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DEPARTMENT OF WATER RESOURCES

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Attorneys for Idaho Ground Water Appropriators, Inc.

### BEFORE THE DEPARTMENT OF WATER RESOURCES

#### OF THE STATE OF IDAHO

IN THE MATTER OF DISTRIBUTION OF WATER TO WATER RIGHT NOS. 36-02356A, 36-07210 AND 36-07427

and

IN THE MATTER OF DISTRIBUTION OF WATER TO WATER RIGHTS NOS. 36-04013A, 36-04013B AND 36-07148 (SNAKE RIVER FARM); AND TO WATER RIGHTS NOS. 36-07083 AND 36-07568 (CRYSTAL SPRINGS FARM) AFFIDAVIT OF BRADLEY V. SNEED IN SUPPORT OF IGWA'S POST-HEARING MEMORANDUM REGARDING DIRECTOR'S ORDER APPROVING IGWA'S 2005 SUBSTITUTE CURTAILMENTS

(Blue Lakes Delivery Call)

(CLEAR SPRINGS DELIVERY CALL, SNAKE RIVER FARM)

STATE OF IDAHO	)
	) ss
COUNTY OF ADA	)

Bradley V. Sneed, being first duly sworn on oath, deposes and hereby states as follows:

1. I am one of the attorneys of record for Idaho Ground Water Appropriators, Inc.

("IGWA"), in the above-captioned matters before the Idaho Department of Water Resources (the "Department").

- On June 5, 2006, the Department, with Director Karl J. Dreher sitting as hearing officer, conducted a hearing in the above-captioned matters at the Department's offices located at 322 East Front Street, Boise, Idaho.
- 3. During that June 5, 2006, hearing, testimony was offered by Cindy Yenter, Tim Luke, Dr. Allan Wylie, John Rex Minchey, Dean Stevenson and Dr. Charles M. Brendecke. The entire substance of the June 5, 2006, hearing, including the testimony of all of the above witnesses, was electronically recorded by Department staff on June 5, 2006.
- 4. Shortly after the June 5, 2006, hearing, I contacted Phillip Rassier (counsel for the Department) and requested a copy of the electronic recording of the June 5, 2006, hearing. After receiving my request, Mr. Rassier delivered a copy of the electronic transcript of the June 5, 2006, hearing to my office by electronic mail.
- 5. Shortly thereafter, I caused the electronic transcript of the June 5, 2006, hearing to be delivered to Accurate Court Reporting, Inc. for transcription. Accurate Court Reporting, Inc. sent me the final transcript of the June 5, 2006, hearing on or about June 15, 2006.
- 6. Attached hereto as Exhibit A is a true and correct copy of the excerpts, which were cited by IGWA in its Post-Hearing Memorandum, from the transcript of the June 5, 2006, hearing before the Department that was prepared by Accurate Court Reporting, Inc.

DATED this 19th day of June, 2006.

Brad N. Sneed

SUBSCRIBED AND SWORN TO before me this \_\_\_\_

day of June, 2006.

[seal]

Motary Public for Idaho Residing at 10011

My commission expires 3.22.2007

#### CERTIFICATE OF SERVICE

I hereby certify that on this 19 day of of the foregoing by delivering the same to each of indicated below, addressed as follows:	the following individuals by the method
Mr. Karl J. Dreher Director Idaho Department of Water Resources 322 East Front Street P.O. Box 83720 Boise, ID 83720-0098	U.S. Mail Facsimile Overnight Mail X Hand Delivery E-mail
Gregory Kaslo Blue Lakes Trout Farm P.O. Box 72 Buhl, ID 83316-0072	_X U.S. Mail Facsimile Overnight Mail Hand Delivery X E-mail
Daniel V. Steenson, Esq. Ringert Clark, Chartered 455 S. Third Street P.O. Box 2773 Boise, ID 83701-2773	X U.S. Mail Facsimile Overnight Mail Hand Delivery X E-mail
Roger D. Ling, Esq. Ling, Robinson & Walker 615 H St. P.O. Box 396 Rupert, ID 83350-0396	X       U.S. Mail         Facsimile       Overnight Mail         Hand Delivery       E-mail
Michael S. Gilmore, Esq. Deputy Attorney General Civil Litigation Division Office of the Attorney General Len B. Jordan Bldg., Lower Level P.O. Box 83720 Boise, ID 83720-0010	X U.S. Mail Facsimile Overnight Mail Hand Delivery X E-mail
James C. Tucker, Esq. Idaho Power Company 1221 West Idaho P.O. Box 70 Boise, ID 83707	X U.S. Mail Facsimile Overnight Mail Hand Delivery X E-mail

James S. Lochhead, Esq. Adam T. Devoe, Esq. Brownstein Hyatt & Farber, P.C. 410 17th Street Twenty-Second Floor Denver, CO 80202	X U.S. Mail Facsimile Overnight Mail Hand Delivery E-mail
Cindy Yenter Watermaster – Water District 130 Idaho Department of Water Resources Southern Regional Office 1341 Fillmore Street, Suite 200 Twin Falls, ID 83301-3380	X U.S. Mail Facsimile Overnight Mail Hand Delivery X E-mail
Frank Erwin Watermaster – Water District 36 2628 South 975 East Hagerman, ID 83332	X U.S. Mail Facsimile Overnight Mail Hand Delivery E-mail
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Boise, ID 83701-0829

Jeffrey C. Fereday Michael C. Creamer Brad V. Sneed

# BEFORE THE DEPARTMENT OF WATER RESOURCES OF THE STATE OF IDAHO

IN THE MATTER OF DISTRIBUTION OF WATER TO WATER RIGHT NOS. 36-02356A, 36-07210 AND 36-07427 (BLUE LAKES),

and

IN THE MATTER OF DISTRIBUTION OF WATER TO WATER RIGHTS NOS. 36-04013A, 36-04013B AND 36-07148 (SNAKE RIVER FARM); AND 36-07568 (CRYSTAL SPRINGS FARM).

#### TRANSCRIPT OF HEARING

JUNE 5, 2006 BOISE, IDAHO

COPY

ACCURATE COURT REPORTING, IN

P.O. Box 140218
Boise, Idaho 83714-0218
(208) 938-0321 • FAX (208) 938-1843

**COPY** 

Prepared for

Reported By

**EXHIBIT** 

Rrad V Speed Joanno M Hirmor CCD

APPEARANCES (Continued) BEFORE THE DEPARTMENT OF WATER RESOURCES OFFICE OF THE ATTORNEY GENERAL For Idaho Department By: Clive J. Strong OF THE STATE OF IDAHO of Water Resources: Deputy Attorney General Natural Resources Section, Chief IN THE MATTER OF DISTRIBUTION OF WATER 210 Statehouse TO WATER RIGHT NOS. 36-02356A, 36-07210 Boise, Idaho 83702 AND 36-07427 (BLUE LAKES), Charles M. Brendecke, Ph.D., PE Also present: Hydrosphere, President 1002 Walnut 12 Suite 200 13 Boulder, Colorado 80302 IN THE MATTER OF DISTRIBUTION OF WATER 15 TO WATER RIGHTS NOS. 36-04013A, 36-04013B Brockway Engineering, PLLC 16 2016 Washington Street North AND 36-07148 (SNAKE RIVER FARM); AND 17 Suite 4 TO WATER RIGHTS NOS. 36-07083 AND 18 Twin Falls, Idaho 83301 19 36-07568 (CRYSTAL SPRINGS FARM). ) 20 Karl Dreher, Director, IDWR 21 Tim Luke, IDWR Allan H. Wylie, Ph.D., IDWR 22 23 Cindy Yenter, IDWR Will Fletcher, IDWR 24 TRANSCRIPT OF HEARING JUNE 5, 2006 BOISE, IDAHO Page 1 Page 3 ACCURATE COURT REPORTING, INC. ACCURATE COURT REPORTING, INC. (208) 938-0213 FAX (208) 938-1843 (208) 938-0213 FAX (208) 938-1843 APPEARANCES INDEX WITNESSES: For North Snake GIVENS, PURSLEY, LLP PAGE Groundwater District. Attorneys at Law CINDY YENTER Jeffrey C. Fereday Magic Valley Groundwater By: Direct Examination by Mr. Fereday 18 District, and Groundwater and Brad V. Sneed Cross-Examination by Mr. Steenson 66 601 Bannock Street 7 Appropriators, Inc.: 76 Cross-Examination by Mr. Simpson Suite 200 83 Voir Dire Examination by Mr. Dreher Boise, Idaho 83702 Redirect Examination by Mr. Fereday 84 9 10 Recross-Examination by Mr. Simpson R4 BARKER, ROSHOLT & SIMPSON, LLP 10 For Clear Springs 11 Foods: Attorneys at Law 12 TIM LUKE 11 By: John K. Simpson Direct Examination by Mr. Fereday 86 13 205 North 10th 14 Cross-Examination by Mr. Steenson 101 12 Suite 520 Boise, Idaho 83702 15 Cross-Examination by Mr. Simpson 107 16 For Blue Lakes Trout RINGERT CLARK, CHARTERED ALLAN H. WYLIE, PH.D. 17 15 Company: Attorneys at Law Direct Examination by Mr. Fereday 18 111 Daniel V. Steenson 19 Cross-Examination by Mr. Steenson 123 16 455 South Third 20 Redirect Examination by Mr. Fereday 129 Boise, Idaho 83702 Voir Dire Examination by Mr. Dreher 130 22 Redirect Examination by Mr. Fereday 133 For Idaho Department OFFICE OF THE ATTORNEY GENERAL 18 23 Cross-Examination by Mr. Simpson 135 19 of Water Resources: Phillip J. Rassier 24 Redirect Examination by Mr. Fereday 137 and Chris M. Bromley Recross-Examination by Mr. Steenson 1.3R 20 Deputy Attorney Generals Idaho Department of Water Resources 21 322 East Front Street 22 Boise, Idaho 83702 23 24 Page 2 ACCURATE COURT REPORTING, INC. ACCURATE COURT REPORTING, INC. (208) 938-0213 FAX (208) 938-1843 | (208) 938-0213 FAX (208) 938-1843

