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STATE OF NEVADA

DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES DIVISION OF WATER RESOURCES BEFORE SUSAN JOSEPH-TAYLOR, HEARING OFFICER

IN THE MATTER OF PROTESTED APPLICATIONS 73783, 73791 THROUGH 73797, 73799, 73800, 73849 THROUGH 73855, 73863 THROUGH 73872, 73908 THROUGH 73915, 73917, 73986, 73987, 74076 THROUGH 74085, 74193 THROUGH 74202 AND RELATED SECONDARY APPLICATIONS (TMWA APPLICATIONS).

IN THE MATTER OF PROTESTED APPLICATION 78034 AND RELATED SECONDARY APPLICATIONS (CITY OF FERNLEY APPLICATIONS).

VOLUME I - TRANSCRIPT OF PROCEEDINGS

PUBLIC HEARING

MONDAY, DECEMBER 14, 2009

CARSON CITY, NEVADA

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ERNEST C. SCHANK	40	70	92	94
ROBERT E. ERICKSON	95	104	106	
NORMAN W. FREY	107			
CHRIS C. MAHANNAH	113	153		

(NOTE: Exhibits Listed in Volume IV.)

1	CARSON CITY, NEVADA, MONDAY, DECEMBER 15, 2009, 1:35 P.M.
2	-000-
3	
4	HEARING OFFICER JOSEPH-TAYLOR: Let's be on the
5	record. Next witness, Mr. Van Zandt.
6	MR. VAN ZANDT: Thank you. The Truckee-Carson
7	Irrigation District, city of Fallon and Churchill County call
8	Chris C. Mahannah.
9	
10	CHRIS C. MAHANNAH
11	called as a witness on behalf of
12	TCID, having been first duly sworn,
13	was examined and testified as follows:
14	
15	DIRECT EXAMINATION
16	BY MR. VAN ZANDT:
17	Q. Mr. Mahannah, would you state your full name for
18	the record and spell your last name, please?
19	A. Chris C. Mahannah, M-A-H-A-N-N-A-H.
20	HEARING OFFICER JOSEPH-TAYLOR: Mr. Van Zandt,
21	I'm going to try to save some time. What are you going to
22	try to qualify Mr. Mahannah in?
23	MR. VAN ZANDT: Water resources and water rights
24	and NCU.
25	HEARING OFFICER JOSEPH-TAYLOR: We'll you

1	haven't qualified in that, Chris, so I have to let you go.
2	Go ahead.
3	BY MR. VAN ZANDT:
4	Q. Where are you employed, Mr. Mahannah?
5	A. Mahannah & Associates.
6	Q. Speak up a little bit. Do you have Exhibit 227
7	in front of you?
8	A. Yes.
9	Q. Would you detail for the State Engineer your
LO	educational background, please?
L1	A. I have a BS in civil engineering from the
L2	University of Nevada Reno.
13	Q. Could you give a description of your experience,
L4	please?
L5	A. Since graduation in '86, 25 years of water
L6	resource engineering, hydrology experience specifically
L7	related to consumptive use issues. I was qualified as an
L8	expert in the Hage v. U.S. trial, the Federal Court of
L9	Claims, which involved consumptive use issues in Monitor
20	Valley.
21	Also been involved in studies in Churchill County
22	on soil moisture studies on the Wild Goose Farm, consumptive
23	use estimates, crop yields, neutron probe studies on that
24	farm.
25	I was also involved in monitoring weather

1 stations in the south Truckee Meadows to compute evapotranspiration consumptive use estimates for monitoring 2 3 effluent application on the Monitor Ranch. Also had numerous agricultural clients in 4 5 assisting them in irrigation system design, including crop 6 water requirements in that regard. HEARING OFFICER JOSEPH-TAYLOR: Mr. Mahannah, try 7 to speak up, please. You're very soft spoken. 8 9 MR. MAHANNAH: Then one of the first jobs out of 10 school in '86 was working for Sierra Pacific Power Company in 11 the central part of the state monitoring crop yield consumptive use under center pivot sprinklers when they were 12 13 converting from high pressure to low pressure to try to save 14 power. 15 We monitored yield consumptive use, a variety of 16 variables under center pivot irrigated alfalfa. 17 BY MR. VAN ZANDT: 18 In terms of your being qualified as an expert in Ο. 19 ET or consumptive use calculations, how many times has that 20 occurred? 21 How many times have I been qualified as an Α. 22 expert? 23 Ο. Yes. Α. I believe it was just the Hage Case. 24 25 Q. Could you just give a brief description of the

1	on-the-job training, 20, 25 years working with my father who
2	specialized particularly in this area.
3	Q. Okay.
4	MR. VAN ZANDT: In addition to Mr. Mahannah's
5	other qualifications, I would like to have him designated as
6	an expert in CU and evapotranspiration.
7	HEARING OFFICER JOSEPH-TAYLOR: Any questions
8	from staff? Nothing? I think based on the Federal Court of
9	Claims qualifying him as an expert in ET and consumptive use,
10	we'll so qualify him.
11	MR. VAN ZANDT: Thank you.
12	BY MR. VAN ZANDT:
13	Q. Now, Mr. Mahannah, were you designated as an
14	expert at this hearing by the Truckee-Carson Irrigation
15	District, county of Churchill and the city of Fallon?
16	A. Yes.
17	HEARING OFFICER JOSEPH-TAYLOR: Hold on, I just
18	did consumptive use and ET. You earlier said water resources
19	and water rights. Is that where you're going?
20	MR. VAN ZANDT: Yes.
21	HEARING OFFICER JOSEPH-TAYLOR: Okay. Thank you.
22	MR. VAN ZANDT: I guess my question for you,
23	Madam Hearing Officer, is has his previous qualification in
24	these areas I believe been accepted. Not yet?
25	HEARING OFFICER JOSEPH-TAYLOR: No. Hydrology

1	several times, ET, remote sensing, surface water and
2	groundwater hydrology, but not water rights and water
3	resources.
4	MR. VAN ZANDT: Thank you.
5	BY MR. VAN ZANDT:
6	Q. Let's talk about your hydrology experience,
7	Mr. Mahannah. Would you give us a brief overview of what
8	that qualification is?
9	A. In hydrology?
10	Q. Uh-huh, yes.
11	A. Starting most currently we're involved with a
12	study of the water resources in Dixie Valley which is a
13	comprehensive water resource study of the hydrologic
14	components of the Dixie Valley and tributary basins. Myself
15	and other consultants, USGS and Bureau of Reclamation have
16	teamed on that study.
17	It didn't go to hearing. I've testified on
18	groundwater, surface water interactions on application 55675
19	which was a TCID protested change application of Westpac's
20	back in the early '90s.
21	HEARING OFFICER JOSEPH-TAYLOR: Mr. Mahannah, I'm
22	going to stop you a second. He's been qualified in
23	hydrology. You said water rights.
24	MR. VAN ZANDT: Water resources and water rights.
25	HEARING OFFICER JOSEPH-TAYLOR: Water resources

1	how? Because I'm not going to spend a lot of time on
2	something he's been qualified on before several times.
3	BY MR. VAN ZANDT:
4	Q. The question has to do with your experience on
5	water resource plans and the management of water resources.
6	A. Yeah, and I've authored Churchill County's, done
7	a large part of their 25/50 year water resource plan as well
8	as their updated plan.
9	In regard to water rights, I'm a licensed water
10	rights surveyor with the State Engineer. I have routinely
11	filed change applications, proofs, been involved in
12	adjudication proceedings before the State Engineer. I taught
13	short courses with Jason, yourself and others on water rights
14	through Norman Seminars.
15	I think I'm well qualified in water rights.
16	HEARING OFFICER JOSEPH-TAYLOR: It's water plans
17	I'm struggling with right now. One water plan doesn't make
18	you an expert.
19	MR. VAN ZANDT: Okay.
20	BY MR. VAN ZANDT:
21	Q. Could you give us some of the tasks that you
22	performed in developing the water resource plans that you
23	have authored, Mr. Mahannah?
24	A. Well, in particular for Churchill County it was
25	looking at their demand, immediate and future demands for

with the two reports that he submitted and the areas that he's going to testify about, and I'm not sure where we're going with water planning and all that stuff in relationship to what was submitted.

That would be my sense really. I'm not objecting to him being qualified as an expert, but if he gets asked a question that's outside his expertise, I'm going to object.

