environment, and Public Trust Resources.
- 3 And just to restate a little bit from yesterday
- 4 that Section 205(a)(5) required the Secretary of the
- 5 Interior to, if necessary, develop and implement a plan
- 6 to mitigate for any significant adverse environmental
- 7 effects resulting from TROA.
- 8 And Section 205(a)(9) stated that the Secretary
- 9 may not become a party if the TROA is likely to
- 10 jeopardize the continued existence any endangered or
- 11 threatened species.
- The EIS/EIR concluded no significant adverse
- 13 impacts and benefits to listed species. I'll tell you
- 14 briefly about our evaluation, then I'll defer to Messrs.
- 15 Caicco and Buchanan to expand on some of these.
- We looked at action alternatives, the three
- 17 alternatives no action, TROA, and a Local Water Supply
- 18 Alternative, as well as current conditions in our
- 19 analysis.
- For surface water, the total amount of water
- 21 stored under TROA is greater under no action, and the
- 22 Local Water Supply Alternative or current conditions,
- 23 primarily in the reservoirs Stampede, Boca, and Prosser
- 24 because of credit water operations.
- 25 Flow in the Lower Truckee River and discharge

- 1 to Pyramid Lake were greater in part because of waters
- 2 that were stored were converted to fishery credit water,
- 3 and also water quality. Those waters could be released
- 4 at a later time to flow all the way down the river to
- 5 Pyramid Lake to achieve the intended benefits. And
- 6 those waters would be in addition to the available flow.
- 7 In dry hydrologic conditions, flows in
- 8 Independence Creek, Little Truckee River, and Prosser
- 9 Creek downstream from the reservoirs were appreciably
- 10 greater under TROA than under the other alternatives.
- 11 And in California, M&I demands in the Lake
- 12 Tahoe and Truckee River Basins were met under all the
- 13 conditions, and M&I demand in the Lake Tahoe Basin in
- 14 Nevada were met.
- In the minimum supply year, Truckee Meadows M&I
- 16 supply was greater under TROA than no action or the
- 17 Local Water Supply Alternative.
- 18 Relative to groundwater, the effects on the
- 19 shallow aguifer in Truckee Meadows would depend on many
- 20 local factors, and we didn't identify a direct effect.
- 21 With criteria established for new well
- 22 construction in California under TROA, however, assumed
- 23 limitations on groundwater use and development of
- 24 surface water drought supplies, TROA would likely have
- 25 the least effect on future California groundwater

- 1 resources than the other alternatives.
- 2 For water quality, Truckee River water quality
- 3 was better under TROA than under no action or current
- 4 conditions because releases of water stored pursuant to
- 5 TROA would to the extent possible be timed to enhance
- 6 flows, particularly in conditions of low flow, as I
- 7 stated earlier.
- 8 Nevada temperature standards under TROA would
- 9 be met more often in dry years, and dissolved oxygen
- 10 standards would be met more often in dry years under
- 11 TROA as well.
- 12 Relative to sedimentation and erosion, no
- 13 storage of water in Lake Tahoe would increase
- 14 sedimentation or degrade water quality. No effects were
- 15 identified.
- 16 No effects for erosion or sedimentation were
- 17 identified for the Truckee River as well. The greatest
- 18 benefit relative to sedimentation was for Pyramid Lake
- 19 where the higher lake level assumed to occur because of
- 20 the additional inflow would help to cover the delta and
- 21 allow more opportunities for passage upstream of Pyramid
- 22 Lake fishes.
- 23 For biological resources, generally speaking,
- 24 conditions for fish in the Truckee River and
- 25 tributaries, Prosser Creek, and Stampede, and Boca

- 1 Reservoirs would be more beneficial because of the
- 2 ability to store credit waters and release them at times
- 3 to provide the greatest benefit for resident fishes.
- 4 For recreation, visitation at Prosser Creek,
- 5 Stampede, and Boca Reservoirs would generally be greater
- 6 under TROA than no action and current conditions because
- 7 the average elevations would assume to be higher, again
- 8 because of the ability to store credit water.
- 9 Under TROA, hydroelectric power generation and
- 10 gross revenues for the existing Truckee River run of the
- 11 rights hydroelectric plants would generally be a bit
- 12 less in high and average flow conditions because of the
- 13 ability to store water.
- But power generation would likely be greater
- 15 under low-flow conditions, again because of the ability
- 16 to release the stored water. And any difference in
- 17 power generation revenues would be compensated because
- 18 those are water rights that are used to generate the
- 19 power.
- For social environment, there were no effects
- 21 to the population because of TROA because it's assumed
- 22 that growth is occurring. TROA was not identified to be
- 23 growth-inducing. Population is expanding even today.
- No effects were identified, generally speaking,
- 25 to cultural resources because of TROA and to trust

- 1 resources, those resources that are associated with the
- 2 various Indian tribes in Nevada.
- For the Washoe Tribe, the Reno-Sparks Indian
- 4 Colony, and the Fallon Paiute Shoshone Tribe, no impacts
- 5 were identified.
- But benefits were identified for the Pyramid
- 7 Lake Tribe because of the additional flow in the Lower
- 8 Truckee River that would be anticipated, the ability to
- 9 time the releases to enhance water quality, and the
- 10 opportunities to release the water to enhance spawning
- 11 flows for the fish. That was viewed as a benefit.
- 12 And no effects on minority or low income
- 13 populations, people, were identified from this. There's
- 14 no construction that's not changing the social climate,
- 15 as I said.
- 16 For the Newlands Project, we did a specific
- 17 analysis and highlighted impacts for it. And diversion
- 18 of the Truckee River water was assumed to satisfy a
- 19 portion of the future Newlands Project water demand as
- 20 currently regulated by OCAP and as assumed to be
- 21 regulated by OCAP in the future. And Mr. Rieker
- 22 identified those operations yesterday.
- 23 Potential effects of TROA on the Newlands
- 24 Project were measured by comparing the quantity of river
- 25 water available for diversion at Derby Diversion Dam and

- 1 resulting Truckee Canal inflow to Lahontan Reservoir,
- 2 Lahontan Reservoir storage, and releases the lower
- 3 Carson River under the various alternatives.
- 4 For the future condition, there was little
- 5 difference in effects on the Newlands Project between
- 6 TROA and other alternatives.
- 7 We do note that slightly less water was
- 8 available for diversion at Derby Dam under TROA compared
- 9 to no action because the holders of upstream senior
- 10 Truckee River water rights would be able to exercise
- 11 their water rights more effectively by diverting the
- 12 consumptive use portion of their previously unused water
- 13 right to storage as credit water.
- We talked this yesterday.
- 15 Effects on Newlands Project water use wouldn't
- 16 be discernible on a long-term basis because average
- 17 annual release from Lahontan Reservoir is similar under
- 18 TROA and no action. We identify a difference of average
- 19 40 acre feet per year.
- 20 Analysis showed that shortages in the Carson
- 21 Division -- and we talked about shortages yesterday, and
- 22 I thought it would be helpful to give you a definition
- 23 of shortage.
- So if you'll permit me that, we identify a
- 25 shortage as an amount of water less than a full supply

- 1 during an irrigation season for the Newlands Project.
- Newlands Project water supply consists of the
- 3 total of Carson River discharge and supplemental Truckee
- 4 River water available for diversion via the Truckee
- 5 Canal to the Lahontan Reservoir from the end of one
- 6 irrigation season to the end of the following irrigation
- 7 season.
- 8 The term "shortage" does not and is not
- 9 intended to indicate that any irrigation entitlement for
- 10 any water right owners served by TCID for the season has
- 11 not been satisfied.
- 12 I'll continue.
- Anyway, the analysis showed that Carson
- 14 Division shortages, as I have defined, occurred in the
- 15 same nine years under no action and under TROA.
- And they were of similar magnitude. In one
- 17 year, we showed TROA shortages to be greater. In
- 18 another year we showed no action shortages to be
- 19 greater. And in the other seven years, shortages were
- 20 very similar.
- 21 For those reasons then, agriculture, wetland
- 22 uses, and Indian Trust resources on the Fallon Indian
- 23 Reservation would not be affected.
- Local groundwater resources would be affected
- 25 primarily to the extent of and in appropriation to the

- 1 differences in amount of Truckee River water diverted to
- 2 the Truckee Canal. And in our analysis, we assumed a
- 3 capacity at that time of 900 cfs. That's what was
- 4 available to flow to Lahontan reservoir.
- 5 The differences in canal flow would affect
- 6 slightly the amount of seepage to the shallow aquifer
- 7 adjacent to the canal and also Lahontan Reservoir
- 8 releases to Carson Division.
- 9 The minor reductions in Truckee Canal discharge
- 10 and Lahontan Reservoir releases for irrigation on the
- 11 Carson Division would likely have no measurable effect
- 12 on groundwater resources on the Newlands Project.
- For TCID's Lahontan Dam hydroelectric power
- 14 plants, analysis showed that hydroelectric power
- 15 generation and gross revenues would be slightly less
- 16 under TROA than no action. We calculated less than 1
- 17 percent, which wouldn't significantly affect the
- 18 profitability of TCID's hydroelectric power operations
- 19 or the regional economy.
- 20 Briefly, that's my testimony. Thank you.
- MR. PALMER: Mr. Strekal, I have just one
- 22 housekeeping item. When you said "our analysis" were
- 23 you referring to the final Environmental Impact
- 24 Statement/Environmental Impact Report?
- MR. STREKAL: Yes, I was.

- 1 MR. PALMER: That's been marked as State Board
- 2 Exhibit 7. Thank you.
- 3 MR. STREKAL: Thank you.
- 4 --000--
- 5 STEVEN L. CAICCO
- 6 Called by APPLICANT AND PETITIONERS
- 7 DIRECT EXAMINATION BY MR. PALMER
- 8 ---00--
- 9 MR. PALMER: The next witness will be Mr. Steve
- 10 Caicco.
- 11 You were not here yesterday -- were you sworn
- 12 in yesterday by the Board, so you're still under oath?
- MR. CAICCO: Yes, I was.
- MR. PALMER: Okay. Briefly state your name and
- 15 spell your last name and your employer.
- MR. CAICCO: My name is Steven L. Caicco.
- 17 That's C-a-i-c-c-o. And I'm employed by the US Fish and
- 18 Wildlife Service in Reno, Nevada.
- MR. PALMER: And you have submitted a statement
- 20 of qualifications that's marked USBR 11?
- MR. CAICCO: Yes, I believe it has.
- MR. PALMER: And is that statement of
- 23 qualifications a true and correct statement of your
- 24 qualifications?
- MR. CAICCO: Yes, it is.

- 1 MR. PALMER: Would you briefly summarize those
- 2 please.
- 3 MR. CAICCO: Yes.
- I have a bachelor's degree in geology and
- 5 biology from Western Washington University and a
- 6 master's degree in botany with an emphasis on plant
- 7 ecology from the University of Idaho.
- 8 I've been employed as a professional biologist
- 9 since 1984. I came to work for the federal government
- 10 first in 1992 here in Sacramento working both on the
- 11 American River as well as on some of the preliminary
- 12 environmental analyses for the Truckee River Operating
- 13 Agreement.
- 14 And since 2003, I have been the Fish and
- 15 Wildlife Service representative for the TROA EIS/EIR in
- 16 Reno.
- MR. PALMER: And you've submitted written
- 18 direct testimony in this proceeding?
- MR. CAICCO: Yes, I have.
- MR. PALMER: And that's been marked USBR
- 21 Exhibit 6. And do you have any corrections you'd like
- 22 to make to that testimony?
- MR. CAICCO: Yes, one minor correction to it.
- On the bottom of the first page, the last full
- 25 paragraph just above the bullet, the second line begins

- 1 with:
- 2 Storing and managing categories of
- 3 credit --
- And the word "water" should be inserted after
- 5 "credit" and before "under" section 7.
- 6 MR. PALMER: With that correction is this --
- 7 CO-HEARING OFFICER DODUC: I'm sorry. Could
- 8 you repeat that? I did not see that.
- 9 MR. CAICCO: Sure.
- 10 The first page, the last full paragraph toward
- 11 the bottom of the page above the bullet.
- 12 CO-HEARING OFFICER DODUC: Yes.
- MR. CAICCO: The last sentence, the second line
- 14 of the last sentence begins with storing and managing
- 15 categories of credit.
- 16 CO-HEARING OFFICER DODUC: Okay.
- 17 MR. CAICCO: That should read credit water.
- 18 CO-HEARING OFFICER DODUC: Thank you.
- MR. CAICCO: Thank you, sir.
- MR. PALMER: Mr. Caicco, with that correction,
- 21 your direct testimony is true and correct?
- MR. CAICCO: Yes, it is.
- MR. PALMER: And with that -- oh. I have one
- 24 other housekeeping item with Mr. Caicco.
- You have three exhibits attached to your direct

- 1 testimony that we've marked USBR Exhibit 16, 17, and 18.
- 2 So he'll be referring to those --
- 3 MR. CAICCO: Yes.
- 4 MR. PALMER: -- in his testimony. Okay.
- 5 Please go ahead and summarize your testimony.
- 6 MR. CAICCO: My testimony pertains to the
- 7 potential effects of TROA on biological resources of the
- 8 Truckee River and its tributaries and the affected lakes
- 9 and reservoirs.
- 10 We looked at a range of biological resources
- 11 that would include fish both in the Truckee River and
- 12 its tributaries as well as fish in the lakes and
- 13 reservoirs, birds including the birds that nest on
- 14 islands in Stampede and Lahontan Reservoir, and special
- 15 status species, threatened and endangered species, and
- 16 other special status species.
- 17 The TROA requires that any operating agreement
- 18 developed shall provide for the enhancement of spawning
- 19 flows available in the Lower Truckee River for the
- 20 Pyramid Lake fishery in a manner consistent with the
- 21 Secretary's obligations under the ESA.
- The specific provisions of TROA that further
- 23 this obligation include Section 7.C which establishes
- 24 Fish Credit Water and Joint Program Fish Credit Water
- 25 and Section 9 which provides for minimum and enhanced

- 1 minimum releases from various reservoirs.
- 2 And that's from our Joint Exhibit 19, which is
- 3 the Operating Agreement itself.
- The Section 9 releases, the minimum enhanced
- 5 releases from the reservoirs, while they're specific to
- 6 California, of course that water flows down and has
- 7 biological benefits downstream in Nevada as well.
- 8 Because TROA was negotiated in a way that
- 9 provides not only the enhanced spawning flows but other
- 10 biological benefits through the flexibility of managing
- 11 the reservoirs and storing water when it's available and
- 12 releasing it when needed downstream, we identified no
- 13 adverse impacts that needed to be mitigated.
- 14 This ability, this flexibility, provided a
- 15 number of benefits that include:
- An enhanced ability to provide the spawning
- 17 flows for threatened and endangered fish;
- An enhanced ability to extend the period in
- 19 which water is available during the growing season in
- 20 the Lower Truckee River and throughout the river;
- 21 Increased annual inflow into Pyramid Lake;
- 22 And appreciably greater flows in the Lower
- 23 Truckee River, Independence Creek, Little Truckee River,
- 24 Prosser Creek, and downstream from the Truckee Meadows.
- These are of course all comparative values of

- 1 TROA when compared to the other three alternatives of no
- 2 action, current conditions or the local water supply.
- 3 When we looked at the fish in the rivers, in
- 4 the Truckee River and its affected tributaries, we found
- 5 no differences among the alternatives under wet median
- 6 mean hydrologic conditions.
- 7 However, when we looked at dry and extremely
- 8 dry hydrologic conditions, what we found was that TROA
- 9 was better able to provide the preferred flows better
- 10 than any of the other alternatives.
- 11 When I refer to the preferred flows, I want to
- 12 reference page 3-186 in the FEIS/EIR which is Water
- 13 Resources Control Board Exhibit 7.
- 14 California Fish and Game has provided
- 15 recommendations for minimum, preferred, and maximum
- 16 flows in various reaches of these tributaries in the
- 17 Truckee River in California, and the Nevada Division of
- 18 Wildlife has provided similar recommendations for the
- 19 Truckee River in Nevada.
- 20 Because the reservoirs can be operated as an
- 21 integrated system under TROA, this allows -- and has
- 22 provisions for water exchanges and credit water -- this
- 23 allows for the stored water to be released in periods
- 24 when its needed, in dry and extremely dry hydrologic
- 25 conditions. That's when we saw the benefits of TROA.

- 1 In lakes and reservoirs for fish, California
- 2 has recommended minimum storage thresholds for Prosser
- 3 Creek, Stampede, and Boca Reservoirs, and the Nevada
- 4 Division of Wildlife also has a conservation pool
- 5 recommendation for Lahontan Reservoir to minimize algal
- 6 bloom.
- 7 We found none of the alternatives made a
- 8 difference at Lahontan Reservoir.
- 9 However, we found that under TROA, the ability
- 10 to meet these recommended minimum threshold levels in
- 11 the California reservoirs range between 9 and 35 percent
- 12 better under TROA than when you compared to the other
- 13 alternatives, and that's of course because more water is
- 14 being stored in these upstream reservoirs.
- 15 Another aspect of reservoir storage that's
- 16 important to fish is the amount of shallow water fish
- 17 spawning habitat. We basically found that there were
- 18 really only small differences among the alternatives in
- 19 the ability to provide shallow water spawning habitat
- 20 for the fish in the reservoirs.
- 21 However, provisions of TROA that allow for
- 22 water exchange among the reservoirs will provide greater
- 23 flexibility to manage the fish spawning habitat in
- 24 Independence Lake in particular.
- In order to look at riparian habitat, riparian

- 1 habitats throughout the arid west, these riparian
- 2 habitats in the streams are subject to a great deal of
- 3 variability depending on the annual precipitation and
- 4 snowpack.
- 5 So the species of vegetation that comprise the
- 6 riparian habitat are extremely resilient. They are used
- 7 to going through periods of drought as well as periods
- 8 of flushes of water.
- 9 There's very little data upon which to look at
- 10 the tolerance ranges of these species, so we used the
- 11 minimum flow recommendations in California -- that
- 12 California and Nevada had developed for fish as a
- 13 surrogate, assuming that the minimum flow
- 14 recommendations for fish are a surrogate for the minimum
- 15 flow recommendations that you would need to at least
- 16 maintain riparian vegetation.
- 17 And downstream of the Truckee Meadows in
- 18 Nevada, we used the flow regime recommendations that
- 19 were developed by the Fish and Wildlife Service and the
- 20 Pyramid Lake Tribe in order to look at the effects on
- 21 riparian vegetation downstream from the Truckee Meadows.
- What we found, again, was the same type of
- 23 pattern wherein under wet and median hydrologic
- 24 conditions there was very little difference among the
- 25 various alternatives.

- 1 But again, when we got into the dry or
- 2 extremely dry hydrologic conditions, that's where we saw
- 3 the benefits of TROA to riparian vegetation.
- 4 And I'll refer you to Reclamation Exhibit 16
- 5 which is a graph. It's actually -- no. That's 18, I
- 6 believe. Is that 16? Okay. I must have the -- let's
- 7 look at 18 then.
- 8 That's the same -- well, 17? I'm sorry. That
- 9 is the one.
- 10 There's actually two graphs on this page, one
- 11 on the left that shows dry hydrologic conditions, and
- 12 one on the right that shows extremely dry hydrologic
- 13 conditions. This is the flow below Derby Dam.
- 14 What I would like to call your attention to is
- 15 that bright red line that's on both graphs.
- 16 Along the left axis of each of these graphs is
- 17 the mean monthly flow and cfs, and along the X axis or
- 18 the bottom axis is a period from April through October,
- 19 which is basically the period during the year when
- 20 riparian vegetation emerges from its winter dormancy,
- 21 puts on leaves, reproduces, photosynthesizes and stores
- 22 carbohydrates or energy in the form of carbohydrates in
- 23 its root system and then goes into dormancy as a result
- 24 of drought or cold temperatures in the fall.
- 25 And what I would like to point, out the salient

- 1 feature here on that red line, is that if you look to
- 2 the right in the first graph, the graph on the left
- 3 under dry hydrologic conditions, you'll see that the red
- 4 line which represents TROA actually provides better
- 5 flows than the other alternatives beginning in early to
- 6 mid August.
- 7 And that benefit extends all the way through
- 8 October, so there's more water in the river later in the
- 9 growing season which allows more energy to be stored and
- 10 provides for more quality riparian habitat.
- I think the difference, if you go to the second
- 12 graph, and you look at that same red line, you can see
- 13 that these -- the benefits are even more marked under
- 14 TROA under extremely dry hydrologic conditions.
- The red line actually provides the better flows
- 16 beginning as early as June, and that extends all the way
- 17 through the growing season.
- 18 So that's the basis for our determination that
- 19 TROA benefits riparian vegetation compared to the other
- 20 alternatives.
- We used riparian vegetation, by the way, as a
- 22 surrogate for riparian-associated wildlife. We assumed
- 23 that if you provide high quality riparian vegetation
- 24 that also provides high quality habitat for
- 25 riparian-associated species.

- 1 For threatened and endangered species, we
- 2 looked at both Cui-ui and the Lahontan Cutthroat Trout.
- For the Cui-ui, we used three measures to -- or
- 4 three criteria to assess the effects. The first was the
- 5 riparian habitat along the Lower Truckee River which we
- 6 just discussed, and I won't go into that any further.
- 7 The better quality riparian habitat along the
- 8 Lower Truckee River provides cooler temperatures in the
- 9 river and therefore benefits both Cui-ui and Lahontan
- 10 Cutthroat Trout.
- 11 We also for Cui-ui looked at the frequency of
- 12 achieving the optimal flow regimes from April through
- 13 June. And if I have got my exhibit numbers correct this
- 14 time, that would be 16. Yes.
- 15 What we found was that -- now this looks at the
- 16 spawning period for Cui-ui, April through June. What we
- 17 found -- TROA is the green bar on the right in all three
- 18 of these graphs. Along the bottom, you see April, May,
- 19 and June.
- We found that there is relatively little
- 21 difference in the ability to achieve these optimal flow
- 22 regimes, and that's flow regimes 1 and 2 that
- 23 Mr. Shahroody described earlier.
- They're roughly compatible among the
- 25 alternatives in April, but beginning in May and then in

- 1 June, you begin to see that TROA actually performs
- 2 better. We're better able to provide these optimal flow
- 3 regimes under TROA.
- 4 And in fact in June, you can see that the other
- 5 alternatives pretty much provide the opportunity 56 out
- 6 of 100 years whereas TROA would provide it in 63 out of
- 7 100 years. So a difference between 56 percent of the
- 8 time and 63 percent of the time.
- 9 The final criteria that we used for Cui-ui was
- 10 the average annual inflow to Pyramid Lake, and I believe
- 11 Mr. Strekal alluded to that in his testimony.
- 12 If you go to the remaining exhibit -- I believe
- 13 it would be 18 -- again, there's two graphs there. The
- 14 one on the left shows the average annual inflow at Nixon
- 15 which is near the terminus or just above the terminus of
- 16 the Truckee River.
- 17 You can see again the TROA is on the right.
- 18 And under wet hydrologic conditions or median hydrologic
- 19 conditions, you can see a slight benefit under wet
- 20 hydrologic conditions.
- They're more or less the same for the four
- 22 alternatives under median hydrologic conditions. But
- 23 the graph on the right -- and there's a reason there's
- 24 two graphs because the scale is considerably different
- 25 between wet years and the dry hydrologic conditions.

- 1 You can see that TROA considerably outperforms
- 2 the other alternatives in terms of the average annual
- 3 inflow to Pyramid Lake based on the gage at Nixon.
- 4 So we concluded that not only did TROA meet the
- 5 requirements of PL 101-618 in that it provided enhanced
- 6 spawning flows for the threatened and endangered
- 7 fisheries of the Lower Truckee River, but it also had
- 8 other benefits as well.
- 9 Finally, for Lahontan Cutthroat Trout, we used
- 10 two of the same criteria. We used this one, the average
- 11 annual inflow to Pyramid Lake, and the riparian habitat
- 12 that I discussed before, so I won't go over those again.
- 13 They accrue the same benefits from TROA.
- But we also looked at the spanning access to
- 15 Independence Creek. Independence Lake is the only
- 16 self-sustaining Lahontan Cutthroat Trout population in
- 17 the Truckee River Basin.
- But there's a delta at the back end where
- 19 Independence Creek flows into the reservoir in
- 20 Independence Lake, and that delta becomes impassable
- 21 whenever the storage falls below 7500 acre feet in
- 22 Independence Lake.
- We basically found that none of the
- 24 alternatives really made any difference there. However,
- 25 Section 5.B.7(a) of TROA -- I was just corrected by Mr.

- 1 Buchanan that it's section H -- actually allows the
- 2 California Department of Fish and Game to direct TMWA to
- 3 provide and maintain a fish channel through that delta
- 4 whenever the storage falls below 7500 acre feet, and
- 5 that provision of TROA would not be available under any
- 6 of the other alternatives.
- 7 That concludes my testimony.
- 8 CO-HEARING OFFICER DODUC: Thank you.
- 9 Mr. Palmer?
- 10 MR. PALMER: I want to just correct a couple --
- 11 we collated his exhibits incorrectly, to fix that.
- I could do that after Mr. Buchanan's done and
- 13 just ask Mr. Caicco to verify that the reference in his
- 14 written testimony has the -- if I do that after --
- 15 CO-HEARING OFFICER DODUC: That's fine.
- 16 MR. PALMER: -- Mr. Buchanan -- all right.
- 17 Okay.
- 18 --000--
- 19 CHESTER C. BUCHANAN
- 20 Called by APPLICANT AND PETITIONERS
- 21 DIRECT EXAMINATION BY MR. PALMER
- --000--
- MR. PALMER: Mr. Buchanan, you were here
- 24 yesterday; is that correct? You were in attendance
- 25 yesterday?

- 1 MR. BUCHANAN: Yes.
- 2 MR. PALMER: And you are still under oath
- 3 today?
- 4 MR. BUCHANAN: Yes.
- 5 MR. PALMER: And we've already concluded your
- 6 preliminaries, so I'll ask you go ahead and summarize
- 7 your testimony for this part.
- 8 MR. BUCHANAN: Okay.
- 9 TROA was originally intended and it was
- 10 negotiated to provide the environmental, water quality,
- 11 and public resource benefits as described by Mr. Caicco
- 12 and Mr. Strekal.
- I have listed in my written testimony many of
- 14 the TROA sections that will allow for these benefits. I
- 15 would like now at this time to summarize a few of these
- 16 sections.
- 17 Sections 5.B.6, 5.B.8, and 7.C.5 negotiated
- 18 specifically for the benefit of threatened and
- 19 endangered fishes of Pyramid Lake would allow well-timed
- 20 releases of water to enhance the spawning flows of these
- 21 fish in the Lower Truckee River.
- Exchanges under Section 5.B.7(h) would assist
- 23 potential Lahontan Cutthroat Trout spawners with access
- 24 to upstream spawning habitat in Independence Creek.
- 25 Improved maintenance of the minimum releases

- 1 from Lake Tahoe through Section 5.B.6(b) would assist
- 2 with established -- excuse me -- would assist with
- 3 reestablishing Lahontan Cutthroat Trout in other fishery
- 4 resources downstream from the lake in addition to
- 5 providing other recreational opportunities.
- 6 Section 9.C through the maintenance, and in
- 7 some cases enhancement, of minimum reservoir releases
- 8 would improve aquatic resources and recreational
- 9 opportunities downstream of the reservoirs.
- 10 Maintenance, and in some cases enhanced minimum
- 11 reservoir and fish pool, in Prosser Creek Reservoir
- 12 under section 5.B.6 would provide the intended benefits.
- Section 5 -- excuse me -- Section 7.C.6
- 14 provides for the establishment and management of Joint
- 15 Program Fish Credit Water that would benefit the
- 16 riparian environment and recreational opportunities in
- 17 California.
- And lastly, the timely release of water quality
- 19 water established under Section 7.E would benefit
- 20 Truckee River water quality through the Truckee River --
- 21 excuse me -- through the Reno/Sparks area downstream to
- 22 Pyramid Lake.
- That concludes my testimony.
- MR. PALMER: Thank you. I had one housekeeping
- 25 item for Mr. Buchanan.

- 1 As you were giving your testimony just now, if
- 2 you would look at page 5 of your written direct
- 3 testimony -- do you have that to look at?
- 4 MR. BUCHANAN: Yes.
- 5 MR. PALMER: And Section E, environmental
- 6 benefits 2.B, the second line from the bottom says "no
- 7 least." Is that -- somehow the English doesn't look
- 8 right.
- 9 MR. BUCHANAN: Which page are you on?
- MR. PALMER: 5.
- MR. BUCHANAN: Where?
- MR. PALMER: 2.B. do you see that section?
- MR. BUCHANAN: B.
- MR. PALMER: Yes.
- MR. BUCHANAN: Yes.
- MR. PALMER: Item 3 in that --
- MR. BUCHANAN: Oh. Ha-ha. Okay.
- 18 It says:
- 19 And 3) no "least" 5,000 acre feet --
- "Less than," supposed to be the correct words.
- 21 I thought you'd pick that up.
- 22 CO-HEARING OFFICER DODUC: A test to see if you
- 23 would.
- MR. PALMER: Thank you. That's all for Mr.
- 25 Buchanan.

- 1 Then Mr. Caicco, I just wanted to make sure we
- 2 had the correct references in your direct testimony, so
- 3 we can do that really quickly.
- 4 On page 5 of your written direct testimony, the
- 5 first full paragraph on that page just before item 6.
- 6 The very last line has a reference to Exhibit 16. I
- 7 understand you to say that should be Exhibit 17, the way
- 8 we've marked it. Is that --
- 9 MR. CAICCO: Yes.
- 10 MR. PALMER: So we'll make that correction.
- And then over on the next page at the top of
- 12 that first continued page, there's a reference to
- 13 Exhibit 17 which I believe you said is now 16?
- 14 Exhibit 16. We swapped them, apparently.
- MR. CAICCO: I think it was 18.
- MR. PALMER: We need to verify that.
- MR. CAICCO: Could we pull 18 up?
- 18 MR. PALMER: You see where I'm looking at in
- 19 your testimony?
- MR. CAICCO: The top of the page.
- 21 MR. PALMER: May and June, it says Exhibit USBR
- 22 17. I want to make sure we have the right reference.
- MR. CAICCO: I think you were correct.
- MR. PALMER: That should be 16?
- 25 CO-HEARING OFFICER DODUC: Larry, could you

- 1 pull up 16?
- 2 MR. PALMER: The sentence you have says we
- 3 found no differences among the alternatives' ability to
- 4 achieve flow regime 1. I think what we marked as
- 5 Exhibit 16, the title here is flow regime.
- 6 Should that be --
- 7 MR. CAICCO: Should be 16.
- 8 MR. PALMER: Okay. Thank you for clarifying
- 9 that.
- 10 And then that occurs again on page 8 of your
- 11 written direct testimony, the paragraph before the
- 12 conclusion. The very end of that paragraph, there's a
- 13 reference to Exhibit 16.
- I think because we swapped them, that should be
- 15 Exhibit 17. Says riparian vegetation, Exhibit 16. I
- 16 think you identified that Exhibit 17 deals with
- 17 riparian?
- MR. CAICCO: Yes.
- 19 MR. PALMER: So that should be Exhibit 17; is
- 20 that right?
- MR. CAICCO: Yes.
- MR. PALMER: Then lastly, I heard you during
- 23 your direct, you made a reference which occurs on page 7
- 24 regarding Independence Lake, second -- or the first full
- 25 paragraph on that page. You reference a TROA section in

- 1 your written direct testimony, 5.B.7(a). I believe you
- 2 made a correction to that?
- 3 MR. CAICCO: Yes. Based on Mr. Buchanan's
- 4 comment, I understand that to be 5.B.7(h), not (a).
- 5 MR. PALMER: If we could make that -- I'm not
- 6 aware of any other corrections. Do you have any other?
- 7 MR. CAICCO: No.
- 8 MR. PALMER: That's all on direct.
- 9 CO-HEARING OFFICER DODUC: Thank you,
- 10 Mr. Palmer. Chair Hoppin has a question.
- 11 CO-HEARING OFFICER HOPPIN: Mr. Lindsay, I was
- 12 making a note when Mr. Palmer was making corrections
- 13 there, but I believe Pyramid Lake inflow graph is USBR
- 14 Exhibit 18; is that correct? If you could rotate that
- 15 up.
- Mr. Caicco, I have to apologize to you. I'm
- 17 not the engineer before you here. Sometimes it takes a
- 18 little longer for a country boy to understand a graph
- 19 than other folks.
- But on the dry hydrologic conditions as shown
- 21 in this graph, could you explain to me why there's an
- 22 increased flow under no action as opposed to current
- 23 circumstance?
- 24 MR. CAICCO: I can't. I don't know the answer
- 25 to that.