1 I N D E X (Continued) 2 WITNESSES: 3 PAGE 4 ALLAN H. WYLIE, PH.D. (Cont'd) 5 Voir Dire Examination by Mr. Dreher 140 6 Recross-Examination by Mr. Simpson 141 7 Voir Dire Examination by Mr. Dreher 141	1 BOISE, IDAHO, MONDAY, JUNE 5, 2006, 9:30 A.M. 2.
ALLAN H. WYLIE, PH.D. (Cont'd) Voir Dire Examination by Mr. Dreher 140 Recross-Examination by Mr. Simpson 141	∠.
Voir Dire Examination by Mr. Dreher 140 Recross-Examination by Mr. Simpson 141	
6 Recross-Examination by Mr. Simpson 141	3 MR. DREHER: Good morning. I'm Karl Dreher,
	4 Director of the Idaho Department of Water Resources, and
, , , , , , , , , , , , , , , , , , , ,	5 I'll be presiding over the hearing this morning. The
8 Recross-Examination by Mr. Simpson 142	
10 JOHN REX MINCHEY	
11 Direct Examination by Mr. Sneed 146	7 Department of Water Resources, 322 East Front Street,
12 Cross-Examination by Mr. Steenson 161 13 Cross-Examination by Mr. Sneed 167	8 Boise, Idaho, on June 5th, at about 9:30 a.m.
14 Voir Dire Examination by Mr. Dreher 168	9 Some other Department staff and
15	10 representatives are present. Mr. Tim Luke, Dr. Allan
16 DEAN STEVENSON 17 Direct Examination by Mr. Sneed 170	·
18 Cross-Examination by Mr. Steenson 179	11 Wylie, and Ms. Cindy Yenter are Department staff here
19 Cross-Examination by Mr. Simpson 185	12 today. Also, with me is Mr. Phil Rassier, who's the
20 21 CHARLES M. BRENDECKE, PH.D., PE	13 principle Deputy Attorney General serving as counsel for
22 Direct Examination by Mr. Fereday 190	14 the Department; Chris Bromley, another Deputy Attorney
23 Cross-Examination by Mr. Steenson 204	•
24 Cross-Examination by Mr. Simpson 213 25 Voir Dire Examination by Mr. Dreher 218	15 General assigned for the Department; and an extern that's
25 Voir Dire Examination by Mr. Dreher 218	16 joining us for the summer, Will Fletcher, who's sitting in
	17 the back.
	18 The purpose of this hearing this morning is to
	19 receive evidence and testimony relative to whether I should
	20 modify my prior Orders approving the Idaho Groundwater
	21 Appropriators' 2005 substitute curtailments in response to
	22 both the Blue Lakes delivery call and the Clear Springs
	· ·
	23 delivery call for its Snake River farm facilities. Those
	24 Orders were issued on April 29th, 2006.
	25 And for the limited purpose of considering
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1 EXHIBITS	1 whether those Orders should be amended or revised, we hav
2 REFERENCED ADMITTED	2 brought both of these matters together. However, they
3 1 - December 2005 memo 21 9 4 2 - January 2006 memo 21 9	
5 3 - Spreadsheet of Northside Canal 21 9	3 remain separate contested cases, and the record of this
6 Company's storage deliveries 7 in 2005	4 hearing will be incorporated into both those matters.
8 4 ~ Information provided by the 35 9	5 The hearing is being conducted in compliance
9 North Snake Groundwater District	6 with applicable provisions of Chapters 2 and 17 of
10 for 2002, 2003, and 2004 11 5 - Resume of Dr. Charles M. Brendecke 190 9	7 Title 42, Idaho Code, as well as Chapter 52, Title 67,
12 6 - Analysis 191 9	• • • • • •
13 7 - Excerpt of Water District 01 storage 193 9	8 Idaho Code, and the Department's rules and procedures.
14 report for 2005 15	9 Just joining us now is Mr. Clive Strong, who
16 8 - Water Management and Conservation 197 9	10 is the Deputy Attorney General, Chief of the Natural
17 Plan for the Northside Canal Company	11 Resources Section in the Attorney General's Office.
18 9 - IDWR Conversion Spreadsheet 145 145 19	- · · · · · · · · · · · · · · · · · · ·
20	12 With that, I would ask that the parties make
21	13 their appearance, beginning with Mr. Fereday.
22 23	14 MR. FEREDAY: Jeff Fereday, Mr. Director,
24	15 on behalf of North Snake and Magic Valley Groundwater
25	
	16 Districts; also, the Idaho Groundwater Appropriators
	17 here today. And with me at counsel table is
	18 Dr. Charles Brendecke of Hydrosphere Resource
	19 Consultants from Boulder, Colorado. Also, joining me is my
	,,
	21 MR. DREHER: Okay.
	22 MR. STEENSON: Dan Steenson representing
	23 Blue Lakes Trout.
	<b>3</b>
	25 Springs Foods.
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canal? Have you ever seen them measured or described? that they are charging Northside. 1 2 A. Of course I am. 2 Q. So the effect of that is that -- see if you Q. Would you say that a 30 percent loss in a 3 3 agree with me. The effect of that is if a person wants a canal system on the Eastern Snake Plain is within the range delivery of a hundred acre-feet at a certain point in the 4 4 of plausibility? canal system there must be 130 acre-feet diverted at Milner 5 5 A. Yes. into the canal to make that delivery. 6 7 Q. Would you say that it's a reasonable amount of Is that an accurate description of how that 7 8 loss? 8 works? 9 A. I don't know if I can answer that. I -- it 9 A. It would be close. But, there again, it's not appears to be reasonable, but it would depend on the system something that I'm -- you know, that I'm delivering on a 10 10 day-to-day basis. But yes, that would be close. That 11 we're talking about. 11 Q. Have you seen losses that are higher than would actually be, uh, more a percent of amount diverted 12 12 30 percent? 13 rather than amount delivered. 13 14 A. Not on the ESPA. Q. Ms. Yenter, would you agree that once a canal 14 Q. Are you aware of any information suggesting 15 system has been charged any acre-foot of water diverted, 15 whether it's natural flow or storage, experiences that this 9400 acre-feet of calculated losses that we have 16 17 been discussing here was used or consumed on any cropland essentially the same carriage loss as any other acre-foot, 17 18 or in any other manner? that there's no way to distinguish between the two? 18 19 19 A. The only information I've seen is what I A. Could you repeat that, please? Q. Once a canal system has been charged and the 20 received from the ESPA. 20 21 Q. So I take it the answer is "no"? 21 canal is up and running, would you agree that carriage 22 losses are experienced across the board by the commingled A. The answer to that would be "I have seen no 22 waters in that canal system; that some acre-feet or some 23 23 evidence." 24 diversions don't -- experience a different carriage loss 24 Q. Okay. Have you seen any evidence that it 25 might have been spilled back to the river? than others? Page 25 Page 27 ACCURATE COURT REPORTING, INC. ACCURATE COURT REPORTING, INC. (208) 938-0213 FAX (208) 938-1843 (208) 938-0213 FAX (208) 938-1843 A. I don't know that I can say that, because I 1 1 A. I've seen no evidence, but I don't -- it's not think it depends on the system that you're talking about. something that I check for, And I don't know the Northside system, for instance, that 3 Q. You don't measure spills? 4 well to really answer that question. A. I am not involved in the administration of 5 Q. Would you know whether the canal system itself 5 Northside Canal Company. 6 discriminates between storage diversions and natural flow6 Q. Because that's in another water district, 7 diversions? Is it different water? It's not, is it? isn't it? 8 A. You mean the physical canal? 8 A. Correct. 9 Q. That's right. 9 Q. Are you aware of any information suggesting 10 A. You're referring to the physical canal? 10 that this 9400 acre-feet did not seep into the aguifer? 11 Q. That's right. 11 A. I am just simply not aware of any information 12 A. Well, of course. The physical canal, no. 12 regarding the 9400 acre-feet. 13 would not know the difference. 13 Q. Now, in its Orders the Department did not give Q. And the water in the canal is commingled, is the groundwater districts a recharge credit for this 9400 14 14 it not, regardless of whose account it might have been 15 15 acre-feet, did it? 16 diverted for? 16 A. That's correct. 17 17 That is my understanding. Q. Did you advise the Department that no credit 18 Q. With regard to the 30 percent surcharge or 18 should be given? carriage loss charge, is it your understanding that that, 19 A. No. I did not make that decision. 19 20 in effect, represents the calculation of 30 percent 20 Q. Would you agree that 9400 acre-feet is a 21 conveyance loss in the canal? Is that another way of 21 significant amount of water in the context of the 22 saying it? groundwater districts' mitigation efforts? 23 23 A. I don't know. Again, I'm not administering Yes, it is a significant amount. 24 that loss so I really can't answer to it. 24 Q. With regard to the voluntary curtailments, 25 Q. Are you familiar with carriage losses in a sometimes called "reduction acres," I would like to ask you Page 26 Page 28 ACCURATE COURT REPORTING, INC. ACCURATE COURT REPORTING, INC. FAX (208) 938-1843 (208) 938-0213 (208) 938-0213 FAX (208) 938-1843