HEARING OFFICER JOSEPH-TAYLOR: We don't have a problem with Mr. Mahannah being qualified in water rights.

Water resources is so broad, Mr. Van Zandt, I think you need to narrow it to something a little more specific.

MR. VAN ZANDT: Okay. Well, I don't know that the water resource part of it is particularly germane to his testimony today, so we'll sit on the water rights and the CU ET qualifications at this time.

HEARING OFFICER JOSEPH-TAYLOR: Any objections to that, Mr. DePaoli?

MR. DePAOLI: No, except to the extent that if water rights includes the ability to give a legal interpretation, I would object.

HEARING OFFICER JOSEPH-TAYLOR: As you should. I wouldn't expect otherwise. So, for right now we'll qualify you as an expert in consumptive use, evapotranspiration and water rights in Nevada.

MR. VAN ZANDT: I'd like to move for the

1	admission of Exhibit 2227, please.
2	HEARING OFFICER JOSEPH-TAYLOR: Any objection to
3	Exhibit 2227?
4	MR. DePAOLI: No objection.
5	HEARING OFFICER JOSEPH-TAYLOR: It will be
6	admitted.
7	MR. VAN ZANDT: Thank you.
8	BY MR. VAN ZANDT:
9	Q. Now, Mr. Mahannah, in conjunction with your
10	designation to testify here today, were you asked to analyze
11	certain aspects of the Truckee Meadows Water Authority
12	applications?
13	A. Yes, I was.
14	Q. So, let's take the first part of your task first
15	for the protestants. What were you tasked to do with regard
16	to these applications?
17	A. Basically to address issues related, I believe
18	it's State Engineer's interim order number 3, to qualify the
L9	amount of consumptive use, and then the timing in which TMWA
20	should be allowed to store that water. That's the thrust of
21	both my direct and the rebuttal.
22	Q. And did you prepare a report in conjunction with
23	the analysis that you performed?
24	A. Yes, I did, Exhibit 801.
25	0. Thank you. 801 is the report that you prepared

1	in support of the protests in this case; is that correct?
2	A. Correct.
3	Q. And then you separately prepared a rebuttal
4	report, correct?
5	A. Correct.
6	Q. We'll get to that in a few minutes. Now,
7	Mr. Mahannah, in conducting this analysis did you gain an
8	understanding of the TMWA applications that are before the
9	State Engineer today?
10	A. To the extent of the information that was
11	provided on the application, yes.
12	Q. You analyzed these applications. Was there any
13	other purpose besides the consumptive use analysis that you
14	analyzed these applications for?
15	A. As I mentioned, primarily to determine the
16	consumptive use amount and then how to properly store that.
17	Q. Okay. Could we go to your you did prepare a
18	power point presentation for the State Engineer, correct?
19	A. I did prepare a power point that very closely
20	follows the written report.
21	Q. Would you summarize the TMWA prime storage
22	application for us, please?
23	A. Yes. Table 1 summarizes the pending storage
24	applications before the State Engineer. It also, the first
25	column there, I've traced the change applications from their
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successive change apps all the way back to the original Orr Ditch Decree claim number, indicated the filing date, the rate.

Of course all these are for storage purposes, duty, who protested, and then if there was a prior State Engineer ruling that dealt with some of the base rights, that's referenced in the second to the last column.

In the last column in table 1, that is the date where the conversion was made from the creek to M and I use under the prior change applications.

- Q. When you say table 1, this is actually a table that's in Exhibit 801, correct?
 - A. Correct.
 - Q. And did you have to revise this table?
- A. I did. The table that we've inserted should indicate revised at the top. It reflects the withdrawn applications that TMWA withdrew and then I believe there was one that we thought was totally withdrawn, but I guess a portion of it was withdrawn, so that one is included as well which I believe was 73798.

The total duty associated with all of these is 12,684 acre feet.

- Q. Did you do some further analysis of these conversions?
 - A. Yes. Table 2, I've basically taken table 1 and

sorted it by the date that the base rights were converted 1 2 from decree to municipal. 3 So, the very first conversion under base right 4 16494 happened in 1955, and then to the present to 2003, and 5 in table 2 I've presented also in a graphical form which is 6 not part of the report but it's on the power point slide 7 here, it plots the cumulative duty, the percent of cumulative 8 duty converted versus the years since converted. 9 As you can see, the first one started in 1955 and by 1973 approximately 40 percent of these had been converted 10 11 to municipal. By 1992, about 72 percent and then by 2003 12 100 percent of them were converted to M and I. 13 Again, this graphically represents what's 14 included in the last three columns of table 2. 15 0. How many were converted through 1995, 16 Mr. Mahannah? 17 Α. Approximately 11,224 acre feet. HEARING OFFICER JOSEPH-TAYLOR: Approximately? 18 19 MR. MAHANNAH: It's kind of an oxymoron but you 20 can see in table 2, that's the amount. It's actually listed for 1993, but a conversion for the next one in 1995 occurred 21 22 I believe in August of 1995. 23 BY MR. VAN ZANDT: 24 Approximately 88 percent of the water rights Ο.

25

we're talking about here were converted prior to 1995; is

Correct.

2 A.

- Q. Now, can you summarize what's shown in tables 1 and 2, please?
- A. I think the salient point is all the pending applications that are before us have previously been converted to M and I and we're not talking about a change of storing the decreed right.

MR. DePAOLI: Madam Hearing Officer, I'm going to object to a couple of things related to this testimony and I may as well do it now before we get too far into it so that I will either head it off at the pass or I won't be interrupting.

There are a couple of aspects of this portion of Mr. Mahannah's testimony. First of all, I will object to testimony on M and I consumptive use on relevance grounds across-the-board.

Second, I will object to Mr. Mahannah expressing any legal opinions as to M and I consumptive use being the appropriate measure of consumptive use here, and I will object to his expressing legal opinions on the meaning of prior State Engineer rulings.

In terms of the overall relevance ground, Madam

Hearing Officer, first of all, when these rights were

converted to M and I use, they were converted for their full

duty over a protest, in situations where protests were involved, by TCID that they should be limited to their consumptive use.

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There has been no limitation on the use of these water rights below their full duty. The entire purpose of getting into a consumptive use analysis is for the purpose of protecting existing rights from injury, legal injury caused by a change from one use to another.

The existing rights are not entitled to be any better off than they would have been had the rights been exercised for their original use. These rights were decreed for original use for irrigation purposes and they are entitled to be used, or the consumptive use component, for these original rights as a matter of law in terms of protecting the 1902 claim 3 right is what their consumptive use was when they were used for irrigation.

Beyond that, Mr. Mahannah is not qualified to express an opinion that there is an erroneous assumption on anyone's part that consumptive use should be measured by anything other than irrigation. He's also not qualified to interpret prior State Engineer rulings.

One other thing that I might as well object to now and that is with respect to attachment 3 which is a 136-page transcript of a hearing before the State Engineer on the conversion of some water rights below Derby Dam from

irrigation to M and I.

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The bottom line, Madam Hearing Officer, is that if TCID or anyone feels that direct diversion rights that have been converted from irrigation to M and I are using more water than they should be able to use because of their historic use for irrigation, that matter is a matter that can be taken up with the Water Master, as well as the State Engineer's office.

But the fact that these rights have been converted to an M and I use does not change the fact that the measurement of conflict with the existing rights is a measure based upon their historic use to protect that right to conditions that were in existence when the junior right was established.

HEARING OFFICER JOSEPH-TAYLOR: Response, Mr. Van Zandt?

MR. VAN ZANDT: I take it that was a speaking Obviously Mr. Mahannah has a great deal of technical knowledge about consumptive use and ET, but none of that can be applied in a vacuum. He does have to understand how the State Engineer has previously looked at CU analysis and ET.

He has to have an understanding of historic and actual ET, and for him to be able to assist the State Engineer, which is his task here in finding factual

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information, he has to orient his testimony written in the context of the way the State Engineer has previously decided issues with regard to CU and ET.

So, it would not help the State Engineer if Mr. Mahannah merely offered opinions on a technical analysis of a calculation if he did not also put that in the context of how the State Engineer has applied that technical information in his prior rulings.