- 1 CO-HEARING OFFICER HOPPIN: Is it
- 2 counter-intuitive to you -- unless I'm not understanding
- 3 what no action is -- why there would be a change in the
- 4 flow?
- 5 MR. CAICCO: Can I ask if anyone else in the
- 6 panel understands?
- 7 CO-HEARING OFFICER HOPPIN: Certainly. I just
- 8 want an answer. I'm not trying to put you on the spot.
- 9 CO-HEARING OFFICER DODUC: Perhaps someone
- 10 could explain the difference between current and no
- 11 action?
- 12 MR. BUCHANAN: I was just talking to
- 13 Mr. Strekal, and I'm speculating now.
- 14 It could be that the agricultural water rights
- 15 in the Truckee Division are assumed to be acquired for
- 16 M&I purposes, and you may be seeing that that water was
- 17 not being stored upstream. But again, I'm not sure.
- 18 CO-HEARING OFFICER HOPPIN: At some point
- 19 Mr. Palmer, if someone could give me an answer on this
- 20 because, you know, we as a board look at these graphs
- 21 and assume that the data in them is accurate -- and
- 22 maybe it is. I just need to know the explanation of the
- 23 difference here if we could. Just at some point.
- MR. PALMER: Yes. We could provide that. I
- 25 assume that's in our EIS because that's where this was

- 1 taken from. We'll identify that.
- 2 CO-HEARING OFFICER HOPPIN: Thank you.
- 3 Mr. Strekal, I have a question for you as well.
- 4 You talked about doing your analysis prior to TROA and
- 5 that there was a groundwater improvement under TROA
- 6 compared to the other options. Is that correct?
- 7 MR. STREKAL: For California?
- 8 CO-HEARING OFFICER HOPPIN: Yes.
- 9 MR. STREKAL: Yes, because there were
- 10 provisions in TROA that limit the distance from stream
- 11 where wells can be drilled.
- 12 CO-HEARING OFFICER HOPPIN: Okay. I'm going to
- 13 get to that.
- MR. STREKAL: Oh.
- 15 CO-HEARING OFFICER HOPPIN: When you looked at
- 16 that analysis, did it just consider current
- 17 circumstance? Or did it project into the future?
- 18 MR. STREKAL: I think we were looking at future
- 19 conditions.
- 20 CO-HEARING OFFICER HOPPIN: Okay.
- 21 MR. STREKAL: Likely development in the basin.
- 22 CO-HEARING OFFICER HOPPIN: Then given those
- 23 dynamics and the fact that in TROA there is a finite cap
- 24 in, I believe, the Truckee and Tahoe Basin -- correct me
- 25 if I'm wrong in my description there -- on a total

- 1 allowable amount of water between groundwater diversions
- 2 and surface water diversions with no possibility of
- 3 augmentation; is that correct?
- 4 MR. STREKAL: That is right.
- 5 CO-HEARING OFFICER HOPPIN: Then how in your
- 6 analysis could you say in the future that there would be
- 7 no effect on population, given the fact that we have
- 8 established a finite amount of water that can be
- 9 utilized in these basins?
- 10 MR. STREKAL: I think I said that it wasn't
- 11 growth-inducing.
- 12 CO-HEARING OFFICER HOPPIN: You said there
- 13 would be no effect on population.
- MR. STREKAL: I may have misstated by saying
- 15 that then.
- 16 We were -- one of the considerations in our
- 17 analysis was the growth-inducing aspect of various
- 18 alternatives, and our conclusion was that implementation
- 19 of TROA wouldn't be growth-inducing.
- 20 CO-HEARING OFFICER HOPPIN: Would be?
- MR. STREKAL: Would not be.
- 22 CO-HEARING OFFICER HOPPIN: That's correct. So
- 23 it would be growth-inhibiting, in other words?
- 24 MR. STREKAL: There would be a limitation.
- 25 CO-HEARING OFFICER HOPPIN: Thank you.

- 1 CO-HEARING OFFICER DODUC: Other questions?
- 2 SENIOR STAFF COUNSEL MAHANEY: Mr. Strekal,
- 3 does the TROA EIS/EIR identify any significant effects
- 4 requiring mitigation?
- 5 MR. STREKAL: No it does not.
- 6 SENIOR STAFF COUNSEL MAHANEY: Thank you.
- 7 Mr. Buchanan, in your testimony beginning on
- 8 page 5, the environmental benefits of TROA, you
- 9 identified a number of provisions dealing with fish
- 10 credit water to maintain preferred stream flows and that
- 11 sort of thing.
- 12 Could you briefly summarize which of those you
- 13 might consider to be mandatory provisions as opposed to
- 14 optional or nonmandatory provisions of TROA with respect
- 15 to fisheries and stream flow -- minimum instream flows?
- MR. BUCHANAN: Okay. I'm not sure I caught
- 17 everything you were saying, but you're basically asking
- 18 me, just to repeat, what are the mandatory provisions in
- 19 terms of maintaining instream flows and what are the
- 20 discretionary?
- 21 SENIOR STAFF COUNSEL MAHANEY: Correct.
- MR. BUCHANAN: For example, one of the main
- 23 things about TROA is trying to get some assurance that
- 24 minimum instream flows will be maintained.
- 25 For example, today there's controversy -- not

- 1 big controversy; disagreement -- on whether we have to
- 2 let 30 cfs out of Stampede to maintain minimum or less.
- 3 TROA will solidify that as 30 cfs so we have
- 4 the minimums.
- 5 Under TROA, there are opportunities under
- 6 certain circumstances in exchanging water amongst
- 7 reservoirs whereby we can enhance those minimum
- 8 releases.
- 9 Stampede, for example would go up to 45 cfs.
- 10 As long as we could protect people's water rights and
- 11 protect their water, then they are required to make
- 12 those exchanges to get those particular flows.
- Is that what you were looking for?
- 14 SENIOR STAFF COUNSEL MAHANEY: Well, you
- 15 describe them as opportunities.
- 16 But if those opportunities are not taken
- 17 advantage of, would the Board's approval of the change
- 18 petitions and applications have an impact on the fishery
- 19 and public trust resources?
- MR. BUCHANAN: A lot of the opportunities are
- 21 associated with fish credit water that is converted to
- 22 Joint Program Fish Credit Water.
- California has the option to use that water for
- 24 environmental purposes, for maintaining reservoir levels
- 25 for recreation, for maintaining instream flows.

- 1 When we ran the computer model, we only
- 2 utilized Joint Program Fish Credit Water for maintaining
- 3 minimum releases whenever they were needed, so they had
- 4 a lot more flexibility.
- 5 It depends upon how California wants to manage
- 6 that water in the future.
- 7 In addition, we did not include in the analysis
- 8 any California environmental water that they may
- 9 purchase or what we call additional environmental credit
- 10 water that may be purchased because no proposal was on
- 11 the table at that time.
- 12 TROA does allow California to acquire these
- 13 waters and utilize them for the benefit of the
- 14 environment, so there's a lot of opportunities.
- And that's why I use the word "opportunity"
- 16 because I can't say exactly how they will manage them.
- 17 They do have guidelines that they will issue under
- 18 Article 9 which provides the targets, things they would
- 19 like to see.
- 20 And the administrator, one of his
- 21 responsibilities when he is scheduling water, managing
- 22 water, is he must look at the environmental impacts.
- 23 And that's in Section 2.A. 2.A.1, I think it is, the
- 24 last sentence.
- 25 Did that help?

- 1 SENIOR STAFF COUNSEL MAHANEY: Yeah. Thank
- 2 you.
- 3 CO-HEARING OFFICER HOPPIN: Mr. Buchanan, just
- 4 a point of clarity for me.
- 5 If California were to purchase environmental
- 6 water in the system, there would be no consumptive
- 7 purpose for it so it would probably just deal with
- 8 instream flows within California and in fact would be
- 9 surrendered and could potentially help meet the
- 10 Floriston rate.
- Is that not correct? Or am I missing the point
- 12 there?
- MR. BUCHANAN: There are a couple of provisions
- 14 in TROA.
- One states the limits that these waters must be
- 16 used for environmental purposes, the environmental
- 17 waters that California may purchase in the future.
- If my memory is correctly, if they purchase the
- 19 water in California and it can no longer be retained in
- 20 storage and it flows downstream, then it becomes
- 21 available in Nevada to meet other existing water rights.
- 22 If the water right was purchased in Nevada by
- 23 California, and they utilize it in California, and then
- 24 it could no longer be stored --
- 25 CO-HEARING OFFICER HOPPIN: How the hell would

- 1 you get it there?
- MR. BUCHANAN: Through exchanges.
- 3 CO-HEARING OFFICER HOPPIN: Okay.
- 4 MR. BUCHANAN: They can credit store it.
- 5 CO-HEARING OFFICER HOPPIN: All right.
- 6 MR. BUCHANAN: If it could no longer be stored,
- 7 and it flowed into Pyramid Lake -- if my memory is
- 8 correctly -- it would flow through Pyramid Lake then.
- 9 It basically becomes the --
- 10 CO-HEARING OFFICER HOPPIN: But if it was
- 11 purchased in California and essentially surrendered
- 12 through nonconsumption, it could not be considered to be
- 13 part of the Floriston rate. It would be available to
- 14 other junior water right holders; is that correct?
- MR. BUCHANAN: Yes.
- 16 CO-HEARING OFFICER HOPPIN: Thank you.
- 17 MR. BUCHANAN: I can give you those section
- 18 numbers later on.
- 19 CO-HEARING OFFICER HOPPIN: I just wanted to
- 20 understand the principle.
- But here in California when we talk about
- 22 environmental water, we usually just blow it out the
- 23 Golden Gate Bridge and turn it into saltwater. So
- 24 you're talking about continued beneficial use here which
- 25 is unique.

```
1
             MR. BUCHANAN: This one goes the other way.
 2
             CO-HEARING OFFICER HOPPIN: It gets salty after
 3
    it gets to Nevada.
 4
             MR. BUCHANAN: You got it.
 5
             CO-HEARING OFFICER DODUC: Any other questions?
             So let's take a lunch break so the poor
 6
    gentleman in the second table there can get some coffee
7
 8
    or take a nap. I was afraid he's about to fall out of
    his chair.
             Let's come back at 12:30. We'll resume then
10
11
    with cross-examination by Mr. Van Zandt.
12
             Thank you.
13
             (Lunch recess)
14
15
16
17
18
19
20
21
22
23
24
```

## AFTERNOON SESSION 1 --000--2 3 CO-HEARING OFFICER DODUC: Okay. Welcome back everyone. Everyone had a good lunch, got coffee? 4 5 Mr. Van Zandt, when you're ready, please begin 6 your cross. 7 MR. VAN ZANDT: Thank you. --000--8 9 CROSS-EXAMINATION BY MR. VAN ZANDT FOR TRUCKEE-CARSON IRRIGATION DISTRICT 10 11 and CHURCHILL COUNTY 12 --000--13 MR. VAN ZANDT: Mr. Strekal. 14 MR. STREKAL: Yes. MR. VAN ZANDT: Good afternoon. 15 MR. STREKAL: Good afternoon. 16 MR. VAN ZANDT: So you were testifying about 17 18 water quality, and you provided some statements with 19 regard to groundwater effects on the shallow aquifer. 20 Is that the way I captured that? 21 MR. STREKAL: Yes. 22 MR. VAN ZANDT: Okay. Were you analyzing, in 23 doing that, effects on community water supply?

MR. STREKAL: We didn't look at a community

water supply. We didn't have a community water supply

24

25

- 1 in mind.
- 2 MR. VAN ZANDT: So you did not look at the
- 3 community water supply, for example, in the city of
- 4 Fernley as it might be affected by the exchange
- 5 applications and petitions?
- 6 MR. STREKAL: Not, specifically no.
- 7 MR. VAN ZANDT: What about the water supply in
- 8 the Lahontan Valley? Do any analysis of the potential
- 9 impacts to the community water supply there?
- 10 MR. STREKAL: We assumed the community -- by
- 11 community water supply, you meant individual wells. We
- 12 didn't do any analysis on individual wells.
- MR. VAN ZANDT: Would that include the City of
- 14 Fallon's water supply, which is a municipal water
- 15 supply, right?
- 16 MR. STREKAL: We didn't look at that
- 17 specifically.
- MR. VAN ZANDT: And you testified that the
- 19 expectation that you have from implementing TROA is
- 20 there will be higher elevations in storage in the
- 21 reservoirs. That's the result, right?
- MR. STREKAL: Overall, yes.
- MR. VAN ZANDT: Okay.
- MR. STREKAL: In the upper basin.
- 25 MR. VAN ZANDT: That means less water flowing

- 1 through the rivers, right?
- 2 MR. STREKAL: No, the flows in the river at
- 3 times would be higher as well because credit water could
- 4 be released to satisfy demands for water quality, for
- 5 drought protection, or for flows to Pyramid Lake.
- 6 So it would depend really on the time of year
- 7 you're looking at.
- 8 But I think in the analysis that Mr. Caicco
- 9 showed that the flow to Pyramid Lake at the terminus of
- 10 the river would be generally greater as a result of
- 11 TROA.
- 12 MR. VAN ZANDT: I was thinking that was the --
- 13 if you have higher elevations in storage, you're
- 14 retaining more water in storage in a particular year,
- 15 the intent is to carry that over to the next year where
- 16 it may be released or it may be carried over for yet
- 17 another year, right?
- 18 MR. STREKAL: It would depend on what the owner
- 19 of that water cared to do.
- 20 MR. VAN ZANDT: Now, the analysis that was
- 21 conducted in the Environmental Impact
- 22 Statement/Environmental Impact Report, that's what's
- 23 supporting your testimony?
- MR. STREKAL: Yes.
- MR. VAN ZANDT: And that analysis was supported

- 1 by a computer model; isn't that right?
- 2 MR. STREKAL: There was a model that provided
- 3 some of the information we used, yes.
- 4 MR. VAN ZANDT: That's the Truckee River
- 5 Operating Model?
- 6 MR. STREKAL: Yes.
- 7 MR. VAN ZANDT: And you had indicated I think
- 8 that for the Newlands Project there was going to be less
- 9 water under the Truckee River Operating Agreement for
- 10 the Newlands Project?
- 11 MR. STREKAL: But not specifically. There
- 12 would be less under operations under TROA because water
- 13 users that had more senior water rights would be able to
- 14 store that water upstream, and at least they could store
- 15 the consumptive use portion.
- MR. VAN ZANDT: That would be part of the water
- 17 that is going to be in either Boca or Stampede that
- 18 could be exchanged under the applications that the Board
- 19 is contemplating here?
- 20 MR. STREKAL: Right, that would be part of the
- 21 credit water for exchange among all the reservoirs.
- MR. VAN ZANDT: Can we pull up SWRCB No. 7,
- 23 which I believe is EIS/EIR 3-107, please. State Water
- 24 Board SWRCB.
- 25 If Mr. Lindsay could enlarge that, that would

- 1 be great. Fantastic.
- 2 So we looked at this figure 3.23 yesterday,
- 3 3-107 of SWRCB Exhibit 7. And my question is: You had
- 4 indicated in your testimony that over the long-term
- 5 there would be very little effect on the water supply
- 6 for Newlands Project. That was what TROA concluded,
- 7 right?
- 8 MR. STREKAL: That is correct.
- 9 MR. VAN ZANDT: And that's from the Truckee
- 10 River Operating Model analysis?
- 11 MR. STREKAL: Information produced by that
- 12 model was used to make that conclusion, yeah.
- MR. VAN ZANDT: All right. And do you have a
- 14 recollection of what the average reduction over the
- 15 95-year history that was looked at in the model for the
- 16 Newlands Project was as a result of TROA?
- 17 MR. STREKAL: Reduction or difference?
- MR. VAN ZANDT: Difference.
- 19 MR. STREKAL: I think I said earlier that -- I
- 20 may not have said it, but I recall it was 40 acre feet a
- 21 year for the hundred year average.
- 22 MR. VAN ZANDT: And that was the --
- MR. STREKAL: That was the difference between
- 24 TROA and no action.
- MR. VAN ZANDT: And of course over 95 years of

- 1 history, you had some significantly high water years?
- 2 MR. STREKAL: Very high water years and some
- 3 very low water years.
- 4 MR. VAN ZANDT: So for example, in 1983 there
- 5 was a -- more than a million acre feet of water flowing
- 6 in the Truckee River, right?
- 7 MR. STREKAL: I'm sure.
- 8 MR. VAN ZANDT: And the chart, figure 3.23,
- 9 depicting the nine driest years of the record --
- 10 isn't that what it's doing?
- 11 MR. STREKAL: Well, the -- yeah. That would be
- 12 correct.
- MR. VAN ZANDT: In those nine dry years, it
- 14 does indicate that some of the shortages in the Carson
- 15 Division would be much more than 40 acre feet, right?
- MR. STREKAL: Yes.
- 17 MR. VAN ZANDT: Okay. And when you average
- 18 these out, though, it kind of diminishes the impact of a
- 19 shortage, right?
- 20 MR. STREKAL: Sure. I also said there was a
- 21 year where under TROA it was about 7,000 acre feet
- 22 greater than no action. I also said there was a year
- 23 that no action was 5,000 acre feet greater than TROA.
- 24 And then I said other years were fairly similar.
- 25 So there is variation, certainly.

- 1 MR. VAN ZANDT: And when you're talking about,
- 2 you know, a farmer who's relying on a water supply for
- 3 an irrigation, and in that particular year he doesn't
- 4 get his last irrigation or maybe even his last two
- 5 irrigations, would you agree that that kind of a
- 6 shortage is a pretty severe impact for that particular
- 7 farmer, isn't it?
- 8 MR. STREKAL: It can be, yes.
- 9 MR. VAN ZANDT: We see a shortage in figure
- 10 3.23 approaching more than 20,000 acre feet. That's
- 11 almost one irrigation delivery for the Carson Division,
- 12 isn't it?
- MR. STREKAL: Well, what we see in that figure
- 14 are several things.
- 15 First of all, we see that current conditions
- 16 produce shortages in nine years. Under future
- 17 conditions, shortages occur in those same nine years.
- So it's not a function necessarily of any type
- 19 of operation. It's a function of the hydrology that
- 20 year.
- 21 Even without TROA, you have shortages. So
- 22 that's one thing that you have to look at with that.
- 23 And the other thing that you have to consider
- 24 with that also is that OCAP is still controlling
- 25 operation of the Newlands Project and diversions from

- 1 the Truckee River. And OCAP considers Lahontan storage,
- 2 considers inflow from the Carson River, considers
- 3 availability of water from the Truckee River, and also
- 4 what the demand is going to be both seasonally and
- 5 monthly.
- 6 So a lot of factors to consider when you look
- 7 at a table like this or a figure like this.
- 8 MR. VAN ZANDT: Well, the current condition
- 9 obviously shows a shortage, and that could be as a
- 10 result of the drought situation, or it could be also
- 11 induced to some extent by OCAP, right?
- MR. STREKAL: I don't think OCAP induces
- 13 anything. OCAP establishes the rules for operation.
- 14 MR. VAN ZANDT: You don't have an understanding
- 15 that OCAP might cause an additional seven years of
- 16 shortages in the Newlands Project over a hundred-year
- 17 period?
- MR. STREKAL: Compared to what?
- MR. VAN ZANDT: Pardon me?
- MR. STREKAL: Compared to what?
- 21 MR. VAN ZANDT: Compared to if you didn't have
- 22 OCAP.
- MR. STREKAL: Well, I don't -- the only
- 24 difference, what I'm seeing you're saying, is you either
- 25 have regulations that control the operation of the

- 1 project or you have no regulation, which was prior to
- 2 1973 or 1967.
- 3 MR. VAN ZANDT: That wasn't my question.
- 4 My question was: OCAP already tilts the
- 5 ability of the project to give a full water supply
- 6 toward shortages in about seven years. And now TROA,
- 7 when you compare current conditions to the TROA bar, it
- 8 exacerbates those shortages, doesn't it?
- 9 MR. PALMER: Object to the question.
- I don't think there's any foundation for OCAP
- 11 providing shortages in the number of years he's
- 12 suggesting.
- So perhaps if he could lay a foundation to
- 14 provide the evidence that OCAP does in fact do that so
- 15 the witness can evaluate that in his answer.
- 16 CO-HEARING OFFICER DODUC: Mr. Van Zandt.
- 17 MR. VAN ZANDT: Well, I don't think that's
- 18 necessary for the answer. I'm just providing as
- 19 Mr. Strekal just testified.
- 20 He says that both climatological conditions and
- 21 the OCAP is embedded in current conditions so it's
- 22 showing a shortage. So what I'm saying is just compare
- 23 that to the TROA bar. I don't think we need to go much
- 24 further.
- 25 CO-HEARING OFFICER DODUC: Please answer the

- 1 question to the best of your abilities.
- 2 MR. STREKAL: I think you need to ask it to me
- 3 again, please.
- 4 MR. VAN ZANDT: Well, I'm just saying whatever
- 5 is embedded in the current conditions, whether it's
- 6 climatological, it's OCAP, whatever it is, there is a
- 7 shortage difference depicted on figure 3.23 between
- 8 current conditions and TROA, correct?
- 9 MR. STREKAL: There are shortages depicted
- 10 there, and there is a difference between current
- 11 conditions, which assumes a certain demand for water in
- 12 the basin, and future conditions, which assumes a
- 13 different demand for water in the future.
- 14 MR. VAN ZANDT: I don't see the term "future
- 15 conditions" so I'm not sure what you are referring to.
- 16 But maybe you can educate the Board on how can
- 17 you have a no-action alternative that does not reflect
- 18 current conditions?
- MR. STREKAL: Well, current conditions does
- 20 reflect no action. And the no-action alternative that
- 21 we've identified on the table and in the document
- 22 assumes water demand in the year 2033.
- 23 And in the year 2033, that's the point in time
- 24 at which the demand for water in the Truckee Meadows is
- 25 119,000 acre feet.

- 1 So we -- the future condition is looking at
- 2 what we would call full build-out or full development of
- 3 available water rights that Truckee Meadows area
- 4 currently has.
- 5 So that's why there's a distinction between
- 6 current conditions.
- 7 In fact, California had asked us to include
- 8 current conditions in the analysis in addition to no
- 9 action. So if there's some confusion with that, it's
- 10 the difference of the intervening years.
- 11 Current conditions here was the year 2002. No
- 12 Action, Local Water Supply Alternative, and TROA were
- 13 all projected to the year 2,033.
- 14 MR. VAN ZANDT: So when the Board is
- 15 contemplating the applications that it has before it now
- 16 in the petition, it -- when it's looking for baseline
- 17 information to compare it to today, they should look at
- 18 current conditions, right?
- MR. STREKAL: Well, you have to realize also
- 20 that current conditions, as displayed in the document,
- 21 is year 2002 which was the best available information at
- 22 the time we were preparing the document, and it's now
- 23 2010.
- 24 But that does provide a baseline. But in terms
- of an across-the-board comparison, the future condition,

- 1 full build-out, full utilization of the water rights
- 2 provides a standard against which to compare the
- 3 alternatives.
- 4 Because we don't control the demographics. We
- 5 can only control the alternatives.
- 6 MR. VAN ZANDT: There was some mention, I
- 7 think, in response to a question that Chairman Hoppin
- 8 asked about that difference between no action and TROA,
- 9 and isn't it true that there is an assumption that's
- 10 built into I believe it's the no-action alternative that
- 11 the Carson Division of the Newlands Project irrigation
- 12 water rights will have been completely retired?
- 13 MR. STREKAL: Truckee Division.
- 14 MR. VAN ZANDT: Truckee Division.
- MR. STREKAL: That's one of the assumptions we
- 16 looked at. And we based that on the trend in water
- 17 rights acquisitions in the basin, at least up to the
- 18 time we did our analysis, and also assuming that the
- 19 City of Fernley would be looking to develop a firm water
- 20 supply using water rights rather than depending on
- 21 groundwater.
- MR. VAN ZANDT: Isn't it true, Mr. Strekal,
- 23 that the City of Fernley has purchased or has dedicated
- 24 to it a significant amount of the water rights that have
- 25 been retired from agricultural uses in the city of

- 1 Fernley area?
- 2 MR. STREKAL: I think the reason the City of
- 3 Fernley was a signatory to TROA, it intends to use
- 4 former agricultural water rights as part of a water
- 5 supply and the basis for creating credit water.
- 6 MR. VAN ZANDT: So that water is not actually
- 7 being retired; it's just having its use converted,
- 8 right?
- 9 MR. STREKAL: Well, it's retired from the
- 10 Truckee Division, and it has then a different schedule
- 11 of use.
- But the water isn't being applied to the land,
- 13 and so operations for Newlands Project will necessarily
- 14 be different because of different timing to satisfy that
- 15 demand and also perhaps a different delivery system as
- 16 well.
- 17 MR. VAN ZANDT: And was it quantified in the
- 18 EIS/EIR exactly what the City of Fernley demand was
- 19 going to be in 2033? Would it completely consume the
- 20 water that they're converting to M&I?
- MR. STREKAL: At this point, I don't remember.
- MR. VAN ZANDT: I was interested in your
- 23 definition of shortages. We had looked in TROA to see
- 24 if there was a definition of shortage that looked like
- 25 that.

- 1 What's the source of your definition of
- 2 shortage?
- 3 MR. STREKAL: I made it up based on my
- 4 understanding of operations and how we view and
- 5 characterize deliveries and operations in the basin and
- 6 with particular reference to Newlands Project.
- 7 Shortage, to me, has a very negative
- 8 connotation. It implies that we're doing something
- 9 intentionally to deprive someone of a resource.
- 10 The definition that I developed identifies that
- 11 it's really a function of hydrology and recognizes that
- 12 water rights are being served in the basin according to
- 13 priority.
- 14 MR. VAN ZANDT: So I'm not sure I captured your
- 15 definition correctly, but you indicated it was -- it
- 16 means less than a full water supply which when you apply
- 17 to the Newlands Project includes the Carson River
- 18 discharge and the Truckee River diversions. Is that
- 19 right?
- MR. STREKAL: Right.
- 21 MR. VAN ZANDT: And that is without regard to
- 22 any shortage that may occur to an individual farmer as a
- 23 result of less than a full water supply?
- 24 MR. STREKAL: Well, you also have to realize
- 25 that full water supply is a moving target that changes

- 1 from year to year based on what Reclamation has
- 2 determined the acreage to be and also decisions that the
- 3 irrigation district makes relative to operations in any
- 4 given year.
- 5 The District decides whether or not it's a 100
- 6 percent supply year or somewhat less. It varies year to
- 7 year.
- MR. VAN ZANDT: So are you saying, for example,
- 9 if TCID, Truckee-Carson Irrigation District, sets the
- 10 allocations in the Carson Division at 80 percent, that
- 11 that is not a shortage?
- MR. STREKAL: In terms of actual -- compared to
- 13 100 percent water year, I would say yes, that is a
- 14 shortage compared to 100 percent.
- But that's not attributed to any specific
- 16 action. It's just a function of the hydrology for that
- 17 year.
- MR. VAN ZANDT: If we're talking about, as you
- 19 testified, that TROA will cause, in your words, a small
- 20 amount of shortages, reduced water supply, to the
- 21 Newlands Project, if that is in fact true, and it's more
- 22 along the lines of our figure 3.23 here in a given year,
- 23 would you consider that to be a shortage that is --
- 24 should be considered by the Board here in its
- 25 deliberations on whether there is an impact to the water

- 1 right owners in the Newlands Project?
- 2 MR. STREKAL: I think the Board would have to
- 3 look at the priority of rights and how they're served in
- 4 any given year, that there are senior rights that are
- 5 exercised and that results in this reduced supply.
- It's not TROA, per se, that's doing it. It's
- 7 really the individual water users exercising their
- 8 right.
- 9 MR. VAN ZANDT: Now when you look at figure
- 10 3.23, because this is the only evidence we have in front
- 11 of us right now about shortages, are you saying that
- 12 everything that we see on this charge is attributable to
- 13 the exercise of senior rights?
- 14 MR. STREKAL: I think what we're seeing here is
- 15 in part an exercise of water rights. It's also a
- 16 function of hydrology.
- And if you look at figure 3.22, which we don't
- 18 have in front of us, for the Truckee Division -- I don't
- 19 know if the Board would like to look at that or not.
- 20 Thank you.
- The demand in the Truckee Division is satisfied
- 22 solely from the Truckee River. And this shows you that
- 23 even without TROA, with water being served directly,
- 24 that there are years of shortages as I've defined -- or
- 25 anyone -- less than 100 percent supply available to

- 1 satisfy the exercise of the rights, irrespective of
- 2 TROA, that there just isn't enough water in the basin
- 3 because there are uses for that water upstream.
- 4 MR. VAN ZANDT: And there was no analysis that
- 5 was done on the Truckee Division under either no action,
- 6 local water supply, or TROA, right?
- 7 MR. STREKAL: Well, we assumed that all of the
- 8 water rights had been acquired and had been transferred
- 9 for other uses, so there was no direct diversion from
- 10 the Truckee Canal to serve those rights.
- 11 MR. VAN ZANDT: And all the shortage analysis
- 12 that you're talking about, this all comes from the
- 13 Truckee River Operating Model, right?
- 14 MR. STREKAL: The results came from the
- 15 application of that model, yes.
- MR. VAN ZANDT: You indicated that hydropower
- 17 production at -- in the Newlands Project would also be
- 18 slightly less under TROA?
- 19 MR. STREKAL: I did.
- 20 MR. VAN ZANDT: And you indicated it would not
- 21 affect the profitability of the hydropower and expected
- 22 the reduction to be about one percent; is that right?
- MR. STREKAL: I think it said less than one
- 24 percent, but yes.
- MR. VAN ZANDT: Now, you understand there are

- 1 three separate power plants in the Newlands Project?
- 2 MR. STREKAL: I do, and they're all
- 3 run-of-the-river operations.
- 4 MR. VAN ZANDT: Technically one is not. One's
- 5 on the canal, but -- two are at Lahontan, and one at the
- 6 26 foot drop.
- 7 MR. STREKAL: Well, I meant it was subject to
- 8 operations. There's no water right for that power
- 9 production. That's what I meant by run of the river.
- 10 MR. VAN ZANDT: And the Truckee-Carson
- 11 Irrigation District you understand is an irrigation
- 12 district formed under the laws of the State of Nevada?
- 13 MR. STREKAL: Yes.
- MR. VAN ZANDT: They're not a company.
- MR. STREKAL: That's right.
- 16 MR. VAN ZANDT: So I was a little mesmerized by
- 17 the term profitability. How does -- how do you look at
- 18 TCID generating power for profit?
- MR. STREKAL: Well, I'm not an economist, and I
- 20 didn't use the term profitability. That's the term
- 21 that's in the document.
- But I think the assumption here is that the
- 23 District does generate revenues from power generation
- 24 and at least a portion of those revenues are used to
- 25 support the activities of the District.

- 1 MR. VAN ZANDT: Again, if you indicated that
- 2 there would be slightly less hydropower generation as we
- 3 look across that 95-year record. But in any individual
- 4 year, that generation could go down significantly or it
- 5 could go up significantly, right?
- 6 MR. STREKAL: Well, that's right.
- 7 MR. VAN ZANDT: And in the years it goes down,
- 8 it's not profitable, right?
- 9 MR. STREKAL: I guess not.
- 10 MR. VAN ZANDT: That's all I have, Mr. Strekal.
- 11 Mr. Caicco.
- MR. CAICCO: Yes, sir.
- MR. VAN ZANDT: How are you?
- MR. CAICCO: Just fine.
- MR. VAN ZANDT: I think it was your testimony
- 16 primarily that TROA will have significant beneficial
- 17 effects on fish and wildlife, the rivers, riparian
- 18 areas, and other environmental resources, right?
- 19 MR. CAICCO: It will have beneficial effects.
- 20 MR. VAN ZANDT: And in the course of the study
- 21 that was done, you indicated that there -- the
- 22 Environmental Impact Statement did in fact look at
- 23 Lahontan Reservoir as part of its scope, right?
- MR. CAICCO: Yes, sir.
- MR. VAN ZANDT: And I think you testified that,

- 1 Fish and Wildlife's perspective, it didn't appear that
- 2 there was going to be any significant impacts on fish or
- 3 wildlife in Lahontan, right?
- 4 MR. CAICCO: We did not look at all of those
- 5 things at Lahontan Reservoir.
- 6 We looked at the fish. We looked at the island
- 7 nesting birds. And we looked at the fish through that
- 8 minimum storage or conservation pool that was
- 9 recommended.
- 10 MR. VAN ZANDT: The Lahontan is -- does contain
- 11 some protected species, doesn't it? Some birds?
- MR. CAICCO: I don't think there's anything
- 13 protected there. Well, bald eagles, I believe occur
- 14 there.
- MR. VAN ZANDT: No falcons?
- MR. CAICCO: Not to my knowledge.
- 17 MR. VAN ZANDT: Okav. And also in the
- 18 boundaries -- within the boundaries of the Newlands
- 19 Project, there's the Stillwater National Wildlife
- 20 Refuge?
- 21 MR. CAICCO: Yes, sir.
- MR. VAN ZANDT: And the Nevada Department of
- 23 Wildlife has a refuge at Carson Lake and Pasture?
- MR. CAICCO: That's correct.
- 25 MR. VAN ZANDT: Okay. And did the EIS/EIR look

- 1 at the potential impact of TROA on those resources?
- 2 MR. CAICCO: No, we did not.
- 3 MR. VAN ZANDT: Was there some particular
- 4 reason that they were excluded?
- 5 MR. CAICCO: It was based on the previous
- 6 discussion of Mr. Strekal about shortages, just our
- 7 assumption that those did not constitute a significant
- 8 impact.
- 9 MR. VAN ZANDT: Now you -- well, are you aware,
- 10 Mr. Caicco, that the Stillwater National Wildlife Refuge
- 11 receives an amount of water from the Newlands Project
- 12 that is called drain water?
- MR. CAICCO: Yes. I don't know much about
- 14 that. I know they also have water rights.
- MR. VAN ZANDT: So when there are shortages
- 16 that occur in a given year, maybe even a given month, in
- 17 the Carson Division of the Newlands Project, wouldn't it
- 18 be fair to say that Stillwater National Wildlife Refuge
- 19 is going to be sharing in the shortages, right?
- MR. CAICCO: Yes, they would be sharing. I
- 21 think it's quite -- waterfowl production is quite a
- 22 different thing than crop production.
- MR. VAN ZANDT: But isn't the Stillwater
- 24 National Wildlife Refuge essentially irrigating wetlands
- 25 to provide crops for waterfowl?

- 1 MR. CAICCO: Yes, as I understand it, they have
- 2 about 150,000 acres of wetlands between Stillwater and
- 3 Fallon National Wildlife Refuge.
- 4 MR. VAN ZANDT: The charts that you used as
- 5 Exhibit 16, 17, and 18, I believe?
- 6 MR. CAICCO: Yes.
- 7 MR. VAN ZANDT: This is USBR 16, 17. Were you
- 8 actually involved in the EIS/EIR process, Mr. Caicco?
- 9 MR. CAICCO: Yes, beginning in 2003.
- 10 MR. VAN ZANDT: So looking at the charts -- you
- 11 can't see it. If we could zoom out a little bit.
- 12 Take note of the annotation on the bottom of --
- 13 this is Exhibit 16. USBR 16. It says based on TROA
- 14 final EIS/EIR, Table 3.75, page 3-270.
- I take from that that this information is
- 16 coming from the Environmental Impact Statement/Impact
- 17 Report?
- MR. CAICCO: Yes, that's correct.
- 19 MR. VAN ZANDT: And was this information also
- 20 derived from the Truckee River Operating Model?
- MR. CAICCO: Yes.
- MR. VAN ZANDT: And would the same be true if
- 23 we looked at 17 and 18?
- MR. CAICCO: Yes.
- MR. VAN ZANDT: Can we look at 18, Mr. Lindsay?