4 before you visited them? a few questions. 2 A. A series of in-office analysis which included 2 With regard to Exhibit 1, you note that it comparison to aerial images, comparison to water rights, 3 contains preliminary conclusions. Do you note that? 3 4 um, comparison to past set-aside databases, um, comparison A. I know that it is simply called "conclusions." 4 5 to canal company share -- you know, share location shape 5 Q. Did you consider these conclusions to be 6 files, um, just comparison to all data that we had 6 final, or were they subject to any further analysis? A. These conclusions just represented the available in our office to see if they met the criteria set 7 determination of my analysis which were passed -- passed on forth in the, uh -- in the Order of last year. 8 Q. An acre was deemed ineligible for voluntary 9 9 to the Director for a decision. 10 curtailment credit unless it was shown to have been 10 Q. At the bottom of the first paragraph of Exhibit 1 is a sentence that says that this is a summary of groundwater irrigated in 2004, or shown to be in a 11 11 work completed, et cetera, and preliminary conclusions. 12 mitigation plan in that year; isn't that correct? 12 13 A. Correct. It was shown to be . . . 13 Now, I just want to make sure that this is not 14 Q. In a mitigation plan or to have been irrigated 14 a preliminary document. A. Uh, you know, I see the, uh -- I see the 15 15 with groundwater in 2004? disconnect here. That is probably a word that should have 16 A. Yes. Otherwise, it would have been 16 17 been removed from the memo, because I did not, in fact, 17 ineliaible. 18 Q. What was the rationale for the Department's 18 make any preliminary conclusions. 19 19 decision not to give curtailment credit to the groundwater Q. You wrote this memo, though, right? 20 A. I did. I did. And that -- that word in that 20 users for those acres unless they had been irrigated with 21 first paragraph probably should have been removed. 21 groundwater or in a mitigation plan in 2004? 22 Q. So these are your final conclusions? 22 A. Well, again, I didn't write that decision. 23 This is my final analysis. 23 That decision came from the Director's Order. But it is my 24 Q. Is it correct to say that additional 24 understanding that we were looking for a, uh -- an actual 25 information could change that analysis? 25 reduction of use -- of groundwater use. Page 29 Page 31 ACCURATE COURT REPORTING, INC. ACCURATE COURT REPORTING, INC. (208) 938-0213 FAX (208) 938-1843 (208) 938-0213 FAX (208) 938-1843 A. Possibly, yes. 1 1 Q. Now, is it true that you did not look at 2 Q. Have you done any further investigation of 2 groundwater irrigation in 2003, 2002, or 2001, in making this analysis? 3 these matters since you wrote this memo, Exhibit 1? 3 4 A. I would have to say no. 4 A. For the most part, yes. Well, we did not look. 5 Q. Now, there were about 21,000 acres of in the initial -- when we made the initial eligibility cut, 6 voluntary curtailments or reductions that were submitted by 6 no, we did not go back to 2003 in making the analysis. 7 the groundwater districts. Do you recall that? 7 Q. Okay. I note that on Attachment A to 8 A. Yes. 8 Exhibit 1 we've got some eligibility code descriptions. 9 Q. And only about one-third or some -- i think it 9 And No. 5, which accounted for some 5200 acres of 10 was 6885 acres or so were recognized in the Director's 10 disqualification, notes "not irrigated in 2004, not 11 Order. Do you recall that? 11 irrigated in 2005, not eligible." 12 A. Correct. 12 Did you write that? 13 13 Q. So we're talking about perhaps one-third --14 around one-third of what was submitted was found qualified. 14 Q. Now, "not irrigated in 2005," it was not 15 Did you personally inspect each of these 15 supposed to not be irrigated in 2005, correct? 16 21,000 some odd acres? 16 A. That's correct. 17 A. I did not personally inspect each acre. Uh, 17 Q. So again, this is really just that it was not myself and up to a half a dozen -- well, actually, it was 18 18 groundwater irrigated in 2004. And therefore, even though more like three or four of us. Myself and three or four 19 19 it's dried up now, it cannot be eligible. Is that how that 20 other staff inspected probably 95 percent of acres which we 20 works? 21 initially determined to be eligible. 21 A. Correct. That was an eligibility description; 22 Q. Did you say 95 percent? 22 in this case, a noneligibility description. 23 A. Of the eli- -- of what we determined to be 23 Q. Do you know who directed that it be the policy eligible. We did field verify the eligibility. of the Department that the land must have been irrigated in 25 Q. How did you determine them to be eligible 2004 with groundwater to be eligible for curtailment Page 30 ACCURATE COURT REPORTING, INC. ACCURATE COURT REPORTING, INC.

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call: isn't that right? credit? 1 2 A. That's correct. A. Who directed it? 2 When you curtail a groundwater well, the same 3 Q. Yes. Where did that policy come from? 3 is not true; is that correct, in general? 4 A. I don't know where the policy came from. The 4 Director included that criteria in his Order. 5 A. "In general." 5 6 Q. And it could take months or even years before Q. Do you know whether the acres that the 6 the curtailed amount could show up, if you will, to help a 7 7 groundwater districts dried up, in any year going back senior somewhere else, in the groundwater context; isn't before 2004, benefit the reach gains in the 9 that correct? Devil's Washbowl reach, or is that something beyond 9 10 A. Correct. There is -- it is expected that 10 your understanding? 11 A. Well, it's something that I don't perform the 11 there is a lag time -- an unknown lag time in the aguifer. 12 Q. I'd like you to refer to Exhibit 4. 12 analysis on. 13 I'll represent to you that this is information 13 Q. Isn't it true that those groundwater rights 14 provided by the North Snake Groundwater District for the 14 which were not pumped in 2004, and, therefore, their nonuse years 2002, 2003, and 2004. 15 in 2005 was not counted, still could be irrigated or pumped 15 16 Do you recognize any of the information on 16 now or in future years? 17 17 A. Under certain conditions, yes. this? Q. And those conditions would include not being 18 A. Yes, I do. 18 19 under a curtailment Order, for example? 19 Okay. Do you recognize that this is a list of 20 conversions that this district carried out in those three 20 A. For example. Not being forfeited, for 21 vears? 21 example. 22 22 Q. Do you know of any forfeitures amongst any of A. Yes. 23 the groundwater acres that were submitted for voluntary 23 Q. Isn't it possible that some lands irrigated 24 curtailment? 24 with surface water in this '02 to '04 period could have 25 A. I wasn't looking for forfeitures. I didn't been receiving the surface water under the North Snake Page 33 Page 35 ACCURATE COURT REPORTING, INC. ACCURATE COURT REPORTING, INC. (208) 938-0213 FAX (208) 938-1843 (208) 938-0213 FAX (208) 938-1843 identify any. Conversion Program in that period? Is that possible? 2 2 Q. Okay. And groundwater rights have not been A. That's possible. Yes, it's possible. 3 forfeited, have they, just because they haven't been pumped 3 Q. Did you evaluate this possibility in deciding for a couple of years? That alone won't cause them to be 4 to disqualify a particular acre from the Curtailment forfeited, correct? 5 5 Program, because it was only being irrigated with surface 6 A. Correct. 6 water in 2004, not groundwater? 7 Q. Now, if it were the objective to increase 7 A. Uh, clarify exactly what you're asking me 8 reach gains in the spring complex of serving Blue Lakes and 8 there, please. Clear Springs, if that were the objective, wouldn't it be 9 Q. Did you evaluate the possibility whether a 10 important that a groundwater right be turned off and kept 10 particular acre that you were disqualifying was because it 11 off for a number of years? Wouldn't that be better than 11 was not irrigated with groundwater in 2004? 12 12 just a one-year turnoff? A. And you're speaking of a reduction acre rather 13 A. Well, again, you're getting into an area 13 than a conversion acre? 14 that's really not my expertise. I mean, I have certain 14 Q. Correct. A reduction acre --15 intuitive feelings about this, but that's not my area of 15 Okay. Α. 16 expertise. You've asked the wrong person. 16 Q. -- actually was in a conversion project that, 17 Q. So that's an "I don't know"? 17 arguably, hadn't been listed -- potentially had not been 18 A. "That's an I don't know." 18 listed by the groundwater user. Did you evaluate that; 19 Q. Okay. Now, with regard to administering water 19 whether there was any disconnect? 20 20 rights and the effect of that administration on the senior A. Uh. I did evaluate the connection between 21 who needs the water, let's take a hypothetical here. If 21 reduction acres and conversion projects. There were a few 22 22 you were to curtail on a surface stream a junior's reduction acres that I disqualified because they were part headgate, you would expect, would you not, that the water 23 23 of an active conversion project. Or it was my that he was foregoing would immediately or nearly understanding that they -- well, they were -- they were to immediately be available to a downstream senior making the be pumped from the same well that was part of an active Page 36 ACCURATE COURT REPORTING, INC. ACCURATE COURT REPORTING, INC.