In particular, because we do have a long history in the State Engineer rulings with regard to protection of downstream users by looking at, instead of having this consumptive use issue embedded in the rulings, there is another path, so to speak, the State Engineer has taken which Mr. Mahannah is I think well qualified to be able to talk about, and that is what this tab 3 is all about, is that history of the determination by the State Engineer historically of how to protect downstream users in lieu of limiting people to a consumptive use portion.

But, in addition, Mr. Mahannah obviously is qualified I believe to offer opinions on what the amount should be and if he looks at the applications, and this probably goes to the weight, it does not necessarily go to whether he's qualified, he looks at the applications and he interprets their applications to have made an erroneous assumption with regard to what they're doing with these

rights, again, that only goes to the weight, it does not go to whether or not he can offer the opinion.

So, I believe he is qualified to do this analysis. He's also qualified to put it in a historical context from prior State Engineer rulings because every person in Mr. Mahannah's situation who is assisting clients is going to have to know how the State Engineer has treated this issue in the past in order to assist them in going forward.

So, that is part of the function that

Mr. Mahannah provides and that's part of the analysis that he
has provided here to help put this in context. So, I think
this testimony is relevant and he's qualified to give it.

HEARING OFFICER JOSEPH-TAYLOR: Anything else, Mr. DePaoli?

MR. DePAOLI: The only thing that I would add is that the other previous situations do not involve what is happening here. The previous situations involved the conversion of irrigation rights to municipal, direct diversion from municipal use.

The State Engineer was asked at that time to impose a consumptive use limit on what could be converted. In virtually every case the State Engineer simply concluded that the full duty could be converted because the M and I returned to the river.

The State Engineer did not have any situation in front of him at that time related to storage of one of these irrigation rights and how much should be stored, and the State Engineer in those situations indicated that if at some point in time there was a problem with how much of that duty was returning to the river, it was a matter that could be brought to the attention of the Water Master and perhaps the State Engineer.

They're just different situations.

objection on the testimony on M and I consumptive use on relevance grounds, the State Engineer hasn't made a determination whether he's going to look at the M and I consumptive use or the historic consumptive use. That objection is going to be overruled. You're going to be allowed to testify, Mr. Mahannah.

As to legal opinions on whether M and I is the appropriate consumptive use, that objection is sustained. You can't give a legal opinion.

To the objection to the legal opinion on the prior meaning of State Engineer rulings, you can state factually what the State Engineer ruling said. As to a legal opinion, I will sustain the objection. Do you follow me?

MR. VAN ZANDT: He hasn't offered any legal opinions, so, this is premature.

1	HEARING OFFICER JOSEPH-TAYLOR: I know he hasn't.
2	Mr. DePaoli said he's trying to save us time, Mr. Van Zandt,
3	and I appreciate that because every time we do one of these
4	we use another 15 minutes.
5	So, Mr. Mahannah, you're allowed to give your
6	testimony on M and I consumptive use. You don't get to
7	decide whether it is the appropriate consumptive use, that's
8	for the State Engineer.
9	You can state factually what the State Engineer's
LO	ruling said, but don't give a legal opinion on what they
L1	mean. It's a fine line. Now you walk it.
L2	THE WITNESS: I'm sure I will be corrected if I
13	deviate.
14	HEARING OFFICER JOSEPH-TAYLOR: Okay,
15	Mr. Van Zandt?
16	BY MR. VAN ZANDT:
L7	Q. Probably the best thing to do at this point,
L8	Mr. Mahannah, I think you still have some summary testimony
L9	you want to fill in here?
20	HEARING OFFICER JOSEPH-TAYLOR: So we will ignore
21	words like erroneously converting.
22	If we can go to tab 1 which was the State
23	Engineer ruling 5791. Are we in Exhibit 801?
24	MR. VAN ZANDT: Exhibit 801, tab 1.
25	HEARING OFFICER JOSEPH-TAYLOR: My exhibit

doesn't have tabs, so it's hard for me to follow. You have a slip sheet. I have it. Thank you.

MR. MAHANNAH: Ruling 5791 was a relatively recent ruling involving I believe the Tribe's protested applications in the Carson Valley. At page 18 --

HEARING OFFICER JOSEPH-TAYLOR: Do you want to clarify. Tribe's protest to applications to in the valley.

MR. MAHANNAH: Correct. Reading directly from the ruling, starting on page 18, in the first paragraph, states, "The Town of Minden argues that the issue of availability of water in the source was thoroughly reviewed when the underlying permits were granted and it was at that time that it would have been appropriate to have protested the availability of water. The State Engineer agrees with the applicants that if the protestant had any issue with the granting of these groundwater rights, they should have protested the applications when the notice of original application was made."

I won't offer any legal opinions, I will just state that for the record.

Similarly in the Dayton Valley ruling that involved both the Tribe and Churchill County protests of changes in Dayton Valley, ruling 5823 at tab 2, at page 21, second paragraph, there's similar language found that states, "The State Engineer finds that protesting the change, "and

emphasis on change," of an existing right is not the proper vehicle in which to address the issue of over appropriation in a particular basin. The State Engineer finds that if the protestants had any issue with the initial granting of these groundwater rights, they should have protested when the notice of the original new appropriation was made and appealed that granting of the original base right permit at that time. The State Engineer finds that almost all the applications under consideration in this ruling are changes to existing rights that have been in existence for decades." The exact situation we have before us here.

Even more on point on page 33 of this same ruling, under section XIII, second to the last paragraph, it says, "As to the applications under consideration in this ruling, the Tribe alleges that the duty should be limited to the historical consumptive use of 2.5 acre feet per acre. Otherwise the application is requesting a new and additional appropriation in an over-appropriated basin."

HEARING OFFICER JOSEPH-TAYLOR: Hold on Mr. Mahannah. That's not on page 33.

MR. MAHANNAH: I'm sorry, on page 32.

HEARING OFFICER JOSEPH-TAYLOR: I'm sorry to interrupt you. We're trying to follow you. Do you want to start again?

MR. MAHANNAH: Yeah. I apologize. So, second to

the last paragraph on page 32, "As to all the applications under consideration in this ruling, the Tribe alleges that the duty should be limited to the historical CU of 2.5 acre feet per acre. Otherwise the application is requesting a new and additional appropriation in an over-appropriated basin."

Then I will skip to the last sentence, starting on the bottom of page 32 where it says, "The State Engineer finds that the Applications 74402, 74427, 74611, 75101, 02, 03, 04, 75160 and 75283 are not requesting a change from irrigation to some other use and overrules the Tribe's protest claims to those applications."

All of those applications had already been converted to municipal. In that case, the State Engineer found that it wasn't appropriate to consider CU or ag in that situation.

As Mr. DePaoli had mentioned, TCID had previously protested a conversion from decreed to M and I which were dealt with in the November 14th, 1989 hearing and ruling 3739, which is at tab 3. There is a copy of the entire transcript from that hearing.

This hearing addressed two conversions from ag to M and I of existing places of use that were below Derby.

There was also considerable discussion on the record for areas of conversion of rights above Derby to M and I.

Mr. Joe Burns provided extensive testimony, Garry Stone, Pete

Morros, Lyman McConnell, Mike Turnipseed.

I think the State Engineer is probably pretty familiar with this ruling. If you haven't read this transcript, it provides a lot of good information as to what the State Engineer was considering at the time for protecting return flows and downstream rights.

I will highlight some of those discussions.

Mr. Burns provided testimony at pages 65 of the transcript
where he's presenting some scenarios. I'm starting at line
eight on page 65 where it states, "Then we assume that there
is a hundred second feet diverted in the Reno/Sparks area for
M and I purpose. And assuming a 50 percent return flow from
that diversion, so we have 400 second feet, after the hundred
second foot diversion; 50 second feet of return flow."

He also references a 50 second foot return flow at page 78, lines 10 and 11 and states, "That is because currently the utility company returns approximately 50 percent through the treatment plant."

In Exhibits 2223 and 2224 there were some diagrams Mr. Burns provided that also showed the 50 percent return flow for M and I use.