- 1 Chairman Hoppin I think had a question that
- 2 maybe you couldn't answer, but maybe now that
- 3 Mr. Strekal has described a little bit what goes on
- 4 between current and no action and local water supply and
- 5 TROA, is it fair to say that the differences we're
- 6 seeing here between current conditions and no action,
- 7 for example, you know, the dry hydrologic conditions,
- 8 that that's maybe a function of some of those
- 9 assumptions that were being made for the year 2033?
- MR. CAICCO: Yes, that's correct.
- 11 MR. VAN ZANDT: Including the complete
- 12 retirement of irrigation rights in the Carson Division?
- MR. CAICCO: That and the provision of water
- 14 quality water.
- MR. PALMER: Just a correction. Did you say
- 16 Carson Division? Did you mean that?
- 17 MR. VAN ZANDT: I meant Truckee Division; I'm
- 18 sorry.
- 19 MR. CAICCO: The page which explains that in
- 20 EIS is page 3-101.
- 21 And it's under 2.B.1. First sentence specifies
- 22 that those differences in dry hydrologic conditions are
- 23 because of water quality water releases.
- MR. VAN ZANDT: Okay. Thank you.
- That's all the questions I have for Mr. Caicco.

- 1 Mr. Buchanan. I just wanted to confirm with
- 2 you the basis for the statements that you made with
- 3 regard to public trust and fisheries.
- 4 That's also based on the Truckee River
- 5 Operating Model analysis, is it not?
- 6 MR. BUCHANAN: Based on the results we're
- 7 seeing in the EIS, and also based on the rationale for
- 8 negotiating some of the provisions in TROA itself such
- 9 as 7 -- what is it -- 7.C.5 where PL 101-618
- 10 specifically says we have to enhance conditions for
- 11 Cui-ui, and that was one of the reasons that was
- 12 negotiated.
- MR. VAN ZANDT: Okay. So that particular
- 14 parameter, for example, would have been included as an
- input to the model, to be some parameter set for that?
- 16 MR. BUCHANAN: I would assume so.
- I didn't run the model, didn't put input into
- 18 it. But I would assume that would be the type of
- 19 information that would be input.
- MR. VAN ZANDT: Okay.
- 21 That's all the questions I have. Thanks.
- 22 CO-HEARING OFFICER DODUC: Thank you, Mr. Van
- 23 Zandt.
- Mr. Mackedon?
- MR. MACKEDON: Thank you. I have questions for

- 1 Mr. Strekal.
- 2 --000--
- 3 CROSS-EXAMINATION BY MR. MACKEDON
- 4 FOR CITY OF FALLON
- 5 ---00--
- 6 MR. MACKEDON: Mr. Strekal, does the final
- 7 Environmental Impact Report assume that water
- 8 appropriated by the Nevada State Engineer's
- 9 unappropriated water decisions, Applications 48061 and
- 10 48494, is stored or to be stored or has a storage route?
- 11 MR. STREKAL: I can tell you that the analysis
- 12 assumes that the items that are being considered by this
- 13 Board were considered to be implemented.
- 14 As Mr. Parr said, we couldn't really separate
- 15 the applications from TROA itself.
- MR. MACKEDON: The applications I'm referring
- 17 to were applications made by the -- or filed by the
- 18 Pyramid Lake Indian Tribe for the remaining waters of
- 19 the Truckee River. You understand that?
- MR. STREKAL: Right. In fact, that's one of
- 21 the requirements for TROA is that that water -- the
- 22 unappropriated water has to accrue to the Tribe, let's
- 23 say, in order for this agreement to be functional.
- 24 MR. MACKEDON: It says nothing about storage,
- 25 if you recall. If you -- you're referring to the Act.

- 1 MR. STREKAL: Right, it -- no, it --
- 2 MR. MACKEDON: It doesn't --
- 3 MR. STREKAL: -- doesn't mention storage.
- 4 MR. MACKEDON: -- make any reference to
- 5 storage.
- 6 MR. STREKAL: It just says the
- 7 unappropriated --
- 8 MR. MACKEDON: And the --
- 9 MR. STREKAL: -- water.
- 10 MR. MACKEDON: -- applications to the State
- 11 Engineer made no reference to storage. You are aware of
- 12 that.
- MR. STREKAL: Well, that's what I heard in
- 14 previous testimony.
- MR. MACKEDON: You're not personally aware of
- 16 that?
- MR. STREKAL: No.
- MR. MACKEDON: My question, for clarification
- 19 then, really repeats the question I began with, if
- 20 you'll forgive me.
- 21 So far as you know, does the EIR assume that
- 22 those water rights that are permitted to the Tribe for
- 23 the remaining waters of the Truckee had a storage right?
- 24 MR. STREKAL: I don't think we mention a
- 25 storage right for that water.

- 1 MR. MACKEDON: In the EIR?
- 2 MR. STREKAL: EIS/EIR.
- 3 MR. MACKEDON: So it was not considered?
- 4 MR. STREKAL: I don't know that it was not
- 5 considered, but I don't think there is a statement in
- 6 the document to that effect.
- 7 MR. MACKEDON: Okay. If it were considered,
- 8 would you expect to see a statement in the document? If
- 9 you can answer that.
- 10 MR. STREKAL: We could. But again, I can't
- 11 state specifically right now.
- MR. MACKEDON: How many times have you been
- 13 involved in the preparation of an Environmental Impact
- 14 Statement?
- MR. STREKAL: Final FEIS. EIR from its
- 16 inception, and I've been involved in the EIS/EIR process
- 17 for most of the time.
- 18 MR. MACKEDON: Have you done it in other
- 19 occasions as well?
- MR. STREKAL: I'm sorry?
- MR. MACKEDON: Have you been involved in the
- 22 same process on other occasions as well?
- MR. STREKAL: Yes.
- 24 MR. MACKEDON: Does the EIR assume or account
- 25 for the Pyramid Lake Indian Tribe's giving its consent

- 1 to store water from the Little Truckee River in Stampede
- 2 Reservoir that would otherwise flow to Pyramid Lake to
- 3 other parties on the -- to TROA?
- 4 MR. STREKAL: I don't know of any statement to
- 5 that effect.
- 6 MR. MACKEDON: Do you mean to say there isn't
- 7 any statement to that effect in the EIR, or you just
- 8 don't know?
- 9 MR. STREKAL: Well, not to my knowledge.
- MR. MACKEDON: Okay. Thank you.
- 11 Did you analyze the community water supply
- 12 community water supply or impacts upon the community
- 13 water supply for the Truckee Meadows region upon the
- 14 implementation -- adoption and implementation of TROA?
- MR. STREKAL: Well, community water supply is
- 16 part of the subject of TROA, the drought supply for the
- 17 Truckee Meadows area. So --
- MR. MACKEDON: I think --
- MR. STREKAL: -- yes.
- MR. MACKEDON: Thank you.
- 21 I think in your direct testimony you made
- 22 reference to groundwater. Is groundwater a part of the
- 23 analysis?
- 24 MR. STREKAL: Groundwater is considered in the
- 25 analysis. It's -- groundwater plays a larger function

- 1 in the Local Water Supply Alternative. In the absence
- 2 of upstream storage, other sources of water had to be
- 3 considered, and groundwater recharge and utilization of
- 4 that resource came under close scrutiny.
- 5 MR. MACKEDON: That was an important
- 6 consideration to the -- in evaluating the environmental
- 7 impact, was it not? Talking about the Truckee Meadows,
- 8 correct?
- 9 MR. STREKAL: Yes.
- 10 MR. MACKEDON: Can you tell me why you would
- 11 exclude this -- not give the groundwater and recharge
- 12 aspect to groundwater the same level of scrutiny and
- 13 consideration in the Newlands Project?
- MR. STREKAL: We saw the groundwater supply in
- 15 the Newlands Project as being related to agricultural
- 16 operations. Since there's no specific right to deliver
- 17 water for those rights, it would be the same as a run of
- 18 the river hydro operation.
- 19 And we saw similar diversions through the canal
- 20 and similar releases to the Carson Division; hence, we
- 21 concluded that there would be little to no impact to
- 22 groundwater rights and certainly no effect to water
- 23 rights.
- 24 MR. MACKEDON: So the -- if I can be sure of
- 25 what you're telling me, you're aware that there are many

- 1 thousand shallow wells that really serves the water
- 2 system to the residents of Churchill County outside the
- 3 City of Fallon or other areas within the county that are
- 4 served by community systems. You're aware of that,
- 5 aren't you?
- 6 MR. STREKAL: I know there are a number of
- 7 wells, yes.
- 8 MR. MACKEDON: And you know those wells are
- 9 shallow.
- 10 MR. STREKAL: I know that a number of wells are
- 11 shallow.
- MR. MACKEDON: Yes. And you know those wells
- 13 rely upon the groundwater that is recharged by the
- 14 irrigation.
- MR. STREKAL: I'm aware of that.
- MR. MACKEDON: That's a fact.
- MR. STREKAL: Yes.
- MR. MACKEDON: And are you of the opinion, or
- 19 was the -- the EIR concluded that because there wasn't a
- 20 right to those individual wells that any negative impact
- 21 could be discounted?
- MR. STREKAL: It wasn't discounted. We
- 23 certainly identified that. But there was no specific
- 24 demand to be served.
- MR. MACKEDON: So because the individual owner

- 1 of a well, a piece of property that it's water supply is
- 2 from a shallow well, because he has no water right, can
- 3 be ignored? Is that --
- 4 MR. STREKAL: No. It wasn't ignored. The
- 5 alternative to having a well go dry is to drill a deeper
- 6 well.
- 7 MR. MACKEDON: Would that be a negative or
- 8 positive impact?
- 9 MR. STREKAL: Well, it certainly wouldn't be
- 10 positive to the person who depended on that well.
- 11 MR. MACKEDON: It would be less than positive
- 12 if they drilled a deeper well and couldn't get water?
- 13 MR. STREKAL: Sure.
- 14 MR. MACKEDON: In that case, a deeper well
- 15 wouldn't be an alternative.
- MR. STREKAL: I don't know the specific
- 17 groundwater hydrology for the Newlands Project.
- MR. MACKEDON: Thank you.
- 19 Now, the -- if there are negative impacts of
- 20 TROA upon Newlands Project Claim 3 water rights -- I say
- 21 if -- are you telling us that would be acceptable,
- 22 justified because Claim 3 water rights are junior to
- 23 water rights that are subject to these applications?
- MR. STREKAL: No. I don't think TROA makes a
- 25 distinction necessarily that the priority of the water

- 1 rights are what they are.
- 2 MR. MACKEDON: I thought in your testimony that
- 3 you did.
- 4 MR. STREKAL: Water can be stored according to
- 5 priority, and water rights can be served according to
- 6 priority. But I don't think we pick and choose. The
- 7 priority of the water rights are what they are.
- 8 MR. MACKEDON: I'm not suggesting you should or
- 9 could or we could.
- 10 My concern is whether in TROA and the
- 11 supporting environmental documents any negative impacts
- 12 that may arise to the Claim 3 water rights are justified
- 13 because they're junior?
- 14 MR. PALMER: Could I ask if you could please
- 15 identify what negative impact you're talking about,
- 16 refer him to that so he can respond as to what
- 17 specifically you're talking about? The question's not
- 18 clear.
- MR. MACKEDON: I'm talking about any negative
- 20 impacts, and I'm talking about whether, in a very
- 21 general way but I think in a precise way, were negative
- 22 impacts, if they occurred, ignored or justified because
- 23 Claim 3 water rights was junior to the water rights that
- 24 are the subject of these applications to change.
- 25 CO-HEARING OFFICER DODUC: Mr. Palmer?

- 1 MR. PALMER: Could we start off by asking the
- 2 witness whether he identified any negative impacts and
- 3 then go from there?
- 4 CO-HEARING OFFICER DODUC: Mr. Mackedon, let's
- 5 do that please.
- 6 MR. MACKEDON: Well, I have to rely to some
- 7 extent I think, if you'll forgive me, on what Mr. -- or
- 8 what I understood Mr. Strekal said.
- 9 He said that the water rights that are subject
- 10 to these petitions for change are -- the parties are
- 11 simply making a better use of them, and because they
- 12 can -- they can -- entitled to this change, and if it
- 13 has a negative impact to the Claim 3, you can ignore it
- 14 or justify it because Claim 3 is junior as a principle.
- 15 CO-HEARING OFFICER DODUC: Can you start by
- 16 asking him that?
- 17 MR. MACKEDON: Did you hear the question?
- 18 MR. STREKAL: As an example, I'd like to go
- 19 back to figure 3.22 and show you that even under current
- 20 conditions, current operations, that there are shortages
- 21 to the Truckee Division. And there is no compensation
- 22 for those shortages based on current operations.
- 23 Again, that's a function of hydrology. It's a
- 24 function of the priority of water rights being served.
- 25 And there is no compensation to those users under such

- 1 circumstances.
- MR. MACKEDON: I don't think that answers my
- 3 question, but perhaps I haven't asked it as carefully as
- 4 I should have.
- 5 Let me ask you this: Did you assume or does
- 6 the EIR assume, if you can remember or if you know, that
- 7 a senior water right owner can make changes to the place
- 8 of use, manner of use, point of diversion, storage
- 9 components, and storage criteria without regard to
- 10 injury to junior rights?
- 11 MR. STREKAL: I think application can be made.
- 12 I think that points of diversion, rediversion, et
- 13 cetera, have to be identified. And I think part of that
- 14 assessment of injury is part of the process of review by
- 15 various Boards or State Engineer.
- MR. MACKEDON: And the Board or State Engineer,
- 17 even though it's a senior right, if they're asking for
- 18 that kind of change, have to determine whether it's
- 19 causing any injury to any other right, including junior
- 20 rights.
- MR. STREKAL: I think that's considered or has
- 22 to be considered.
- MR. MACKEDON: Was that done in the EIR?
- 24 MR. STREKAL: Well, this isn't a legal process
- 25 to approve the applications. This is merely an analysis

- 1 of possible effects were the proposed action to be
- 2 implemented.
- 3 MR. MACKEDON: Your discussion of the senior
- 4 and junior rights made me believe you made those
- 5 assumptions.
- In this case, the petitions request -- for
- 7 change request redistribution of storage within four
- 8 reservoirs, right?
- 9 MR. STREKAL: Yes. Well --
- 10 MR. MACKEDON: The addition of points of
- 11 diversion and rediversion, correct?
- 12 THE WITNESS: Mm-hmm.
- MR. MACKEDON: The enlargement of place of use
- 14 to provide for a common place of use under the licenses
- 15 and permits, and the addition of purposes of use. Isn't
- 16 that right?
- MR. STREKAL: Well --
- MR. MACKEDON: I --
- 19 MR. STREKAL: -- let's say that the actions
- 20 that have been presented to this Board for action were
- 21 assumed to be implemented as part of TROA.
- MR. MACKEDON: And --
- MR. STREKAL: Of course --
- MR. MACKEDON: -- if the Board.
- 25 MR. STREKAL: -- have to analyze --

- 1 (Interruption by the reporter)
- 2 MR. MACKEDON: Excuse me, I --
- 3 MR. STREKAL: I was just going to say of course
- 4 dependent on the decisions here, absent concurrence,
- 5 approval by the Board, these would not be implemented,
- 6 TROA would not be able to implement, then we likely are
- 7 not implementing TROA.
- 8 MR. MACKEDON: Do you think Nevada water law is
- 9 implicated here, or do you know?
- 10 MR. STREKAL: Well, applications were filed
- 11 with the State Engineer as well. So there were
- 12 proceedings in the State of Nevada as well.
- MR. MACKEDON: And in some respect, those
- 14 petitions were granted, right? As far as you know?
- MR. STREKAL: Yes.
- MR. MACKEDON: It did not include a storage
- 17 right, at least in the case of the unappropriated
- 18 waters?
- 19 MR. PALMER: I think we need clarification on
- 20 what applications. I think you may have been talking
- 21 about two different applications in that last exchange.
- 22 You might need to clarify what applications
- 23 you're asking Mr. Strekal about.
- 24 CO-HEARING OFFICER DODUC: Mr. Mackedon, please
- 25 provide clarification.

- 1 MR. MACKEDON: I'm sorry. I got distracted.
- 2 CO-HEARING OFFICER DODUC: Please make your
- 3 objection again, Mr. Palmer.
- 4 MR. PALMER: I'm just concerned that there was
- 5 misunderstanding between the question and the answer,
- 6 and just thought it would be helpful to be sure we
- 7 identify which applications that question was regarding
- 8 and that the answer was consistent with that.
- 9 So I just wondered if Mr. Mackedon could
- 10 identify the applications he was referring to that were
- 11 approved in that question.
- MR. MACKEDON: I won't spend much more time
- 13 here. But earlier in this hearing and yesterday,
- 14 reference was made to a ruling by the State Engineer
- 15 regarding the -- pretty much these very questions, and
- 16 stated that the State Engineer approved them.
- 17 My point was that it did not include a storage
- 18 right for this -- for the unappropriated water.
- 19 MR. PALMER: Do you understand that? I think
- 20 he's talking about the Tribe's permits for
- 21 unappropriated water.
- Is that correct?
- MR. MACKEDON: Yes.
- MR. PALMER: Okay.
- MR. STREKAL: Well, I -- I don't know.

- 1 MR. MACKEDON: Thank you.
- Now you've told the Board there were no rules
- 3 before OCAP regarding the river. We had the Orr Ditch
- 4 Decree in place, and the Orr Ditch Decree includes
- 5 rules.
- 6 MR. STREKAL: Oh, right.
- 7 MR. MACKEDON: And we had the Water Master to
- 8 administer the river prior to the first OCAP, correct?
- 9 MR. STREKAL: Yes.
- MR. MACKEDON: We had Nevada law. We had
- 11 Bureau of Reclamation contract all in place. So there
- 12 was a set of rules by which the river was operated prior
- 13 to the OCAP.
- MR. STREKAL: I may have misstated, or maybe
- 15 you misunderstood what I said, relative to rules.
- I was referring specifically to operations
- 17 involving diversions from the Truckee River to the
- 18 Newlands Project, not operations for the Truckee River
- 19 per se.
- MR. MACKEDON: Now you do understand that in
- 21 OCAP, even what is regarded as the final 1997 OCAP, must
- 22 meet the water duties prescribed and mandated by the Orr
- 23 Ditch Decree.
- 24 MR. STREKAL: Well, the Orr Ditch Decree
- 25 identifies the water duties, and the project is operated

- 1 to satisfy the exercise of the water rights.
- 2 MR. MACKEDON: And if OCAP fails to satisfy the
- 3 decree, then the OCAP would have to be modified to be
- 4 able to satisfy the decree?
- 5 MR. STREKAL: Depends on what you mean by
- 6 "fails."
- 7 MR. MACKEDON: Fails to meet the duties, serve
- 8 the demand, serve the right. That's what I mean, fails
- 9 to serve.
- 10 MR. STREKAL: Well, again, go back to figure
- 11 3.22, and you have operations of direct diversions from
- 12 the Truckee River, and you cannot satisfy the full
- 13 exercise of the water rights on direct diversion from
- 14 the Truckee River. That's irrespective of OCAP. There
- 15 is just not enough water to satisfy that demand.
- MR. MACKEDON: It depends on the year, correct?
- 17 MR. STREKAL: Of course.
- MR. MACKEDON: Just one second.
- 19 Is there any other evidence related to
- 20 shortages that are contained in the EIS/EIR than what
- 21 you testified to today?
- MR. STREKAL: I'm not sure what you mean.
- MR. MACKEDON: Thinking of shortages -- I guess
- 24 we have a debate over what we mean by shortage. I guess
- 25 I'll define it my way. That would be a case where the

- 1 owners of water project rights in the Newlands Project
- 2 do not receive a full duty of water under TROA.
- 3 MR. STREKAL: Right offhand, I don't recall.
- 4 MR. MACKEDON: Okay.
- I have no further questions, and I have no
- 6 questions for the other witnesses. Thank you.
- 7 CO-HEARING OFFICER DODUC: Thank you,
- 8 Mr. Mackedon.
- 9 Mr. Palmer, any redirect?
- 10 MR. PALMER: Yes, a few. Thank you.
- --000--
- 12 REDIRECT EXAMINATION BY MR. PALMER
- --000--
- MR. PALMER: Mr. Strekal, if you could -- you
- 15 had some questions regarding community water supply. I
- 16 guess I just wanted -- there were some questions about
- 17 whether that had been evaluated in the EIS/EIR, and I
- 18 think you indicated that it hadn't been.
- 19 But could you explain, if it was not, why it
- 20 was not looked at and why that is sufficient for your
- 21 analysis.
- MR. STREKAL: Well, I do know that there are a
- 23 lot of wells, and as Mr. Mackedon said, that are served
- 24 by shallow -- a lot of wells in the shallow aquifer.
- 25 We don't know -- I don't know of a specific

- 1 water right demand for water supply that's served with
- 2 Newlands Project water.
- 3 So there was no way to quantify an effect on an
- 4 unknown operation.
- 5 MR. PALMER: But to the extent that might have
- 6 relied on groundwater, did you in fact look at effects
- 7 to the groundwater system in the area?
- 8 MR. STREKAL: Well, again, we based our
- 9 analysis on available water, diversions through the
- 10 Truckee Canal, and releases from Lahontan Reservoir and
- 11 distribution of that water through the Carson Division,
- 12 yes.
- MR. PALMER: Another point of clarification.
- 14 There were some questions regarding OCAP, and this may
- 15 have been made clear, but in TROA, is it assumed that
- 16 OCAP continues or is not continued in operation -- or in
- 17 effect, I should say?
- 18 MR. STREKAL: It's assumed that OCAP continues
- 19 in operation. OCAP are the regulations that control the
- 20 operation of the Newlands Project, how water is diverted
- 21 from the Truckee River, how water is distributed through
- 22 the Newlands Project.
- MR. PALMER: There were some questions
- 24 regarding no action and current condition. And I'm not
- 25 sure if there was confusion. Maybe I was the only one

- 1 that got confused.
- 2 But could you explain for the purpose of NEPA
- 3 analysis what is no action?
- 4 MR. STREKAL: No action is a required
- 5 alternative to be analyzed, and it provides a baseline
- 6 of comparison for a proposed action and any other
- 7 alternative.
- 8 You try to keep the variables to a minimum to
- 9 the extent that you can.
- In this instance in particular, no action was
- 11 looking at the water demand in the year 2033 which again
- 12 is when the rights owned by the Truckee Meadows Water
- 13 Authority were assumed to be fully exercised.
- 14 And that seems to be the most reasonable time
- 15 to evaluate the impacts of an operating agreement that
- 16 was looking at full utilization and exercise of those
- 17 rights.
- 18 MR. PALMER: In your experience with NEPA, was
- 19 that an unusual way of looking at no action?
- MR. STREKAL: No. In fact, that's the way we
- 21 normally look at it. And the comparison with current
- 22 conditions was helpful in providing a perspective on
- 23 different demands and also the effects of demographic
- 24 change over time.
- MR. PALMER: Mr. Strekal, you were also asked

- 1 about Board Exhibit 7 and figure 3.23 on page 3-107.
- 2 That's the Carson Division shortage graph. Do you
- 3 recall that?
- 4 MR. STREKAL: Yes, I do.
- 5 MR. PALMER: I want to refer you to page 3-108.
- 6 And I'm looking at the top of that page, is the next
- 7 page in the document. And there's some bullets there.
- 8 Does that describe in any way how this analysis
- 9 was looked at?
- 10 MR. STREKAL: Well, that certainly gives a much
- 11 fuller explanation of the distinctions that we see
- 12 there. And it says that Newlands Project supplies from
- 13 the Truckee River under no action are less under current
- 14 conditions, and lists five reasons.
- 15 It primarily deals with changes in the exercise
- 16 of upstream water rights and storage in upstream
- 17 facilities.
- 18 So it identifies that there are additional
- 19 demands or increasing demands, and that future condition
- 20 recognizes and evaluates that future demand compared to
- 21 current conditions.
- MR. PALMER: Just for clarification, in the
- 23 first bullet there is the acronym WRAP. Would you just
- 24 identify that?
- MR. STREKAL: Yeah, I should have done that

- 1 before.
- 2 WRAP refers to the Water Right Acquisition
- 3 Program which is a program to acquire water rights for
- 4 wetlands in the Stillwater area which was referred to
- 5 earlier. It's under Section 206 of Public Law 101-618.
- And the reason that demand would be less for
- 7 wetlands as a result of the Water Right Acquisition
- 8 Program, it's assumed that the water rights that are
- 9 transferred to the wetlands would be transferred at the
- 10 consumptive use amount and not at the full exercise
- 11 amount.
- 12 So rather than 4.5 or 3.5, the water rights
- 13 that are acquired for and transferred to the wetlands
- 14 would be exercised at 2.99 acre feet per acre, therefore
- 15 the demand would be less, with a smaller demand there
- 16 would be less water diverted from the Truckee River to
- 17 satisfy that diminished demand.
- MR. PALMER: Again, in reference to this figure
- 19 3.23, I think it was Mr. Mackedon asking questions
- 20 about -- I think referred to it as negative impacts to
- 21 Claim 3 water rights.
- 22 Are water rights really part of the analysis
- 23 that we're looking at in figure 3.23?
- MR. STREKAL: No. It's a matter of supply and
- 25 demand.

- 1 MR. PALMER: Not water rights.
- 2 MR. STREKAL: Not water rights specifically,
- 3 no.
- 4 MR. PALMER: And in your testimony, one of the
- 5 questions regarding groundwater, I believe you talked
- 6 about did the analysis show this average of 40 acre feet
- 7 difference between TROA and no action, and would that
- 8 difference have any measurable effect on the
- 9 groundwater?
- 10 MR. STREKAL: On an average basis, no. And
- 11 even in an individual year, I think if anyone were
- 12 depending on a water supply, it would not be a
- 13 dependable water supply if it were affected by great
- 14 fluctuations in the water supply with water being
- 15 delivered to an area.
- 16 I think if it were that variable one would seek
- 17 a different source.
- 18 MR. PALMER: There was a question to you
- 19 regarding the permits by the Pyramid Lake Paiute Tribe
- 20 for unappropriated water, about whether that was
- 21 involved in the analysis in the EIS. And I believe you
- 22 indicated no.
- The question I had: Is your understanding that
- 24 those permits are based on the unappropriated water in
- 25 the Truckee River?

- 1 MR. STREKAL: Yes.
- 2 MR. PALMER: Was that unappropriated water part
- 3 of the analysis in the EIS?
- 4 MR. STREKAL: We assume that the unappropriated
- 5 water was available for Pyramid Lake and would be
- 6 subject to any of the rules that TROA had incorporated
- 7 into it for storage exchange, et cetera, and also the
- 8 ability to schedule and release.
- 9 MR. PALMER: So you did include that in your
- 10 analysis?
- 11 MR. STREKAL: I have to assume it was. I may
- 12 have been misunderstanding the question based on
- 13 petitions and such, but we've already stated that TROA
- 14 assumes that the subject -- the issues that are the
- 15 subject of this hearing were incorporated in the TROA in
- 16 order for it to be fully effective.
- 17 MR. PALMER: And it's expressly written into
- 18 TROA for the unappropriated water to be resolved --
- MR. STREKAL: Yes.
- 20 MR. PALMER: -- that issue to be resolved?
- 21 You were asked a question regarding, I think by
- 22 Mr. Mackedon, about the duties and the Orr Ditch Decree
- 23 for Claim 3. And are those limits --
- MR. STREKAL: Those are maximum -- I'm sorry.
- MR. PALMER: Go ahead.

- 1 MR. STREKAL: I'm getting excited here.
- 2 MR. PALMER: I think you've got my question.
- 3 MR. STREKAL: I do understand your question.
- 4 The duties that are identified are maximum
- 5 amounts, not to be exceeded and water to be provided
- 6 from any source. Claim 3 is merely an opportunity or an
- 7 ability to divert water but doesn't have any explicit
- 8 duty associated with it --
- 9 I'm off.
- 10 CO-HEARING OFFICER DODUC: Off the record
- 11 please.
- 12 (Recess; technical difficulties)
- 13 CO-HEARING OFFICER DODUC: All right. Since
- 14 it's been a few minutes, if you could please repeat your
- 15 last question. Even I don't remember what it was.
- 16 (Record read by the reporter as follows:
- 17 MR. STREKAL: The duties that are
- identified are maximum amounts, not to be
- 19 exceeded and water to be provided from
- any source. Claim 3 is merely an
- 21 opportunity or an ability to divert water
- 22 but doesn't have any explicit duty
- associated with it -- I'm off.)
- 24 MR. STREKAL: And I stand on that.
- MR. PALMER: No further answer on that one?

- 1 MR. STREKAL: I think I gave the answer.
- 2 MR. PALMER: Okay.
- I have a question for Mr. Caicco then. That's
- 4 all I have for Mr. Strekal.
- 5 Mr. Caicco, a question came up -- I think it
- 6 might have been from Mr. Van Zandt -- regarding wetlands
- 7 and use of water. I just thought a little clarification
- 8 might be helpful.
- 9 So what are the purpose of the wetlands?
- MR. CAICCO: Well, the purpose of the wetlands,
- 11 and specifically Stillwater National Wildlife Refuge, is
- 12 for the production of waterfowl.
- MR. PALMER: Is there a difference in your mind
- 14 between irrigation of crops and use of water on the
- 15 wetlands?
- MR. CAICCO: Yeah, quite a difference.
- 17 I'm not a farmer, but in terms of waterfowl
- 18 production, if you get a little bit less water in a
- 19 year, that doesn't necessarily cause a failure of your
- 20 waterfowl crop.
- 21 You might get fewer waterfowl produced which
- 22 is, given that waterfowl in general are migratory,
- 23 that -- that's kind of a blip in the larger picture of
- 24 the entire migratory waterfowl population, whereas you
- 25 could -- in agriculture, you could get a crop failure.

- 1 So I think that's a significant difference.
- 2 MR. PALMER: I believe a question was asked
- 3 requiring irrigation of the wetlands.
- 4 Do you know whether or not Fish and Wildlife
- 5 Service considers the wetlands to be irrigated with
- 6 Newlands Project water, in that terminology?
- 7 MR. CAICCO: No, not really. We don't consider
- 8 return flow as irrigation and in particular, because of
- 9 the water quality issues, could cause as many problems
- 10 as the additional water creates or adds to.
- MR. PALMER: All right. Thank you.
- 12 That's all I have of Mr. Caicco.
- 13 CO-HEARING OFFICER DODUC: Any redirect for Mr.
- 14 Buchanan?
- MR. PALMER: Yes, I have one for Mr. Buchanan.
- 16 CO-HEARING OFFICER DODUC: Okay.
- MR. PALMER: I'm sorry.
- Mr. Buchanan, you were asked regarding TROA and
- 19 certain provisions of TROA as inputs to the model. And
- 20 in your testimony, you were describing the environmental
- 21 benefits and how you determined whether those are
- 22 benefits or not.
- Did you need to run the model in order to
- 24 determine whether there were benefits that you
- 25 described?

- 1 MR. BUCHANAN: No. For example, some things
- 2 can become quite logical, especially when you start
- 3 looking at threatened and endangered fishes of Pyramid
- 4 Lake.
- 5 They are in that situation because of extensive
- 6 diversions from the Truckee River over the years, and
- 7 that's why they have been clarified as threatened and
- 8 endangered, and it comes down to the point that any time
- 9 we can get additional water for them, that will benefit
- 10 them.
- 11 Because of the small amount of water we've had
- 12 in the past for these two fish, it became very important
- 13 for us to establish near-optimum spawning flows. That's
- 14 why we like to control the amount of water.
- So sometimes when you get into those
- 16 situations, you just use your intuition. It will let
- 17 you know, your professional background of working with
- 18 these fish for 30 years, that the more the better with
- 19 them.
- When it comes to more storage in reservoirs,
- 21 that becomes obvious too. Boat ramps are more
- 22 accessible for fishermen. The fish population have a
- 23 better chance of surviving spawning. Same way waterfowl
- 24 and et cetera.
- There is just a lot of professional experience

- 1 that you draw upon.
- 2 MR. PALMER: That's all the questions I have on
- 3 redirect.
- 4 CO-HEARING OFFICER DODUC: The you, Mr. Palmer.
- 5 Mr. Van Zandt? Recross?
- 6 MR. VAN ZANDT: Thank you. Just a few here for
- 7 Mr. Strekal, please. Thanks.
- 8 --000--
- 9 RECROSS-EXAMINATION BY MR. VAN ZANDT
- 10 --000--
- MR. VAN ZANDT: Mr. Palmer showed you figure
- 12 3.23 and then another page on -- of the EIS, SWRCB
- 13 Exhibit 7.
- And I wanted to ask you, as far as you know, is
- 15 there any other evidence that is included in the record
- 16 here that includes an analysis of potential shortages in
- 17 the Newlands Project other than the Environmental Impact
- 18 Statement/Impact Report?
- 19 MR. STREKAL: I'm sorry? Ask me that again
- 20 please?
- MR. VAN ZANDT. My question is: Is there any
- 22 other analysis or evidence of potential shortages to the
- 23 Newlands Project other than the information that's
- 24 presented in the Environmental Impact Statement/Impact
- 25 Report?