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accurate way of saying this? conversion project and, uh, there was that overlap. 1 2 A. Um, yes. Yes. Because that is -- that was --I didn't evaluate the fact that there might 2 another part of that was that they were not part of the have been an unlisted conversion project if that's -- if 3 3 I've answered your question -- if I've understood your 4 conversion project so, therefore, we could not give them 4 credit for that. But, yes, that would be as accurate as 5 5 question? 6 Q. Yes, that's right. You say you disqualified 6 you could probably get it. 7 Q. So in that case, then, is it accurate to say an acre because it was part of an active conversion 7 project. The point there is you would not want to count it that an individual landowner might forego groundwater 8 pumping and, instead, use her Northside shares, for 9 twice? 10 example, on her property? And that would, would it not, 10 A. Exactiv. 11 reduce groundwater pumping from the aquifer? 11 Q. In category 6 --12 A. That is correct. It would. 12 A. You're back on reduction --13 Q. -- back on the Exhibit 1; that is, eligibility 13 Q. But you decided not to give it credit as a 14 Code 6. 14 conversion because it was not listed as part of the 15 A. Uh-huh. 15 conversion program? It states that it's irrigated in 2005 with 16 A. No. The reason we didn't give it credit is 16 17 because in most of those cases there simply was not enough 17 surface water, not part of a conversion project, not background data to determine a reduction in groundwater 18 eligible. And this indicates, does it not, that there were 19 some 3400 acres of submitted lands that were not given any 19 mitigation credit, because even though it was irrigated 20 Q. Is it possible that there could be more 20 information gathered up on those situations, or do you feel 21 with surface water in '05, the lands were not formally part 21 22 of any conversion project? 22 like you have completely exhausted all the available data 23 Is that an accurate description of that 23 on those questions? 24 A. Oh, no. We could get to the point where that 24 disqualification code? 25 A. Ummm, partly. Um, that was just referring to could actually be done, where there are just some data gaps Page 37 Page 39 ACCURATE COURT REPORTING, INC. ACCURATE COURT REPORTING, INC. (208) 938-0213 (208) 938-0213 FAX (208) 938-1843 FAX (208) 938-1843 those lands which we disqualified, because there was a that are being closed, that -- actually, they are being 2 supplemental source of water which was going to be closed, but -- as we get more data that is likely possible. 3 continued to be used even though groundwater use was partly 3 Q. Have the groundwater districts, or, in this 4 or entirely eliminated. case, North Snake Groundwater District, been forthcoming in 5 Q. When you say "a supplemental source," do you providing data when asked? 5 6 mean a supplemental groundwater source? 6 A. Oh, yes. 7 7 A. No. In this -- in this case -- and I believe Q. What would the groundwater districts have to 8 this question has come up previously, and my answer now is do to qualify these -- what I'll call -- "do-it-yourself the same as it was then. In all these documents I use the 9 conversion lands" for credit? 10 10 term "supplemental" not referring to the primacy in any A. We need a good baseline of groundwater use 11 particular right, but just in cases where there are two 11 data. And, uh, you know, we're just -- we're missing 12 sources of water that may be used to irrigate the same 12 enough measurements on some of these particular diversions 13 land. 13 that -- that we just can't establish a baseline. And so 14 So in this case the surface water being a, uh, even though we have a current -- a good, current additional source of water that could be used to irrigate measurement we don't have anything to compare it to. So 15 16 groundwater acres. They may have reduced their groundwater 16 the more years we get good, solid data, uh, the better 17 17 use, but they continue to irrigate all the acres with their position we will be in to document -- document 18 other water source and, uh, weren't given credit for a 18 reduction -- actually document. 19 conversion project so the acres were not eligible. We 19 Q. And I take it you're willing to work with 20 20 basically decided not to extend credit to multi-source North Snake to evaluate that data should they provide it? 21 21 acres unless the acres were dried up. A. Oh, yeah. 22 Q. Is this to say, then, Ms. Yenter, that these 22 Q. In 2005, you recall, I'm sure, the unusually 23 wet spring, don't you? lands were not listed in a conversion project, and even 23 24 A. Yes. 24 though they were irrigated with surface water and not with groundwater they were, therefore, ineligible? Is that an 25 Q. And you're aware that because of this 25 Page 40 ACCURATE COURT REPORTING, INC. ACCURATE COURT REPORTING, INC.

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A. I didn't actually ever disqualify any available moisture that some crops actually emerged and conversions. There were a number that weren't developed. were maturing into June without any irrigation; isn't that 2 3 Q. Okay. 3 right? A. There was four or five that weren't developed, 4 4 A. Correct. Q. And some crops may even have produced a full but I -- I didn't actually disqualify out of hand any 5 5 conversions. crop without any irrigation that year; isn't that correct? 6 Q. Some you disqualified in part, did you not, 7 7 A. It was possible. 8 because of your conclusion that there was a supplemental Q. Could you describe how, in making your field 8 inspections, you determined whether a crop had received 9 well providing groundwater to the property? 9 10 A. Well, I'm confused. No. No. Because we irrigation water in those months in 2005? 10 11 wouldn't have -- we wouldn't have disqualified a conversion 11 A. That one did pose us a bit of a -- a bit of a 12 project. We would have -- we would have -- no. We quandary at times. We did have both an early and a late 12 photograph in '05, so we were able to pick up things like wouldn't have disqualified a conversion project just 13 13 because there was a supplemental well. I think that was 14 14 early frost. And, um, then it was sometimes just a matter 15 kind of the point. of field investigation to see the type of crop that had 15 Q. Let me rephrase that. You extended less than 16 been grown and if there was any evidence in the irrigation 16 17 full credit to some conversion projects because of the system. Every -- it was -- a lot of times it was a 17 case-by-case issue. We were cognizant of that, though. existence of a supplemental well operating on the property 18 19 19 Q. Where it was not clear what did you tend to isn't that correct? do? 20 A. In the final analysis, yes. 20 A. Where it was not clear we tended to -- quite 21 21 Q. Did you evaluate the licenses or decrees of honestly, we went with our gut. You know, it was somewhat 22 each of those supplemental well situations to determine 22 23 subjective. And in some cases we would, uh, just give them whether those wells were, in fact, pumping a supplemental 24 the benefit of the doubt. I -- it really didn't involve 24 groundwater right? 25 all that many acres. I don't have a number for you, 25 A. We did not evaluate as to primacy. We only Page 41 Page 43 ACCURATE COURT REPORTING, INC. ACCURATE COURT REPORTING, INC. (208) 938-0213 FAX (208) 938-1843 (208) 938-0213 FAX (208) 938-1843 though. It strikes me that that didn't involve more evaluated as to -- well, no, wait. Let me back up. By than -- well, I don't know, 10 percent or 8 percent. Maybe "supplemental," were you referring to the existence of 3 not even that many. Like I said, I just don't have a good canal shares? That's really all we investigated was the 4 feel for that. 4 existence of both the groundwater right and -- and the 5 Q. I'd like to ask you some questions now about 5 existence of canal shares on any given parcel. 6 the conversion project in North Snake Groundwater District. 6 Q. So, in your view, a well is deemed 7 7 Refer to your memo, which is Exhibit 2, the January 13, supplemental for purposes of the conversion process if 8 2006 memo, please. 8 there are canal shares on that same land; is that accurate? 9 9 Now, you prepared this as a result of your A. Well, it's a term we use rather loosely. 10 field inspections and other work; did you not? 10 Sometimes it's -- you know, sometimes it can have different 11 meanings. A. Correct. 11 12 12 Q. Now, I asked you earlier about visiting each Q. You're aware, aren't you, that licenses and 13 of the conversion parcels, and you, I think, indicated 13 decrees for groundwater wells will contain actual supplemental language? Are you aware of that? 14 that -- or maybe this was the reduction parcels. 14 15 15 Let me just ask you: Did you visit each of A. I am. And that's why I say we use that term 16 the conversion parcels? 16 somewhat loosely, because in -- in some cases that's not 17 I did or an associate did. 17 necessarily a declaration of privacy of the right. 18 Q. So it wasn't a 95 percent, it was a hundred 18 You know, we -- again, in the context of this exercise I 19 percent? 19 confuse the word "supplement" that you refer to anytime 20 A. Yes. This was a 100 percent reduction. 20 there's more than one source of water on any given 21 Q. Now, you determined that a number of the 21 irrigated acreage. 22 proposed conversions were ineligible. You disqualified 22 Q. Are you aware, though, that many groundwater 23 them, correct? users who have a primary groundwater right will use the 24 A. The conversions or reductions? 24 groundwater right and not use their shares?