There was also extensive discussion regarding the water right dedication rule 17 or what's commonly referred to as the 58 percent rule, page 83, and basically my understanding of the 58 percent rule is that at the time up

1	until I believe February 21st, 1995, Sierra Westpac required
2	water right dedication for every one acre foot of demand,
3	actual demand, 1.72 acre feet was required to be dedicated.
4	And again starting at page 83, line 16, there's a
5	question to Mr. Burns.
6	"QUESTION: I believe part of your testimony also
7	involved the Public Service Commission rule with regards to
8	1.72 factor; is that correct?
9	"ANSWER: That's correct.
10	"QUESTION: Would you explain for me what that
11	means?
12	"ANSWER: Well, it means that an applicant for
13	service from Sierra, through Reno and Sparks, would require a
14	1.72 acre feet of water be brought in in order for the
15	company to deliver one acre foot of water.
16	"QUESTION: What is the purpose of that?
17	"ANSWER: The purpose is that Sierra Pacific,
18	with their water supply today, and their stored water, can
19	and are agreeing to support the irrigation rights up to that
20	yield of 58 percent. The 58 percent is the maximum amount of
21	water you can get from an irrigation right in the Truckee
22	Meadows. That's an annual basis."
23	Moving to pages 90 through 92 of the transcript,
24	starting at line 11, Mr. Morros states,
25	"QUESTION: So unless you have got some way to

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supplement that water supply in those dry years, from sources that are independent from the Truckee River system, you are stuck with that as a water supply."

The witness agreed.

"MR. MORROS: You can't perceive that unless some other water supply could be developed that would supplement that during your dry years, there would be any reason to change that. We have to deal with reality, and the reality is that water ain't there in dry years. It's as simple as

Mrs. Oldham states, "It doesn't change the yield or the right. And I don't think we ever said that to the Commission."

I think that all this was Mr. Burns states, "No. presented to the Commission. It did not indicate there would be any change to that.

"MR. MORROS: I worry about that changing, without the addition of another supply to offset that.

"MS. OLDHAM: We would not propose it.

"MR. MORROS: I think the 58 percent was adopted and embraced by the PSC as a result of the power company's presentations to the Commission during those series of hearings that they conducted when the Rule 17 was being considered, wasn't it?

"MR. BURNS: As a matter of fact, those same

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studies that were used at that hearing were used today, and still have not changed."

Moving on to pages 112 and 113, starting at line 22, Lyman McConnell indicates, "Well, our position basically is that the irrigation rights previously had return flows. Those return flows are made up of returns through to the treatment plant. If that is gone, then our position would be that those return flows have to be made up.

> "MR. MORROS: And I am in full accordance. Garry Stone, Water Master, "I agree."

Those return flows have to be "MR. MORROS: accounted for. That has been my position all along. hasn't changed. And I see no reason to even consider changing it."

Mr. Morros issued an oral ruling that was part of the transcript and found that existing rights were protected due to the M and I return flows in combination with the dedication rule, the 58 percent rule.

Rule 7, which is the water dedication rule that TMWA is currently operating under, has relaxed that dedication rate from 1.72 to 1.11 for each acre foot of demand under TROA.

Following the 1989 ruling, we have 20 years of subsequent rulings by the State Engineer's office that overruled TCID's continued protests and in each one of those rulings there's language that states the Sierra Pacific
service area is sewered and wastewater is treated and
returned to the river upstream of the protestant's point of
diversion.

"The State Engineer finds that the change of the full duty of water from irrigation to municipal will not reduce flow in the Truckee River. The State Engineer further finds that the approval of applications 56732 and 56734 will not conflict with any downstream water rights," and that comes from ruling 4486. That same nearly identical language is found in every other ruling.

So, at I believe tabs 4 through 9 which contain rulings 3878, 4005, 4011, 4449, 4486 and 4582, and then under Exhibits 2202 through 2209 include rulings 4008 through 10, 4514, 4521, 4729, 5811 and 5938.

So, you can see there's been a long history of the State Engineer relying on that 1989 testimony that was provided at that time.

HEARING OFFICER JOSEPH-TAYLOR: Mr. Mahannah, you said Exhibits 2202 through 2209. Did you mean to exclude 2201? That's ruling 3875.

MR. MAHANNAH: Actually 3875, we have a duplicate I believe. That's under my tab 4 in the initial, so it's actually in the record twice.

HEARING OFFICER JOSEPH-TAYLOR: Mr. Van Zandt,

1	we're back to you.
2	BY MR. VAN ZANDT:
3	Q. Thank you. Mr. Mahannah, you had mentioned
4	Exhibits 2223 and 2224.
5	HEARING OFFICER JOSEPH-TAYLOR: I think it would
6	be easier if you said 2223.
7	BY MR. VAN ZANDT:
8	Q. Would you describe for the record what those
9	exhibits are?
LO	A. I'm sorry, which exhibits?
L1	Q. These are the ones referred to, I believe that
L2	Mr. Burns had prepared.
13	A. Yes. I don't have the exhibits in front of me,
14	but I'm familiar with what those are generally.
15	Q. You said that those were prepared by Mr. Burns in
16	conjunction with one of the rulings that we're talking about
17	here?
18	A. Yes. That was prepared in reference to the '89
19	hearing under ruling 3739.
20	Q. I believe it's your third bullet on your power
21	point there that makes a reference to these exhibits?
22	A. Correct.
23	Q. What's the significance of these exhibits for the
24	record here?
25	A. The point of including those is there were a

number of stick figures that ran through a variety of scenarios and again assumed a 50 percent return flow from M and I in each of those.

HEARING OFFICER JOSEPH-TAYLOR: I want to identify those better for the record, Mr. Van Zandt. 2223 is Exhibit 5 from the 1989 hearing and it's called Case A, rights acquired below Derby Dam for hearing in the matter of applications 53092, 53093 and 53669.

Exhibit 2224 was Exhibit 6 in the 1989-case and it's titled Case B, rights acquired below Derby Dam for the hearing in the matter of applications 53092, 53093 and 53669. Thank you.

BY MR. VAN ZANDT:

- Q. Now, Mr. Mahannah, were there any prior M and I consumptive use analyses that you investigated?
 - A. Yes.
 - Q. And what was that?
- A. In 1991 TCID had protested a change application Westpac had made, I believe it was application 55675 which moved a point of diversion of a groundwater right very close to the Truckee River alleging impacts to the river.

Part of the -- it never went to hearing. We actually settled it the morning of the hearing. Part of Westpac's argument against the protest was that even if that groundwater well were with intercepting Truckee River water,

that 50 percent of that water would return to the river through the treatment plant.

So, we had prepared a consumptive or an M and I CU analysis in 1991, we meaning Water Research Development, WRD as it was commonly referred to. We looked at a time frame from 1980 through '88. The average return flow for the entire year was 46 percent.

During the summer months when outside watering is occurring the return flow was 27 percent and in January when there was virtually no outflow of water, the return flows obviously are much higher.

Another prior CU analysis, M and I CU analysis was done by CES in 1994 and tab 12, this dealt with the city of Reno's -- tab 12 is a letter from Mr. Turnipseed to the city of Reno stating that an M and I return flow analysis needed to be done.

It suggested how it should be done. Tab 13 is CES's M and I return flow analysis and they analyzed the time frame from 1983 through 1993 and they found an average return flow percentage of 54 percent which was slightly higher than our analysis in 1991, and that is because they considered or we did not, WRD did not consider which water which was exported out and not returned back to the treatment plant, i.e., water sent to south Truckee Meadows.

That in addition to the assumption that ten

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1	percent of the power company's customers were still on seption
2	and there was no effluent return flow to the treatment plant
3	they came up with a slightly higher return flow than we did
4	in 1991.
5	BY MR. VAN ZANDT:
6	Q. Has there been an update of the CU analysis since
7	the CES and the WRD studies?
8	A. Yeah, we did an updated one more recently which
9	looked at flows from 1989 through 2005 that's reported at
LO	table 3.
L1	Q. Table 3 of Exhibit 801?
L2	A. Yes. The end of the text of 801, where we went
L3	through a similar procedure that CES did to look at waters
L4	that were exported out of the Truckee Meadows, not returned
L 5	to the treatment plant and then also considered the return
L 6	flows both with and without effluent reuse, which are on
_7	columns 9 and 10 of table 3.
8_	The average M and I return flow including
_9	effluent reuse is 45 percent. It's slightly lower at
20	44 percent when you exclude effluent reuse.
21	Q. How was this analysis conducted that you used to
22	arrive at table 3?
23	A. How was it conducted?
24	Q. Yes.
5	A. It was using existing data, the sources of which

are provided in table 3 to compute the M and I return flow. This analysis is conservative because again, it doesn't consider any unsewered or customers that are still on septic systems.