- 1 MR. STREKAL: Are you asking have other
- 2 analyses been done outside of this process?
- 3 MR. VAN ZANDT: I'm asking that's being
- 4 presented here to the Board with regard to that issue.
- 5 MR. STREKAL: I don't know. I'm a little bit
- 6 uncertain of your question to me.
- 7 MR. VAN ZANDT: Well, you testified from your
- 8 perspective that there will be these small shortages
- 9 that will be caused and gave the reasons why you thought
- 10 that was true. My question is: Do you have any
- 11 other -- hello?
- 12 CO-HEARING OFFICER DODUC: Oh, no. Hold that
- 13 thought.
- 14 Off the record.
- 15 (Recess; technical difficulties)
- 16 CO-HEARING OFFICER DODUC: I think we're ready,
- 17 Mr. Van Zandt.
- MR. VAN ZANDT: We were pursuing the subject of
- 19 the source of the evidence for shortages, and just want
- 20 to make sure the record's clear that you testified, in
- 21 your written statement and orally, that you believe that
- 22 there will be a small amount of shortages.
- 23 And what I want to confirm for the record is
- 24 that as far as this Board is concerned the only source
- 25 of information with regard to shortages that's being

- 1 presented by the applicants and petitioners is the
- 2 information that's contained in the EIS/EIR?
- 3 MR. STREKAL: Well, it's more than just
- 4 shortages that's presented in the FEIS/EIR.
- 5 But there is information on the Carson Division
- 6 shortages, Truckee Division shortages. And getting back
- 7 to Mr. Mackedon's question, there's also Truckee Meadows
- 8 shortages presented in here.
- 9 But this is the -- FEIS/EIR is the decision
- 10 document for the Department of Interior as well as the
- 11 decision document for the State of California. So this
- 12 does include the information that's the basis of our
- 13 decision.
- MR. VAN ZANDT: And to your knowledge, there
- 15 isn't any other information regarding shortages that's
- 16 in the record here?
- MR. STREKAL: Not to my knowledge.
- MR. VAN ZANDT: You had indicated that there
- 19 were some transfers to wetlands. I guess we looked at
- 20 on page 3-108 of SWRCB 7 with regard to that.
- 21 And there was some reduction in the amount of
- 22 the water duty that was being transferred, correct?
- MR. STREKAL: The water -- the exercised water
- 24 duty for wetlands is less than the -- excuse me. I
- 25 thought I turned this off.

- 1 CO-HEARING OFFICER DODUC: At least it's not
- 2 making a noise.
- 3 MR. STREKAL: I'm sorry.
- 4 That the duty for the water rights that are
- 5 transferred to the wetlands are exercised at a lower
- 6 rate than the 3.5 or 4.5.
- 7 MR. VAN ZANDT: And that lower duty is 2.99
- 8 acre feet per acre.
- 9 MR. STREKAL: That's right.
- 10 MR. VAN ZANDT: And it doesn't matter whether
- 11 it's based on a transfer of three and a half or four and
- 12 a half. It's still 2.99.
- MR. STREKAL: That's right.
- 14 MR. VAN ZANDT: And that 2.99 is considered by
- 15 the Nevada State Engineer to be the consumptive use
- 16 portion of the water duty, right?
- 17 MR. STREKAL: Yes.
- 18 MR. VAN ZANDT: Now isn't it also true that
- 19 there are some additions to water rights that are going
- 20 on in the Newlands Project even as we speak?
- 21 And I'm referring specifically to the
- 22 bench/bottom reviews that are underway by the Federal
- 23 Water Master. Are you familiar with those?
- MR. STREKAL: No, I'm not.
- 25 MR. VAN ZANDT: I think there was a question

- 1 that was talking about the storage of the unappropriated
- 2 water from Mr. Palmer. And are you familiar with
- 3 Section 7.C.2 of TROA?
- 4 MR. STREKAL: I know that there is such. A
- 5 copy is coming to me.
- 6 Yes. It's establishment of fish credit water
- 7 in lieu of inflows to Pyramid Lake.
- 8 MR. VAN ZANDT: And that provision specifically
- 9 indicates that to the extent allowed by changes under
- 10 applicable Nevada law to the water right under Nevada
- 11 State Engineer Ruling No. 4683, the water available to
- 12 satisfy that right may be retained in Truckee River
- 13 reservoirs for establishment only as fish credit water,
- 14 right?
- MR. STREKAL: That's what it says.
- MR. VAN ZANDT: So 4683, that ruling, that's
- 17 the unappropriated water ruling for the Tribe, right?
- MR. STREKAL: Yes.
- MR. VAN ZANDT: Okay. And -- uh-oh.
- 20 (Recess; technical difficulties)
- 21 CO-HEARING OFFICER DODUC: All right.
- MR. VAN ZANDT: We have established that the
- 23 Nevada State Engineer Ruling No. 4683 is the
- 24 unappropriated water hearing ruling, right?
- MR. STREKAL: Right.

- 1 MR. VAN ZANDT: For the Tribe.
- 2 So based on this, Mr. Strekal, and the fact
- 3 that the EIS/EIR is analyzing the impact of TROA,
- 4 wouldn't you expect that the Tribe's unappropriated
- 5 water in storage would have been analyzed?
- 6 MR. STREKAL: That would be a logical
- 7 assumption.
- 8 MR. VAN ZANDT: Thank you.
- 9 Mr. Palmer asked you about the Claim 3 water
- 10 duties, the 3.5 and 4.5. Do you recall that?
- 11 MR. STREKAL: Yes.
- MR. VAN ZANDT: And I think you described them
- 13 as maximum duties; that's right?
- MR. STREKAL: I did.
- MR. VAN ZANDT: Okay. And you just answered my
- 16 question about the 2.99 as being the consumptive use
- 17 portion of that water duty?
- 18 MR. STREKAL: I did say that.
- 19 CO-HEARING OFFICER DODUC: Louder, please.
- 20 MR. STREKAL: I did say that.
- MR. VAN ZANDT: Thank you.
- You have a working understanding of what the
- 23 consumptive use portion of a water right is, water duty?
- MR. STREKAL: Yes.
- MR. VAN ZANDT: What is that?

- 1 MR. STREKAL: The amount of water that if
- 2 applied for a use it would thereby diminish the
- 3 remaining supply based on that reduction.
- In other words, the 2.99 for the wetlands is
- 5 applied because the wetlands are at the terminus of the
- 6 water delivery system for the Newlands Project.
- 7 There are no other users downstream from the
- 8 wetlands; therefore, there's no -- there's no
- 9 nonconsumptive water to go anyplace else, so all of the
- 10 water is used on the wetlands.
- 11 MR. VAN ZANDT: Okay. I think you
- 12 misunderstood my question.
- MR. STREKAL: Oh.
- 14 MR. VAN ZANDT: Do you have a working
- 15 understanding of what the concept of consumptive use is
- 16 as applied to water duties?
- 17 MR. STREKAL: Yes.
- MR. VAN ZANDT: What is your understanding?
- 19 MR. STREKAL: The consumptive use portion is
- 20 that amount that is diminished through the exercise of
- 21 the right.
- MR. VAN ZANDT: You wouldn't agree,
- 23 Mr. Strekal, that the consumptive use portion is the
- 24 portion that the plant actually uptakes and uses?
- 25 MR. STREKAL: That's a definition I understand,

- 1 yes.
- 2 MR. VAN ZANDT: Okay. And the rest of the
- 3 water duty is assigned because there are on field losses
- 4 and evaporation.
- 5 MR. STREKAL: Yes.
- 6 (Interruption by the reporter)
- 7 MR. STREKAL: I gave the definition I did
- 8 before because we also apply consumptive use to M&I uses
- 9 as well, so -- but I agree with what you said.
- 10 MR. VAN ZANDT: Okay. And even in the M&I
- 11 context, the consumptive use would be the portion that
- 12 is accessed for M&I purposes, and there could be a
- 13 return flow back to the source, right?
- 14 MR. STREKAL: Over and above that, yes.
- 15 MR. VAN ZANDT: All right.
- MR. STREKAL: Part of the duty.
- 17 MR. VAN ZANDT: And the way that you seem to
- 18 characterize these water duties under Claim 3 as maximum
- 19 only, that there's some lesser amount of water that is
- 20 in somebody's mind that a water right owner anywhere in
- 21 the Orr Ditch Decree may really only have a right to a
- 22 lesser amount of water.
- MR. STREKAL: What I'm implying is that
- 24 different crops have different requirements. So you may
- 25 not need or want to irrigate the full amount, but you

- 1 can irrigate up to that amount.
- 2 MR. VAN ZANDT: Okay. But you would agree that
- 3 the amounts, the water duties under Claim 3, are the
- 4 ones that were determined by the court to be necessary
- 5 to achieve beneficial use?
- 6 MR. STREKAL: Under Orr Ditch and Alpine, the
- 7 3.5 and 4.5 are related to beneficial use. That's the
- 8 water that's applied for irrigation.
- 9 But you're not required to take that full
- 10 amount. If you were irrigating something other than
- 11 alfalfa, you may wish to apply less water.
- MR. VAN ZANDT: And in fact the decrees
- 13 actually talk a little bit about that in terms of less
- 14 water may be required for different crops, right?
- MR. STREKAL: Yes.
- 16 MR. VAN ZANDT: But the vast majority of crops
- 17 that we're talking about here are alfalfa, and they
- 18 require the three and a half and four and a half.
- 19 MR. STREKAL: We assumed that the application
- 20 of water in Newlands is 3.5 and 4.5.
- 21 MR. VAN ZANDT: And that's what was modeled in
- 22 the TROA EIR?
- MR. STREKAL: That's what's assumed. Except
- 24 for wetlands, of course, with the 2.99.
- MR. VAN ZANDT: But to your knowledge, was

- 1 there any increase in the amount of water that was
- 2 modeled in the EIS/EIR due to the Federal Water Master's
- 3 conversion of water from bottom to bench lands?
- 4 MR. STREKAL: I'm not aware of any.
- 5 To my knowledge, the appropriate calculations
- 6 were made based on the identified amounts of bottom and
- 7 bench. That's the best I can tell you with that.
- 8 MR. VAN ZANDT: As they existed in 2003?
- 9 MR. STREKAL: 2002.
- MR. VAN ZANDT: 2002, okay. Thank you.
- I don't know if we've actually identified the
- 12 TROA, the signed TROA, as an exhibit yet. Joint Exhibit
- 13 19? That's the one we've been referring to?
- 14 MR. PALMER: Yes, I think we did identify it
- 15 yesterday.
- MR. VAN ZANDT: Thank you, Mr. Strekal.
- 17 Mr. Caicco.
- MR. CAICCO: Yes, sir.
- 19 MR. VAN ZANDT: Mr. Palmer was asking you about
- 20 whether Fish and Wildlife Service wetlands that are
- 21 receiving water as an irrigation. Do you recall that?
- MR. CAICCO: Yes, I do.
- MR. VAN ZANDT: And you answered that Fish and
- 24 Wildlife didn't consider it to be, right?
- MR. CAICCO: We don't consider it irrigation in

- 1 the sense of agricultural irrigation.
- MR. VAN ZANDT: Okay. Isn't it true,
- 3 Mr. Caicco, that the Nevada State Engineer in a recent
- 4 ruling in fact has ruled that it is irrigation and that
- 5 the entire amount of the water right is transferable?
- 6 MR. CAICCO: I don't know that.
- 7 MR. VAN ZANDT: You have no knowledge of that?
- 8 MR. CAICCO: No, I do not.
- 9 MR. VAN ZANDT: You are not familiar with the
- 10 Nevada wild fowl case?
- MR. CAICCO: No, I'm not.
- MR. VAN ZANDT: That's all I have.
- 13 CO-HEARING OFFICER DODUC: Thank you, Mr. Van
- 14 Zandt.
- Mr. Mackedon?
- 16 MR. MACKEDON: One question for Mr. Strekal.
- 17 -- 000--
- 18 RECROSS-EXAMINATION BY MR. MACKEDON
- 19 ---00--
- 20 MR. MACKEDON: And it's the same question.
- 21 It's the question -- that last question that Mr. Van
- 22 Zandt asked and directed it to Mr. Caicco.
- 23 You testified that the EIS -- FEIS and EIR
- 24 assume a transfer rate of 2.99 acre feet of all waters,
- 25 ag waters that go to the wetlands, correct?

- 1 MR. STREKAL: Yes.
- 2 MR. MACKEDON: Now are you aware that the
- 3 Nevada Supreme Court has ruled in the Nevada waterfowl
- 4 case that Nevada law regards it as irrigation, and it
- 5 would transfer at the full duty. Are you aware of that?
- 6 MR. STREKAL: I am aware of that.
- 7 But at the time that we did the analysis, that
- 8 was the information that we had. And that's still the
- 9 premise that we operate under.
- MR. MACKEDON: That's the assumption that you
- 11 made, and you continue in that assumption.
- 12 MR. STREKAL: Right.
- MR. MACKEDON: Okay. Which would be incorrect?
- 14 MR. STREKAL: At the time, it was a good
- 15 assumption.
- 16 MR. MACKEDON: It's not correct now.
- MR. STREKAL: Well, we still operate the
- 18 project accordingly. I mean we still view the delivery
- 19 of water to wetlands as being 2.99.
- MR. MACKEDON: Who is we?
- MR. STREKAL: The government.
- MR. MACKEDON: I'm sorry?
- MR. STREKAL: The federal government.
- 24 MR. MACKEDON: Okay. So it delivers at a rate
- 25 different from Nevada law?

- 1 MR. STREKAL: Actually, I shouldn't say that.
- 2 That is my assumption that we do that.
- 3 MR. MACKEDON: Thank you.
- I have no questions of any other witness nor
- 5 any more of this witness.
- 6 CO-HEARING OFFICER DODUC: That completes the
- 7 recross. Look to Chair Hoppin.
- 8 --000--
- 9 OUESTIONS FROM BOARD and BOARD STAFF
- 10 --000--
- 11 CO-HEARING OFFICER HOPPIN: I have two
- 12 questions to the respective counsel. The second one is
- 13 on the periphery of your line of questioning. It's
- 14 something that I intend to ask at some time during the
- 15 hearing.
- But if any of the three of you object after I
- 17 ask the second of my questions to Mr. Strekal, you don't
- 18 need to give me an explanation. Just say I object,
- 19 whether that's formal legal proceeding or not, and I
- 20 will ask the question at a later date. Is that fair
- 21 enough?
- The least controversial of my questions, I
- 23 would assume, Mr. Strekal: When you deliver this 2.99
- 24 acre feet to the refuges, is there any allowance or any
- 25 permission of any degradation of the water where this is

- 1 a terminus end to your project?
- 2 Is there any effluence that comes off
- 3 agricultural land or any drainage that would otherwise
- 4 degrade the quality of this water as opposed to the
- 5 quality that you would be required to deliver to
- 6 agricultural land?
- 7 MR. STREKAL: Well, there are two kinds of
- 8 water that get delivered to the wetlands.
- 9 One is the transferred agricultural right which
- 10 is assumed to be prime water but which has gone through
- 11 the project, so it probably has other types of water
- 12 mixed with it, but it's still considered to be
- 13 agricultural irrigation water.
- 14 There is also drain water that goes to the
- 15 wetlands as well.
- 16 CO-HEARING OFFICER HOPPIN: But the drain water
- 17 isn't part of the 2.99. That -- in this case, we talked
- 18 earlier that the 3.5 and 4.5 were static numbers; they
- 19 couldn't be augmented. But the water to the refuges can
- 20 be augmented by drainage water; is that correct?
- MR. STREKAL: Right. That water goes. But it
- 22 depends on availability.
- 23 CO-HEARING OFFICER HOPPIN: Okay.
- 24 MR. STREKAL: There's no call for it. It
- 25 depends on what develops.

- 1 CO-HEARING OFFICER HOPPIN: No place else for
- 2 it to go.
- 3 MR. STREKAL: Right.
- 4 CO-HEARING OFFICER HOPPIN: Thank you.
- 5 The other question, the one I referred to, and
- 6 I -- let me ask the question, and then if counsel
- 7 objects we'll just go on about our business here.
- But my question is: In Pyramid Lake, is there
- 9 always adequate capacity to receive any amount of water
- 10 you may be entitled to? Or is it limited?
- 11 Are there times when it's too full to receive
- 12 anything? I've only been there once, and I thought I
- 13 was in a sandstorm in the Serengeti desert. I thought I
- 14 was going to go fishing, and all I did was sandblast my
- 15 boat and went home with my tail between my legs. So I
- 16 don't know the topography.
- 17 MR. STREKAL: We're at least 60 to 70 feet
- 18 below the historic high, and that would -- maybe even
- 19 more than that. Well, prehistorically, even greater
- 20 capacity --
- 21 CO-HEARING OFFICER HOPPIN: Wait a minute. Let
- 22 me ask the whole thing because -- does this seems like
- 23 it's all right to you, Mr. Van Zandt?
- MR. VAN ZANDT: That's fine.
- 25 CO-HEARING OFFICER HOPPIN: So my question to

- 1 you then is: We've had it stated repeatedly that the
- 2 intent of the storage regime to allow pulses for
- 3 migration for fish and fish habitat on the periphery of
- 4 the lake. As the fish come out of the lake to spawn,
- 5 you need adequate flows to take care of that spawning.
- 6 But if it were not for obligations under the
- 7 Floriston rate or physical capacity in the system or
- 8 this need to have these pulses for the fishery needs,
- 9 you in theory could take all the water you were entitled
- 10 to and be done with it; is that correct?
- 11 MR. STREKAL: I'm not sure I understand the
- 12 second part of -- the last part of what you just said.
- 13 CO-HEARING OFFICER HOPPIN: As I understand it,
- 14 the desire for storage and changes and flow regimes are
- 15 solely for the purpose of fish spawning and habitat in
- 16 the stretch prior to Pyramid Lake; and if it weren't for
- 17 that desire, the capacity, if not for requirements of
- 18 Florin or the physical capacity of the conveyance
- 19 system, you could take all your water and be done with
- 20 it?
- 21 MR. STREKAL: Well, there are a lot of factors
- 22 that come into play with Pyramid Lake. First of all,
- 23 it's a terminus lake.
- 24 CO-HEARING OFFICER HOPPIN: Right.
- MR. STREKAL: Or terminal, lake I should say.

- 1 And terminal lakes, since the water only
- 2 disappears by evaporation, is affected -- the salt
- 3 concentration in the lake is affected greatly by the
- 4 amount of inflow.
- 5 Obviously as the lake is going down, there's
- 6 less inflow. It becomes more saline. The more -- the
- 7 greater the inflow of suitable quality, the lower the
- 8 TDS, the more beneficial that is to the resident fish
- 9 population.
- 10 There's also a situation as the lake has been
- 11 going down that a delta forms because of erosion and
- 12 sedimentation in the basin. The lower the lake goes,
- 13 the less likelihood of the fish being able to pass
- 14 upstream because of that blockage with that sediment.
- And if the fish can't migrate upstream or can't
- 16 be passed upstream somehow, the species won't survive.
- 17 CO-HEARING OFFICER HOPPIN: Are they passing
- 18 upstream?
- 19 MR. STREKAL: Passing upstream.
- The Cui-ui go from Pyramid Lake upstream into
- 21 the Truckee River. They spawn. Then the adults return
- 22 to Pyramid Lake. The eggs develop. And then the larvae
- 23 migrate down to Pyramid Lake.
- So there's water required both to attract the
- 25 fish to the river, provide passage upstream, provide

- 1 sufficient habitat for the fish to lay the eggs, provide
- 2 sufficient water for the adults to migrate back
- 3 downstream, give the --
- 4 CO-HEARING OFFICER HOPPIN: But those aren't
- 5 the only factors that need -- this isn't a loaded
- 6 question. I just need to --
- 7 MR. STREKAL: No, I'm just trying --
- 8 CO-HEARING OFFICER HOPPIN: -- have a visual
- 9 what we're doing here.
- 10 So the flow regimes not only facilitate this
- 11 upstream migration for spawning and return to the lake,
- 12 but they provide by virtue of the variation in flows,
- 13 they provide benefits as far as salinity and a more
- 14 constant environment in the lake to deal with these
- 15 other issues that you were talking about.
- MR. STREKAL: And they also provide better
- 17 habitat in the lower river for development of tree
- 18 canopy shade, stability of the river channel itself. So
- 19 a lot of factors.
- 20 CO-HEARING OFFICER HOPPIN: So it's not only
- 21 for spawning and the return of the spawn fish to the
- 22 lake.
- 23 MR. STREKAL: Right. But that spawning and the
- 24 return of fish to the lake is a primary component of the
- 25 recovery.

- 1 CO-HEARING OFFICER HOPPIN: I understand that.
- 2 MR. STREKAL: Yeah.
- 3 CO-HEARING OFFICER HOPPIN: Thank you very
- 4 much.
- 5 MR. STREKAL: You're welcome.
- 6 CO-HEARING OFFICER DODUC: Any other questions
- 7 for this panel? Ms. Mahaney?
- 8 SENIOR STAFF COUNSEL MAHANEY: I have a
- 9 question for Mr. Caicco.
- I believe you said that the EIS/EIR does not
- 11 address impacts to the National Wildlife Refuges. Did I
- 12 hear that correctly?
- 13 MR. CAICCO: That's correct.
- 14 SENIOR STAFF COUNSEL MAHANEY: Could you -- I
- 15 simply didn't follow your explanation as to why. Could
- 16 you repeat that please or clarify that?
- 17 MR. CAICCO: Well, the shortages that we have
- 18 been talking about in figure 3.23 are just so small that
- 19 they wouldn't have any practical effect on the wildlife
- 20 refuge.
- It's 150,000 acres of wetlands there. So, you
- 22 know, if the refuge is short water in a given year, the
- 23 refuge is managed in a way there's an intricate systems
- 24 of canals and valves and locks and things like that.
- 25 They simply shift their management to -- according to

- 1 the amount of water they have available.
- And, you know, they're used to a wide-ranged
- 3 variability in the amount of water they get.
- 4 SENIOR STAFF COUNSEL MAHANEY: Thank you.
- 5 CO-HEARING OFFICER DODUC: Any other questions?
- 6 Okay. Please bring up the next panel, and let's go off
- 7 record.
- 8 (Recess)
- 9 CO-HEARING OFFICER DODUC: Let us give it a
- 10 try.
- Mr. Palmer.
- 12 --000--
- 13 KENNETH PARR
- 14 Called by APPLICANT AND PETITIONERS
- 15 DIRECT EXAMINATION BY MR. PALMER
- 16 --000--
- 17 MR. PALMER: Thank you. The first witness for
- 18 this grouping is Mr. Parr.
- 19 And Mr. Parr, you were here yesterday in
- 20 attendance of the hearing?
- MR. PARR: Yes, I was.
- MR. PALMER: And you understand you're still
- 23 under oath?
- MR. PARR: Yes, I do.
- MR. PALMER: We've already identified Mr.

- 1 Parr's direct testimony, so if you would please go ahead
- 2 and summarize your testimony for this part.
- 3 MR. PARR: Thank you, I will.
- 4 Good afternoon, everyone. I'm still the Area
- 5 Manager for the Bureau of Reclamation. I just want to
- 6 continue with my testimony from yesterday, provide an
- 7 overview of the benefits associated with the change
- 8 petitions and applications dealing with the Truckee
- 9 River Operating Agreement.
- 10 Today I am basically simply providing
- 11 introductory remarks, introductions to this panel on
- 12 public interest. Other panel members here will be
- 13 providing more information and more detail.
- 14 The approval of the change petitions,
- 15 applications, and implementation of TROA would allow
- 16 public benefit -- public interest benefits to accrue.
- 17 Such benefits include the interstate
- 18 allocation. I think we've spent a day and a half
- 19 talking quite a bit about the interstate allocation, at
- 20 least yesterday, so I won't elaborate too much on that.
- The allocation will go into effect when TROA is
- 22 approved. TROA provides for a flexible and coordinated
- 23 operational basis consistent with this allocation.
- 24 Mr. Caicco, I believe, and others have
- 25 testified extensively on environmental benefits

- 1 associated with the Truckee River Operating Agreement,
- 2 that this analysis that Mr. Caicco has provided, and
- 3 others, generally shows that stream flow under TROA
- 4 would be beneficial for fish and other biological
- 5 resources. And TROA operations would result in
- 6 beneficial effects on several environmental resources.
- 7 Another benefit accrued is municipal drought
- 8 supply. Providing storage under TROA will satisfy M&I
- 9 water demand in the future without having to build new
- 10 storage facilities.
- I think that's a significant benefit there,
- 12 without having to build new facilities.
- And the gentleman next to me, Greg here, he
- 14 will provide -- I can't remember how to pronounce his
- 15 last name so would you please --
- MR. EVANGELATOS: Evangelatos.
- 17 MR. PARR: Thank you, Mr. Evangelatos.
- 18 Mr. Evangelatos here will provide additional
- 19 testimony on municipal drought supply concerning with
- 20 the City of Fernley.
- 21 And of course recreational opportunities we
- 22 already mentioned. Through the accumulation of credit
- 23 waters and Truckee River reservoirs, recreational
- 24 opportunities will be enhanced increasing recreational
- 25 visitation of these reservoirs.

- 1 There will be, as Mr. Strekal has testified,
- 2 there will be improved water quality in the Lower
- 3 Truckee River.
- 4 There will be enhanced stream flow and
- 5 recreational opportunities in the Truckee River basin in
- 6 addition to the reservoirs.
- 7 And also there will be methods of reducing the
- 8 likelihood that Lake Tahoe will drop below its natural
- 9 rim, improving the efficient use of Lake Tahoe during
- 10 extreme drought conditions.
- And that's all I have for my brief introductory
- 12 testimony this afternoon.
- 13 CO-HEARING OFFICER DODUC: Thank you.
- 14 Mr. Palmer?
- MR. PALMER: I'll turn it over to Mr. Taggart
- 16 for the next.
- 17 CO-HEARING OFFICER DODUC: Okay.
- 18 --000--
- 19 GREG EVANGELATOS
- 20 Called by APPLICANT AND PETITIONERS
- 21 DIRECT EXAMINATION BY MR. TAGGART
- --000--
- MR. TAGGART: Good afternoon. For the record,
- 24 Paul Taggart. And good morning -- or good afternoon,
- 25 Mr. Evangelatos, were you here yesterday for the

- 1 swearing in of the witnesses?
- 2 MR. EVANGELATOS: No, I was not.
- 3 MR. TAGGART: I think if you'd like to swear
- 4 the witness in?
- 5 CO-HEARING OFFICER DODUC: Could you please
- 6 stand and raise your right hand. Please let me find my
- 7 oath again which I believe is just:
- 8 Do you promise to tell the truth during this
- 9 proceeding?
- MR. EVANGELATOS: Yes, I do.
- 11 CO-HEARING OFFICER DODUC: Thank you.
- MR. TAGGART: And could you please tell the
- 13 Board what is your current position in the City of
- 14 Fernley?
- MR. EVANGELATOS: Mr. Chairman, members of the
- 16 commission, my name is Greg Evangelatos. I am currently
- 17 the City Manager of the City of Fernley Nevada.
- 18 MR. TAGGART: And did you prepare written
- 19 testimony for this proceeding?
- MR. EVANGELATOS: Yes, I did.
- 21 MR. TAGGART: Do you have copy of that front of
- 22 you?
- MR. EVANGELATOS: Yes, I do.
- 24 MR. TAGGART: Is that a true and correct copy
- 25 of that written testimony?

- 1 MR. EVANGELATOS: It is correct. There's one
- 2 correction on page 3. There's a typo that's it's 1500
- 3 cubic feet per second rather than 15,000. That needs to
- 4 be corrected.
- 5 CO-HEARING OFFICER DODUC: Which line is that
- 6 on page 3?
- 7 MR. EVANGELATOS: Line 13.
- 8 CO-HEARING OFFICER DODUC: Line 13. And that
- 9 15,000 should be --
- MR. EVANGELATOS: 1500.
- 11 CO-HEARING OFFICER DODUC: 1500. Thank you.
- MR. TAGGART: With that, I'd like to have that
- 13 exhibit marked as City of Fernley Exhibit No. 1.
- 14 And could you please tell the Board a little
- 15 bit about your background, your professional background,
- 16 Mr. Evangelatos?
- 17 MR. EVANGELATOS: Mr. Chairman, I currently am
- 18 the city manager. I have been the city manager for a
- 19 year and a half.
- 20 My professional training is as a professional
- 21 city planner with 30 years' experience.
- I'm AICP in both public and private in both the
- 23 States of California and Nevada and have served 22 years
- 24 in governmental administration, either managing planning
- 25 departments or in this capacity as administrator of a

- 1 municipality.
- 2 MR. TAGGART: Could you please tell the Board a
- 3 little bit about the City of Fernley, the basic
- 4 background about the city.
- 5 MR. EVANGELATOS: The City of Fernley started
- 6 out as a settlement basically in 1904-1905 associated
- 7 with Newlands Project.
- 8 It's basically a farming and agricultural
- 9 community that was associated with the development of
- 10 the canal.
- 11 It has evolved over the last 100 years to a
- 12 town and then finally an incorporated city as of
- 13 July 2001. At that time, it was approximately 7,000
- 14 people. It is now currently 19,000 people.
- Over the last ten years, it has had a very
- 16 rapid rate of increase and suburbanization pattern and
- 17 largely a conversion from an agricultural base to a
- 18 municipal and industrial base in terms of the conversion
- 19 of ag land to suburban subdivisions, commercial
- 20 development, industrial development, and the like.
- 21 MR. TAGGART: And does the City of Fernley own
- 22 Claim 3 water rights under the Orr Ditch Decree?
- MR. EVANGELATOS: Yes, we do.
- 24 MR. TAGGART: Do you know how much?
- MR. EVANGELATOS: I believe it's 10,000 acre

- 1 feet.
- 2 MR. TAGGART: And does Fernley support TROA?
- MR. EVANGELATOS: Yes, we do.
- 4 The City Council of the City of Fernley voted
- 5 to adopt, embrace TROA in September 2008.
- 6 MR. TAGGART: And in your view as the city
- 7 manager, how will Fernley benefit from TROA?
- 8 MR. EVANGELATOS: We believe that the
- 9 application of TROA will allow for the maximum use of
- 10 Fernley's water rights, more customers for the same
- 11 amount of water, no need to construct additional water
- 12 storage reservoirs since they already currently exist,
- 13 and Fernley may rely on the delivery of more water on
- 14 average per year if water is stored upstream relative to
- 15 our drought cycles.
- MR. TAGGART: And has Fernley filed change
- 17 applications with the Nevada State Engineer regarding
- 18 storage of those water rights under TROA?
- 19 MR. EVANGELATOS: Yes, we have. We have filed
- 20 for 4178 acre feet, and those are 19 applications.
- 21 MR. TAGGART: That concludes my questions for
- 22 this witness.
- 23 CO-HEARING OFFICER DODUC: Thank you.
- 24 Any questions from Chair Hoppin or staff for
- 25 these two?

- 1 CO-HEARING OFFICER HOPPIN: I have a question.
- 2 CO-HEARING OFFICER DODUC: Chair Hoppin.
- 3 --000--
- 4 QUESTIONS FROM BOARD and BOARD STAFF
- 5 ---00--
- 6 CO-HEARING OFFICER HOPPIN: Mr. Taggart, if you
- 7 asked this question while I was writing, once again I'll
- 8 apologize.
- 9 Mr. Evangelatos, the growth in Fernley, both
- 10 from residential and industrialization, has that been
- 11 accomplished through utilization of prior water rights
- 12 that you hadn't fully exercised? Or is a part of it
- 13 through the acquisition of new water rights from retired
- 14 agriculture land?
- MR. EVANGELATOS: Well, our current water
- 16 supply system is based on groundwater. And we have 9500
- 17 acre feet of groundwater.
- We in the last three years, as of July of last
- 19 year, constructed a new state-of-the-art water treatment
- 20 facility that allows for arsenic removal. So our
- 21 primary system is currently based on groundwater.
- But this effort, in terms of the surface water,
- 23 is based and predicated on the future in terms of
- 24 allowing for orderly growth of the community.
- So we have developed a plant which can be

- 1 accommodated to serve as surface water treatment with
- 2 some additions and modification and diversions from the
- 3 Truckee River and/or the canal systems.
- 4 CO-HEARING OFFICER HOPPIN: But those are
- 5 rights that you don't currently have?
- MR. EVANGELATOS: Yes, we do. We have 9500
- 7 acre feet of groundwater, and we have 10,000 acre feet
- 8 of surface water. So we have both of them.
- 9 But we do not have the ability to apply them
- 10 now, physically, to municipal and industrial use, and so
- 11 we're in the process of applying to the State Engineer.
- 12 CO-HEARING OFFICER HOPPIN: You know, it's
- 13 interesting to me. Some people would say, and
- 14 incorrectly probably, that Nevada's kind of a backward
- 15 state and California's an advanced state.
- You just have established the fact that Nevada
- 17 in fact has a groundwater policy, and in California we
- 18 don't. So more power to you.
- 19 MR. EVANGELATOS: Well, we're in a desert. We
- 20 have a hundred-year history.
- 21 CO-HEARING OFFICER HOPPIN: Well, you should be
- 22 proud of that. I wish we had something like that around
- 23 here. Just an editorial comment.
- Thank you.
- 25 CO-HEARING OFFICER DODUC: Does staff have

- 1 questions right now? All right.
- If you could join your witnesses, I'll ask
- 3 Mr. Van Zandt and Mr. Mackedon to come up for cross.
- 4 And for your information, Mr. Van Zandt and
- 5 Mr. Mackedon, I will allow you each an hour
- 6 cross-examination for each of the three panels, I guess
- 7 mini-panels, that we've created for this topic.
- 8 So you'll have a total of three hours each for
- 9 the entirety of this topic, but I will trust that you
- 10 use that time wisely and efficiently.
- And my attorney pointed out that you don't need
- 12 to take the entire three hours.
- 13 (Laughter)
- 14 CO-HEARING OFFICER DODUC: You may begin
- 15 whenever you are ready, Mr. Van Zandt.
- MR. VAN ZANDT: Thank you.
- 17 --000--
- 18 CROSS-EXAMINATION BY MR. VAN ZANDT
- 19 FOR TRUCKEE-CARSON IRRIGATION DISTRICT
- 20 and CHURCHILL COUNTY
- 21 --000--
- MR. VAN ZANDT: Mr. Parr, so your testimony was
- 23 short, and that was appreciated, I'm sure.
- One of the things you addressed though was the
- 25 ability of TROA to prevent Tahoe from going below the

- 1 rim more often, and I was wondering, because that's
- 2 happened in the last several years here and clearly
- 3 effects Floriston rates, is the anticipation that there
- 4 would be addition of credit exchange water into Lake
- 5 Tahoe that would assist in preventing it from going
- 6 below the rim? Or was there -- is it the fact that the
- 7 other reservoirs may be used in such a way that less
- 8 water would be released from Lake Tahoe?
- 9 MR. PARR: I just think the TROA would allow
- 10 the flexibility to do a combination of things, whether
- 11 it's an exchange of credit water or whether it's just
- 12 using the reservoirs in concert in different ways.
- MR. VAN ZANDT: Because if the parties are --
- 14 and this is not an application that's before the Board,
- 15 but you raise the subject so I just have to ask.
- If the parties are credit-exchanging water into
- 17 Lake Tahoe where there is also the Claim 4 water which
- 18 is used for Floriston rates, isn't it -- there a
- 19 potential that we could have a displacement of Claim 4
- 20 water by the exchange water being stored there?
- 21 MR. PARR: I don't think there would be a
- 22 displacement of that. But I also -- I just do not have
- 23 an answer for you to that. I don't have the -- I just
- 24 don't know.
- MR. VAN ZANDT: Okay. Thank you.