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A. Yes. I am aware that that occurs.

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Q. The conversions.

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difficulty? 1 reduction, though, to be accurate, would have to be 1 2 A. Yes. And those were the operators who were parcel-specific and it would have to look at the specific 2 mix of waters actually being used on that particular required to put alternative devices on for 2005. 3 4 Q. Do you remember who some of those individuals 4 parcel? 5 A. Of course. I will -- I can tell you that I were? 5 6 A. Well, not without my notes, no. It's all believe the 30 percent represented an average -- what the 6 7 contained in the spreadsheet which was sent out. Department believed was an average reduction. 7 8 Q. That was the large format spreadsheet? Q. Okay. Back to conversions. 8 9 A. Correct. There was, I think, a specific 9 A. Okay. column in there that even referred to device required for Q. Were there certain conversions where you felt 10 10 11 2005. that the headgate measuring device for the delivery of 11 Q. With regard to those conversions that were 12 surface water was inaccurate? 12 13 A. There was one that I had some concerns about, 13 irrigated under Northside shares, I take it you did not make any attempt to determine whether the shares were being 14 um, and I never really investigated the headgate delivery 14 rented or whether they were appurtenant to those parcels? 15 structures on the conversion projects last year. I did not 15 16 A. No. We did not look into that. I mean, not 16 have time. directly with the canal company, only the information we 17 Q. Do you think that is a significant problem 17 18 had in our office. going forward? I just want to know whether you think that 18 19 maybe the headgate diversion measuring devices need to be 19 Q. With regard to the power consumption 20 coefficient, or PCC measurements, you note back in 20 improved for the future? 21 Exhibit 1 that even -- quote, "Even with current PCC 21 A. I don't really know, Mr. Fereday. I --22 because I haven't looked at a lot of them. This just 22 measurements power consumption data are not received until 23 happened to be one that was right on the farm, and I could 23 January or February, and final determinations of 24 groundwater use cannot be made until then," end quote. see it, and I had some questions about it. And, uh, the 25 Do you recall that? rest of them, uh, were up the ditch somewhere and I didn't 25 Page 53 Page 55 ACCURATE COURT REPORTING, INC. ACCURATE COURT REPORTING, INC. FAX (208) 938-1843 (208) 938-0213 FAX (208) 938-1843 (208) 938-0213 really get a chance to look at them. That is something 1 A. Yes. 2 2 Q. Did you acquire those power records after that needs to be verified. 3 Q. Okay. In that one instance where there were 3 writing this memo and attempt to make final determinations 4 of groundwater use on those parcels? 4 some questions did you notify that landowner or that 5 5 irrigator about that problem? A. No. On the conversion projects we requested 6 A. I notified the operator that I had a concern 6 power data from -- through the North Snake Groundwater 7 7 about the device. I did not talk to the ditch rider. District, who collected it from their users, who I assume 8 Q. Do you remember who that operator was? 8 had to go directly to Idaho Power on the ones that we 9 A. Yes. It was, um -- well, it was K & W Farms. 9 needed. 10 10 The name of the operator escapes me right now. Q. What about attempting to acquire power data Q. And with regard to some of the conversions 11 after the January/February date? Are you saying that 11 12 where there were groundwater pump measuring systems 12 that's when it was provided? 13 involved, didn't you find that in some of those situations 13 A. No. It was provided on conversion projects, the measuring system was not up to snuff or was not as 14 uh, for us in, uh, December -- before I -- before I wrote 15 accurate as you would like? Is that fair to say? 15 this note for just those conversion wells where PCC remains 16 A. Yes. 16 valid and where -- well, actually -- yeah. Where PCC 17 Q. And what specific concerns with regard to pump 17 remains valid and where we could get to areas of groundwater withdrawal using PCC, we actually requested measurements -- groundwater pump measurements -- did you18 18 19 identity? that early power records be turned in to us in December of 20 20 Mostly the issue was that when the, um -- the 2005 so we could make this analysis. 21 Q. So the analysis, then, was not necessarily as 21 system was converted over to a mixed-use system, um, the 22 former method of power consumption coefficient was no 22 accurate as it could have been if the final PCC data had 23 come in after February; isn't that correct? 23 longer valid, because of multiple demands on its 24 24 A. No, I wouldn't say that. power meter. 25 Q. Did you inform those operators of this 25 Q. Why not? Page 54 Page 56 ACCURATE COURT REPORTING, INC. ACCURATE COURT REPORTING, INC.

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Exhibit 1, in that December 12th memo you wrote that, quote, "Acres under endguns were not accepted. Parcels less than one acre were not accepted."

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What was the rationale behind your decision to deny credit for acres under endguns and all parcels under one acre?

A. Acres under endguns are pretty hard to determine in some cases because of overspray and because of pivot overlap. Acres under endguns don't actually always amount to production. We saw some of that.

I also saw acres under endguns which were not a part of the water -- about the water right. In other words, the endgun has been added after the water right was determined and, uh --

#### Q. In other words, it was an enlargement of some kind?

A. Actually, an enlargement. But a lot of times I reported those under "enlargements" rather than under "endguns." I believe -- and, here again, I'm not totally familiar with this reference, but I believe the Department, in one of its programs, has made the determination not to recognize endgun reduction as just being minor, and so we tried to stay consistent with that.

24 Um, parcels less than one acre were just 25 really -- even when we had good documentation on 'em -- so

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another circle. So to turn that endgun off really gains you nothing. That area is still irrigated under that other 2 circle. Um, and what's left over was just -- almost insignificant. 4

5 Q. What if an endgun, though, is the only source of water for that particular corner or acre or parcel? 6

A. Um --

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8 Q. Wouldn't turning it off actually cause less water to be diverted from the aquifer and less consumptive 9 10 use to occur?

A. I would agree that it could cause less consumptive use. I would not always agree that less water was diverted, but that's simply because the system just makes an adjustment when an endgun comes on.

Q. What kind of adjustment does the system make when an endgun comes on?

A. A lot of times the, uh, pressure at the 18 nozzles for the rest of the pivot are just, uh -- are just reduced to accommodate the extra flow of the demand of the 19 20 endgun. 21

Q. So shutting off -- if there was -- let's just 22 pick a number. If there were a hundred gallons a minute coming into the pivot, turning on or shutting off the endgun would not cause that hundred gallons a minute to change. Is that --

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small that -- well, we couldn't verify 'em on our -- on our, uh, digital -- digital photography that we had. They 2 3 were just too small and our resolution was too gross. We just couldn't get down that small. 4

And also, even when you'd go out in the field sometimes it was tough to find them or even determine anything. So for the number of small parcels that there were -- and I don't believe there was more than a handful -- we, uh -- we just didn't -- we just didn't include it.

Q. You agree, though, that drying up even a small parcel that was irrigated with groundwater would cause a reduction in consumptive use from the aquifer?

A. It varies, certainly.

Q. You mentioned that reductions -- often endgun -- turning off endguns doesn't cause a reduction. I think that's what I -- at least that's what I heard.