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And then also there is return flows from M and I to the river that are not as a result of effluent return flows and that's clearly evident in a recent application that the city of Reno filed to appropriate basically urban runoff from Chalk Creek which is through the urbanization of the northwest part of the Truckee Meadows. There was a creek that became, it was an ephemeral, mostly dry most of the year.

The city of Reno tried to appropriate that at tab I'd like to read from the attachment to that application. They're referring to Chalk Creek again. is just upstream -- it's just downstream of where the Orr Ditch diverts from the Truckee River.

They state, "This creek flow has developed subsequent to the decree on the Truckee River as a result of In 1980 prior to the bulk of development, the urbanization. Chalk Creek flow was ephemeral. By 2006 most of the watershed has been developed and the creek has become a flowing perennial stream as a result of secondary recharge."

Further down they state, "Storm water flow from impervious surfaces, irrigation and over watering has

contributed to making this flow continuous."

Now, TCID, Churchill County and the Truckee

Meadows Water Authority protested this application. I'd like

to read one of the protest points that TMWA raised. They

state, "The proposed use conflicts with existing water

rights, including those granted under 4683," which was the

unappropriated water ruling, "And with other Truckee River

water rights in that it seeks to appropriate water which

should be allowed to return to the river."

So, again, this is an M and I return flow to the river that's not an effluent return flow.

The State Engineer just this year under ruling 5972 denied that application and found that ultimately these applications were approved for full duty rather than for the consumptive use portion of the irrigation under the reasoning that there would remain return flows in the river under the municipal uses. It is these nonconsumptive portions of the upstream rights returning to the river that help to serve those downstream rights.

TCID and Churchill County both have identified claims in the Truckee River Decree which serve the Newlands Project as a downstream water right that would be impacted by the new appropriation on the Truckee River. The State Engineer finds that the approval of the application would conflict with existing rights.

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to store the consumptive use of base rights which are M and I They've long since been converted from decreed to municipal, as I mentioned, on average nearly 30 years ago in some cases up to a half a century ago.

Based on the portions of the rulings I read in Dayton Valley and Carson Valley, the State Engineer must act on the applications before him, not prior changes.

The 1989 hearing and for two years the State Engineer rulings considering the decreed M and I changes that downstream rights have been protected due to M and I effluent return flows and the 58 percent dedication rule.

Past and current M and I CU analysis is approximately 50 percent. So, to protect historical M and I return flows and limit storage timing of the M and I CU to the historical M and I consumption.

MR. VAN ZANDT: I'd like to move for the admission of Exhibit 801 at this time.

HEARING OFFICER JOSEPH-TAYLOR: Any objection, Mr. DePaoli?

MR. DePAOLI: I would restate my objection. Exhibit 801 does contain legal conclusions and I would object I would continue my objection on relevance. to it. I would object also to the introduction of a transcript, 136-page transcript of a prior proceeding not involving the issues here.

legal conclusions.

I have no objections to the State Engineer rulings. I do object to the admission also of attachment 13 as being a hearsay document that this witness had no involvement in the preparation of that document or in the conclusions reached in that document.

HEARING OFFICER JOSEPH-TAYLOR: I'm not sure how to work my way through this. I can't sit here and pencil out sentences in a two-inch high document. So, as to your objection that it has legal conclusions in it, the State Engineer has already ruled that Mr. Mahannah doesn't make

I also object to attachment 14 as to relevance.

So, we will have to look at those as we go through the document. Objecting to the transcript, that's a public record of this office which I've already taken administrative notice of, so I would overrule that objection.

As to attachment 13, I'm just going to have to take that under advisement and see what the State Engineer does with it and rule on it if he uses it, Mr. DePaoli.

MR. VAN ZANDT: May I be heard on that, Madam Hearing Officer?

HEARING OFFICER JOSEPH-TAYLOR: Yes, sir.

MR. VAN ZANDT: Obviously, Mr. Mahannah, as an expert, can rely on hearsay. He's basically relating to the State Engineer a historical event that occurred and resulted

Τ.	in a determination ditimately with regard to the consumptive
2	use portion.
3	So, an expert can rely on hearsay it would go
4	more to the weight than it would to the admissibility, so I
5	think there's no reason to keep it out on that basis.
6	HEARING OFFICER JOSEPH-TAYLOR: I didn't say I
7	was keeping it out. I said it would be ruled on if and when
8	the State Engineer used it, so I'm reserving that.
9	As to attachment 14, that's a public record of
10	this office, the objection will be overruled. Is this a good
11	place, Mr. Van Zandt, to take a break?
12	MR. VAN ZANDT: Yes.
13	HEARING OFFICER JOSEPH-TAYLOR: Let's be in
14	recess for 15 minutes. We're off the record.
15	(A short recess was taken.)
16	HEARING OFFICER JOSEPH-TAYLOR: Let's be on the
17	record. Mr. Van Zandt, you had a few other exhibits you
18	wanted to offer?
19	MR. VAN ZANDT: We did. I'd like to offer
20	Exhibits 2223 and 2224.
21	HEARING OFFICER JOSEPH-TAYLOR: Any objection,
22	Mr. DePaoli?
23	MR. DePAOLI: I need to grab the right binder to
24	see what those are.
25	HEARING OFFICER JOSEPH-TAYLOR: Those are Joe

1	Burns' case scenarios. They're also published records of
2	this hearing office from the earlier hearing.
3	MR. DePAOLI: Same objection.
4	HEARING OFFICER JOSEPH-TAYLOR: So noted, they'll
5	be admitted.
6	MR. VAN ZANDT: Then the collection of rulings
7	2202 through 2209.
8	HEARING OFFICER JOSEPH-TAYLOR: Any objection,
9	Mr. DePaoli?
10	MR. DePAOLI: No objection to those.
11	HEARING OFFICER JOSEPH-TAYLOR: 2202 through 2209
12	will be admitted.
13	MR. VAN ZANDT: And then 2219 which Mr. Mahannah
14	referenced in his testimony regarding the TMWA 2005 through
15	225 water resource plan.
16	HEARING OFFICER JOSEPH-TAYLOR: Mr. DePaoli, any
17	objection?
18	MR. DePAOLI: No objection.
19	HEARING OFFICER JOSEPH-TAYLOR: It will be
20	admitted. Thank you. Is that it, Mr. Van Zandt?
21	MR. VAN ZANDT: On that exhibit, yes.
22	HEARING OFFICER JOSEPH-TAYLOR: Cross-
23	examination, Mr. DePaoli, on Exhibit 801?
24	MR. DePAOLI: I wasn't expecting that, so you
25	need to give me a minute.

1	HEARING OFFICER JOSEPH-TAYLOR: Let's be off the
2	record a minute to let Mr. DePaoli get set up.
3	(A discussion was held off the record.)
4	HEARING OFFICER JOSEPH-TAYLOR: As to
5	Exhibit 801, were you offering that, Mr. Van Zandt?
6	MR. VAN ZANDT: I am.
7	HEARING OFFICER JOSEPH-TAYLOR: Noting
8	Mr. DePaoli's objections and the rulings on them, I will
9	admit Exhibit 801. Go ahead, Mr. DePaoli.
10	CROSS-EXAMINATION
11	BY MR. DePAOLI:
12	Q. Mr. Mahannah, with respect to the State
13	Engineer's ruling number 5791, you quoted from page 18, do
14	you happen to have that in front of you? That's tab 1, I
15	believe.
16	HEARING OFFICER JOSEPH-TAYLOR: Is that the
17	Carson Valley ruling in the Carson Valley change apps?
18	MR. MAHANNAH: Yes. I have that in front of me.
19	BY MR. DePAOLI:
20	Q. In that proceeding, the Pyramid Lake Tribe was
21	protesting the applications on the basis that the groundwater
22	basins were over appropriated, were they not?
23	A. I wasn't a party to that proceeding. I think
24	that was one of their arguments.
25	Q. They were contending there was no unappropriated

Mr. Mahannah?

A. I guess I'd actually like to look at that application. It appears from the way it's written that that was a new appropriation. The next one down is also referenced in that chain, 74227, which does indicate the proposed use is for quasi-municipal and the existing use is commercial.

Again, that's an example where the Tribe is alleging ag CU reduction and the State Engineer found that was inappropriate because the base right was commercial.

- Q. The original appropriation was commercial. There was no change in any use in that application?
 - A. I'm referring to 74227.