- 1 Mr. Evangelatos, good afternoon. How are you?
- 2 We met earlier.
- 3 Do you have an idea of how many people in the
- 4 city of Fernley are receiving Claim 3 water and are
- 5 irrigating?
- 6 MR. EVANGELATOS: I don't have a feeling for
- 7 that number.
- MR. VAN ZANDT: Were you aware that about 2200
- 9 acres of land in the Truckee Division are still being
- 10 irrigated?
- MR. EVANGELATOS: I think that's a good
- 12 approximate figure.
- MR. VAN ZANDT: Yeah. Not all of those are
- 14 within the City of Fernley, though, right?
- MR. EVANGELATOS: That's correct.
- MR. VAN ZANDT: Truckee Division is larger than
- 17 the City of Fernley.
- The Claim 3 rights that Fernley has been
- 19 acquiring surface water rights -- you said about 10,000
- 20 acre feet, right?
- MR. EVANGELATOS: Correct.
- MR. VAN ZANDT: Those 10,000 acre feet, they
- 23 have been acquired partially by purchase and partially
- 24 dedication?
- MR. EVANGELATOS: I would say predominantly by

- 1 dedication from developers who have come to the city in
- 2 exchange for development rights and the intensification
- 3 of the property they convey the water rights to the
- 4 City, and then they're placed in a water rights bank.
- 5 So they're then converted over time, obviously, to
- 6 will-serves.
- 7 MR. VAN ZANDT: And not all of those water
- 8 rights, the 10,000 acre feet, have been converted to M&I
- 9 at this point; is that right?
- 10 MR. EVANGELATOS: That's correct.
- 11 MR. VAN ZANDT: Do you know approximately how
- 12 many?
- MR. EVANGELATOS: Could I confer with counsel?
- MR. VAN ZANDT: Well, if you don't know, you
- 15 can say you don't know.
- MR. EVANGELATOS: I'm thinking about 8,000 of
- 17 those acre feet.
- MR. VAN ZANDT: I think that's right. About 7
- 19 to 8,000 is about right.
- The other 1500 or so, 2,000 acre feet, do you
- 21 know if there's still irrigation taking place with some
- 22 of those waters?
- 23 MR. EVANGELATOS: I believe it's mixed. I
- 24 think some have been stripped off, and I think some are
- 25 still being applied, either because of agreements or

- 1 just because the banks have held them and they've not
- 2 been converted to any sort of development.
- 3 MR. VAN ZANDT: And does Fernley at lease back
- 4 any of the water for -- that they're not using?
- 5 MR. EVANGELATOS: Yes, we do.
- 6 MR. VAN ZANDT: And that's for irrigation
- 7 purposes?
- 8 MR. EVANGELATOS: Correct.
- 9 MR. VAN ZANDT: And all the water that we're
- 10 talking about here is Claim 3 water that is accessed
- 11 right now, that's water that's taken out of the Truckee
- 12 Canal?
- MR. EVANGELATOS: That's correct.
- 14 MR. VAN ZANDT: And the 8,000 acre feet that
- 15 we're talking about that has been converted to M&I, do
- 16 you know if any of that water is being utilized right
- 17 now?
- 18 MR. EVANGELATOS: I think some of it is being
- 19 applied to beneficial use in, I think, two or three
- 20 areas. Some at the golf course. Some is -- I think it
- 21 might be at Swingle Bench. Some are sort of applied,
- 22 trying to keep in beneficial use.
- MR. VAN ZANDT: Do you have an idea
- 24 approximately how many acre feet are being applied right
- 25 now?

- 1 MR. EVANGELATOS: Maybe 1500, something like
- 2 that, that magnitude.
- 3 MR. VAN ZANDT: And what is happening with the
- 4 rest of the 10,000 acre feet right now?
- 5 MR. EVANGELATOS: Well, we have developed a
- 6 couple of options.
- 7 One, this past year we entered into a lease
- 8 agreement with the Pyramid Lake Tribe for the
- 9 utilization of approximately 6,000 acre feet of water
- 10 during the irrigation season to allow for enhancement of
- 11 the fisheries. In exchange for that, we received 1800
- 12 acre feet of storage.
- This year, we have continued the discussions
- 14 relative to leasing a little bit more -- I think it's
- 15 risen in terms of approximately 6600 acre feet -- for
- 16 possible leasing and compensation through a grant
- 17 program coming from the federal government, or storage.
- And that remains to be seen. This will be some
- 19 federal money coming to us.
- 20 MR. VAN ZANDT: When you say leased to Pyramid
- 21 Lake, what do you mean by that?
- MR. TAGGART: I'm just going to object. This
- 23 is far beyond the scope of the direct exam. I let the
- 24 questions go for a while, but this witness didn't
- 25 testify about any of these items on direct exam.

- 1 CO-HEARING OFFICER DODUC: Mr. Van Zandt?
- 2 MR. VAN ZANDT: Well, the reality is that the
- 3 Fernley water is being stored in the reservoirs -- and
- 4 I'll get to that question in a second -- that are the
- 5 subject of this hearing.
- And in fact, there's an intent to continue to
- 7 store them, so they will be part of the water inventory
- 8 that the Board is looking at to approve in terms of the
- 9 change applications.
- 10 CO-HEARING OFFICER DODUC: I'll allow the
- 11 question. It is related to the issues that we're
- 12 looking at.
- 13 Please answer.
- 14 MR. EVANGELATOS: Could you repeat the
- 15 substance?
- MR. VAN ZANDT: The 6,000 acre feet that's
- 17 leased to Pyramid Lake, do you know what happens to
- 18 that?
- 19 MR. EVANGELATOS: Yes. This year, we are
- 20 working on an agreement between ourselves and the
- 21 Pyramid Lake Tribe to allow for that water to be
- 22 diverted to Pyramid Lake during the irrigation season
- 23 for fishery enhancement in exchange for either another
- 24 consideration of storage or possible funds.
- MR. VAN ZANDT: And I think you indicated there

- 1 was about 1800 acre feet that would go into storage?
- 2 MR. EVANGELATOS: The exchange would be the
- 3 6,000 acre feet of water for the last year. It would be
- 4 1800 acre feet of storage capacity in the future.
- 5 MR. VAN ZANDT: That water is not being stored
- 6 right now?
- 7 MR. EVANGELATOS: No.
- 8 MR. VAN ZANDT: You have no credit storage for
- 9 that water?
- 10 MR. EVANGELATOS: We receive the credit, but I
- 11 do not believe we are storing the water.
- MR. VAN ZANDT: So isn't it true,
- 13 Mr. Evangelatos that in the TROA, as it's been
- 14 negotiated, that the City of Fernley will get a
- 15 municipal credit under TROA?
- MR. EVANGELATOS: Yes.
- 17 MR. VAN ZANDT: Okay. And this water that
- 18 you're getting a credit for from the Tribe last year --
- MR. EVANGELATOS: Yes.
- 20 MR. VAN ZANDT: -- is that part of that
- 21 municipal credit water?
- MR. EVANGELATOS: It would allow for us in the
- 23 future to store.
- MR. VAN ZANDT: So you're kind of creating an
- 25 advance bank of water right now?

- 1 MR. TAGGART: I'm just going to object.
- 2 This is far beyond the scope and there's a lot
- 3 of facts that are being assumed in the questions, and I
- 4 think it's a vague question with respect to the
- 5 definition of what credit is.
- 6 This witness did not prepare testimony on these
- 7 subjects and did not submit testimony these subjects and
- 8 quite frankly isn't prepared to testify about these
- 9 subjects.
- 10 CO-HEARING OFFICER DODUC: Mr. Taggart, under
- 11 our proceedings rules and procedures, cross-examination
- 12 is allowed to go beyond the scope of the direct
- 13 testimony if it is relevant to the issues at hand.
- In this matter, I believe it is relevant to the
- 15 issues at hand. I'm allowing the questions to proceed,
- 16 but I will take your objections into consideration in
- 17 weighing this portion of the testimony.
- 18 So with that, Mr. Van Zandt, you may continue.
- 19 MR. VAN ZANDT: Thank you.
- I think the last question that I had was so the
- 21 City of Fernley is creating a kind of advance bank of
- 22 water that eventually will be recognized under TROA;
- 23 isn't that right?
- MR. EVANGELATOS: Yes.
- MR. VAN ZANDT: And is it Fernley's intent to

- 1 store that water primarily in Stampede?
- 2 MR. EVANGELATOS: Yes.
- 3 MR. VAN ZANDT: So it would be fair to say that
- 4 that water would become part of the water that is the
- 5 subject of the petition to change that's before the
- 6 Board?
- 7 MR. EVANGELATOS: Yes.
- 8 MR. VAN ZANDT: It could be exchanged into
- 9 another reservoir, in other words?
- 10 Mr. Evangelatos, you are familiar with the
- 11 Truckee-Carson Irrigation District, correct?
- MR. EVANGELATOS: Yes, I am.
- MR. VAN ZANDT: And you have an understanding
- 14 that the Truckee-Carson Irrigation District is
- 15 responsible for the operation and management of the
- 16 Newlands Project, right?
- 17 MR. EVANGELATOS: Correct.
- MR. VAN ZANDT: And part of the operational and
- 19 management responsibilities that TCID has is the
- 20 management of the Claim 3 water for the benefit of the
- 21 project, right?
- MR. EVANGELATOS: Yes.
- MR. VAN ZANDT: So the City of Fernley has
- 24 elected to take its share of Claim 3 water and treat it
- 25 as a separate water right from the Claim 3 rights; isn't

- 1 that correct?
- 2 MR. TAGGART: If I may object, I'll be a little
- 3 more clear.
- 4 There's a subject of litigation between the
- 5 parties that involves the exchange. It's a federal
- 6 lawsuit. Part of my objections are concerning the
- 7 questions that are being asked that are arguably
- 8 discovery in that particular lawsuit.
- 9 The question that was just asked is the
- 10 specific subject of litigation, and the question of
- 11 control that TCID has over Claim 3 water.
- 12 So again, I just -- I want to say for the
- 13 record that we object to this line of questioning
- 14 because it's not something this witness prepared for,
- 15 and it's -- we don't think it's highly relevant to this
- 16 proceeding.
- 17 CO-HEARING OFFICER DODUC: Hold on a second.
- 18 MR. VAN ZANDT: May I respond?
- 19 CO-HEARING OFFICER DODUC: Mr. Van Zandt.
- 20 MR. VAN ZANDT: Mr. Taggart was correct. There
- 21 was litigation.
- But TCID has moved to dismiss that litigation
- 23 as being moot because it was a temporary change
- 24 application from last year, and it's already happened
- 25 and over.

- 1 CO-HEARING OFFICER DODUC: Mr. Taggart?
- 2 MR. TAGGART: We have an application for -- the
- 3 way the temporary applications in Nevada work is that
- 4 they have a one-year life.
- 5 We filed applications in 2009, and they were
- 6 granted. And after they were granted, an appeal was
- 7 filed. I'm not aware that that appeal was withdrawn. I
- 8 thought I would have received notice if that had been
- 9 done.
- But then in 2010, we filed temporary change
- 11 applications which were granted, over TCID's protest.
- 12 They were granted in the last three days, and the appeal
- 13 time for those -- for that particular temporary change
- 14 application is pending as we speak.
- So this is definitely an issue that was
- 16 litigated last year, and we anticipate it will be
- 17 litigated again.
- 18 CO-HEARING OFFICER DODUC: Mr. Taggart, I'll
- 19 take your objection under advisement. I will allow
- 20 Mr. Van Zandt to continue. And we'll consider your
- 21 objection in weighing the testimony.
- Mr. Van Zandt.
- MR. VAN ZANDT: Thank you.
- So my last question, Mr. Evangelatos, was that
- 25 the portion of the Claim 3 water that the City of

- 1 Fernley has acquired, they are managing that separately
- 2 from the management that TCID applying; isn't that
- 3 right?
- 4 MR. EVANGELATOS: I really do not know the
- 5 answer to that.
- 6 MR. VAN ZANDT: Well, let me -- let me ask you
- 7 this: The water that the City of Fernley would receive
- 8 that is under the management of the Truckee-Carson
- 9 Irrigation District, that would be diverted at Derby Dam
- 10 into the Truckee Canal, right?
- MR. EVANGELATOS: That's correct.
- MR. VAN ZANDT: But the City of Fernley has
- 13 chosen not to do that but to allow that water to flow to
- 14 Pyramid Lake in return for this banking credit, right?
- MR. EVANGELATOS: Not in its entirety.
- MR. VAN ZANDT: The 6,000 acre feet has been.
- 17 MR. EVANGELATOS: Yes.
- 18 MR. VAN ZANDT: And do you know,
- 19 Mr. Evangelatos, if it's the City of Fernley's intention
- 20 in the future, if TROA in fact is approved and
- 21 implemented, City of Fernley would continue to credit
- 22 store its water, or would it now credit store its water
- 23 upstream in Stampede under TROA?
- 24 MR. EVANGELATOS: We would be looking to create
- 25 and accept storage capabilities, yes.

- 1 MR. VAN ZANDT: That's all I have.
- 2 CO-HEARING OFFICER DODUC: Mr. Mackedon?
- 3 MR. MACKEDON: Thank you.
- 4 --000--
- 5 CROSS-EXAMINATION BY MR. MACKEDON
- 6 FOR CITY OF FALLON
- 7 --000--
- 8 MR. MACKEDON: I have a question for Mr. Parr
- 9 that I asked yesterday, and you said you would answer it
- 10 today if I recall correctly.
- 11 What are the benefits to the owners of water
- 12 rights in the Carson Division of the Newlands Project
- 13 derived from TROA?
- 14 MR. PARR: I believe there's a couple of
- 15 benefits that can be derived from TROA to the water
- 16 right holders of the Newlands Project.
- I think just settling the interstate allocation
- 18 and having those, that allocation of water, settled
- 19 between California and Nevada will allow people in the
- 20 Truckee Basin and in the Carson River Basin to go on
- 21 with now future planning knowing what that allocation
- 22 is.
- I think another benefit there is basically
- 24 increased return flows during drought periods that could
- 25 be would be made available to the Newlands Project.

- 1 MR. MACKEDON: In the first case, the first
- 2 portion of your answer, you're talking about the
- 3 interstate allocation.
- 4 That's how Nevada and California have operated
- 5 for many years, correct? And these benefits that would
- 6 flow from having that legally formalized would flow to
- 7 everybody, the Truckee Division, everybody in the
- 8 watershed having that.
- 9 MR. PARR: The front end of your question,
- 10 Mr. Mackedon, I need a little assistance here, some
- 11 clarification. I don't think the interstate allocation
- 12 has been going on for the time period you're talking
- 13 about.
- But I think just being able to implement the
- 15 interstate allocation would allow entities, cities,
- 16 communities, Truckee-Carson Irrigation District, to go
- 17 on with future planning knowing what that allocation is.
- MR. MACKEDON: Your opinion then that
- 19 individuals within the Carson Division would be sharing
- 20 in the same way that people in the Truckee Division
- 21 would be by virtue of that interstate allocation
- 22 settling?
- MR. PARR: I'm not certain what you mean by
- 24 what they're sharing and --
- MR. MACKEDON: I don't need to pursue that.

- 1 MR. PARR: Okay.
- 2 MR. MACKEDON: That's a benefit to the Carson
- 3 Division that's unique to the Carson Division. Or would
- 4 you regard it as just a benefit to everyone on the
- 5 watershed?
- 6 MR. PALMER: I guess I'd object for what it's
- 7 worth. He's answered that twice now.
- 8 CO-HEARING OFFICER DODUC: I think he's ready
- 9 to move on anyway.
- 10 MR. MACKEDON: That's all the questions I have
- 11 for Mr. Parr. Thank you.
- I have a question or two for Mr. Evangelatos.
- 13 I believe you testified that the City of Fernley owns
- 14 groundwater --
- MR. EVANGELATOS: Yes.
- 16 MR. MACKEDON: -- has groundwater rights
- 17 permitted by the State Engineer's Office of the State of
- 18 Nevada, 9600 acre feet. That in addition to that, it
- 19 owns surface water which Newlands Project water rights
- 20 10,000 acre feet; is that correct?
- MR. EVANGELATOS: Yes.
- MR. MACKEDON: Can you tell me, if you know,
- 23 what is the source of recharge for the groundwater that
- 24 Fernley owns and presently relies upon for its drinking
- 25 water supply?

- 1 MR. EVANGELATOS: I do not have a scientific
- 2 basis for speculating on that topic.
- 3 MR. MACKEDON: I'm not asking for scientific
- 4 analysis. Have you read in your capacity as city
- 5 manager what the source of recharge is? Read about
- 6 that?
- 7 MR. EVANGELATOS: Well, I'm aware that the
- 8 canal has seepage, and the seepage feeds the aquifer,
- 9 and that could be a significant source of it. But
- 10 beyond that, I don't know what else is in the
- 11 groundwater profile.
- MR. MACKEDON: So here we have a case where the
- 13 -- one could argue that at least a portion of the
- 14 surface water, the groundwater, is the same body of
- 15 water.
- MR. EVANGELATOS: You could.
- 17 MR. MACKEDON: Okay. I have no further
- 18 questions. Thank you, both witnesses. Thank you.
- 19 CO-HEARING OFFICER DODUC: Thank you,
- 20 Mr. Mackedon.
- 21 Mr. Palmer, any redirect.
- MR. PALMER: I have none. Thank you.
- 23 CO-HEARING OFFICER DODUC: Mr. Taggart, any
- 24 redirect?
- MR. TAGGART: No questions, thank you.

- 1 CO-HEARING OFFICER DODUC: Chair Hoppin, any
- 2 questions?
- 3 CO-HEARING OFFICER HOPPIN: No.
- 4 CO-HEARING OFFICER DODUC: Staff? Okay. Thank
- 5 you very much.
- 6 Mr. DePaoli, I believe you have two witnesses
- 7 for the next grouping?
- Begin whenever you're ready, Mr. DePaoli.
- 9 --000--
- JANET CARSON PHILLIPS
- 11 Called by APPLICANT AND PETITIONERS
- 12 DIRECT EXAMINATION BY MR. DePAOLI
- 13 --000--
- MR. DePAOLI: Mrs. Phillips, would you please
- 15 state your name and spell it for the record.
- MS. PHILLIPS: My name is Janet Phillips,
- 17 P-h-i-l-l-i-p-s. However, prior to 2007, I was known as
- 18 Janet Carson.
- 19 MR. DePAOLI: Mrs. Phillips, were you here
- 20 yesterday and sworn as a witness?
- MS. PHILLIPS: Yes, I was.
- MR. DePAOLI: And is TMWA Exhibit 2-0 a true
- 23 and correct copy of your testimony?
- MS. PHILLIPS: Yes.
- MR. DePAOLI: Would you -- and is TMWA

- 1 Exhibit 2-1 a true and correct copy of your educational
- 2 and professional background?
- 3 MS. PHILLIPS: Yes.
- 4 MR. DePAOLI: Would you briefly summarize your
- 5 education and professional experience?
- 6 MS. PHILLIPS: Yes.
- 7 I received a bachelor's degree in economics
- 8 from Stanford University. After that, I received a
- 9 master's degree in water resources engineering at UCLA.
- I, after I finished my education, held several
- 11 positions in water resources in northern Nevada. First
- 12 I was deputy Federal Water Master for the Carson and
- 13 Truckee Rivers. Subsequent to that, I was a water
- 14 resource planner on the Carson River.
- In 1989, I joint Sierra Pacific Power Company.
- MR. DePAOLI: What was your position with
- 17 Sierra Pacific Power Company?
- 18 MS. PHILLIPS: I had several positions during
- 19 my 12 years there, culminating in Director of Water
- 20 Policy and Planning.
- MR. DePAOLI: Using some examples from your
- 22 testimony, could you provide some examples of operation
- 23 of the reservoirs on the Truckee River system today
- 24 under the Orr Ditch Decree and the Truckee River
- 25 Agreement?

- 1 MS. PHILLIPS: Yes. I have three examples.
- 2 They are intended -- this is not the right exhibit -- I
- 3 mean display -- right now. Thank you.
- 4 Three examples intended to illustrate the
- 5 rigidity of the Truckee River under its current
- 6 operating rules.
- 7 The first one has to do with a farmer in Reno.
- 8 In the 1950s, this gentleman would have diverted ten
- 9 acre feet to irrigate his farm today. He had Orr Ditch
- 10 Decree right. Priority was probably in the 1860s or
- 11 1880s; however, his water right was converted to
- 12 municipal use in accordance with the Orr Ditch Decree
- 13 and Nevada state law.
- 14 The municipality does not need that water
- 15 today. The ten acre feet, they don't need it today.
- 16 But they do anticipate needing it in the fall or
- 17 possibly next year.
- 18 Under the current rules of the Truckee River,
- 19 there's no way you can retain that water upstream in
- 20 storage for future use because of the Floriston rate
- 21 rules.
- The utility therefore is forced to either watch
- 23 their water flow by their point of diversion or build a
- 24 reservoir somewhere in Reno to capture it.
- Under TROA, in the future it will be possible

- 1 to retain that water in upstream storage in California
- 2 for future use.
- 3 The second example, also having to do with
- 4 reservoir rigidity is the utility is in a drought. They
- 5 need a lot of water to be released from Independence,
- 6 and they need that release to be made in accordance with
- 7 their customers' needs. So it's going to vary widely
- 8 from day to day.
- 9 The Little Truckee River and Independence Creek
- 10 are sensitive fish habitats. They don't like that
- 11 variable flow.
- 12 So if you could exchange the water from
- 13 Independence down to Boca, for instance, and release it
- 14 from there, because Boca is immediately adjacent to the
- 15 main stem of the Truckee River, you wouldn't have these
- 16 adverse effects on Independence Creek and Little Truckee
- 17 River.
- Under current rules, there is no way to do
- 19 that.
- 20 The third example -- this also gets to the
- 21 reservoirs' rigidity with their purposes of use -- has
- 22 to do with a situation -- this actually arose in 1981 --
- 23 where Stampede Reservoir is the only source of water for
- 24 the spawning in the Lower Truckee River. You've heard a
- 25 lot about that.

- In 1981, there was a call by Fish and Wildlife
- 2 Service for 90,000 acre feet down by Pyramid Lake for
- 3 spawning. That volume of water, if taken over the
- 4 two-month period they had in mind, would have resulted
- 5 in a flow in the Little Truckee River of 750 fifty cubic
- 6 feet per second.
- 7 That's three times greater than what the
- 8 maximum recommended flow is under the California
- 9 guidelines.
- 10 So if you had the ability to release the water
- 11 from several different source reservoirs through
- 12 exchanges, you wouldn't have that severe impact on the
- 13 Little Truckee.
- Under the rules currently in effect, that isn't
- 15 something you can do. Under TROA, you'd be able to do
- 16 that.
- MR. DePAOLI: Would you please explain Sierra's
- 18 objectives in negotiating the Truckee River Operating
- 19 Agreement and why those objectives are important to a
- 20 water utility, be it Sierra or TMWA?
- 21 MS. PHILLIPS: Yes. Sierra -- at the time of
- 22 the Orr Ditch Decree, Sierra had three water sources.
- 23 There was a thing called the 40 cubic foot per second
- 24 right, Hunter Creek which is a local tributary in Reno,
- 25 and Donner and Independence, the two private reservoirs.

- 1 During the 1950s, the utility started acquiring
- 2 irrigation rights and converting them to municipal use.
- 3 And that system is still in effect today, only
- 4 the responsibility has been put onto developers.
- 5 I don't know if you have anything like this in
- 6 California, but if you want to get a building permit,
- 7 you have to go buy a water right and deed it to the
- 8 utility. That way the water supply grows as the
- 9 community grows.
- But those rights don't provide a full supply
- 11 during drought years. Like anywhere in the west, they
- 12 don't fully equal water during droughts.
- Back in the 1970s, the expectation was that
- 14 Stampede Reservoir would provide drought storage for the
- 15 municipality.
- When that -- so the court decision in 1982, I
- 17 think it was, that Stampede was not going to be
- 18 available for municipal drought storage, when that came
- 19 out it caused a problem for Sierra to find an alternate
- 20 storage capability. So we had to go find some other
- 21 storage options.
- I'd like to talk about the water resource plan
- 23 a little bit because shortly after the Stampede decision
- 24 came out Sierra started doing a systematic job of doing
- 25 water resource planning, and the primary purpose of that

- 1 was to find drought storage.
- 2 So in the first plan which was in 1985, there
- 3 were four reservoir options identified. By the time the
- 4 one that I was mostly involved with, 1994, there were 18
- 5 reservoir options. All but one of them were in Nevada.
- The concept was not to capture new water, but
- 7 to take these water rights that we had been gathering
- 8 from developers and from converted irrigation rights,
- 9 take the consumptive use part of those water rights, and
- 10 store them for drought use. Take a little bit of water
- 11 every year, store it so that you have a supply during
- 12 droughts.
- When Public Law 101-618 was passed, and it
- 14 appeared the TROA was headed toward implementation, we
- 15 really focused on the TROA storage option and put the
- 16 other local reservoir options on the back burner.
- MR. DePAOLI: In your written testimony, you
- 18 mention that the defining event of your years at Sierra
- 19 was the 1988 to '94 drought.
- 20 Would you tell the Board about that drought and
- 21 how it influenced the manner in which Sierra managed its
- 22 municipal water supply?
- MS. PHILLIPS: Yes. I was responsible for
- 24 water resources during that drought period. It was
- 25 worse than either of the two previous droughts of the

- 1 twentieth century on the Truckee River. It's also the
- 2 period when many of the cornerstones of TROA were
- 3 negotiated.
- 4 The drought made us realize the importance of
- 5 capturing Independence and Donner water in other
- 6 reservoirs and saving them for a drought period so
- 7 during normal years we could get along without using
- 8 those waters, store them for drought use.
- 9 Also the ability to store the consumptive use
- 10 portion of our Nevada water rights, which a lot has been
- 11 said about that here today, but that was a decision the
- 12 Nevada State Engineer already made, and Mr. Erwin's
- 13 going to speak to that further.
- 14 So to not let those flow down river, because
- 15 they're very senior rights and we can't afford to just
- 16 let them go a by, to store those became very important
- 17 for drought times.
- 18 Let me just describe briefly the scenario.
- 19 When you have a drought on the Truckee River, what that
- 20 means is that Lake Tahoe is low. And if it's so low
- 21 that the water level is below the outlet rim, then no
- 22 water will flow into the river at all from Lake Tahoe.
- 23 At that point, the flow in the river is
- 24 comprised mostly of Boca releases. When Boca runs out,
- 25 the river drops abruptly and suddenly to a relative

- 1 trickle, and from that day forward for the rest of the
- 2 summer and fall, the utility needs a different water
- 3 supply, a supplement.
- 4 So during the drought of the '90s, Donner Lake
- 5 and Independence Lake were the primary supplement.
- In 1992, it was so dry that we used over half
- 7 the water in Independence, 9,000 acre feet. Scared the
- 8 dickens out of me because had the drought continued for
- 9 1993 we would have run out of water.
- 10 Luckily, we got some reprieve in '93, and we
- 11 got a little bit more most moisture. But it really
- 12 shook me up to where we need more drought storage.
- MR. DePAOLI: What did you do during that
- 14 period to manage to get through the drought?
- MS. PHILLIPS: We had an assortment of
- 16 short-term contracts.
- 17 Thankfully we had a 1988 agreement to store
- 18 water in Boca with the Washoe County Water Conservation
- 19 District. They raised some issues about that in 1990.
- 20 And then in 1991, Bureau of Reclamation said
- 21 they thought the agreement was illegal because they
- 22 weren't a party to it. So that was obviously a crisis
- 23 for us; in 1991, we were right in the middle of the
- 24 drought.
- So in 1993 we had a thing called a borrowing

- 1 agreement where we were able to borrow 5,000 acre feet
- 2 from the United States. Didn't ever have to exercise
- 3 it, but it was there. That was in March.
- In October we had another one-year deal with
- 5 storing water. That was good for one year for 3,000
- 6 acre feet.
- 7 But they were very much stopgap measures.
- MR. DePAOLI: Besides these stopgap measures,
- 9 did Sierra arrange for somewhat longer storage
- 10 arrangement?
- MS. PHILLIPS: Yes. We had a provision in
- 12 Public Law 101-618 allowing for interim storage.
- 13 Apparently, Congress realized we were in a
- 14 severe drought and that it might take some time for TROA
- 15 to be implemented. I don't think anybody knew how much
- 16 time.
- 17 So there was a provision for interim storage.
- 18 That took four years to negotiate, but it did put in
- 19 place a 25-year storage agreement.
- 20 Paradoxically at the end of the negotiations
- 21 when we signed that in 1994, the drought ended in 1995.
- I guess one of the things I take away from this
- 23 is my successors at the water utility won't have to deal
- 24 with all the stopgap measures in future droughts.
- MR. DePAOLI: Mrs. Phillips, there is a chart

- 1 at the end of your written testimony. Using that
- 2 chart -- and I think a portion of that chart will be put
- 3 on the screen -- could you tell the Board a little bit
- 4 how the change petitions relate to some of the
- 5 operations allowed by the Truckee River Operating
- 6 Agreement?
- 7 MS. PHILLIPS: Yes. I put --
- MR. DePAOLI: That's the whole chart, isn't it?
- 9 MS. PHILLIPS: That's the whole chart. That's
- 10 fine.
- I put six examples in my testimony. This is
- 12 not intended to be an exhaustive description of TROA,
- 13 but I thought it might be helpful to the Board to
- 14 describe a couple of real-life scenarios how TROA would
- 15 work and how this change petition would work.
- The only two I'm going to talk about orally are
- 17 the ones highlighted in yellow.
- And the first one is that you have an instream
- 19 flow goal, California has, in Independence Creek and
- 20 Little Truckee River. Say it's springtime and it's
- 21 pretty dry, but Independence Lake is in priority to
- 22 store.
- You know, Independence is fairly junior. It's
- 24 junior to the Newlands Project diversion, and it's
- 25 junior to all the direct diversion rights in Nevada.

- 1 But nonetheless, there is a period in the spring
- 2 Independence could capture some water.
- 3 However, TMWA agrees to let its water pass
- 4 through Independence in order to accommodate
- 5 California's goals for more instream flow, but then they
- 6 capture it in one of the lower reservoirs on the Little
- 7 Truckee River, either Stampede or Boca.
- 8 The point of the petition request for
- 9 additional points of diversion would be to accommodate
- 10 that transaction. And under TROA provision 8 and 3,
- 11 that can only happen for maintaining minimum flow or
- 12 enhanced minimum flow or direct delivery to customers.
- So it's a fairly narrow definition of when that
- 14 could be done; nonetheless, it would be for the benefit
- 15 of instream flows.
- The second one I'll briefly describe is that
- 17 TMWA in TROA has a block of 7500 acre feet of emergency
- 18 water in Stampede. And it just sits there most of time.
- 19 It's for emergencies. It's for what we call a worse
- 20 than worse case drought. So it's not generally going to
- 21 be released. It's an insurance policy.
- However, over in Prosser Creek, which is of
- 23 course over in the other drainage, there's a block of
- 24 water held by the fishery parties, but they want to
- 25 release. They would like to use it for fish purposes

- 1 and let it out of the reservoir.
- Well, California has a goal to keep 19,000 acre
- 3 foot pool in Prosser for recreation.
- 4 So if you could do an exchange -- and this is
- 5 purely a paper transaction; there's no actual water
- 6 moving. Put the TMWA emergency water over there in
- 7 Prosser where it's not going to be released. Put the
- 8 fish water in Stampede where it is intended to be
- 9 released. Then you end up with Prosser staying high
- 10 which is a goal California has.
- 11 Now in order to do that from a California
- 12 license or permit standpoint, we need to have additional
- 13 municipal purposes and places of use added to the
- 14 Prosser license -- sorry. Is that a license or permit?
- 15 I forget.
- Anyway, Prosser needs to have municipal uses
- 17 and places because we put our utility over in Prosser.
- On the Stampede side of that exchange, you
- 19 don't need to do anything because Stampede already has
- 20 fishery purposes.
- 21 So those are kind of two illustrations of the
- 22 way that these change petitions can add more flexibility
- 23 to the system to help accomplish some California goals
- 24 and protect the drought robustness of our supply.
- MR. DePAOLI: That concludes my direct

- 1 examination. There's a couple things I want to take
- 2 care of because I'm not sure I did them at the
- 3 beginning.
- 4 CO-HEARING OFFICER DODUC: Okay.
- 5 MR. DePAOLI: Mrs. Phillips, did you have any
- 6 revisions or corrections to TMWA Exhibit 2-0 --
- 7 MS. PHILLIPS: No.
- 8 MR. DePAOLI: -- your written testimony?
- 9 And I think I asked you this, but is TMWA
- 10 Exhibit 2-0 a true and correct copy of your written
- 11 testimony?
- MS. PHILLIPS: Yes.
- MR. DePAOLI: And do you affirm that the
- 14 testimony there is true and correct and that your
- 15 testimony today was true and correct?
- MS. PHILLIPS: Yes.
- MR. DePAOLI: Ready to move on.
- 18 CO-HEARING OFFICER DODUC: Actually, before you
- 19 do, Mr. Hoppin?
- 20 CO-HEARING OFFICER HOPPIN: Ms. Phillips, I
- 21 have two questions for you.
- --000--
- 23 QUESTIONS FROM BOARD and BOARD STAFF
- --000--
- 25 CO-HEARING OFFICER HOPPIN: You had mentioned

- 1 that without storage provisions even senior water right
- 2 holders, and the example you gave I recall was a
- 3 municipality, if they can't capture that water, they
- 4 surrender it in a pass-through; is that correct?
- 5 MS. PHILLIPS: That's correct.
- 6 CO-HEARING OFFICER HOPPIN: And under Nevada
- 7 law, who has the right to reclaim that water and put it
- 8 to beneficial use after it passes past the point of
- 9 diversion? How does that work?
- MS. PHILLIPS: I would --
- 11 CO-HEARING OFFICER HOPPIN: Say we use Fernley,
- 12 for example. Fernley has a water right -- if they do or
- 13 they don't; I'm just making this up.
- 14 They have a senior water right. They don't
- 15 have the ability, because of lack of storage facilities
- 16 or any conjunctive use, groundwater recharge. They have
- 17 to let, because of the time of the year, a portion of
- 18 their water right pass their point of diversion.
- 19 Who has the right to pick up that water or what
- 20 happens to it once it passes that point of diversion?
- 21 MS. PHILLIPS: I'd like to answer this and be
- 22 careful that I say it from a practical operating
- 23 standpoint and not from a legal standpoint.
- 24 If we are unable to divert our water, for
- 25 whatever reason, even though our rights are in priority

- 1 and senior, the water goes downstream and is available
- 2 for diversion by others.
- 3 That does not, however, give them the right to
- 4 that water.
- 5 CO-HEARING OFFICER HOPPIN: I kind of
- 6 understand what you just said, but I understand why
- 7 you're not saying.
- 8 More the other question I have, you talked
- 9 about developer's rights. If you're a developer in
- 10 Sparks or Reno, if you want to build a whatever, you
- 11 have to acquire a water right.
- MS. PHILLIPS: That's correct.
- 13 CO-HEARING OFFICER HOPPIN: But that is an
- 14 interruptible water right.
- MS. PHILLIPS: It's -- the way we have done it
- 16 is the developer brings in the irrigation water right.
- 17 We all understand that that's not 100 percent guaranteed
- 18 to deliver water, so it's the utility's job to partner,
- 19 to match that irrigation right with some form of
- 20 storage.
- 21 And so the custom has been and the rule has
- 22 been that the developer has to bring in extra water to
- 23 put in storage. The utility's going to go find the
- 24 storage so that the developer does in fact get a
- 25 reliable water supply.