Could you elaborate on that, please? Is that a correct characterization of your statement?

 A. Yeah, that's what I said. Um, in many cases 21 what I see in the field is that pivots overlap, and the 22 real benefit of the endguns is only in the corners. But, um, on the sides of the pivots the two pivots come together, and so you've basically got your endgun watering somebody else's -- you know, watering the area underneath

ACCURATE COURT REPORTING, INC. (208) 938-0213 FAX (208) 938-1843 1 A. I have --

Q. -- a good hypothetical?

A. I have measured systems where the endgun on or endgun off condition, the diversion from the well was 4 5 approximately the same. It didn't make a significant 6 difference. But that, again, is only referencing the 7 actual version of water, the actual withdrawal of water. The consumptive use could be decreased. It was an amount 9 that we decided to stay consistent and just not allow any 10 endguns. 11

Q. Now, the groundwater districts did receive curtailment credit for some corners -- pivot corners, did they not?

14 A. Sure, they did.

15 Q. And many others they did not receive credit; 16 isn't that correct?

A. That's correct.

18 Q. Could you just describe how you made the 19 determination from one to the other?

 A. Well, in a -- in a pivot corner where it's irrigated with, uh, hand lines or wheel lines or some other equipment separate from the pivot, um, there was a valid water right on that corner and that corner had been irrigated and it was no longer irrigated and, uh, we wouldn't get credit for that -- for those acres.

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Q. Now, what we're talking about here today Q. But if it was irrigated with the same pivot by 1 means of an endgun, or some other technique, you would tend 2 relates to, does it not, the following paragraph that I'll 2 read to you in the Director's May 19th, 2005 Order. This 3 not to give it credit? 4 is at Page 21. A. That's correct. An endgun will pick up -- I 4 5 Do you happen to have that? don't know, I would say less than an acre of land -- extra 5 A. I do have that one. Page 21? 6 land in a corner. And there's typically three to seven 6 7 Q. I'm sorry, I'm at Page 28. acres in a corner, depending on the acre in the (inaudible) 7 8 A. 28. 8 system. 9 Q. And this is the paragraph in parentheses Q. Ms. Yenter, just a few additional questions to 9 10 numbered "(1)". go back over a couple of things that maybe aren't clear. 10 11 A. Okay. With regard to Exhibit 1, I believe you 11 indicated that you made an initial determination of which 12 Q. And I won't read the entirety of it, but it 12 begins "By 5 p.m. on May 30, 2005, the irrigation district of the 21,000 some odd acres did not meet eligibility 13 13 or groundwater districts that polled (phonetic) to 14 14 criteria, and I think you indicated that you verified represent the groundwater rights for consumptive uses 15 something like 95 percent of those. 15 having priority dates later than December 28th, 1973, 16 Isn't that what you said? 16 17 causing material injury to water right number 36-07427 of A. Yes. The ones that were initially determined 17 the affected water rights must submit a plan or plans to 18 18 to be eligible. 19 the Director to provide mitigation by offsetting the 19 Q. What were the initial eligibility criteria that you applied? Are they set out fully in this memo? 20 entirety of the depletion to the ESPA under such rights, or 20 A. They are set out mostly in this memo in the 21 to provide Blue Lakes travel with a replacement water 21 22 supply of suitable water quality of 10 cfs a minute 22 table on Page 2. (inaudible)." 23 Q. Do you know how many acres met this 23 24 24 preliminary eligibility criteria out of the 21,000? This is the paragraph that is the basis for A. You know, not exactly, Mr. Fereday, because 25 25 the Replacement Water Plans and it's the hearing that we're Page 65 Page 67 ACCURATE COURT REPORTING, INC. ACCURATE COURT REPORTING, INC. FAX (208) 938-1843 (208) 938-0213 FAX (208) 938-1843 (208) 938-0213 some of our numbers were adjusted after we did our field having today; is it not? 2 A. Correct. reviews both up and down, you know, before end use, but it wasn't too awfully far away from the orig- -- you know, the 3 Q. And the particular part of this paragraph that 3 4 final number of 6885. these plans are submitted to address is the following 5 MR. FEREDAY: We have no further questions. 5 phrase, quote, "must submit a plan or plans to the Director 6 MR. DREHER: Thank you. 6 to provide mitigation by offsetting the entirety of the 7 7 depletion to the ESPA under such rights"; is that correct? Mr. Steenson, you can go to Cross. 8 8 Do you see that phrase? MR. STEENSON: Yes, sir. 9 9 A. Yeah. I see that phrase. Yes. 10 Q. That's the phrase that these plans are 10 CROSS-EXAMINATION BY MR. STEENSON: 11 submitted to address; isn't that correct? 11 12 A. Yes. 12 Q. I have a few questions concerning the question Mr. Fereday asked related to credit for voluntary 13 Q. And what does this phrase mean to you; "-- by 13 14 curtailments and with respect to the seepage. I'll ask 14 offsetting the entirety of the depletions from the ESPA 15 about voluntary curtailments, first. 15 under such rights"? Do you mind if I called you "Cindy"? 16 A. What does it mean to me? 16 Q. Yes. 17 17 A. No. 18 A. I guess I would have to say it would mean to 18 Q. Cindy, are you familiar with the Director's -with respect to Blue Lakes, the Director's May 19th, 2005, 19 me that it, uh -- that the groundwater user would be 19 required to offset the injury which had been determined 20 Order responding to Blue Lakes' demand? 21 A. Yes, I am. under that particular (inaudible). And by providing, you 22 Q. Okay. And have you reviewed the Orders that know, replacement water at -- at that point. 22 he's issued subsequent to that relating to the Groundwater 23 Q. Specifically the phrase "depletion from the **Districts' Replacement Water Plans?** 24 ESPA," what does that mean? 24 25 A. "Depletion from the ESPA" typically refers 25 A. Yes, I reviewed them. Page 66 Page 68 ACCURATE COURT REPORTING, INC. ACCURATE COURT REPORTING, INC. (208) 938-0213 (208) 938-0213 FAX (208) 938-1843 FAX (208) 938-1843

correct? happened. Uh, early in '06, before it happened, there was î 2 Α. Correct. this water running in the canals. And some of that water 2 3 Where did this 9400 acre-feet go, in your came from a natural flow right at Milner which was a 3 4 view? 4 priority. 5 A. I don't know. Uh, you know, I do know that MR. SIMPSON: Thank you. 5 20,000 some odd acre-feet, just a little over 20,000, was MR. DREHER: Okay. Ms. Yenter, thank you veryo. 6 being reported as being delivered to the conversion project 7 much. You're excused. headgates. Uh, roughly, 11,000 or so was delivered, as I And we'll take, what, a ten-minute recess? 8 9 understand it -- or reported to have been delivered -- to MR. FEREDAY: Yes. Or five, perhaps? 9 the Sandy Pipeline. And based on what Northside considers 10 10 MR. STEENSON: Whatever. its losses and -- which is, as I understand it, what they 11 MR. DREHER: Let's do the ten. 11 figure is 30 percent to back into the 9400. 12 MR. FEREDAY: Okay. 12 Q. You recognize, and I assume agree with 13 (A recess was taken.) 13 Ms. Yenter, that all the water that's in the Northside MR. DREHER: Mr. Fereday. 14 Canal system is commingled as it's moving down the canal? MR. FEREDAY: We would like to call Tim Luke,15 15 A. Commingled in the sense of storage water and 16 please. MR. DREHER: Mr. Luke. 17 natural flow? 17 Q. Correct. 18 Would you raise your right hand, please. 18 19 A. Yes. 19 20 Q. And commingled in the sense of water diverted 20 TIM LUKE, 21 for one user's account as opposed to another water users having first duly affirmed under oath, testified 21 22 account. They're all commingled, aren't they? 22 as follows: 23 A. Yes. 23 So if this water was diverted at Milner and 24 24 MR. DREHER: You may be seated. 25 not delivered to the conversions, to the Sandy Ponds or to Page 87 Page 85 ACCURATE COURT REPORTING, INC. ACCURATE COURT REPORTING, INC. FAX (208) 938-1843 (208) 938-0213 (208) 938-0213 FAX (208) 938-1843 DIRECT EXAMINATION the other Northside Canal Company shareholders, and not 2 spilled back to the river, then it must have gone into the 2 BY MR. FEREDAY: aguifer, wouldn't you say? 3 Q. Mr. Luke, could you please describe what your 4 A. You know, I can't say for sure. Um, I can 4 role is at the Department of Water Resources; your 5 only testify that the 9400 was a calculated number. 5 position? 6 Q. It also was a diverted number, was it not? 6 A. I am the manager for the water distribution 7 section in the Water Allocation Bureau. And relative to Uh, I don't know if it was really diverted. I 7 this matter I supervise Cindy Yenter as the watermaster of can only tell you what was reported as being delivered to 8 9 those field headgates. Um, the 9400 was a calculated Water District 130. And I work with various water 9 10 number. Uh, you know, I believe water was certainly 10 districts as well the measurement program (inaudible). 11 delivered for conversion projects in Sandy Pipeline through 11 Q. You worked with Water District 01, then? 12 A. Uh, from time to time. 12 Milner, that's correct. And I think, you know, if you were 13 to look at the -- and there is certainly water reported as 13 Q. And you are generally familiar, aren't you, being delivered to Milner through Water District 01. 14 with the subject matter that Ms. Yenter has been testifying 14 15 Q. Do you remember Exhibit 3? And perhaps you 15 about this morning? 16 would like to refer to it there. Ms. Yenter and I were 16 A. Yes. 17 discussing it during her testimony. 17 Q. With regard to that 9400 acre-feet of what I'm calling "losses" in the Northside Canal, do you remember 18 Do you have any reason to believe, based on 18 19 that exhibit, that the 9444 acre-feet were not diverted the testimony this morning from Ms. Yenter about that? 19 20 into the Milner -- excuse me, the Northside Canal at 20 A. Yeah, essentially. 21 Milner? 21 Q. And that discussion between Ms. Yenter and me had to do with the 9400 acre-feet that was accounted -- was 22 A. Do I have any reason to believe it wasn't? 22 diverted at Milner into the Northside system and paid for Q. Correct. 23 23 by the groundwater districts as storage water, and then not 24 No, huh-uh. I can't really testify to the 24 amount. I can just tell you that what was reported to us actually delivered because it was counted as a loss, 25 Page 86 Page 88 ACCURATE COURT REPORTING, INC. ACCURATE COURT REPORTING, INC. (208) 938-0213 FAX (208) 938-1843 (208) 938-0213 FAX (208) 938-1843