HEARING OFFICER JOSEPH-TAYLOR: You guys are losing me, I'm sorry. We're jumping around and it's real hard to pull a ruling without really studying it to do this. You're going into great detail. Try it again for me. BY MR. DePAOLI:

Q. Application 74427 was a change from quasi-municipal to commercial. It didn't involve irrigation at all, did it, ever?

MR. VAN ZANDT: I'll object. That misstates the ruling.

THE WITNESS: That's correct. The point I'm trying to make is the Tribe tried to impose an ag CU on that

1	and the State Engineer found that not to be appropriate.
2	BY MR. DePAOLI:
3	Q. But he didn't find that not to be appropriate
4	because an original irrigation right had been already changed
5	to a commercial use, did he?
6	A. I'd have to dig a little further. I believe a
7	lot of these there was a change, change upon change where
8	Q. I'm not asking you what you believe. I'm asking
9	you what you know as you sit here today.
10	A. I believe many of these that are listed in the
11	first line of page 33
12	MR. DePAOLI: Move to strike the answer as to his
13	beliefs. I'm asking him what he knows as he sits here today.
14	HEARING OFFICER JOSEPH-TAYLOR: Sustained.
15	MR. MAHANNAH: I would need to look at each of
16	those applications.
17	BY MR. DePAOLI:
18	Q. In this ruling as to the applications that sought
19	to change an irrigation right to a municipal use right, the
20	State Engineer did determine consumptive use, did he not, for
21	the Dayton Valley for irrigation?
22	A. Yes, I believe he did.
23	Q. And what number did he come up with?
24	A. I'd have to go through the ruling. It looks like
25	3.2 was the number.

1	Q. And those were water rights that had a four-acre
2	foot duty, were they not, that consumptive use?
3	A. Yes, I believe so. These were groundwater
4	rights, not surface water rights.
5	Q. And actually the State Engineer didn't actually
6	limit the new use to that amount, did he?
7	A. I haven't read the entire ruling cover to cover
8	in some time, so I couldn't adequately answer that.
9	Q. With respect to ruling 3739, and what tab is
10	that, Mr. Mahannah?
11	A. Tab 3.
12	Q. Do you know why Sierra Pacific at that time was
13	requiring a dedication of 1.72 acre feet of water rights for
14	each acre foot of demand?
15	A. I believe it was based on the critical drought
16	period from the late '20s, early '30s that found they needed
17	to dedicate 1.72 acre feet of paper water to deliver one acre
18	foot of water during a drought period similar to that.
19	Q. During the most critical drought year of that
20	extended drought?
21	A. That's my understanding.
22	Q. And that's because the analyses at that time
23	showed that in those kind of years, a Truckee River water
24	right would only yield 50 percent of its face amount
25	58 percent, I mean?

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That's my understanding, yes. Α.

And the reason Sierra Pacific was doing that at Q. that time was because their drought supply storage availability at that time was not adequate to back up Truckee River water rights one for one in that kind of a drought, was it not?

> I believe so. Α.

- The water rights in that ruling 3739 were water Q. rights that were water rights being changed from irrigation below Derby Dam -- let me back up -- below Vista at the point of the wastewater treatment facility return somewhere below vista and somewhere below Derby Dam, were they not?
- I believe there was three applications, two of Α. which were protested, I believe the two TCID protests were below Derby, but there was discussion beyond just those applications, the diversion from ag to M and I.
 - There was what? ο.
- There was discussion between the State Engineer, Mr. Burns and others I believe for a variety of scenarios, not just two of the three pending applications that were before the State Engineer in that hearing.
- And what we were talking about with respect to Q. the 58 percent and the 1.72 is actually confirmed by the quotes that you made from pages 83 and 84 of that transcript, are they not?

1	A. He didn't condition them based on that, but he
2	expressed concern about that changing in the future.
3	Q. But he wasn't so concerned about it that he made
4	it a condition of the permits, did he?
5	A. No.
6	Q. Didn't he specifically say that if a problem
7	developed in the future, that it would be subject to the
8	continuing jurisdiction and regulation of the Federal Water
9	Master as provided in the Orr Ditch Decree?
.0	A. I believe he did.
1	Q. Now, all of the rulings that you have referred to
2	which follow this tab, which are tabs help me out. What
L3	tabs are they?
L 4	A. Tabs 4 through 10.
L5	Q. 4 through 10. Then you also have rulings that
L 6	are tabs 2202 to 2209.
L7	HEARING OFFICER JOSEPH-TAYLOR: Not tabs,
L8	exhibits.
L9	MR. DePAOLI: Exhibits, I'm sorry.
20	BY MR. DePAOLI:
21	Q. Let's look at Exhibit 2208 which is ruling 5811
22	which was made by State Engineer Tracy Taylor in January of
23	2008. Do you have that?
24	A. Yes.
25	Q. These are similar in terms of their

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1	he asked you.
2	MR. MAHANNAH: Would you restate the question,
3	then?
4	BY MR. DePAOLI:
5	Q. The protest ground was conditioned, the
6	consumptive use was a condition only to be imposed when the
7	wastewater from the municipal treatment plant was removed
8	from the river, was it not?
9	A. Yes.
10	Q. And was this protest ground similar to protest
11	grounds raised both in 1989 and in all of these other rulings
12	that we've been talking about?
13	A. Yes.
14	Q. On page four in paragraph III the State Engineer
15	makes a finding of fact, does he not, that because the Water
16	Authority's service area is sewered and because wastewater is
17	treated and returned to the river, the State Engineer finds
18	that the change of a full duty from irrigation to municipal
19	as proposed should be allowed and that would not reduce flow
20	in the Truckee River?
21	A. Yes.
22	Q. So, the State Engineer approved the change for
23	the full duty?
24	A. Yes.
25	Q. And he did not impose any condition that there

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1	period of use of Orr Ditch decreed rights are unaffected
2	under the approved change permit and regulation of the same
3	is the responsibility of the Federal Water Master."
4	Q. So, in all these decisions and rulings the State
5	Engineer made no finding about the consumptive use for
6	irrigation?
7	A. There was testimony put on by Mr. Burns
8	regarding
9	MR. DePAOLI: Move to strike as nonresponsive.
10	BY MR. DePAOLI:
11	Q. What I asked is did the State Engineer make any
12	determination as to consumptive use of these Orr Ditch
13	decreed water rights for irrigation?
14	A. He didn't come up with a number in acre foot per
15	acre, but he considered scenarios and testimony that
16	Mr. Burns put forward on his assumptions for ag CU versus M
17	and I CU.
18	Q. And were Mr. Burns' assumptions for ag CU higher
19	than the assumptions for M and I CU?
20	A. Yes, and he acknowledged that they were just
21	assumptions on the record.
22	HEARING OFFICER JOSEPH-TAYLOR: Let's be off the
23	record for a minute.
24	(A discussion was head off the record.)
25	HEARING OFFICER JOSEPH-TAYLOR: We're on the

1	record. Continue, Mr. DePaoli.
2	BY MR. DePAOLI:
3	Q. Mr. Mahannah, attachment 11 to the 1991 WRD,
4	Water Research & Development excerpt, who prepared that
5	report?
6	MR. VAN ZANDT: Are you talking about tab 11 to
7	Exhibit 801?
8	MR. DePAOLI: Yes.
9	THE WITNESS: The M and I return flow analysis, I
10	believe I did that. There was other aspects my father
11	participated in. HCI, another consultant, was involved with
12	some of the groundwater modeling. It was somewhat of a
13	combined.
14	BY MR. DePAOLI:
15	Q. And that reports shows that municipal return flow
16	over a 12-month period fluctuates, does it not?
17	A. Yes, it varies by the month.
18	Q. It shows, for example, that the high during that
19	period of study was 53.8 percent in 1982, the average for the
20	12 months in 1982 was 53.8?
21	A. Yes.
22	Q. And it also shows that the low consumptive use
23	was 40.2 percent in 1985?
24	MR. VAN ZANDT: 40.4 percent?
25	MR. MAHANNAH: 40.4 in 1985.