- 1 CO-HEARING OFFICER HOPPIN: So the way they
- 2 deal with the interruptible component is to have excess
- 3 of what they would anticipate their needs are so the
- 4 utility can afford or facilitate some augmentation, if
- 5 you will, if you get into an interruptible situation for
- 6 health and human services needs; is that correct?
- 7 MS. PHILLIPS: Right.
- 8 CO-HEARING OFFICER HOPPIN: So they don't take
- 9 agricultural water rights that would be simply
- 10 interruptible and replace them with a component of water
- 11 since for health and human services they get some
- 12 special dispensation that the way this is dealt with is
- 13 with the excess water right?
- MS. PHILLIPS: Right. I suppose you could
- 15 think of an interruptible customer on a water utility,
- 16 but I've never heard of one.
- So yes, the intent is you provide a water
- 18 supply all year, every year to those customers.
- 19 CO-HEARING OFFICER HOPPIN: Thank you for your
- 20 answer.
- 21 CO-HEARING OFFICER DODUC: Any questions from
- 22 staff? Ms. McCue?
- 23 WATER RESOURCE CONTROL ENGINEER McCUE: Just
- 24 have one question, and maybe it's just me. I can't
- 25 follow it.

```
But in your table, in your exhibit, can you put
```

- 2 that up? I don't know what -- doesn't have a number or
- 3 page.
- 4 Next to that 3 it says add new -- what you need
- 5 the State Board action needed, it says:
- 6 Add new points of diversion Boca and
- 7 Stampede to Independence license --
- 8 And I'm not sure what "limit to actual flow
- 9 available for storage in Independence Creek" means.
- 10 MS. PHILLIPS: Yeah, I'm sorry. That's kind of
- 11 shorthand.
- 12 It meant that a logical condition of that would
- 13 be that the amount of water that could be stored in say
- 14 Stampede would be limited to the amount of water
- 15 actually at Independence Creek.
- We're not trying to store more water than we
- 17 could have by storing at the actual location of
- 18 Independence.
- 19 WATER RESOURCE CONTROL ENGINEER McCUE: Okay.
- 20 Thank you.
- 21 CO-HEARING OFFICER DODUC: All right.
- Mr. DePaoli, you may continue.
- 23 ///
- 24 ///
- 25 ///

- 1 --000--
- 2 JOHN ERWIN
- 3 Called by APPLICANT AND PETITIONERS
- 4 DIRECT EXAMINATION BY MR. DePAOLI
- 5 ---00--
- 6 MR. DePAOLI: Mr. Erwin, please state your
- 7 name.
- 8 MR. ERWIN: John Erwin, E-r-w-i-n.
- 9 MR. DePAOLI: And you testified yesterday, did
- 10 you not?
- MR. ERWIN: Yes, sir.
- MR. DePAOLI: Continuing with your testimony,
- 13 would you please describe TMWA's water supply and how
- 14 that water supply is managed today to meet TMWA's
- 15 obligation to its customers?
- MR. ERWIN: All right.
- Just picking up, dovetailing a little bit on
- 18 what Mrs. Phillips said, but I don't want to echo a lot
- 19 of what she did say, the important thing in creating and
- 20 managing the water supply for the Truckee Meadows Water
- 21 Authority has the two components.
- One is the addition of water resources which
- 23 developers bring to us.
- 24 And probably the more critical element is the
- 25 preservation enhancement and management of a backup

- 1 supply or drought supply for those irrigation rights.
- 2 And the primary reason for that, as has been
- 3 pointed out in numerous testimony we've heard so far, is
- 4 the fact that there's such variability in the Truckee
- 5 River water supply.
- 6 So what the utility uses, what TMWA has
- 7 available to it, as part of the acquisition of the
- 8 assets of Sierra Pacific are the storage rights or half
- 9 interest currently in Donner Lake.
- 10 We have the interest -- the full interest in
- 11 storage rights as indicated by the current license that
- 12 we have in Independence of 17,500.
- 13 And then the third leg that we have for
- 14 upstream storage is what we call the interim storage
- 15 agreement which is a contract executed between Sierra
- 16 Pacific Power, the Washoe County Water Conservation
- 17 District, Pyramid Lake, and the United States.
- And the interim storage contract, as I think
- 19 Mrs. Phillips alluded to, was identified in the PSA as
- 20 an element needed prior to the full implementation of
- 21 the permanent drought water supply project known as
- 22 TROA.
- It is interim. It had a 25-year life. It was
- 24 executed in 1994. Upon implementation of TROA, the
- 25 interim storage contract is no longer valid.

- 1 So those are the three elements that we have
- 2 available to us for having a resource mix that provides
- 3 that insurance policy that the utility seeks when it
- 4 comes to managing its water supplies, particularly the
- 5 water supplies based on the river sources.
- 6 So at TMWA we do our planning -- as indicated
- 7 earlier, we do our planning for drought supplies based
- 8 on the '87 to '94 drought cycle which is worst we've
- 9 experienced to date.
- In doing so, we seek to have as much water as
- 11 long as possible for as many years as possible because
- 12 the one unknown thing we don't know -- we do know this:
- 13 It will probably rain. It will probably snow. The
- 14 problem is we don't when, and we don't know for how
- 15 much.
- So as a purveyor, water purveyor, we're very
- 17 keen on being sure that our customers have the water
- 18 they need for all their applications and at the same
- 19 time understanding that the Truckee River, because of
- 20 its variability, can cause issues for managing our water
- 21 resources.
- 22 And so having these reserves that we have,
- 23 again in the reservoirs that I indicated there, and then
- 24 looking forward to TROA, that it's available to us to
- 25 provide the water supply that we need for our some

- 1 400,000 residents there in the cities of Reno and Sparks
- 2 and surrounding areas.
- 3 MR. DePAOLI: Would you explain how the
- 4 operations contemplated by the Truckee River Operating
- 5 Agreement will be beneficial to TMWA with respect to the
- 6 drought water supply?
- 7 MR. ERWIN: From TMWA's perspective, the
- 8 Truckee River Operating Agreement solves several
- 9 long-term challenges that were accruing over time
- 10 towards or against the water supplies of the utility.
- 11 So this agreement provides -- creates
- 12 opportunity to enhance and to expand TMWA's need for,
- 13 again, that reliable drought supply that we as a water
- 14 purveyor like to have.
- Some examples of these challenges include,
- 16 you've heard already, the California-Nevada allocations.
- 17 We have talked a little bit -- other witnesses
- 18 have talked about increases to minimum flows, and if
- 19 there are increases to minimum flows, what's the cost in
- 20 terms of water to the drought reserves, so TROA solves
- 21 those problems.
- 22 And then there is also the potential for other
- 23 changes that would be handed to us as a result of
- 24 endangered species or other regulatory requirements on
- 25 the various streams that we need to be protected.

- 1 So by agreeing to TROA, TMWA has the assurances
- 2 it needs to protect its water supplies, particularly as
- 3 we talk about drought storage and the long-term need for
- 4 drought storage because we just don't know how long the
- 5 next drought's going to take.
- 6 So TROA replaces the interim storage agreement,
- 7 as I mentioned, with a permanent solution which is
- 8 really good for a utility to have a permanent solution.
- 9 And also with a solution that's able to grow as
- 10 the needs of the community grows.
- 11 Additionally, TROA provides the opportunity for
- 12 TMWA to optimize the use of its senior Orr Ditch Decree
- 13 water rights through the diversion of the consumptive
- 14 use portion of those rights which operation was recently
- 15 permitted by the Nevada State Engineer, although that
- 16 ruling is currently under judicial review.
- By exercising its storage rights and its senior
- 18 priority Orr Ditch rights pursuant to TROA, TMWA will be
- 19 able to build up and have the drought supplies it needs
- 20 and seeks as well as to eliminate the numerous
- 21 uncertainties that have been accumulating with respect
- 22 to future use of Truckee River supplies.
- MR. DePAOLI: And are the change petitions,
- 24 particularly Independence change petitions, important in
- 25 connection with the things that you just summarized?

- 1 MR. ERWIN: The change petitions before the
- 2 Board here, Petition 4297, is just one more piece of the
- 3 puzzle to make TROA work and to ensure, as I mentioned,
- 4 that Truckee Meadows Water Authority has the assurances
- 5 it has long-term for its water supplies.
- 6 So Petition 9247 seeks to expand the place of
- 7 use and manner of use and points of diversions of TMWA's
- 8 existing license 4196 for the waters of Independence.
- 9 Subject to TROA operations if granted, Petition
- 10 4297 would provide additional flexibility for us to be
- 11 able to move the Independence water from reservoir to
- 12 reservoir.
- 13 TMWA agreed to enhance minimum releases as an
- 14 example from one reservoir to another in order to
- 15 protect its resources and protect the ability to
- 16 preserve and build up and maintain its drought supplies
- 17 in doing so.
- As Mrs. Phillips has already mentioned, this
- 19 particular petition makes possible several types of
- 20 diversion, release, rediversion, of water all the while
- 21 within the confines of the existing petition which is
- 22 the 17,500 acre foot limitation that we have annually,
- 23 as Mr. Van Camp has already testified to.
- So granting the petition, again, also expands
- 25 the place of use and manner of use of Independence water

- 1 for many of the uses contemplated under TROA because
- 2 currently the license is for municipal use, but now
- 3 we're looking to expand it for many of the environmental
- 4 uses and benefits you've already heard today and
- 5 yesterday.
- 6 MR. DePAOLI: That concludes my direct
- 7 examination.
- 8 CO-HEARING OFFICER DODUC: Thank you.
- 9 Any questions?
- I think now is a good time to take a break.
- 11 Let's take a ten-minute break? Five is fine? Okay.
- 12 And then the attorneys can switch places and
- 13 we'll continue with cross-examination by Mr. Van Zandt.
- 14 (Recess)
- 15 CO-HEARING OFFICER DODUC: I think we're ready
- 16 to resume. Mr. Van Zandt, please begin your cross.
- 17 --000--
- 18 CROSS-EXAMINATION BY MR. VAN ZANDT
- 19 FOR TRUCKEE-CARSON IRRIGATION DISTRICT
- 20 and CHURCHILL COUNTY
- --000--
- MR. VAN ZANDT: Thank you. Good afternoon.
- 23 Mrs. Phillips, if I call you Ms. Carson, you'll
- 24 appreciate the fact that I've known you for a while.
- 25 MS. PHILLIPS: It wouldn't be the first time.

- 1 MR. VAN ZANDT: Okay.
- 2 You testified that one of the major concerns
- 3 that Sierra Pacific had in particular when it was going
- 4 through the drought situation was there were these
- 5 senior water rights that were passing by your intakes,
- 6 and you didn't have any way to store that water, right?
- 7 MS. PHILLIPS: That's a concern in all years,
- 8 not just in droughts.
- 9 MR. VAN ZANDT: And -- but it's also true that
- 10 at the particular time that the water may have been
- 11 passing your intakes that you didn't have a way to put
- 12 it to beneficial use either, right?
- MS. PHILLIPS: The rights were put to
- 14 beneficial use when decreed and primarily for growing
- 15 crops as those rights were converted to municipal use as
- 16 scheduled changes, and the rigidity of Floriston rates
- 17 makes it impossible to change the releases from the
- 18 reservoirs to match the new scheduled use.
- 19 MR. VAN ZANDT: That wasn't my question.
- 20 My question was the, you know, with the water
- 21 being released as Floriston rates, and you're saying
- 22 that within that Floriston rate water are these rights
- 23 that have been converted from agricultural to M&I,
- 24 right?
- MS. PHILLIPS: Well, Floriston rates were

- 1 originally designed to meet the needs of hydromechanical
- 2 mill.
- 3 They do incidentally also serve most of the
- 4 senior rights on the river, but the original purpose of
- 5 them was for milling.
- 6 MR. VAN ZANDT: All right. That wasn't even
- 7 close to the question that I asked you, okay?
- 8 The question was: Within Floriston rates that
- 9 are being released from the reservoirs are included
- 10 these -- what you're calling these unexercised senior
- 11 water rights, right?
- MS. PHILLIPS: The water that comes across the
- 13 state line as Floriston rate flow satisfies the Orr
- 14 Ditch rights. And some of those Orr Ditch rights are
- 15 not exercised every day, and therefore on those days the
- 16 water runs by the points of diversion.
- 17 MR. VAN ZANDT: But on those particular days,
- 18 Sierra Pacific, in the case of your testimony, does not
- 19 have a need to put that water to beneficial use, right?
- 20 Does not have a need to take it into your treatment
- 21 plant and supply it to a customer, right?
- MS. PHILLIPS: It may not be needed to supply
- 23 to a customer, but it is needed for drought storage.
- 24 MR. VAN ZANDT: I understand that. I'm just
- 25 talking about the water that's flowing down the river,

- 1 right?
- 2 MS. PHILLIPS: Yes.
- 3 MR. VAN ZANDT: So what the situation then is,
- 4 the water that goes past the intakes that Sierra Pacific
- 5 had is part of the remaining Floriston rate water,
- 6 correct?
- 7 MS. PHILLIPS: I'm not sure what the remaining
- 8 Floriston rate water means.
- 9 MR. VAN ZANDT: Well, what I'm talking about is
- 10 if we're releasing 500 cfs at Farad, by the time it gets
- 11 down into the Truckee Meadows it might be less than 400.
- 12 Maybe it's 350. There is water taken out for use in the
- 13 Truckee Meadows, and maybe we're passing, you know, 250
- 14 or so as -- past the Glendale treatment plant at the end
- 15 of your system, right?
- MS. PHILLIPS: Right. It would flow out of the
- 17 Truckee Meadows in the river.
- MR. VAN ZANDT: Right. So what I'm talking
- 19 about is those rights that were unexercised by Sierra
- 20 Pacific. They would go past the Truckee Meadows service
- 21 area and be included in the remaining portion of the
- 22 Floriston rates that gets down to past the Glendale
- 23 treatment plant, right?
- MS. PHILLIPS: I'm not sure if you're putting
- 25 special emphasis on Floriston rates. They'd be flowing

- 1 in the river.
- 2 MR. VAN ZANDT: Well, I quess -- cut to the
- 3 statement that was concerning me. The question --
- 4 or the answer that you gave about the water that Sierra
- 5 Pacific didn't have a current need for remains in the
- 6 river and can't be captured because you don't have a
- 7 storage facility, and then it's available for use by
- 8 another water right owner downstream of the Truckee
- 9 Meadows, right?
- 10 MS. PHILLIPS: I believe I said in response to
- 11 Chairman Hoppin that the water would be eligible to be
- 12 diverted by downstream users, but that does not
- 13 necessarily give them a right to that water.
- 14 MR. VAN ZANDT: So when you look at the 500 cfs
- 15 of water that makes up Floriston rates, and we heard
- 16 testimony from Mr. Rieker yesterday that -- by
- 17 Mr. Blanchard -- that that's intended to satisfy all of
- 18 the water rights that are in the river.
- 19 When that water goes past Truckee Meadows, and
- 20 there is a downstream user who has a water right and
- 21 takes water out of that remaining cfs of Floriston
- 22 rates, are you saying that person does not have a right
- 23 to take that water under its Orr Ditch Decree water
- 24 rights?
- MS. PHILLIPS: I'd like to respond to that in

- 1 two parts.
- 2 When Mr. Blanchard said that the Floriston
- 3 rates were intended to satisfy the water rights on the
- 4 Truckee River, I did not agree with him.
- 5 As I said a minute ago, the intention of
- 6 Floriston rates was to satisfy hydromechanical drive for
- 7 mills that once existed on the Truckee River.
- 8 They do coincidentally satisfy most rights,
- 9 although, as you pointed out, they do not satisfy Claim
- 10 3 at all times.
- 11 That was with regard to the first portion of
- 12 your question.
- The second portion is a downstream diverter has
- 14 the right to the flow in the river but does not have
- 15 some right to insist on the senior upstream right holder
- 16 continuing to bypass his rights.
- MR. VAN ZANDT: All right. That wasn't my
- 18 question. The second part was not my question.
- 19 My question was: Once Sierra Pacific decides
- 20 to let that water go past the Glendale treatment plant,
- 21 then -- and that water is available in the water for
- 22 diversion under Claim 3, the downstream water right
- 23 owner can divert that water; isn't that right?
- MS. PHILLIPS: Yes.
- MR. VAN ZANDT: So part of the water that

- 1 Sierra Pacific negotiated to store that was converted
- 2 from agricultural to M&I is somebody's senior what are
- 3 called unexercised rights, correct?
- 4 MS. PHILLIPS: There are three components that
- 5 are intend to be stored under TROA. There's the Donner
- 6 water, Independence water, and the Orr Ditch rights that
- 7 the State Engineer approved.
- 8 MR. VAN ZANDT: And that water now will be --
- 9 the ones that the State Engineer approved, those would
- 10 be stored upstream, the consumptive use portion of them,
- 11 that's right?
- MS. PHILLIPS: That's right. The consumptive
- 13 use part would be stored. The nonconsumptive portion
- 14 would flow downstream as it had historically.
- MR. VAN ZANDT: Now there's actually a
- 16 provision in TROA that talks about these rights; isn't
- 17 there?
- MS. PHILLIPS: I'm sure there is. Can you
- 19 point me?
- MR. VAN ZANDT: Section 4.B.1?
- MS. PHILLIPS: This is joint Exhibit 19, I
- 22 think, isn't it?
- MR. VAN ZANDT: I think it's 19, yes.
- 24 MS. PHILLIPS: Yes. 4.B.1 talks about the
- 25 power company's excess water rights.

- 1 MR. VAN ZANDT: You're familiar with the -- and
- 2 there's a reference in that paragraph to the .72. Do
- 3 you see that?
- 4 MS. PHILLIPS: Do. I don't remember this being
- 5 in my testimony, but I see that.
- 6 MR. VAN ZANDT: Thank you. The .72, you
- 7 actually made a reference to dedications by developers
- 8 that require them to actually dedicate extra water.
- 9 That was part of your direct testimony?
- 10 MS. PHILLIPS: Yes, right.
- MR. VAN ZANDT: Okay. That's what we're
- 12 talking about here, isn't it? In the past, Sierra
- 13 Pacific had required a 1.72 dedication for every acre
- 14 foot that was required to be delivered, right?
- MS. PHILLIPS: Yes.
- MR. VAN ZANDT: That was partially for drought
- 17 protection, right?
- MS. PHILLIPS: Yes.
- 19 MR. VAN ZANDT: But it was also partially to
- 20 protect downstream water right owners, wasn't it?
- MS. PHILLIPS: No.
- MR. VAN ZANDT: You are not familiar with the
- 23 State Engineer rulings with regard to -- in 1989 -- with
- 24 regard to this 1.72 acre feet rule?
- 25 CO-HEARING OFFICER DODUC: Mr. DePaoli?

- 1 MR. DePAOLI: I'm going to object to this line
- 2 of questioning. This is a lot of what is the subject
- 3 matter of the motion to exclude in the State Engineer's
- 4 rulings going back clear to 1989, and it does not seem
- 5 to me to be cross-examination of this witness.
- It's an attempt to get into the issue of how
- 7 much water ought to remain in the river for downstream
- 8 users under the State Engineer's decision, both the
- 9 recent decision, future decisions, and past decisions.
- 10 CO-HEARING OFFICER DODUC: Mr. Van Zandt?
- 11 MR. VAN ZANDT: Well, I think it goes right to
- 12 the heart of one of the key issues the Board is
- 13 contemplating here, and that has to do with injury to
- 14 existing water rights.
- We've already established that part of the
- 16 water that's going to be stored in Stampede Reservoir
- 17 includes Truckee Meadows Water Authority water.
- 18 It is going to be subject to the petitions for
- 19 change. In other words, it can be exchanged into the
- 20 other reservoirs.
- 21 And the question is whether that will cause an
- 22 injury to existing water rights. It goes right to the
- 23 very heart of this provision 4.B.1 and its intention of
- 24 the .72 to protect downstream water rights from
- 25 agricultural to M&I conversions that happened in the

- 1 past.
- 2 MR. DePAOLI: May I address that?
- 3 CO-HEARING OFFICER DODUC: Mr. DePaoli.
- 4 MR. DePAOLI: That is not true.
- 5 The water that is the subject of the Nevada
- 6 change applications will be stored in the reservoirs
- 7 pursuant to the primary permit issued by the Nevada
- 8 State Engineer which allows for the diversion of the
- 9 storage of consumptive use component of that water into
- 10 any of these reservoirs.
- 11 The use of that water and the exchange of that
- 12 water is going to happen through secondary permits
- 13 issued by the Nevada State Engineer on each of those
- 14 reservoirs.
- Each reservoir for the primary permit which
- 16 allows the consumptive use component to be stored in
- 17 Boca, Stampede, Prosser, or Independence, there will be
- 18 a secondary permit that allows the water that is stored
- 19 in any of those reservoirs to be used for municipal
- 20 purposes pursuant to the provisions of the Truckee River
- 21 Operating Agreement.
- There will be a secondary permit that will
- 23 allow that water to be used for fish and wildlife
- 24 purposes from any of those reservoirs on to Pyramid
- 25 Lake.

- 1 There will be a secondary permit that allows
- 2 that water to be used for incidental power purposes at
- 3 the hydroelectric plants.
- 4 That use, those multiple uses of that water,
- 5 are not dependent on anything that's going on with these
- 6 change petitions.
- 7 CO-HEARING OFFICER DUDOC: And your final
- 8 thoughts, Mr. Van Zandt, on that objection?
- 9 MR. VAN ZANDT: Two things.
- I mean it clearly is the intention in the
- 11 context of the applications that are before the Board
- 12 that the Truckee Meadows Water Authority will be storing
- 13 the .72 and the .11 -- we haven't talked about that
- 14 yet -- portion that are referenced in Section 4.B as
- 15 part of -- an exchange as a part of the applications
- 16 that are before the Board today.
- 17 The other issue is that there was a motion, you
- 18 know, to exclude testimony about consumptive use, but
- 19 this witness, Mrs. Phillips, has testified extensively
- 20 about consumptive use portion of their -- of the Sierra
- 21 Pacific water rights being transferred upstream as did
- 22 Mr. Erwin.
- So I find it a little bit inconsistent that
- 24 there's a motion to exclude our cross-examining
- 25 representing evidence, but they're allowed to present

- 1 direct testimony on it.
- 2 CO-HEARING OFFICER DODUC: We're not going to
- 3 get into discussion of that motion today.
- 4 I'm going to allow Mr. Van Zandt's line of
- 5 questioning. I will caution Mr. Van Zandt that that
- 6 motion is still before us, and we will make a ruling on
- 7 that next week.
- 8 So to the extent -- I urge you to proceed
- 9 carefully with respect to the consumptive use portion,
- 10 and we will take your objection, Mr. DePaoli, in
- 11 consideration when we weigh this portion of Mr. Van
- 12 Zandt's cross-examination.
- But with that, I will allow you to proceed.
- Mr. Van Zandt.
- MR. VAN ZANDT: Thank you.
- Mrs. Phillips, the provision that we're talking
- 17 about under TROA 4.B.1(a) and 1(b), it's your testimony
- 18 that the .72 and the .11 that are referenced there are
- 19 not intended to prevent injury to downstream users based
- 20 on the conversion from agricultural to M&I; is that
- 21 right?
- MS. PHILLIPS: That's right. The .72s have to
- 23 do with the yield of water rights.
- I am -- I believe what you're referring to is
- 25 the consumptive use fraction which is a different number

- 1 and a different concept.
- 2 MR. VAN ZANDT: No. I'm talking about the .72
- 3 right now. We'll get to the consumptive use thing in a
- 4 second here.
- 5 What I am trying to do is, you know, understand
- 6 is there used to be a dedication rule for 1.72 acre feet
- 7 for every acre foot that a developer would need for a
- 8 project; is that right?
- 9 MS. PHILLIPS: That's right.
- 10 MR. VAN ZANDT: And that water was dedicated to
- 11 Sierra Pacific, now to TMWA.
- MS. PHILLIPS: Right.
- MR. VAN ZANDT: And I believe the -- there was
- 14 a break off at, what, about 80,000 acre feet?
- MS. PHILLIPS: It was in 1995. I don't
- 16 remember the demand level at that time.
- MR. VAN ZANDT: So are you familiar with the
- 18 hearing that took place in 1989 that was a resolution of
- 19 a Truckee-Carson Irrigation protest against conversion
- 20 of agricultural M&I rights by the Sierra Pacific
- 21 company?
- MS. PHILLIPS: I do not recall that.
- MR. VAN ZANDT: Let me show you TCID
- 24 Exhibit 247.
- 25 CO-HEARING OFFICER DODUC: Hold on a second.

- 1 Don't do that, Mr. Van Zandt.
- 2 That exhibit is part of the motion to exclude.
- 3 I am not allowing you to bring it up at this time.
- 4 MR. VAN ZANDT: All right. So these witnesses
- 5 will be subject to recall for that purpose. Is that how
- 6 we're going to treat this?
- 7 CO-HEARING OFFICER DODUC: It depends on the
- 8 ruling on the motion. I will consider that then. But I
- 9 am not allowing discussion of this exhibit today.
- 10 MR. VAN ZANDT: All right. Let me see if I
- 11 understand. The witness testified specifically about
- 12 the dedications by the developer in addition to what was
- 13 required for their needs of their project which is the
- 14 subject of this ruling, but we're going to defer that.
- 15 Is that my understanding of your motion?
- 16 CO-HEARING OFFICER DODUC: Let me ask
- 17 Mr. DePaoli. Do you have an objection to your witness
- 18 responding to this exhibit, since it is after all your
- 19 motion as well?
- MR. DePAOLI: Yes, I do for two reasons.
- 21 The fact that we have discussed the fact that
- 22 the Nevada State Engineer has allowed for these changes,
- 23 has made a determination as to the consumptive use
- 24 component, that that's on appeal, that this very same
- 25 transcript was an exhibit in those proceedings, that

- 1 this argument that this .72 is to protect the downstream
- 2 user is simply not relevant to the issues that are
- 3 before the Board regarding these change petitions.
- 4 And all these witnesses have said is that there
- 5 have been changes to water rights approved in Nevada
- 6 that will allow for this.
- 7 They haven't gone into whether the State
- 8 Engineer is right or wrong on those questions. It's
- 9 simply presenting a lot of information and taking up a
- 10 lot of time that doesn't --
- 11 CO-HEARING OFFICER DODUC: Mr. DePaoli, I am
- 12 not ruling on your motion today. I asked whether you
- 13 object to your witness --
- MR. DePAOLI: I do.
- 15 CO-HEARING OFFICER DODUC: -- and your answer
- 16 is you do.
- Mr. Van Zandt, as I said before, we will not
- 18 discuss this particular exhibit today. I will reserve
- 19 the right to recall Mrs. Phillips depending on the
- 20 ruling that this Board issues with respect to
- 21 Mr. DePaoli's motion.
- 22 And we will move on from there, Mr. Van Zandt.
- MR. VAN ZANDT: Thank you.
- Mrs. Phillips, you have a statement in your
- 25 testimony, TMWA 2-0 exhibit. It's on page 4 at the top

- 1 of the page if you'd like to refer to it.
- 2 You say there after some prefatory language:
- 3 The Settlement Act created the
- 4 opportunity to use existing vacant
- 5 storage space in upstream reservoirs
- 6 instead of building new dams.
- 7 Do you see that?
- 8 MS. PHILLIPS: I see that language.
- 9 MR. VAN ZANDT: I guess my question I have:
- 10 What did you mean by that statement?
- MS. PHILLIPS: If TROA didn't exist and 101-618
- 12 didn't exist, the utility would build a reservoir near
- 13 Reno and store water in it from these extra water
- 14 rights.
- And that because of the Settlement Act and
- 16 101-618 and TROA, instead of doing that, a utility can
- 17 put its water under its water rights in vacant space
- 18 upstream.
- 19 And that is primarily Stampede. Since Stampede
- 20 is so junior on the system, it often has empty space in
- 21 it. So the idea was to fill up some of that empty space
- 22 with the irrigation water rights that we hold.
- MR. VAN ZANDT: I think you talked a little bit
- 24 about the exchanges that were proposed by Sierra
- 25 Pacific, now Truckee Meadows Water Authority, in your

- 1 chart you have on page 13 of your testimony, correct?
- 2 MS. PHILLIPS: Yes.
- 3 MR. VAN ZANDT: One of the examples that you
- 4 gave was you could have a situation where water is
- 5 exchanged out of Independence or moved out of
- 6 Independence into Stampede, and then there would be an
- 7 exchange with Prosser.
- 8 MS. PHILLIPS: I'm sorry I didn't number these,
- 9 but could you tell me which one you're looking at?
- 10 MR. VAN ZANDT: Well, it's the one you
- 11 testified about. I think it's the third one down.
- 12 Second one we have highlighted here.
- MR. VAN ZANDT: It's the 5.B.6(c)(5).
- 14 MS. PHILLIPS: That's not an Independence
- 15 operation. That's a Stampede-Prosser operation.
- 16 MR. VAN ZANDT: I understand. The TMWA
- 17 emergency water?
- MS. PHILLIPS: Yes.
- 19 MR. VAN ZANDT: What's the source of that?
- MS. PHILLIPS: TMWA stores water in Stampede in
- 21 the very -- kind of the -- if you think of the reservoir
- 22 as being in layers with the most secure water in the
- 23 bottom, the 7500 feet in the bottom is not going to
- 24 spill, and it's there for emergencies.
- 25 And that 7500 acre feet would be the worse --

- 1 what we call the worse-than-worst-case water.
- 2 MR. VAN ZANDT: Are you talking about Stampede
- 3 or Independence now?
- 4 MS. PHILLIPS: Talking about Stampede. This
- 5 number 3, the one that's highlighted there, is about
- 6 Stampede.
- 7 MR. VAN ZANDT: So you're saying that TMWA has
- 8 7500 acre feet of emergency water in Stampede under --
- 9 MS. PHILLIPS: Not today. Under TROA.
- 10 MR. VAN ZANDT: Under TROA. Okay.
- And what is the source of that water? Where is
- 12 it coming from?
- MS. PHILLIPS: It would be stored by water
- 14 rights that aren't being used. I would imagine it would
- 15 be primarily Independence and Donner in the beginning.
- Since the water rarely will ever be used, it
- 17 only has to be filled up one time.
- MR. VAN ZANDT: And no evaporation loss is
- 19 applied to it?
- MS. PHILLIPS: I can't recall.
- MR. VAN ZANDT: Let's assume that it was
- 22 Independence water is part of that water that's being
- 23 moved, and then the exchange happens with Prosser.
- 24 Isn't it true that there is capacity now in Independence
- 25 to store more water?