Q. That would be fine, if you'd like to. was delivered as -- to the field headgates for the 1 I'm not sure which Order that was. conversion projects and Sandy Pipeline. And that they were 2 2 Was that the May 19th Order of Blue Lakes 3 Q. charged, I think, for 9400 acre. 3 Q. Okay. Mr. Luke, you're aware of aquifer 4 2005? 4 recharge programs that have occurred in the past, aren't 5 Α. Probably. 5 Do you have a copy of it there? you, whereby water has been diverted into ESPA area canals 6 Q. 6 7 I don't think so. including the Northside Canal, specifically to recharge the Α. 7 aquifer through seepage losses; you're aware of those And I think -- was it at Page 21? 8 Q. 8 9 I don't know. I don't have the Order in front Α. 9 programs? 10 10 of me. A. Uh, yes. Q. And those programs have occurred in a number 11 Q. Can you remember what it said? 11 12 A. Well, I think, uh, it said essentially that of years in the past, including this year, 2006; isn't that 12 adding the storage delivery to the pond -- Sandy Pipeline correct? 13 13 A. Uh, I think water diverted to Northside in and the conversion projects -- on top of the normal water 14 14 15 delivery to Northside, did not increase recharge by the 15 2006 was really under Northside's normal natural flow same amount for that water. rights and just part of their charging up the system. To 16 16 17 Q. I believe that was the April 29th, 2006 Order. 17 the extent that there's incidental recharge from that (inaudible) could be -- there can be incidental recharge as 18 Is that your recollection? 18 19 19 A. No. a result. Q. And that incidental recharge occurs because of 20 (Inaudible comment.) 20 21 MR. FEREDAY: I'm sorry. Can we go off the 21 what? 22 record for a moment? 22 A. Well, in, like, most canal systems when you're charging it up at the beginning of the year it's --23 THE WITNESS: Sure. 23 conditions are dry and you will lose a fair amount of water 24 24 (Discussion off the record.) at the beginning of the year. 25 Q. (BY MR. FEREDAY) I'm showing you the Order 25 Page 89 Page 91 ACCURATE COURT REPORTING, INC. ACCURATE COURT REPORTING, INC. (208) 938-0213 FAX (208) 938-1843 (208) 938-0213 FAX (208) 938-1843 regarding IGWA Replacement Water Plan dated June 7th, 2005. 1 1 Q. And that will --2 Was that the Order you were referring to? 2 A. It's just a matter of maintenance cleaning out their canals and getting the system charged. 3 3 4 Q. And I note that you're referring to Page 6 in 4 Q. And that water loss will enter the aquifer? 5 5 paragraph 29 there? A. Uh, correct. 6 6 Q. And losses occur after the canal is charged, A. Correct. 7 7 as well, do they not? Q. That states in part "When the canals of 8 A. Correct. Not necessarily at the same rate. 8 Northside are fully charged and water is already seeping 9 9 into the ground, the addition of surface water on top of Q. In 2006, water was diverted at Milner into the Northside Canal under the Idaho Water Resource Board's 10 existing surface water will not significantly increase the 10 seepage"? 11 recharge water right; isn't that correct? Or am I mistaken 11 12 about that? 12 A. Correct. 13 Q. Is that right? 13 A. Well, I'm not certain. 14 Q. So do you know the reason why the Department 14 A. Yes. That's -- the paragraph says that. Q. You, Mr. Luke, know yourself whether that is a 15 of Water Resources did not extend a recharge credit to the 5 16 groundwater districts for their conversion and 16 true statement? Sandy Pipeline diversions in 2005, in their mitigation 17 THE RECORDER: (Inaudible comment.) 17 18 MR. FEREDAY (To the Recorder): Well, yeah. 18 plan? 19 A. I think the reason was in the -- one of the 19 Let's go -- we are back on the record, I hope? 20 THE WITNESS: I generally compare it with that 20 Orders that was -- I believe Mr. Steenson referred to 21 earlier, and this is Ms. Yenter's testimony. premise, yes. 21 22 Q. Could you describe what that reason was --22 Q. (BY MR. FEREDAY) So it's your position that A. Uh --23 the 9400 acre feet that was put into the canal and not 23 accounted as a seepage credit went somewhere? Or did it go 24 Q. -- in your own words? 25 A. I'd prefer just to refer to the Order. 25 nowhere? Page 92 Page 90 ACCURATE COURT REPORTING, INC. ACCURATE COURT REPORTING, INC. (208) 938-0213 FAX (208) 938-1843 | (208) 938-0213 FAX (208) 938-1843

A. I think that would be consistent with the A. I can't answer that question. I don't know 1 1 2 Order. 2 what was actually delivered for that purpose. Again, the 3 Q. And what do you think is more valuable to the 9400 acre-feet was what was charged to (inaudible). 3 aquifer if the goal is to increase recharge to the aquifer, 4 4 Q. So you're actually suggesting that maybe that a well that is turned off for one year or a well that is 5 9400 acre-feet never found its way into the canal? A. Um, no, I don't think I'm suggesting that. turned off for more than one year? 6 7 A. I couldn't answer that question 7 I'm just saying I don't know. necessarily. It's probably outside of my expertise. 8 8 Q. Okay. Let's assume that it did find its way into the canal. Are you saying that it did not go into the 9 Q. Okay. With regard to the Department's 9 10 aquifer? 10 determination that some wells were supplemental and, A. I think some of the water could have gone into 11 therefore, their curtailment acres could not get full 11 credit, do you recall the testimony this morning from 12 12 the aguifer. Um, I don't know that that storage that was Ms. Yenter? delivered to the canal company was really anymore storage 13 13 14 than what's normally delivered to Northside and . . . you 14 A. Yes. 15 Q. Did you have any role in evaluating or making 15 know, the -- I -- I don't know the answer. policy concerning the credit to be given for those acreages 16 Q. So you don't know where it went, but you 16 17 where wells were deemed to be supplemental? 17 don't -- you are not saying that it didn't go into the 18 aquifer; is that correct? 18 A. You're referring to the reduction acres? 19 Q. Yes. With reference to reduction acres. 19 A. Correct. 20 Q. The 9400 acre-feet, if, in fact, it was 20 A. Um, no. I was involved in discussions, but diverted at Milner as we believe it to have been, Mr. Luke, 21 not any decisions. My involvement was more in the 21 22 22 does that water actually just float on top of the other analysis. 23 Q. Do you recall any discussion or analysis of 23 water that's already in the canal, or is it commingled? 24 A. It's commingled. 24 the determination that a 30 percent credit would be given 25 Q. Okay. With regard to the irrigated in 2004 under certain circumstances for those acreages where a Page 93 Page 95 ACCURATE COURT REPORTING, INC. ACCURATE COURT REPORTING, INC. (208) 938-0213 FAX (208) 938-1843 (208) 938-0213 FAX (208) 938-1843 1 requirement as to credit for voluntary curtailments, did 1 supplemental well was deemed to exist? 2 you hear the testimony this morning of Ms. Yenter about 2 A. Are you talking reduction or . . . 3 that? 3 Q. Reduction, yes. Do you recall that 30 percent 4 A. Yes. 4 figure at all? Q. Could you describe for us the reasons why the 5 A. We didn't give 30 percent reduction on 6 Department disqualified from consideration as a curtailment 6 supplemental -- or reduction -- on the reduction acres. 7 acre those acres that were not irrigated in 2004 with Q. Didn't you give credit to the tune of 7 8 groundwater? 30 percent in some circumstances, based on your conclusion 9 A. That was a decision of the Director. 9 that there was a supplemental well usage on the property? A. Well, I thought on reduction acres on 10 Q. Did you have a role in that decision? 10 11 Α. 11 supplemental we didn't -- for supplemental there was no --12 Q. Was it due to an interpretation of the 12 the land continued to be irrigated, but we didn't get any 13 groundwater districts' mitigation plan that Mr. Steenson 13 credit. Uh, if the land was not irrigated, then, yes, we 14 referred to in his colloquy with Ms. Yenter; do you know? 14 did give 30 percent. So if it was land in which the 15 No, I'm not sure. 15 groundwater right was supplemental, it can have water. And 16 Q. If the wells that were not pumped in 2004, and 16 if it was not irrigated, you know, we gave 30 percent 17 17 whose acreages, therefore, were ineligible, were turned credit. 18 back on tomorrow and then shut off next year, would they 18 I'm sorry. I didn't understand your question. 19 come back into eligibility next year because they had been 19 Q. Perhaps you can refer to the Exhibit 1 which 20 pumped this year? describes the reduction acre analysis. And I believe if 21 21 A. Is that just a hypothetical question? you refer to eligibility code 3 on Page 6 you'll find the 22 22 Q. That is a hypothetical question, that's right. notation that it was irrigated in 2004, not irrigated in 23 23 A. Assuming that we were looking at a mitigation '05, groundwater supplemental 30 percent credit. 24 plan next year? 24 A. Correct. And as I just said, yeah -- I didn't 25 Q. Yes. understand your question originally -- it was just that. Page 94 Page 96 ACCURATE COURT REPORTING, INC. ACCURATE COURT REPORTING, INC.