1	BY MR. DePAOLI:
2	Q. You are right, 40.4 in 1985.
3	A. Yes.
4	Q. So, in 1985, then, the consumptive use would have
5	been 59.6 percent?
6	A. Based on these figures. I mentioned that these
7	were conservative because we did not consider unsewered
8	customers, experts
9	Q. We'll get to that. We'll get to that. But just
LO	based on these figures it would have been 59.6 percent, would
L1	it not?
12	A. Yes.
13	Q. And what is 59.6 percent of a four and a half
14	acre foot water duty?
L 5	A. 2.65 at four and a half.
L 6	Q. I noticed that in February of 1986 the return
L7	flow was 105-point something period. Do you know what that
L8	was all about?
L9	A. I believe '86 as well as '85, I believe those
20	were extremely wet years and a possible explanation for that
21	is flooding and infiltration of sanitary sewers by storm
22	water. I think I noted that I came up with that same
23	situation in the January of 1997 flood in recent work.
24	Q. You think that was a flood, then?
25	A. Without going back and looking at the specific

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1	numbers, that's what I'm surmising based on what I observed
2	in 1997.
3	Q. Moving to attachment 13 to Exhibit 801, do you
4	know whose handwriting is on that document?
5	A. I believe that's a copy of the letter that we got
6	from the State Engineer's Office, so perhaps it's the State
7	Engineer's staff. It's certainly not my writing.
8	Q. So you don't know?
9	A. I don't know.
10	Q. Did you have any involvement in the preparation
11	of that letter?
12	A. No.
13	Q. So then you don't have any information at all as
14	to the accuracy of that letter's estimate of there being ten
15	percent, a ten percent estimate of unsewered customers?
16	A. No. I believe CES followed what was directed by
17	them from Mr. Turnipseed's letter to the city of Reno under
18	tab 12.
19	Q. But you don't know?
20	A. Don't know what?
21	Q. You don't have any information on the accuracy of
22	that estimate?
23	A. I was not directly involved in preparing it, no.
24	Q. That estimate and its accuracy will affect the
25	percentage number for consumptive use, will it not?

1	A. I think based on the analysis that was done here
2	in 1991 by WRD and then most recently for this proceeding, as
3	well as TMWA's water resource plan and Mr. Burns' testimony,
4	50 percent is a number that
5	HEARING OFFICER JOSEPH-TAYLOR: That is not what
6	he asked you. He asked you if the ten percent number was
7	different, would that change the consumptive use figure.
8	THE WITNESS: I apologize. I thought he moved
9	off the ten percent.
LO	HEARING OFFICER JOSEPH-TAYLOR: Read the question
L1	back, please.
12	(The record was read.)
13	THE WITNESS: Yes.
14	BY MR. DePAOLI:
15	Q. Is there a difference between an estimate of
16	unsewered customers and a percentage of water demand that is
17	unsewered?
18	HEARING OFFICER JOSEPH-TAYLOR: Did you follow
19	that? I didn't.
20	THE WITNESS: I didn't, no.
21	BY MR. DePAOLI:
22	Q. Is there a difference between estimating how many
23	customers are unsewered and estimating how much of a
24	company's water demand is unsewered?
25	A. I'm still having a I'm not following you.

1	Q. Let me try again. If TMWA has ten customers and
2	one of them is unsewered, ten percent of the customers are
3	unsewered, are they not?
4	A. In that hypothetical, yes.
5	Q. And if that one customer is using one percent of
6	the water demand, then only one percent of the demand is
7	unsewered?
8	HEARING OFFICER JOSEPH-TAYLOR: Make it a
9	correct.
10	BY MR. DePAOLI:
11	Q. Correct?
12	A. Correct.
13	Q. So, do we know which one of those CES is using in
14	this letter?
15	A. As I stated under item three, unsewered portion
16	of Truckee Meadows area is ten percent, estimate only.
17	Q. They're actually just reducing, taking ten
18	percent off the demand, are they not?
19	A. I would need to take some time to study all their
20	tables here to see, following their math to see exactly how
21	they did that.
22	Q. Well, let's do that. Let's look at the page that
23	is attached that says calculation of available effluent and
24	let's look at number two there, the shaded number under two
25	where it says 68,692 acre feet committed to users of the

1	Truckee Meadows users. Do you see that?
2	A. Uh-huh.
3	Q. And then do you see below that three, unsewered
4	portion of Truckee Meadows portion area, ten percent,
5	estimate only, and then they subtract 6869?
6	A. Okay. So it does look like they took ten percent
7	of that 68,692.
8	Q. So that's ten percent of the demand?
9	A. Yes.
10	Q. Do you have any information as to how much water
11	was actually delivered by Sierra Pacific to unsewered
12	customers in each of the months during each of the years that
13	CES looked at here?
14	A. No.
15	Q. You also presented information in the WRD
16	attachment which I think was attachment 11 to 801 and you
17	presented information from the CES letter which is attachment
18	13 and then you had your own data which is I believe table 3
19	to your report?
20	A. Correct.
21	Q. There's some overlap in the WRD data and the CES
22	data in terms of years, is there not?
23	A. The CES data, you are looking from 1983 to 1993
24	and WRD was 1980 through 1988.
25	Q. So there's an overlap between 1983 and 1988 in

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1	the data?	
2	Α.	Yes.
3	Q.	If you look at the WRD data, for example, for
4	1987, đo yo	u have that?
5	Α.	Yes.
6	Q.	For 1987 WRD shows total use of 63,384 acre feet?
7	A.	Uh-huh.
8	Q.	And for 1987, what does CES show for surface
9	water, excu	se me, just for surface water?
10	A.	Production data, 54,214.
11	Q.	The number, and I need to clarify the question
12	that I aske	d you earlier. The number you quoted for 1987 in
13	the WRD dat	a, that was for surface water as well, was it not?
14	Α.	Yes.
15	Q.	That's a substantial difference, is it not?
16	Α.	Yes.
17	Q.	Let's look at 1988. What's the WRD data show for
18	surface wat	er for 1988 for Sierra Pacific?
19	Α.	WRD is 54,394.
20	Q.	And what does the CES show for 1988 for surface
21	water?	
22	Α.	54,954.
23	Q.	One more down.
24	Α.	I'm sorry. 48,954.
25	Q.	Another substantial difference, right?

1	Α.	5,000 acre feet.
2	Q.	What's the overlap between your recent report and
3	the CIS rep	ort in years?
4	A.	1985 through 2005, theirs is 1983 through 1993.
5	Q.	So, the overlap there is 1989 to 1993?
6	Α.	Correct.
7	Q.	And what does the Chris Mahannah data show for
8	surface wat	er in 1989?
9	Α.	54,554.
10	Q.	And what does CES show for that same year?
11	Α.	48,234.
12	Q.	Another substantial difference, right?
13	Α.	Yes. And the source of my data for column one in
14	table 3 was	provided by the Water Master who in turn received
15	that from T	MWA.
16	Q.	How about 1991, Chris Mahannah CES surface water?
17	А.	Mahannah is 47,934, 44,733 for CES in 1991.
18	Q.	So another difference.
19	Α.	Yes.
20	Q.	Who do you think is right, Mahannah's or CES's?
21	Α.	Again, as I just mentioned, I'm taking my data in
22	table 3 fro	om the Water Master's record.
23	Q.	So, do you think you're right?
24	Α.	I'm taking their records at face value.
25	Q.	So, if you're right and CES is wrong, then the

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1	consumption in those years would have been higher, would it
2	not, the M and I consumption?
3	MR. VAN ZANDT: Vague as to which years?
4	MR. DePAOLI: The years that we were just talking
5	about.
6	BY MR. DePAOLI:
7	Q. The years in which you had a higher surface water
8	diversion than they did, and when I say the Mahannah, I mean
9	the WRD in 1987 and 1988, and the Chris Mahannah in 1989 and
10	1991.
11	A. That is reflected. The average of all of these
12	years the Mahannah was 44 percent and they came up with
13	54 percent.
14	Q. Let's look at some of your data that you have in
15	your table 3, Mr. Mahannah. For example, in your data, and
16	I'll just use the data from the column without effluent
17	reuse, the low return flow in that column is 36 percent, is
18	it not, for 2003?
19	A. Yes.
20	Q. And there then is a high of 53 percent for 1995?
21	A. Yes.
22	Q. So, in 2003 the consumptive use portion would
23	have been 64 percent, would it not?
24	A. Yes. Again, this does not include unsewered
25	customers.