- 1 MS. PHILLIPS: This transaction, if we're
- 2 looking at the same one here, this 5.B.6(c)(5), doesn't
- 3 have anything to do with Independence.
- 4 MR. VAN ZANDT: You just told me it could be a
- 5 part of Independence water.
- 6 MS. PHILLIPS: This would have been filled up
- 7 years ago.
- I mean emergency water is going to sit there
- 9 for a long, long time. So at some point in the distance
- 10 past, a 7500-acre-foot block of water was created in
- 11 Stampede as the fall-back, worst-case water.
- 12 And all this transaction does is it swaps it on
- 13 paper to Prosser. Doesn't impact Independence one way
- 14 or the other.
- MR. VAN ZANDT: But the first time this water
- 16 is moved from Independence down to Stampede to establish
- 17 the 7500 acre feet, isn't it possible that Independence
- 18 then can be refilled?
- MS. PHILLIPS: If the license amount of 17-5
- 20 has not been exercised and the water right's in
- 21 priority, which is quite junior, it could capture more
- 22 water, yes.
- MR. VAN ZANDT: And I was interested in the
- 24 fourth one down where TMWA trades its previously stored
- 25 water in Independence with California previously stored

- 1 water in Stampede to avoid a large drawdown of
- 2 Independence.
- 3 Can you explain what that means?
- 4 MS. PHILLIPS: Yes.
- 5 This is one of the mandatory provisions in TROA
- 6 that Ms. Mahaney was asking about. This can be ordered
- 7 by California.
- 8 And the purpose of it is to avoid drawing
- 9 Independence down below 10,500 acre feet because at that
- 10 level you have issues with fish passage out of
- 11 Independence up the creek to spawn. So California has a
- 12 desire to keep at least 10,500 in Independence Lake.
- The conditions are that California can order
- 14 that this transaction be done, this fourth one here
- 15 that's highlighted. That's the only way it can happen,
- 16 is by California's order.
- 17 And then the -- again, this is a paper
- 18 transaction where you'd have the water in Independence
- 19 that was going to be released for municipal purposes,
- 20 and therefore draw the reservoir down, would simply be
- 21 swapped on paper with water in Stampede because Stampede
- 22 doesn't have that sensitive drawdown issue.
- 23 MR. VAN ZANDT: Let's talk about another
- 24 example of a real-world exchange, I quess.
- 25 Water is released from Independence, it's put

- 1 in Stampede, and it may sit there for a while or it
- 2 could be released for M&I purposes in the Truckee
- 3 Meadows, right?
- 4 MS. PHILLIPS: It's a broad statement, and
- 5 there are many rules in TROA as you know.
- But in general, you can release water from
- 7 Independence, move it down to Stampede, and use it for
- 8 M&I purposes. That's pretty much what the first example
- 9 in the table is.
- 10 MR. VAN ZANDT: Okay. That creates space in
- 11 Independence, right?
- MS. PHILLIPS: Yes.
- MR. VAN ZANDT: Okay. Now, the water that is
- 14 being stored in Independence -- or, excuse me -- in
- 15 Stampede that came from Independence, if it's not used
- 16 by Truckee Meadows Water Authority, what happens to the
- 17 water?
- 18 MS. PHILLIPS: It accumulates in Stampede up to
- 19 certain limits that are defined in TROA. The limits at
- 20 present are quite small. It goes up as the utility
- 21 system gets bigger.
- 22 Right now, it's 2,000 acre feet of what's
- 23 called firm and 4,000 acre feet of nonfirm.
- 24 If it's a drought situation, more water can be
- 25 accumulated. If it's not a drought situation, those are

- 1 the limits. And it can also be pulled out for direct
- 2 delivery to customers.
- 3 MR. VAN ZANDT: And the nonfirm water, what
- 4 happens to that if it is not used within a certain
- 5 period of time?
- 6 MS. PHILLIPS: If in April, if it's not a
- 7 drought, the water -- of course, it could be spilled out
- 8 of the reservoir if you have a big runoff year.
- 9 But if it's not spilled, then it becomes fish
- 10 credit water. That's the example number 5 on this
- 11 table. On April 15th, a portion of TMWA's water becomes
- 12 fish credit water.
- MR. VAN ZANDT: And any water that's stored by
- 14 Truckee Meadows Water Authority right now in these
- 15 reservoirs that is part of that nonfirm which isn't used
- 16 by a certain period or is not needed for drought
- 17 purposes, that gets converted to fish credit water,
- 18 correct?
- 19 MS. PHILLIPS: I'm sorry. Talking about now or
- 20 after TROA?
- 21 MR. VAN ZANDT: With TROA.
- MS. PHILLIPS: With TROA? There are these
- 23 defined limits that may be retained. Any water above
- 24 that becomes fish credit water.
- MR. VAN ZANDT: Thank you.

- 1 You have familiarity with the Truckee River
- 2 Agreement, Mrs. Phillips?
- 3 MS. PHILLIPS: I have happily been away from it
- 4 for some years. I know -- I recall some parts, not the
- 5 whole thing.
- 6 MR. VAN ZANDT: Do you recall a provision in
- 7 the Truckee River Agreement which was -- let's back up.
- 8 You understand that the Truckee River Agreement
- 9 was an agreement between the United States, the Washoe
- 10 County Water Conservation District, the Truckee-Carson
- 11 Irrigation District, and Sierra Pacific Power Company
- 12 along with some individual water right owners, right?
- MS. PHILLIPS: Right.
- 14 MR. VAN ZANDT: And Sierra Pacific agreed in
- 15 that agreement to a provision that indicated that if
- 16 there is water flowing in the Truckee River that is not
- 17 necessary to meet demands that it would go to other
- 18 parties to the agreement. Do you recall that?
- MS. PHILLIPS: I do not.
- 20 MR. VAN ZANDT: You do not recall that Article
- 21 3 of the Truckee River Agreement?
- MS. PHILLIPS: No, I'm sorry.
- MR. VAN ZANDT: If I showed you the agreement,
- 24 would it refresh your memory?
- 25 MS. PHILLIPS: I'm sure it would.

- 1 My understanding that was going to be the Orr
- 2 Ditch case and the Orr Ditch -- the court -- the Orr
- 3 Ditch court was going to get into that.
- I have not reviewed the Truckee River Agreement
- 5 in preparation for this proceeding.
- 6 MR. VAN ZANDT: All right. I won't test your
- 7 memory.
- 8 When you were at Sierra Pacific, did you have
- 9 any occasion to kind of review the history of some of
- 10 the creation of Sierra Pacific's water rights, for
- 11 example at Independence?
- MS. PHILLIPS: You mean the acquisition of
- 13 Independence Lake by Sierra Pacific?
- MR. VAN ZANDT: Yes.
- MS. PHILLIPS: I have to say I only know the
- 16 broad brush of that.
- MR. VAN ZANDT: Were you aware that TCID had
- 18 protested Sierra Pacific's application at Independence?
- MS. PHILLIPS: No, I did not know that.
- 20 MR. VAN ZANDT: How about the Truckee River
- 21 Agreement? Did you have any occasion to look at the
- 22 history of how the Truckee River Agreement was
- 23 negotiated and decided upon by the parties?
- 24 MS. PHILLIPS: Only that it was an action
- 25 brought by the United States to -- I mean the Orr Ditch

- 1 case was brought by the United States to -- it's the
- 2 quiet title to the rights on the Truckee, and the
- 3 Truckee River Agreement was incorporated into that.
- I do not know all the ins and outs of the
- 5 negotiation.
- 6 MR. VAN ZANDT: Okay. That's all the questions
- 7 I have for Mrs. Phillips.
- 8 Mr. Erwin, you had testified primarily about
- 9 the Truckee Meadows Water Authority water resource plans
- 10 for drought protection. Basically part of your
- 11 testimony is justification for TMWA's participation in
- 12 TROA?
- MR. ERWIN: That's correct.
- 14 MR. VAN ZANDT: And do you have an idea of when
- 15 the 119,000 acre foot demand that the Truckee Meadows
- 16 Water Authority is projecting will be needed, the entire
- 17 amount of it will be needed?
- MR. ERWIN: Under today's scenario or under the
- 19 EIS/EIR? Because I heard a number there is 2033.
- 20 Under the current planning, I think it's
- 21 extended a little farther out than that, but I don't
- 22 know the exact date, the estimated date.
- MR. VAN ZANDT: Okay. So under TROA, the plan
- 24 or the projected arrival date of the 119 is 2033, but
- 25 you think it might be a little further out under the

- 1 resource plan?
- 2 MR. ERWIN: Under -- if the current economic
- 3 trends hold, it's going to be a ways out there.
- 4 MR. VAN ZANDT: Hopefully that won't last too
- 5 much longer.
- 6 That 119,000 acre feet of water that -- is
- 7 that, all that water, now in the Truckee Meadows Water
- 8 Authority portfolio?
- 9 MR. ERWIN: It is not.
- And again the 119,000 acre feet is a demand
- 11 number. To get to that demand number, resources or
- 12 water rights have to be brought to the utility to
- 13 achieve that level of demand.
- 14 So the water rights are not -- we do not have
- 15 the water rights to do that at this point. They have to
- 16 be brought to the utility as the utility demands grow.
- 17 So I think that answers your question.
- 18 MR. VAN ZANDT: So the actual amount of water
- 19 that would be in Truckee Meadows Water Authority's
- 20 portfolio would be much greater than the 119,000.
- 21 MR. ERWIN: Yes. The number of water rights
- 22 would have to grow. I don't know the number, but it's
- 23 somewhere around 30,000, 35,000 acre feet in addition to
- 24 what we have today.
- MR. VAN ZANDT: Have all of the agricultural

- 1 rights that the Truckee Meadows Water Authority now
- 2 holds been converted to M&I at this point?
- 3 MR. ERWIN: There is currently some pending
- 4 applications with the Nevada State Engineer.
- 5 I think we have 400 acre feet that are ready
- 6 for action or ready for action under protest, and
- 7 there's another 200 acre feet that we are cleaning up
- 8 the remaining left-over filing that we had when we
- 9 became TMWA.
- 10 So about 600 acre feet yet to be permitted.
- 11 MR. VAN ZANDT: And it's also Truckee Meadows
- 12 Water Authority's intention to store that water upstream
- 13 if they get the opportunity to do that under TROA?
- 14 MR. ERWIN: The water that is to be permitted
- 15 as it's coming in or the stuff we're cleaning up has not
- 16 been filed with the State Engineer or had an application
- 17 put on it to store that.
- Currently it is water that had been acquired by
- 19 Sierra Pacific, I don't know, as early as 1982-83 or
- 20 late 1980s that has a commitment against it for a
- 21 will-serve letter. So it will probably be -- it will be
- 22 exercised or has been exercised for that purpose.
- 23 At this point, as you are aware, we filled for
- 24 about 12,000 acre feet in the State Engineer hearings
- 25 for transfer up to storage, the consumptive use portion

- 1 into storage. And that is the portion of the water
- 2 rights you already referenced with Mrs. Phillips.
- 3 MR. VAN ZANDT: Okay. So the water rights that
- 4 you're going to be converting or transferring, they have
- 5 a current demand for a particular project. Is that what
- 6 you're saying?
- 7 MR. ERWIN: Yes.
- 8 MR. VAN ZANDT: Okay. I think based on the
- 9 ruling the rest of my questions for you would delve into
- 10 the areas that are under the motion to exclude.
- So I'll ask that the witness be made available
- 12 if that motion is denied. Thank you.
- 13 CO-HEARING OFFICER DODUC: Mr. Mackedon, please
- 14 begin your cross.
- MR. MACKEDON: Thank you.
- 16 --000--
- 17 CROSS-EXAMINATION BY MR. MACKEDON
- 18 FOR CITY OF FALLON
- 19 ---00--
- 20 MR. MACKEDON: Direct these questions to
- 21 Mrs. Phillips.
- Mrs. Phillips, Mr. Blanchard testified
- 23 yesterday that he -- or testified that Floriston rates
- 24 are the foundation of the operation of the Truckee
- 25 River. Do you agree with that?

- 1 MS. PHILLIPS: Yes.
- 2 MR. MACKEDON: Is it true that the
- 3 implementation of TROA will change Floriston rates?
- 4 MS. PHILLIPS: No.
- 5 MR. MACKEDON: And how can that be true?
- 6 MS. PHILLIPS: Floriston rates will remain the
- 7 standard of the flow regime on the river. And what will
- 8 happen under the change applications that the Nevada
- 9 State Engineer has approved is that flows would be
- 10 diverted above Floriston into storage as compared to the
- 11 Floriston rate flow.
- I think of it sort of like the speed limit.
- 13 You can't go above it, but you can go below it, but the
- 14 speed limit stays there.
- MR. MACKEDON: I think I included the phrase
- 16 "from current practice". You mean Floriston rates are
- 17 going to be the standard, and the standard is not going
- 18 to be changed, correct?
- MS. PHILLIPS: Right.
- 20 MR. MACKEDON: But the water that is
- 21 presently -- the actual water that's physically part of
- 22 Floriston rates is going to be in a different place than
- 23 it is under current practice.
- MS. PHILLIPS: Right.
- 25 MR. MACKEDON: There are those of us who think

- 1 that's a change.
- 2 The other question I have to you -- maybe two.
- 3 I'll be very brief.
- 4 You spoke of the movement of water between
- 5 reservoirs and as proof of the flexibility or what you
- 6 consider flexibility offered by the implementation ever
- 7 TROA.
- 8 The Tribe has -- representatives of the Tribe
- 9 have testified that the Tribe has given its consent to
- 10 store water from the Little Truckee River in Stampede
- 11 Reservoir that would otherwise flow to Pyramid Lake.
- 12 Is that happening now, or do you know that?
- MS. PHILLIPS: I have heard a lot about the
- 14 Tribe's rights, and I cannot say I'm an expert on that
- 15 subject. I'm going to have to say I don't know.
- MR. MACKEDON: All right. Thank you.
- 17 Finally, if I understand -- I'm trying to
- 18 understand some of the core conflicts at work here, that
- 19 I think are at work and have been at work.
- But you've told us and told the Board that the
- 21 current operation of the Truckee River is rigid. Is
- 22 that the phrase you used?
- MS. PHILLIPS: Yes.
- MR. MACKEDON: Now the water rights that Sierra
- 25 Pacific purchased and that TMWA now owns and is

- 1 purchasing were agricultural rights; is that correct?
- 2 MS. PHILLIPS: Right.
- 3 MR. MACKEDON: And those agricultural rights
- 4 had a season of use associated with a growing season?
- 5 MS. PHILLIPS: No, that's not correct.
- 6 Under the Orr Ditch Decree, there's a maximum
- 7 25 percent per month that can be diverted but there is
- 8 not a defined season of use.
- 9 MR. MACKEDON: There's reference to a growing
- 10 season, correct?
- 11 MR. DePAOLI: I'm going to reregister the
- 12 objection made earlier with Mr. Van Zandt's questions.
- The season issue is also raised in the
- 14 testimony and the exhibits related to the motion to
- 15 exclude.
- 16 CO-HEARING OFFICER DODUC: Okay. Please hold
- 17 on to that question.
- MR. MACKEDON: I was not aware of that. I have
- 19 to confess that I was gone -- I've been gone for the
- 20 last two weeks, and I did not see the motion.
- 21 So I'll to have to look at it to see what's --
- 22 I don't think it got into my office until Friday night,
- 23 and I have not seen it.
- And if this is in conflict, I'm sure you'll let
- 25 me know, Mr. DePaoli.

- 1 When an ag right has a growing season -- well,
- 2 let me put it differently.
- 3 An M&I need or an M&I right has a need for a
- 4 constant -- constant annual need, right?
- 5 MS. PHILLIPS: M&I use pattern is not uniform
- 6 over the year. It's lower in the winter and more in the
- 7 summer.
- 8 MR. MACKEDON: Depending on the industry.
- 9 MS. PHILLIPS: Well, I can only --
- MR. MACKEDON: But it's --
- MS. PHILLIPS: -- speak to --
- MR. MACKEDON: I agree with that.
- MS. PHILLIPS: -- the Reno/Sparks --
- 14 (Interruption by the reporter)
- MR. MACKEDON: I'll be quick about this.
- The M&I has an annual need. It may be
- 17 different in the summer or winter or month to month, but
- 18 it's like a residential need.
- MS. PHILLIPS: Right.
- 20 MR. MACKEDON: Okay. And there is an inherent
- 21 incompatibility between say an ag right with a season of
- 22 use and an M&I right that has no season of use.
- 23 And I'm not going into whether the rights that
- 24 you purchased have a season of use or not; I'm just
- 25 saying hypothetically that's the case. That would be

- 1 the case, isn't it?
- 2 MS. PHILLIPS: Let me try not to get into the
- 3 area of dispute, but the schedule of use of those two
- 4 applications would be different.
- 5 MR. MACKEDON: Can be in conflict. And what
- 6 you consider rigidity may in the mind of an ag user be
- 7 regarded as a stabilizing factor. Would you agree with
- 8 that?
- 9 MS. PHILLIPS: I can't speculate what an ag
- 10 user would think.
- MR. MACKEDON: Okay. Thank you.
- I don't have any questions for -- oh, I do.
- 13 One. I would ask, Mr. Erwin, only this: Do you agree
- 14 that Floriston rates are the foundation of the river
- 15 operation?
- MR. ERWIN: Yes.
- 17 MR. MACKEDON: Okay. I have no further
- 18 questions. Thank you.
- 19 CO-HEARING OFFICER DODUC: Thank you,
- 20 Mr. Mackedon.
- 21 Redirect, Mr. DePaoli?
- --000--
- 23 REDIRECT EXAMINATION BY MR. DePAOLI
- 24
- MR. DePAOLI: Mrs. Phillips, you were asked a

- 1 question about water that the utility might not be able
- 2 to use -- that it may have a right to but might not be
- 3 able to use and would have to allow it to pass
- 4 downstream and be available for -- under Claim No. 3.
- 5 Do you recall that question?
- 6 MR. ERWIN: Yes.
- 7 MR. DePAOLI: Are there other Orr Ditch Decree
- 8 water rights with priorities senior to Claim No. 3
- 9 between the last diversion of the utility and Derby Dam
- 10 on the Truckee River?
- 11 MR. ERWIN: Yes, there are several other Orr
- 12 Ditch Decree diversions downstream of the utility before
- 13 you get to Derby Dam with senior rights to Claim 3.
- MR. DePAOLI: I have no other questions.
- 15 CO-HEARING OFFICER DODUC: Thank you.
- Mr. Van Zandt, recross for Mrs. Phillips?
- 17 MR. VAN ZANDT: Nothing further.
- 18 CO-HEARING OFFICER DODUC: Mr. Mackedon?
- MR. MACKEDON: No, thank you.
- 20 CO-HEARING OFFICER DODUC: Questions?
- 21 With that, I will ask Mrs. Phillips and
- 22 Mr. Erwin to be available next week.
- In making the ruling with respect to
- 24 Mr. DePaoli's motion to exclude, we will also consider
- 25 Mr. Van Zandt's -- and I gather, Mr. Mackedon, you also

- 1 had questions for Mrs. Phillips with respect to the
- 2 consumptive use?
- 3 MR. MACKEDON: I'm not sure that I do. I have
- 4 to read the motion and be sure of what -- but I'm not
- 5 sure that I do.
- 6 CO-HEARING OFFICER DODUC: Well, we'll ask you
- 7 to be prepared to come back next week, and we'll let you
- 8 know as soon as possible next week on that matter.
- 9 Thank you both.
- 10 If the court reporter is able to continue?
- 11 Okay. I will ask I believe Mr. Palmer, Mr. Soderlund,
- 12 as well as Mr. DePaoli to bring up the last three
- 13 witnesses for this panel. In fact, your last three
- 14 witnesses.
- 15 You may begin whenever you are ready.
- 16 --000--
- 17 ALI SHAHROODY
- 18 Called by APPLICANT AND PETITIONERS
- 19 DIRECT EXAMINATION BY MR. PALMER
- 20 --000--
- 21 MR. PALMER: The first witness for this part
- 22 will be Mr. Shahroody. We're trying to get his
- 23 PowerPoint back up for this part, so we'll get that
- 24 going.
- 25 It looks like we're ready. We have

- 1 Mr. Shahroody's PowerPoint up, so I'll ask Mr. Shahroody
- 2 to summarize this part of his testimony.
- 3 MR. SHAHROODY: Good afternoon.
- 4 My purpose of my testimony this afternoon is to
- 5 present that Pyramid Lake decline and benefits of TROA
- 6 to the Pyramid Lake and Lower Truckee River.
- 7 Construction of Truckee Canal was, as you have
- 8 heard, completed in 1905. And with that construction
- 9 and construction of the Derby Dam together in the Lower
- 10 Truckee River, that became the single largest diversion
- 11 work on the Truckee River itself.
- 12 After the diversion started in 1906, that's
- 13 after the diversion began in 1906 from Truckee River to
- 14 Truckee Canal on to Lahontan Reservoir, water surface
- 15 elevation in Pyramid Lake and Winnemucca Lake began to
- 16 decline.
- I don't know you heard today or yesterday about
- 18 Winnemucca Lake or not. Winnemucca Lake used to be the
- 19 twin lake to the Pyramid Lake. In fact, just to the
- 20 east of it. And through the mud slough, there was a
- 21 connection to that Winnemucca Lake.
- 22 Winnemucca Lake, since Pyramid Lake is a
- 23 terminal lake, and as you heard because of evaporation
- 24 it tends to accumulate salts. But Winnemucca Lake sort
- 25 of acted as overflow from Pyramid Lake into the

- 1 Winnemucca Lake as a flushing, if you want to say, of
- 2 the Pyramid Lake itself.
- 3 And then of course Winnemucca Lake itself had
- 4 the same fishes, like Cui-ui and Lahontan Cutthroat
- 5 Trout, and had extensive wetlands as the history refers
- 6 to that.
- 7 But the fact of the matter that Pyramid Lake
- 8 began to decline, so did the availability of water to
- 9 Winnemucca Lake. By 1938, Winnemucca Lake had already
- 10 gone dry.
- 11 Pyramid Lake elevation reached its lowest
- 12 historic level in 1967, and this represented more than
- 13 85 feet of drop from its historic high.
- In 1967, Secretary of Interior, as you heard
- 15 before, issued the regulation known as OCAP, or
- 16 Operating Criteria and Procedures, limiting diversions
- 17 from the Truckee River to Newlands Project.
- I think this chart demonstrates what was the
- 19 history of Pyramid Lake, at least of the recent time of
- 20 the record where the measurements of the elevations were
- 21 made.
- If you have noticed that on the left part on
- 23 the top -- first of all, to the left of the chart is
- 24 elevation and of course the bottom is the years, and
- 25 chart is referred to Pyramid Lake historical lake

- 1 elevation from early 1900 to 2010.
- 2 Truckee Canal, as I said, diversions started in
- 3 1906 and that's pointed out at the upper part to the
- 4 left of the chart.
- 5 Then also in the lower part it shows that in
- 6 1967 it reached its lowest points. And of course, that
- 7 was the time that OCAP was issued or were issued by the
- 8 Secretary.
- 9 And based on that, of course, you would see
- 10 there is certain stability in the lake level fluctuating
- 11 depending on hydrologic conditions.
- MR. PALMER: Mr. Shahroody, just for the
- 13 record, I wanted to point out that the chart you were
- 14 just discussing I understand is in your written direct
- 15 testimony. I have it as page 37 which is figure 6 of
- 16 USBR 7, just so we can refer back to that if we need to.
- MR. SHAHROODY: Correct.
- Following in 1967 OCAP, in 1973, and again you
- 19 have heard this one, Secretary of Interior issued new
- 20 OCAP complying with the court order Tribe v Morton.
- The court also in that order, and again was
- 22 stated the directive was to maximize the use of the
- 23 Carson River for Newlands Project and minimize diversion
- 24 from Truckee River.
- 25 Also under Claim 3 the Orr Ditch Decree gives

- 1 the United States the discretion to control, dispose,
- 2 and regulate water diverted under Claim 3 at Derby Dam
- 3 provided that water rights of the Newlands Project
- 4 farmers are satisfied.
- 5 Generally the OCAP should be implemented in a
- 6 manner to carry out the requirements of the Tribe v
- 7 Morton by providing sufficient water to meet the decreed
- 8 rights on the Newlands Project by ensuring that water in
- 9 the Truckee River not needed for those rights flow to
- 10 Pyramid Lake.
- 11 That's basic principle, and in 1997 OCAP pretty
- 12 much attempts to do that.
- 13 Again going back to that chart if have to be
- 14 looked at, but in 1930s Pyramid Lake elevation dropped
- 15 rapidly and large delta was formed at the mouth of the
- 16 Truckee River into Pyramid Lake.
- 17 MR. PALMER: Mr. Shahroody, when you say the
- 18 chart, do you mean the one we looked at previously, the
- 19 Pyramid Lake elevation?
- MR. SHAHROODY: That is correct.
- 21 The combination of delta, lower lake level, and
- 22 reduced flows, they act as a barrier for the fish to
- 23 move from Pyramid Lake to go upstream for spawning.
- And in fact, a simple analogy of the Cui-ui,
- 25 the way it does is anadromous -- and also LCT is

- 1 anadromous -- the way it does is more like salmon.
- They seasonally in the springtime, large
- 3 freshet coming down the river. They would begin to
- 4 gather pretty close to Pyramid Lake, Truckee River
- 5 entrance.
- And then of course with high flows then they
- 7 would begin to migrate upstream. And following that of
- 8 course, following the migration and the spawning, they
- 9 return back.
- 10 And then of course, from what the biologists
- 11 have told me, the eggs would then -- after about 17
- 12 days, they would come back.
- 13 LCT uses the river more, I would say, year
- 14 around. And they utilize the Lower Truckee River for
- 15 their habitat and also they habit in Pyramid Lake
- 16 itself.
- By 1940s the original strain of LCT in Pyramid
- 18 Lake became extinct because of the barrier, because of
- 19 lack of access to Truckee River itself.
- The other thing that was happening, of course,
- 21 is the matter as I indicated before, the chemistry of
- 22 the Pyramid Lake itself. The lack of flushing saw
- 23 increased evaporation at the lake drop. The reduced
- 24 inflows increased the salinity of the lake from about
- 25 3500 parts per million to more than 5,500 over the

- 1 period of twentieth century coming into '60s and '70s.
- 2 Cui-ui was listed as endangered in 1967, and
- 3 Lahontan Cutthroat Trout threatened in 1975.
- 4 In 1975, Reclamation constructed Marble Bluff
- 5 Dam and Pyramid Lake Fishway. That was done as a part
- 6 of the Washoe Project, and both of those facilities are
- 7 near the entrance to Pyramid Lake on the Truckee River.
- 8 MR. PALMER: Mr. Shahroody, one clarification.
- 9 I don't know if we have identified this, if you have.
- 10 You referenced the Cui-ui as endangered and LCT
- 11 as threatened. What does that mean?
- MR. SHAHROODY: That's on the Endangered
- 13 Species Act as amended.
- MR. PALMER: Thank you.
- MR. SHAHROODY: Marble Bluff Dam was designed
- 16 to stabilize the rapidly degrading river channel. And
- 17 that is, being an engineer, I can explain that.
- 18 As the lake level had dropped that created
- 19 substantial gradient at the entrance to the lake, and
- 20 that what's referred to as head cutting. The head
- 21 cutting that moved up the stream and basically degrades
- 22 the river and steepens the river itself.
- 23 So basically the Marble Bluff Dam was
- 24 constructed because nobody could control the drop in
- 25 lake elevation because of the upstream diversion.

- 1 The only thing they could do was then to
- 2 construct a dam -- not a diversion dam; just a dam -- to
- 3 control the sill of the river so therefore there will be
- 4 stability from that point on upstream.
- 5 The fishway was designed to aid migration of
- 6 the Pyramid Lake fishes. That means what it was, as a
- 7 part of this project, sort of a canal was constructed
- 8 which just immediately upstream of the Marble Bluff Dam
- 9 so the canal would then meander into the lake and open
- 10 up a channel for the lake to create access for fish.
- 11 That included several ladders. It turned out
- 12 to be these ladders quite steep for Cui-ui because they
- 13 did not have much knowledge about Cui-ui, and they use
- 14 what's referred to as system of ladder and -- for fish
- 15 from the northwest, and that's referred to as
- 16 ice-harbor-type ladder.
- 17 It turned out to be too steep for the Cui-ui to
- 18 navigate, and it is partially successful and partially
- 19 has not been and created very limited access.
- 20 Similarly, a fish-lifting facility was also
- 21 constructed at the toe of the Marble Bluff Dam to
- 22 provide passage, meaning that lift. So therefore there
- 23 would be a lift, and the fish basically would head --
- 24 during the spawning time would head upstream, of course
- 25 would come against the Marble Bluff Dam, and then there

- 1 would be a container, if you want to call it.
- 2 Therefore fish would move into that container,
- 3 it would lift it, and then basically pass it on
- 4 upstream. It's more like a trap and truck, but there's
- 5 no truck involved here.
- 6 What -- basically that caused some problem
- 7 because there was substantial basically death in a part
- 8 of fish because of suffocation. They're piling on top
- 9 of each other.
- 10 So more recently they have constructed a new
- 11 system, what's referred to as lock system, and that to
- 12 some extent does its job much better than the original
- 13 lift.
- 14 Fish water from Stampede and Prosser Creek
- 15 Reservoir is released to support the passage flows for
- 16 Cui-ui to migrate and overcome the delta. That's been
- 17 in fact done as of today.
- In this June for the purpose of aiding the
- 19 passage because the lake level is fairly down again
- 20 because of number of dry years. The lake elevation is
- 21 at 3,801. At least what the biologists tell, me 3,812
- 22 is more accessible.
- 23 So therefore in order to make fish to overcome
- 24 the delta situation where there are quite a bit of
- 25 braiding, if you want to call, which makes the channels

- 1 unnavigable for fish. The only way you would have it
- 2 because to increase the flows which was done this spring
- 3 by making supplemental releases from both Prosser and
- 4 Stampede Reservoir.
- 5 MR. PALMER: Mr. Shahroody, you were referring
- 6 to a lake just a moment ago. You meant Pyramid Lake?
- 7 MR. SHAHROODY: Yes, I did.
- In addition to passage, of course, the Tribe
- 9 has endeavored to maintain the habitat not only for
- 10 Cui-ui but also for the Lahontan Cutthroat Trout
- 11 year-round.
- 12 Those flow regimes were developed to have
- 13 different flows for different months depending on the
- 14 demand within the lower part of the Truckee River.
- However, the fish water stored in the Stampede
- 16 and Prosser Creek Reservoir is not adequate to meet the
- 17 flow targets to overcome the passage barrier and provide
- 18 adequate flows for habitat maintenance in Lower Truckee
- 19 River in most years.
- 20 So therefore we have to be pretty selective how
- 21 we manage this water. And some years basically we get
- 22 words from Fish and Wildlife Service. They say this is
- 23 not a good year to do passage because we don't have
- 24 enough water.
- Now the TROA benefits, as you heard, I directed

- 1 in terms of passage because I'm in basically the
- 2 position working with the Tribe to manage the Tribe's
- 3 water resources for the purpose of fish and making
- 4 releases to meet the flow requirements. And passage is
- 5 a major issue.
- 6 But the TROA would allow Pyramid Lake to
- 7 accumulate water in the Truckee River reservoirs, but
- 8 under TROA such water would be stored as fish credit
- 9 water in the Truckee River reservoirs within the permit
- 10 conditions of those reservoirs.
- Now having had the access to fish credit water
- 12 plus water in Stampede and Prosser Creek under the
- 13 permits, therefore in combination those waters would be
- 14 released to aid the Lahontan Cutthroat and Cui-ui at the
- 15 Pyramid Lake Delta.
- 16 Increased release under TROA would also provide
- 17 for spawning flows and improved habitats. Now having
- 18 increased flows in the river as in the stream flow, that
- 19 by itself also aids in improving the water quality in
- 20 the river.
- 21 This happens mostly where there are problems in
- 22 terms of water quality in the river or in dry years
- 23 because there's not enough water to keep the water
- 24 quality in the lower river, but the fact of the matter,
- 25 the Tribe would have fish credit water and other waters

- 1 from the project meaning that Stampede project and
- 2 Prosser Creek Reservoir project in combination be able
- 3 to store and then carryover to dry period and make
- 4 releases, so that by itself would aid the water quality
- 5 also.
- 6 MR. PALMER: I wanted to ask just one
- 7 clarifying question back at the beginning, just as we
- 8 look back at this for reference.
- 9 You discussed Winnemucca Lake. It was pointed
- 10 out to me that that's not on the map, USBR 15, that
- 11 we've been looking at. And if you -- but it is shown on
- 12 the map in the front cover of Board Exhibit 7.
- And it's a fold-out map right inside the cover
- 14 that shows Winnemucca Lake. Maybe you could describe
- 15 briefly the geographic location of Winnemucca Lake.
- MR. SHAHROODY: Yeah, I notice that that's not
- 17 included as part of the exhibits that we had, and Tribe
- 18 takes quite a --
- 19 CO-HEARING OFFICER DODUC: Hold on a second.
- 20 Mr. Van Zandt?
- 21 MR. VAN ZANDT: I'm sorry to interrupt, but I
- 22 have a question. According to the schedule that we were
- 23 given, Mr. Shahroody's already testified for 15 minutes
- 24 previously. He's now into his 18th minute in this
- 25 presentation.

- I was just wondering if we -- and the clock
- 2 isn't working unfortunately -- I was just trying to
- 3 figure out where we're going with this because we have a
- 4 40-minute presentation by these three gentleman, and
- 5 almost half of it has already been consumed by
- 6 Mr. Shahroody.
- 7 CO-HEARING OFFICER DODUC: Is the clock not
- 8 working? No, the clock is working.
- 9 I wanted to clarify that the joint parties in
- 10 total have six hours to present their direct. And while
- 11 Mr. Shahroody's testimony is a bit over, I'm granting
- 12 you that latitude because it is relevant.
- But Mr. Van Zandt's comment is noted. I assume
- 14 that you will not have an additional --
- MR. SHAHROODY: We'll be very quick.
- 16 CO-HEARING OFFICER DODUC: Okay.
- 17 MR. SHAHROODY: I just pointed out Winnemucca.
- 18 As I said, the Tribe takes pride in -- when you talk to
- 19 elders, they take pride in Winnemucca Lake because of
- 20 its vast wetlands and of course the fish resources
- 21 there.
- But right now, what you see is basically a dry
- 23 lake bed. And that's located immediately to the east of
- 24 Pyramid Lake. It is about -- when of course was a lake,
- 25 and a functional lake -- it's about the same size as

- 1 Pyramid Lake.
- 2 And there is a slough, if somebody's there to
- 3 see it. You can see what we refer to as Mud Slough.
- 4 That's the connecting channel between the Winnemucca
- 5 Lake and also Pyramid Lake.
- 6 But Pyramid Lake is so far down, that is, I
- 7 would say, something in order of 60 feet below that Mud
- 8 Slough.
- 9 CO-HEARING OFFICER DODUC: Thank you.
- 10 MR. PALMER: That's all I have for Mr.
- 11 Shahroody on direct.
- 12 CO-HEARING OFFICER DODUC: Thank you.
- Mr. DePaoli, your witness please.
- 14 --000--
- 15 DONALD A. MAHIN
- 16 Called by APPLICANT AND PETITIONERS
- 17 DIRECT EXAMINATION BY MR. DePAOLI
- 18 ---00--
- 19 MR. DePAOLI: Mr. Mahin, please state your name
- 20 and spell it for the record.
- MR. MAHIN: Yes. My name is Donald A. Mahin,
- M-a-h-i-n.
- MR. DePAOLI: Were you here yesterday and sworn
- 24 as a witness?
- MR. MAHIN: Yes, I was.

- 1 MR. DePAOLI: Is TMWA 4-0 a true and correct
- 2 copy of your written testimony?
- 3 MR. MAHIN: Yes, it is.
- 4 MR. DePAOLI: Do you have any changes to it?
- 5 MR. MAHIN: No, I do not.
- 6 MR. DePAOLI: Do you affirm that TMWA
- 7 Exhibit 4-0 is true and correct?
- 8 MR. MAHIN: Yes, I do.
- 9 MR. DePAOLI: Does TMWA Exhibit 4-1 accurately
- 10 describe your educational and professional experience?
- MR. MAHIN: Yes, it does.
- MR. DePAOLI: Would you very briefly summarize
- 13 that experience?
- MR. MAHIN: Yes.
- I have a pair of associate of arts degrees from
- 16 Shasta College in physical science and geology, a
- 17 bachelor of arts degree from Fresno State in geology,
- 18 and a master of science in hydrology from the University
- 19 of Nevada, Reno.
- I have approximately 29 -- actually, a little
- 21 bit more than that -- 29 years of experience in the
- 22 field of hydrology.
- I have been employed initially four years in
- 24 various private consulting forms with a short stint with
- 25 the US Geological Survey.

- 1 The next 25 years beginning in 1982 through
- 2 2007 was spent with Washoe County in various
- 3 departments. Washoe County is the county where Reno and
- 4 Sparks are located.
- 5 All of that work was spent doing water resource
- 6 work ranging from water quality monitoring to resource
- 7 management, land use planning associated with water
- 8 supply.
- 9 And then the past three years since my
- 10 retirement, I've worked for Eco:Logic Engineering in
- 11 Reno.
- MR. DePAOLI: Would you describe the purpose of
- 13 your testimony and then please summarize it for the
- 14 Board?
- MR. MAHIN: The purpose of my testimony is to
- 16 provide some background information concerning water
- 17 rights acquisitions that have taken place as part of
- 18 Truckee River Operating Agreement Settlement Act and how
- 19 the change petitions will enhance the use of those water
- 20 rights for protecting and enhancing water quality in the
- 21 Lower Truckee River and actually in the Truckee River in
- 22 California too.
- Beginning in about 1990, I was assigned to work
- 24 for the Washoe County manager on a variety of projects.
- 25 Shortly after I began that assignment, I began work on

- 1 the Truckee River Operating Agreement.
- I was assigned to that on behalf of Washoe
- 3 County as their policy and technical representative. I
- 4 continued on that task through my retirement.
- 5 Shortly after that, around 1994, a series of
- 6 negotiations began dealing with the Truckee River water
- 7 quality issues and some lower river issues.
- 8 Those negotiations eventually led to the
- 9 Truckee River Water Quality Settlement Agreement. I
- 10 participated in those negotiations as the technical and
- 11 policy representative of Washoe County.
- 12 That agreement was executed in October of 1996.
- 13 The parties to that agreement were the three local
- 14 governments, Reno, Sparks, and Washoe County; the State
- 15 of Nevada; the Department of Interior; the Nevada
- 16 Department of Environmental Protection; the Pyramid Lake
- 17 Paiute Tribe; and the Department of Justice. I may have
- 18 repeated myself on part of the list there.
- The issues that were being settled in that
- 20 agreement related to water quality problems on the Lower
- 21 Truckee River, primarily temperature and dissolved
- 22 oxygen.
- Both of those problems arise in times of low
- 24 flow, particularly below Derby Dam. Derby Dam in its
- 25 historic operation has diverted a large fraction of the

- 1 Truckee River water at certain times of the year.
- 2 Sometimes the flow below Derby Dam has been
- 3 recorded by the USGS as actually being zero flow.
- 4 Frequently it's in the range of 30 cubic feet per
- 5 second.
- At the 30-cubic-feet-per-second flow rate, the
- 7 temperature tends to rise above the water quality
- 8 standards that are set by the State of Nevada. At those
- 9 temperature ranges, the dissolved oxygen also plummets
- 10 to a level that is inconsistent with fish life.
- 11 So the Truckee River Water Quality Settlement
- 12 Agreement ultimately required the three local
- 13 governments, Reno, Sparks, and Washoe County, along with
- 14 the Department of Interior to purchase \$24 million worth
- 15 of water rights for augmenting the flow of the Truckee
- 16 River.
- 17 Reno, Sparks, and Washoe were responsible for
- 18 12 million, and the Department of Interior another 12
- 19 million of water rights purchases.
- The Department of Interior contracted with the
- 21 Pyramid Lake Paiute Tribe to carry out their obligations
- 22 and provided the funding to the Tribe to purchase the
- 23 water rights on behalf of the Department of Interior.
- The purchases began in approximately 1997 or
- 25 they began shortly after that.

- In 1997, the three local governments Reno,
- 2 Sparks, and Washoe County, established a committee known
- 3 as the Local Government Oversight Committee. I served
- 4 on that committee from its inception through my
- 5 retirement in 2007.
- 6 That committee was charged with carrying out
- 7 the purchases and management of water rights and
- 8 associated lands for the water quality settlement
- 9 agreement on behalf of Reno, Sparks, and Washoe County.
- 10 The Pyramid Lake Paiute Tribe in approximately
- 11 the same time frame began purchasing water rights. And
- 12 as of the present time, between the two purchasing
- 13 entities, the Local Government Oversight Committee and
- 14 the Pyramid Lake Paiute Tribe, purchase of 5390 acre
- 15 feet has been completed so far to date.
- Most of the money's been spent. Less than
- 17 110,000 left to be spent out of the 24 million, so
- 18 they're very close to purchasing all the water needed
- 19 under the agreement. Expect that to be probably
- 20 completed in the very near future.
- In addition to the Water Quality Settlement
- 22 Agreement purchases themselves, TROA has a provision
- 23 which requires Reno, Sparks, and Washoe County to
- 24 purchase or otherwise acquire a 6700 acre feet of
- 25 additional water quality water to be managed in the same

- 1 manner as the water under the Water Quality Settlement
- 2 Agreement.
- 3 A large fraction of that water is already under
- 4 control or ownership of Reno, Sparks, and Washoe County.
- 5 So combined, the Local Government Oversight
- 6 Committee or the -- backing up -- the water acquired
- 7 pursuant to the Water Quality Settlement Agreement plus
- 8 the 6700 acre feet required under TROA equate to
- 9 approximately 42 cubic feet per second of water
- 10 available for flow augmentation.
- 11 So the low flow condition that was in the range
- 12 of zero to 30 cfs below Derby Dam, there are now water
- 13 rights available to provide to the lower river amounting
- 14 to somewhere a little over 42 cfs.
- 15 A portion of those already have change
- 16 applications approved by the State Engineer to allow
- 17 their manner of use to be used for wildlife in the
- 18 river.
- There are some applications still pending and
- 20 some yet to be filed, but those are in progress. And
- 21 progress is being made on those.
- One application that I was personally involved
- 23 with was challenged -- or was approved by the State
- 24 Engineer and challenged in the Orr Ditch Court. The
- 25 court basically sustained the State Engineer's ruling,

- 1 and that right is no longer subject to challenge.
- 2 Already touched on water quality issues to be
- 3 satisfied by these, which are the dissolved oxygen and
- 4 temperature below Derby Dam.
- 5 But the agreement doesn't specify specifically
- 6 just those two parameters. It's open to any future
- 7 water quality concerns that arise down the road that are
- 8 amenable to flow augmentation.
- 9 One other important point that's been brought
- 10 out in testimony here and included in my written
- 11 testimony is that in the years 1992 and 1994 the Truckee
- 12 River had very low flow conditions, and actually in the
- 13 Truckee Meadows just east of the, at the time, Sierra
- 14 Pacific water diversions, the Truckee River was actually
- 15 dry in portions of the summer.
- There was no water in the Truckee River flowing
- 17 past the diversions in the Truckee Meadows. The only
- 18 water flowing down the Truckee River at that point in
- 19 time was essentially the wastewater that was generated
- 20 by the community and returned to the river.
- So a portion of the summers of '92 and '94,
- 22 there was an experience of a dry river, very low flow
- 23 conditions in the Lower Truckee River, and a need to
- 24 have aquatic habitat for fish both in the Truckee
- 25 Meadows and in the lower river that was drought-caused.

- 1 This water, had it been available at that time,
- 2 would not be capable of fixing that problem. With a
- 3 lack of storage and the water being available only when
- 4 Floriston rates are met, the water that's been purchased
- 5 for these \$24 million plus the additional 6700 acre feet
- 6 would not be available for use in the Truckee River for
- 7 augmenting the flow, reducing the temperature, or even
- 8 providing a minimal wet fish habitat or vegetation to
- 9 maintain the vegetative cover next to the river.
- 10 These change petitions will help facilitate
- 11 storage that's permitted in TROA for this water quality
- 12 water so that it can be used and made available at times
- 13 when it wouldn't otherwise be available, like I just
- 14 described, under these conditions like 1992 or '94 when
- 15 there were hydrologic drought that did not allow water
- 16 to pass the Truckee Meadows other than the wastewater.
- MR. DePAOLI: Will that storage provide
- 18 benefits both in Nevada and California?
- 19 MR. MAHIN: Yes, it will in a couple ways.
- One, in California, it will be water that will
- 21 be -- a portion of the water that's acquired will be
- 22 sitting in the reservoirs waiting for these dry years
- 23 when it can be released to be used downstream as flow
- 24 augmentation.
- 25 That flow augmentation would also be taking

- 1 place concurrently in California where I would assume
- 2 same the dry conditions would also be present, so
- 3 there's a full augmentation and a recreational benefit
- 4 both accrued in California.
- In Nevada it would be a benefit that would
- 6 occur with the flow augmentation in these extra dry
- 7 periods where there's the possibility of an absolutely
- 8 dry river.
- 9 MR. DePAOLI: That concludes my direct.
- 10 CO-HEARING OFFICER DODUC: Thank you
- 11 Mr. DePaoli.
- 12 Questions?
- --000--
- 14 OUESTIONS FROM BOARD and BOARD STAFF
- 15 --000--
- 16 CO-HEARING OFFICER HOPPIN: I have one question
- 17 for the cast. Mr. Mahin you talked -- maybe you'd like
- 18 to answer this. You talked about wastewater returns
- 19 below TMWA in the early '90s.
- Is this drainage water? Is it primary treated
- 21 sewage water? What kind of -- what's it draining out
- 22 of, people or streets?
- MR. MAHIN: The water that I was referring to
- 24 was from the Truckee Meadows water reclamation facility.
- 25 It's an advanced wastewater treatment plant. The water

- 1 is extremely high quality coming out of that.
- 2 CO-HEARING OFFICER HOPPIN: But it does go back
- 3 into the Truckee River?
- 4 MR. MAHIN: It is returned to the Truckee River
- 5 in part as a means of disposal, in part to take care of
- 6 return flow issues associated with consumption of water
- 7 by the community.
- 8 CO-HEARING OFFICER HOPPIN: But it's basically
- 9 going back into a body of water that people retreat and
- 10 blend and use for drinking water; is that right?
- 11 MR. MAHIN: At the present time, there is no
- 12 municipal or potable diversion downstream that I'm aware
- 13 of. Fernley has not built their facility. They would
- 14 be the only community that in the near future is
- 15 contemplating a surface water diversion for municipal
- 16 purposes downstream.
- 17 CO-HEARING OFFICER HOPPIN: That's what I was
- 18 getting at. At such time as Fernley initiates the
- 19 project that they talked about, they would in fact be
- 20 using that water for potable purposes.
- MR. MAHIN: That's one of the reasons why it's
- 22 an advanced wastewater treatment plant and providing
- 23 nutrient removal and a very high level of treatment.
- 24 CO-HEARING OFFICER HOPPIN: And all of that
- 25 treatment water goes back into the system? Or is some

- 1 of it recycled for other purposes?
- 2 MR. MAHIN: There's a portion it that is reused
- 3 for landscape irrigation of golf courses, parks, and
- 4 other generally public areas.
- 5 And a significant portion of that is land or
- 6 areas that have already provided water rights to augment
- 7 the flow of the Truckee River back to replace that water
- 8 that would be depleted from the wastewater.
- 9 So it's not necessarily a one -- or a removal
- 10 without replacement of a water source back into it.
- 11 CO-HEARING OFFICER HOPPIN: And when they make
- 12 that exchange for wastewater versus flow, is it the 1.72
- 13 acre feet per acre foot level as well, or is it on a
- 14 one-to-one basis?
- MR. MAHIN: When there is a replacement, it is
- 16 a one-for-one.
- 17 Some of the water that is taken out is not
- 18 replaced because it was associated with groundwater that
- 19 was not part of the Truckee River system so -- or other
- 20 water rights where there was a -- where it was imported
- 21 into the Truckee River Basin from another area where
- 22 there may have been a source that's independent of the
- 23 Truckee River, or that there's been a consumptive use
- 24 reduction in those areas where it's been imported.
- 25 So it all depends on the source.

- 1 CO-HEARING OFFICER HOPPIN: But the general
- 2 practice is a one-to-one exchange.
- 3 MR. MAHIN: Yes.
- 4 CO-HEARING OFFICER HOPPIN: Thank you.
- 5 Mr. Shahroody I have one for you, and that will
- 6 probably get me off your back for the rest of the day.
- 7 I hear people talking almost casually about
- 8 acquiring water rights to take care of future needs.
- 9 We've got to be dealing with a rather finite amount of
- 10 existing water rights to acquire.
- I assume somebody's sitting back smiling,
- 12 waiting for the price to go up? Or is there an eminent
- 13 domain trigger that can kick in? Or are people just
- 14 doing this out of the goodness of their heart?
- MR. MAHIN: You're absolutely correct. In
- 16 terms of the water right, until we have this recession,
- 17 there was quite a price tag.
- Water rights in Truckee Meadows, Reno/Sparks
- 19 area, they used to go about, I would say, ten years ago
- 20 about \$2,000 per acre foot or \$3,000 per acre foot.
- 21 Then, during the height of the development, it
- 22 did go as far as upper 20,000.
- And that, of course, has come down right now,
- 24 and just a matter of willing buyer and willing seller
- 25 situation.

- But that water supply is finite. That's
- 2 correct.
- 3 CO-HEARING OFFICER HOPPIN: But you can
- 4 identify, if the price is right, enough water to satisfy
- 5 the build-out needs to 2033? I mean it's there if
- 6 somebody pays the price for it.
- 7 MR. MAHIN: That is correct.
- 8 CO-HEARING OFFICER HOPPIN: Thank you very
- 9 much. Those are both good answers.
- 10 CO-HEARING OFFICER DODUC: Other questions?
- 11 Mr. Soderlund?
- MR. SODERLUND: Thank you. The Department of
- 13 Water Resources would once again like to call John Sarna
- 14 as a witness.
- 15 --000--
- JOHN E. SARNA
- 17 Called by APPLICANT AND PETITIONERS
- 18 DIRECT EXAMINATION BY MR. SODERLUND
- 19 --000--
- MR. SODERLUND: Mr. Sarna, did you take the
- 21 oath that was administered yesterday?
- MR. SARNA: Yes, I did.
- MR. SODERLUND: Thank you. At this time could
- 24 you please provide a brief purpose of your testimony and
- 25 summarize the remaining portion of your testimony?

- 1 MR. SARNA: I can.
- 2 I'll start just repeating my qualifications.
- 3 As mentioned before, I'm a senior engineer, Registered
- 4 Civil Engineer with California.
- 5 And I am Chief of the California-Nevada and
- 6 Watershed Assessment Section, California Department of
- 7 Water Resources. I neglected to mention, I also have a
- 8 doctorate in environmental science and engineering from
- 9 UCLA.
- The purpose of my testimony for this panel is
- 11 to briefly describe the benefits that we expect from
- 12 TROA generally and the benefits that are directly
- 13 related to the petitions for change.
- 14 As I understand the testimony that has been
- 15 presented thus far, others have presented evidence to
- 16 demonstrate that the petitions for change will not
- 17 result in a new water right, will not harm other legal
- 18 users of water or the environment, and will protect the
- 19 public trust.
- 20 My testimony is intended to demonstrate that,
- 21 speaking for California, approval of these change
- 22 petitions which are necessary to implement TROA are in
- 23 the public interest.
- We support these positions because they provide
- 25 many benefits for California. Here are those I believe

- 1 most relevant.
- Others are in my written testimony. Others
- 3 were mentioned by others in this proceedings, and still
- 4 others are unmentioned but they do exist in TROA on a
- 5 careful reading.
- The first benefit I want to emphasize really is
- 7 the interstate allocation of Truckee River, Carson
- 8 River, and Lake Tahoe between California and Nevada
- 9 which would be put into effect with TROA.
- 10 Currently, there is only the unratified
- 11 interstate compact which is not binding. The allocation
- 12 would provide an increased, assured, and known future
- 13 water supply to users in California.
- 14 And just a few details on the allocation. The
- 15 allocation limits overall water use in the California
- 16 portion of the Tahoe Basin the 23,000 acre feet per
- 17 year. We estimate current water use to be about
- 18 seven-eighths of this, so we're getting fairly close to
- 19 the limit on use of that water in the Tahoe Basin.
- 20 Allocation limits overall water use in the
- 21 California portion of the Truckee River Basin to 32,000
- 22 acre feet per year of which -- that's ground and surface
- 23 water combined -- of which 10,000 acre feet per year may
- 24 be from surface water.
- 25 We estimate current water use in the Truckee

- 1 Basin to be about one-third of this, so there's plenty
- 2 of room to grow in the Truckee Basin.
- 3 Let me go back. Just for the Tahoe Basin, the
- 4 23,000 acre feet per year applies to both ground and
- 5 surface water, so that's a total for both ground and
- 6 surface water.
- 7 In terms of the Carson River, implementation of
- 8 TROA would also confirm the Alpine Decree which is the
- 9 law of the river for the Carson River.
- 10 But it also allows water to be used for
- 11 existing rights outside that decree up to an additional
- 12 1300 acre feet per year by depletion for use in
- 13 California.
- 14 Another benefit. Once TROA then the Settlement
- 15 Act with interstate allocation go into effect, it's my
- 16 understanding that the State Water Resources Control
- 17 Board -- at its discretion, of course -- may resume
- 18 processing water right applications pending since 1972.
- 19 Since then, with few exceptions, the State
- 20 Water Board has not approved new permits in the Tahoe
- 21 Basin and probably in the Truckee River Basin as well.
- Next benefit. The Settlement Act which goes
- 23 into effect once TROA is implemented gives current and
- 24 future service water users in the Truckee Basin in
- 25 California a higher priority than all but three

- 1 downstream water rights in Nevada.
- Next benefit. TROA provides siting and design
- 3 criteria for wells to meet the Settlement Act required
- 4 that new water wells in the Truckee Basin be designed to
- 5 minimize any short-term reductions in surface stream
- 6 flows to the maximum extent feasible.
- 7 Next benefit. TROA Section 6.C.2 provides new
- 8 opportunities for California M&I water users to maintain
- 9 drought storage in federal reservoirs in the Truckee
- 10 Basin.
- 11 Next benefit. Implementation of the TROA will
- 12 end current litigation and avoid potential litigation
- 13 among water users in California and Nevada.
- 14 Next benefit. TROA provides \$50,000 to
- 15 \$100,000 per year for a habitat restoration program in
- 16 California and Nevada. This is to be split three ways,
- 17 California, Nevada, and the Tribe.
- 18 Next benefit. The TROA provides for creation
- 19 and use of the California Guidelines which were
- 20 mentioned earlier which identify California's objectives
- 21 to help better meet DFG proposed minimum and preferred
- 22 flows, ramping flows, and avoid exceeding maximum flows.
- 23 And TROA specifies that these must be considered by the
- 24 administrator during scheduling.
- 25 Finally, TROA gives California control over the

- 1 establishment and release of a substantial amount of
- 2 Joint Program Fish Credit Water and California
- 3 environmental credit water.
- While stored in California, Joint Program Fish
- 5 Credit Water may be used for instream flows, water
- 6 quality, and to maintains reservoir levels.
- 7 After it crosses the state line, it reverts to
- 8 fish credit water and flows to Pyramid Lake where it --
- 9 and this is Joint Program Fish Credit Water -- where it
- 10 would have flowed had it not been stored upstream.
- 11 California environmental credit water may be
- 12 used as specific in TROA for instream flows, water
- 13 quality, and enhancing riparian vegetation.
- 14 After it crosses the state line, it may be used
- 15 to make Floriston rates if it came from California water
- 16 rights or to maintain instream water quality in Nevada
- 17 and flow to Pyramid Lake if it came from Nevada water
- 18 rights.
- 19 As for the change petitions themselves, they
- 20 will allow for better coordination between Truckee River
- 21 reservoirs and for more flexibility so that water from
- 22 one reservoir may be rediverted in place of water from
- 23 another reservoir.
- The movement of water between reservoirs will
- 25 result in benefits to the environment and recreation.

- 1 In regard to recreation, by allowing more water
- 2 to be stored upstream in lieu of direct diversions, the
- 3 change petitions should increase Truckee River reservoir
- 4 levels substantially during the recreation season.
- 5 As predicted in the TROA EIS/EIR, total
- 6 end-of-month storage under TROA is about one percent
- 7 greater in wet hydrologic conditions, five percent
- 8 greater in median hydrologic conditions, and 56 percent
- 9 greater in dry hydrologic conditions.
- 10 This was something that our local constituents
- 11 really asked for, and we're glad to see this amount of
- 12 benefit.
- The change petitions will also result in
- 14 improved instream flows in the Truckee River and its
- 15 tributaries to provide better fish and wildlife habitat,
- 16 water quality, and environmental conditions.
- 17 Through system of mandatory and voluntary
- 18 exchanges, we anticipate meeting DFG minimum flows
- 19 substantially more often in all reaches with TROA than
- 20 in a future without TROA.
- These benefits are quantified in my written
- 22 testimony; however, an example might be helpful. I'm
- 23 going to take -- this will be the last -- I guess this
- 24 will be the end of it, but the -- I'm going to take
- 25 Stampede and provide an example from Stampede just to

- 1 show you what an exchange -- one of the mandatory
- 2 exchanges might do in TROA.
- 3 The current permit as I read it requires 6 to 8
- 4 cfs out of Stampede to meet the instream flows below
- 5 Stampede. There's an old extinct agreement, the US
- 6 agreed to provide 30 cfs. As an aside, TROA -- we
- 7 negotiated in TROA that that will become a mandatory 30
- 8 cfs minimum floor.
- 9 However, Fish and Game wanted to see 45 cfs.
- 10 So the way we determined -- we provided a
- 11 mandatory exchange in TROA to achieve that 45 cfs much
- 12 of the time by saying well, if Tahoe is releasing
- 13 Floriston rates say at 200 cfs, and say you have 30 cfs
- 14 coming out of Stampede, what you can do is lower the
- 15 water coming out of Tahoe from 200 cfs to 185 cfs, raise
- 16 the water coming out of Stampede from 30 cfs to 45 cfs.
- 17 You have the same amount of water going
- 18 downstream to meet the needs downstream in Nevada.
- 19 However, now you have this benefit to instream flows in
- 20 Stampede.
- The only problem is you have to move the water.
- 22 Somebody is loosing water from Stampede. So you take
- 23 those people who have credit water in Stampede and move
- 24 their water, on paper, into Lake Tahoe at 15 cfs.
- 25 So that -- so by doing that, the -- in fact we

- 1 need change petitions to do something like that among
- 2 all the reservoirs.
- 3 And so basically you're seeing this benefit of
- 4 having an exchange -- and this is mandatory in TROA --
- 5 that this happens as long as that water can be safely
- 6 moved from Stampede into Lake Tahoe.
- 7 So that's why we're glad to see these improved
- 8 instream flows below not only Stampede but the same
- 9 applies to all the reservoirs, and that's why the change
- 10 petitions involve moving purposes and places of use
- 11 among the different reservoirs and providing it to all
- 12 reservoirs.
- So consider that -- oh. I just want to mention
- 14 too that in a way -- hopefully this might help -- this
- 15 is taking the Tahoe-Prosser Exchange that we discussed
- 16 earlier and -- that kind of exchange -- and actually
- 17 applying it to all reservoirs in the system.
- 18 Tahoe-Prosser Exchange applies now, but we
- 19 can't do that now with any of the other reservoirs.
- In conclusion, based on these benefits to water
- 21 supply, recreation, instream flows, and water quality in
- 22 California as well as other benefits I haven't
- 23 mentioned, we believe approving the change petitions and
- 24 applications will serve the public trust.
- MR. SODERLUND: Thank you, Mr. Sarna. I just

- 1 have a couple questions.
- In your written testimony, on page 10 for
- 3 reference, you have a short summary of the CEQA process,
- 4 and I believe you summarized that in your testimony
- 5 yesterday as well.
- Is it true that the 30-day period for
- 7 challenging the CEQA document has passed?
- 8 MR. SARNA: Yes, that's true.
- 9 MR. SODERLUND: And in your knowledge and
- 10 professional judgment, is there any new information or
- 11 changed circumstances that would result in a new
- 12 analysis being required or new findings in that
- 13 document?
- MR. SARNA: No, there's none.
- MR. SODERLUND: Thank you.
- I have no further questions.
- 17 CO-HEARING OFFICER DODUC: You overshot your
- 18 four-hour estimate by one minute.
- Mr. Hoppin.
- 20 ---00--
- 21 QUESTIONS FROM BOARD and BOARD STAFF
- --000--
- 23 CO-HEARING OFFICER HOPPIN: Mr. Sarna, I'm
- 24 going to ask you a question very similar to a question I
- 25 asked Mr. Strekal earlier in the day.

- 1 It's something quite honestly that fascinates
- 2 me. Down here in the valley, we talk about area of
- 3 origin water rights. And when people start talking
- 4 about taking them people, start loading guns and hiring
- 5 attorneys that I can't afford and things like that.
- 6 We're talking about the Tahoe Basin here being
- 7 limited to a finite amount of water in combination of
- 8 ground and surface of 23,000 acre feet.
- 9 I will confess to you that in a former life I
- 10 did a brief calculation. I used almost 40 percent of
- 11 that volume of water myself to barely make a living.
- 12 It's hard for me to believe, unless there's
- 13 just this indigenous no-growth settlement in the Tahoe
- 14 Basin, that people are going ah, we've used
- 15 seven-eighths of our water and we can't by any more --
- 16 and do they like that?
- 17 I wouldn't.
- 18 I can't believe that an element of this isn't
- 19 somebody jumping up and down and saying you have put a
- 20 lifetime cap on the water in our area.
- 21 And maybe, like I said -- we have a little
- 22 issue we dealt with down in the Monterey Peninsula where
- 23 a large, rather affluent community doesn't have any
- 24 water because they took that very, you know, tact.
- 25 So but -- is this -- nobody cares about that

- 1 part of it? I'm the only one that goes oh, my god?
- 2 Other than the fact that I'm not sure how I'm going to
- 3 administer the groundwater portion of it.
- 4 Just the theory of it. Am I the only one that
- 5 spins around in a circle on this one?
- 6 MR. SARNA: I haven't heard many complaints.
- 7 In fact, I don't think I have heard any complaints from
- 8 the people in Tahoe Basin about, you know, being limited
- 9 by the allocation.
- I understand they're concerned how to comply
- 11 with it. But it's -- there's a concern about, you know,
- 12 how -- I believe there is three different zones in the
- 13 Tahoe area, and those zones each have accepted a certain
- 14 proportion of the allocation.
- I believe the Tahoe City zone is the one
- 16 closest to that, you know, being, you know, exceeding
- 17 their -- they're still within it, but very close.
- I think they accept it because the alternative
- 19 is if they don't have a limit on it then they face
- 20 litigation and perhaps it -- the limit might be lower.
- 21 CO-HEARING OFFICER HOPPIN: Do you think -- I
- 22 know I'm calling for a conclusion of your witness if you
- 23 want to go ahead and say it before I ask him the
- 24 question.
- 25 Are you assuming that they're taking that

- 1 attitude because they're concerned about litigation, or
- 2 really there is just a certain I don't really want any
- 3 more neighbors anyhow kind of attitude.
- 4 MR. SODERLUND: I will object because it is
- 5 asking for conjecture, but I'm also okay with John
- 6 answering the question as long as it's acknowledged that
- 7 he is guessing on others' behalf.
- 8 CO-HEARING OFFICER HOPPIN: You can put the
- 9 same restrictions on my questions as you do on Mr. Van
- 10 Zandt. Does that make you feel good?
- 11 CO-HEARING OFFICER DODUC: I will decline to
- 12 answer that.
- 13 CO-HEARING OFFICER HOPPIN: He doesn't have to
- 14 answer if he doesn't want. I mean obviously it's
- 15 something that just seems peculiar to me that it's not
- 16 an element of what we're talking about.
- 17 CO-HEARING OFFICER DODUC: Your objection is
- 18 noted, Mr. Soderlund.
- 19 CO-HEARING OFFICER HOPPIN: Out of respect for
- 20 Mr. Soderlund, I will thank Mr. Sarna, and we will move
- 21 on.
- MR. SARNA: I can provide an answer.
- I'd just like to say that 23,000 acre feet is
- 24 in the compact which comes out of -- goes way back to
- 25 1950s. I think there is --

- 1 CO-HEARING OFFICER HOPPIN: So it's an existing
- 2 number. It's just kind of codified.
- 3 MR. SARNA: The 23,000 goes way back.
- 4 CO-HEARING OFFICER HOPPIN: Okay. That helps a
- 5 lot. Thank you all.
- 6 CO-HEARING OFFICER DODUC: Any other questions?
- 7 Okay. Mr. Van Zandt unless you have a -- do
- 8 you have a burning question that cannot wait until
- 9 tomorrow, because I prefer not to break up your cross.
- 10 MR. VAN ZANDT: I would prefer to rest
- 11 everybody's eyes and brains for the evening and start in
- 12 the morning fresh.
- 13 CO-HEARING OFFICER DODUC: We are all extremely
- 14 grateful.
- On that note, though, let me say one thing. In
- 16 order to provide you with the opportunity to file your
- 17 opposition to Mr. DePaoli's motion to exclude, and to
- 18 allow us the opportunity to consider your opposition, I
- 19 am going to limit the presentation of your case-in-chief
- 20 tomorrow.
- 21 And I'm going to be limiting it to very
- 22 specific exhibits and witnesses, and Ms. Mahaney will
- 23 outline those conditions for you.
- 24 SENIOR STAFF COUNSEL MAHANEY: All right.
- On behalf of TMWA, Mr. DePaoli has moved to

- 1 exclude certain exhibits relating to consumptive use.
- 2 Those exhibits are TCID 244B through TCID 257 including
- 3 the Mahannah report on consumptive use which is TCID
- 4 244B. Did I get that right?
- 5 TCID 280 including TCID 144, again a Mahannah
- 6 report.
- 7 Certain pages of TCID 282. Those pages are
- 8 page 7, line 4 to line 17; page 8, line 14 to page 10
- 9 line 26.
- 10 Is that correct Mr. DePaoli?
- 11 MR. DePAOLI: That certainly sounds like it.
- 12 I'm --
- 13 SENIOR STAFF COUNSEL MAHANEY: All right.
- MR. DePAOLI: -- sounds correct, yes.
- 15 SENIOR STAFF COUNSEL MAHANEY: By my
- 16 calculations, and I'm sure one of you will correct me if
- 17 I'm wrong, this leaves:
- TCID 267, the Mahannah report on unappropriated
- 19 water.
- 20 Portions of TCID 282 that are not covered by
- 21 those excluded pages.
- Mr. Knox's testimony in TCID 276B.
- Mr. Schank's testimony in TCID 281.
- 24 And Mr. Shahroody's -- I'm not sure I'm
- 25 pronouncing that correctly -- in TCID 275B.

- 1 CO-HEARING OFFICER DODUC: Would you like that
- 2 to be repeated, Mr. Van Zandt?
- 3 MR. VAN ZANDT: I think those pages are in the
- 4 motion to exclude.
- 5 I would just lodge an objection to having
- 6 essentially the case that we had prepared now -- hate to
- 7 use the word eviscerated, but it seems that way to me,
- 8 that we're -- all of a sudden I've got to rearrange my
- 9 entire presentation, truncate various witnesses,
- 10 rearrange their schedules, and maybe even force them to
- 11 come back when I wasn't planning to do that.
- 12 It just seems the late filing of this motion to
- 13 exclude and the holding up of our presentation is giving
- 14 me a lot of concern about due process. Thank you.
- 15 CO-HEARING OFFICER DODUC: My attorney reminded
- 16 me to remind you that the reason for holding up the
- 17 presentation of your case was to allow you the
- 18 opportunity to respond to the motion for exclusion.
- 19 So with that, we will reconvene tomorrow at
- 20 9 o'clock, and Mr. Van Zandt may begin his
- 21 cross-examination of these witnesses.
- Thank you all.
- 23 \* \* \*
- 24 (Thereupon the WATER RESOURCES CONTROL BOARD hearing adjourned at 5:54 p.m.)

25

1	CERTIFICATE OF REPORTER
2	I, LINDA KAY RIGEL, a Certified Shorthand
3	Reporter of the State of California, do hereby certify:
4	That I am a disinterested person herein; that
5	the foregoing WATER RESOURCES CONTROL BOARD hearing was
6	reported in shorthand by me, Linda Kay Rigel, a
7	Certified Shorthand Reporter of the State of California,
8	and thereafter transcribed into typewriting.
9	I further certify that I am not of counsel or
10	attorney for any of the parties to said meeting nor in
11	any way interested in the outcome of said meeting.
12	IN WITNESS WHEREOF, I have hereunto set my hand
13	this August 12, 2010.
14	
15	
16	
17	
18	LINDA KAY RIGEL, CSR Certified Shorthand Reporter
19	License No. 13196
20	
21	
22	
23	
24	
25	