1	Q. We'll get to that too in a second. What is
2	64 percent times a four and a half acre foot duty?
3	A. He wants me to make a calc with an average duty
4	of four and a half. The average duty of their transfers is
5	four if you go back to the original decreed claim.
6	So what's the calculation again?
7	Q. 64 percent times well, go ahead and do it for
8	four.
9	A. 2.5.
10	Q. 2.56?
11	A. Correct.
12	Q. And the numbers would be somewhat close to that
13	for 2004 and 2001, would they not?
14	A. Yes.
15	Q. Again, all of this information that you provided,
16	both in the prior WRD report, the CES report, shows that
17	municipal return flows vary, do they not?
18	A. Yes, they vary from year to year and I think we
19	need to be cautious in cherry picking specific years.
20	Q. But there's no particular there's nothing in
21	place that says it can't be 64 percent in 2003, is there?
22	A. I'm sorry, can you repeat the question?
23	Q. There isn't anything that prevents a consumption
24	of 64 percent of the M and I water in a year like 2003, is
25	there?

1	A. No.
2	Q. So, suppose this municipal return flow
3	consistently went into the '60s, the '70s, or let's say TMWA
4	decided to go to land application and there was no return
5	flow. What would happen then?
6	A. Well, I think we have an issue with what was
7	addressed in the '89 hearing, that they wouldn't condition
8	the permit at that time on some event which may or may not
9	happen in the future.
10	Q. And if we had that hearing, what would the State
11	Engineer consider in terms of how to get his arms around this
12	situation?
13	MR. VAN ZANDT: Calls for speculation.
14	MR. MAHANNAH: I'm not sure I followed that
15	question.
16	HEARING OFFICER JOSEPH-TAYLOR: Read that
17	question back, Mary.
18	(The record was read.)
19	HEARING OFFICER JOSEPH-TAYLOR: Sustained.
20	BY MR. DePAOLI:
21	Q. Wouldn't there be a hearing on the consumptive
22	use of these rights in their original irrigation use?
23	MR. VAN ZANDT: Calls for speculation.
24	HEARING OFFICER JOSEPH-TAYLOR: Hold on,
25	Mr. Van Zandt. Do you want to rephrase it, Mr. DePaoli, for

1	me?
2	BY MR. DePAOLI:
3	Q. If a protest ground on all of these applications
4	when they were being changed from irrigation to M and I was
5	that they ought to be limited to consumptive use for
6	irrigation, was that not the protest ground?
7	A. I believe prior to that '89 hearing we attempted
8	to reach settlement with
9	HEARING OFFICER JOSEPH-TAYLOR: That's not what
LO	he asked you. He asked you what was the protest ground in
11	the '89 hearing. Was it limited to a change to consumptive
12	use of irrigation?
13	A. The protest stated limit the application to the
14	consumptive use amount leaving the remaining amount in the
15	Truckee River to meet downstream water rights which rely on
16	these return flows. We attempted before the hearing to have
17	that limit be 50 percent.
18	BY MR. DePAOLI:
19	Q. What does the protest read?
20	A. What I just read.
21	Q. Read it again without the editorial at the end.
22	MR. VAN ZANDT: He's arguing with the witness.
23	HEARING OFFICER JOSEPH-TAYLOR: Well, the witness
24	is elaborating past the question, too. Answer the question.
25	We're going to go about another 15 minutes and then I'm going

1	to break for the day to take a conference call.
2	MR. MAHANNAH: Item one of the TCID protest at
3	the time states, "Limit the application to the consumptive
4	use amount leaving the remaining amount in the Truckee River
5	to meet downstream water rights which rely on these return
6	flows."
7	BY MR. DePAOLI:
8	Q. Thank you.
9	A. Then we go on to state that this condition shall
10	only be met upon removal of the wastewater from the river.
11	MR. VAN ZANDT: What page are you reading from,
12	Mr. Mahannah?
13	MR. MAHANNAH: I'm just reading from page two of
14	ruling 4005 where the State Engineer states TCID's protest
15	ground.
16	HEARING OFFICER JOSEPH-TAYLOR: Exhibit 801, tab
17	what?
18	MR. MAHANNAH: Tab 5.
19	BY MR. DePAOLI:
20	Q. So, if we got into a situation that was consumed
21	in that condition, wouldn't you agree that the hearing would
22	be on the consumptive use of the water right for irrigation?
23	A. Can you restate the question?
24	HEARING OFFICER JOSEPH-TAYLOR: It's a fairly
25	simple question. If they started using, if TCID thinks

1	they're using more consumptive use and you called for a
2	hearing, would your evidence be consumptive use of
3	irrigation? Did I follow you, Mr. DePaoli?
4	MR. DePAOLI: Yes.
5	MR. MAHANNAH: If we called for a hearing after
6	this hearing had already the results of this had already
7	been determined?
8	HEARING OFFICER JOSEPH-TAYLOR: Mr. DePaoli posed
9	to you if TMWA starts using more and more effluent and TCID
10	thinks there's injury and wanted a hearing on you're using
11	more than 50 percent, what would TCID's evidence look at for
12	consumptive use to show injury?
13	MR. MAHANNAH: In that case they would probably
14	look at the ag CU and return flow.
15	BY MR. DePAOLI:
16	Q. Mr. Mahannah, if you could look at Exhibit 801 in
17	your conclusions, the first paragraph on page four at the
18	bottom, the last line of heading IV
19	A. Where on the conclusions?
20	Q. Under IV, the first paragraph, the last line,
21	could you just read that out loud?
22	A. Starting with "Should drought conditions"?
23	Q. Yes.
24	A. "Should drought conditions exist in any given
25	year whereby the water master deems the original municipal

1	duty could not be diverted, then volume stored should be
2	proportionately reduced."
3	Q. So, what is the original municipal duty in
4	connection with these applications?
5	HEARING OFFICER JOSEPH-TAYLOR: Which
6	applications, Mr. DePaoli?
7	BY MR. DePAOLI:
8	Q. The applications that are the subject of this
9	hearing.
10	A. Can you restate that again?
11	Q. You say that if the Water Master deems the
12	original municipal duty could not be diverted then the volume
13	stored should be proportionally reduced. What I'm asking you
14	is what is the original municipal duty you're referring to
15	there?
16	A. The municipal duty that was granted under the
17	base rights on all of the change applications before us
18	today.
19	Q. That would be the full duty of all these water
20	rights?
21	A. Yes.
22	Q. And is it your understanding that the Water
23	Master can regulate the extent to which water would be stored
24	under these change applications if they're approved?
25	A. I believe his office will if TROA has to go into

1	effect and the decreed modified.
2	Q. Assuming that happened, it's your understanding
3	the Water Master could regulate those?
4	A. That's my understanding, yes.
5	MR. DePAOLI: I'm about to go into the timing
6	issue. I don't know how much longer you're going to go.
7	HEARING OFFICER JOSEPH-TAYLOR: We've got about
8	five minutes. Do you want to break and come back tomorrow?
9	MR. DePAOLI: Yes, I don't think I can finish in
10	five minutes, so it's a good place to break.
11	HEARING OFFICER JOSEPH-TAYLOR: Okay. Thank you
12	for that. We're still on schedule doing that, correct,
13	Mr. Van Zandt? You're moving along quite well?
14	MR. VAN ZANDT: I believe so. What time do we
15	start?
16	HEARING OFFICER JOSEPH-TAYLOR: Nine o'clock. I
17	believe we're looking at possible weather again tomorrow, so
18	travel safely.
19	We'll be in recess until tomorrow morning at
20	nine o'clock and we'll continue with cross-examination on
21	Exhibit 801. Thanks, everybody.
22	
23	(The proceedings recessed at 4:08 p.m.)
24	
25	

1	STATE OF NEVADA,)
2) ss. CARSON CITY.)
3	
4	I, MARY E. CAMERON, Official Court Reporter for the
5	State of Nevada, Department of Conservation and Natural
6	Resources, Division of Water Resources, do hereby certify:
7	That on Monday, the 14th day of December, 2009, I
8	was present at 901 South Stewart Street, Second Floor, Carson
9	City, Nevada, for the purpose of reporting in verbatim
10	stenotype notes the within-entitled public hearing;
11	That the foregoing transcript, consisting of pages
12	1 through 182, inclusive, includes a full, true and correct
13	transcription of my stenotype notes of said public hearing.
14	
15	Dated at Carson City, Nevada, this 4th day
16	of January, 2010.
17	
18	
19	Mary & Cameron
20	MARY E. CAMERON
21	Nevad e CCR #98
22	
23	