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North Snake Groundwater District that Northside was over 1 If it was not irrigated in '05, but irrigated in '04, and 20,000 acre feet for conversion. it was supplemental, we gave the 30 percent credit. 2 2 3 Q. Correct. Q. And why was 30 percent chosen? 3 A. The Department determined the excess water as 4 A. Uh, that would be a better question or 4 a result of the some of conversion project when we looked 5 5 Mr. Wylie -- or Dr. Wylie, but I believe it was a figure at the surface water delivery and/or the combined surface from a groundwater model. It was consistent with the 6 7 water groundwater use under those same projects had it groundwater model and how the groundwater model treated 7 exceeded four acre-feet for being normal duty in that area supplemental wells. And I can't explain the basis for the 8 8 9 of groundwater rights. 30 percent, but I'm pretty certain that's where the figure 9 10 So if particular delivery combined came from. So we were being consistent with how that 10 groundwater/surface water use or just surface water 11 11 situation was applied in the model. exceeded four, we calculated four acre feet at a value 12 Q. That was not, then, a policy choice that you 12 associated with four acre-feet. And any additional was 13 13 made? viewed as excess and then spread out across the Northside A. No. 14 14 Q. What was the Department's policy goal or 15 delivery area. 15 Q. And input to the SPA groundwater model as reasoning in declaring a reduction acre would be rejected 16 16 17 aquifer recharge, correct? 17 if it were not irrigated with groundwater or in a A. Correct. Except that I think some portions mitigation plan in 2004? 18 18 19 of -- of conversion projects and, uh, the excess was 19 A. Again, that -- that wasn't my decision. I 20 think it just had to do with, you know, actual reduction in actually taken out, because, uh, portions of the Northside 21 Canal service area and some of the conversion projects fell 21 modeling acres that just were not irrigated the prior year. 22 outside of a, uh, area of impact under the delivery call, I think it was just reviewed as a real reduction; an actual 22 23 which was determined by the groundwater model, which has to 23 reduction. 24 Q. Okay. With regard to the excess deliveries do with the accuracy. I can't explain it. Dr. Wylie can. that we discussed with Ms. Yenter, did you have any role in So I guess some of the delivery was not actually -- some of 25 Page 97 Page 99 ACCURATE COURT REPORTING, INC. ACCURATE COURT REPORTING, INC. (208) 938-0213 FAX (208) 938-1843 (208) 938-0213 FAX (208) 938-1843 reevaluating or establishing policy with regard to how the excess -- a small portion of it was not actually excess deliveries would be credited? counted and -- as well as some conversion for it, because 3 A. You're referring to diversion projects? 3 it fell outside of that accuracy. 4 4 Q. Outside of that "trimline," if you will? Q. Correct. 5 5 A. Yes. A. Yeah. I had some role in assisting on the 6 6 Q. But the excess water that did fall within it analysis for the data. 7 Q. The excess deliveries were credited as was credited to the aquifer, correct? 8 recharge; isn't that correct? 8 A. Correct. 9 9 Q. Do you have any explanation as to why the 9400 A. They were. acre-feet that was delivered down the canal system was not 10 Q. And those were amounts of water that were 11 diverted down to Northside Canal, correct? 11 credited to recharge, when this excess that the Department 12 found through deliveries was credited to recharge? 12 A. Uh, that was water that was actually reported 13 13 as diverted at the field headgates by the groundwater Do you have any explanation for the 14 difference? 14 district and Northside Canal. 15 15 Q. But that water was storage water, was it not, A. No. Other than, I guess, the one difference, 16 that was acquired by the groundwater districts, and then 16 though, is that the Department had accepted that this 17 delivered into the Northside Canal system? 17 excess water was part of the water delivered to the canal, 18 18 and that it was just excess water. 19 Q. So that water was diverted down the Northside 19 Q. Do you know why the excess water was credited 20 20 Canal system, correct? across the Northside system, as opposed to being credited 21 21 A. Yes. at the point of delivery? 22 22 Q. Those excess deliveries were credited to A. Uh, not for sure. I believe it -- you know, 23 23 we didn't really know where the water went. It was just an recharge, correct? 24 A. Twenty thousand- -- referring to . . . -- was equitable approach, I believe. 25 reported to the Department from the groundwater district --25 MR. FEREDAY: No further questions. Page 100 ACCURATE COURT REPORTING, INC. ACCURATE COURT REPORTING, INC.

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MR. DREHER: Ah. Okay. All right. I knew 2 Q. Did you hear the discussion today about the 2 something was missing. Okay. Excuse me. You may proceed. 3 relative benefit of shutting off a supplemental well --3 Q. (BY MR. FEREDAY) In those evaluations that 4 there was some testimony about the issue of supplemental 4 5 led to the 30 percent figure, did you assume that wells. Did you hear that today? 5 groundwater deliveries, a duty of water, would be four 6 A. Yes, I did. acre-feet per acre of diversions from that groundwater 7 7 Q. Has your work with modeling ever included 8 well? evaluating what the effect of shutting off supplemental 8 9 A. Uh, we were assuming that the groundwater and wells might be? Have you ever looked at the supplemental 9 surface water combined would yield a four acre-feet per well question? 10 10 A. So your question is, uh, land irrigated 11 acre. 11 12 Q. Have you evaluated what the typical diversion partially by surface water and partially by groundwater? 12 13 for a groundwater-irrigated acre is in the Northside Canal 13 Q. That's correct. 14 Company service area where only groundwater is used; what A. And then what would be the effect of turning 14 the duty of water typically would be there? 15 15 off the groundwater well? 16 A. No, I have not. 16 Q. Correct. A. Um, you're asking how we -- how we evaluated 17 Q. Do you believe that it would be the same --17 that is four acre-feet -- as it is with surface water? 18 18 that? 19 A. I guess in the absence of any other 19 Q. Yes. How, in general, you have evaluated those kinds of situations in the past using the Model; if 20 information I would have to accept four. 20 21 21 Q. The duty of water of four acre-feet, if it is you have. 22 water that is delivered down the Northside Canal it 22 A. The, uh -- in this case we weren't supplied 23 involves more than that, doesn't it, to get it there to the 23 with any case what percentage of the time the groundwater 24 field headgate to carry water? well was used. So we used the number that we determined 24 25 during model calibration that, in general, lands in the 25 A. Yes. There are losses. Page 113 Page 115 ACCURATE COURT REPORTING, INC. ACCURATE COURT REPORTING, INC. (208) 938-0213 FAX (208) 938-1843 (208) 938-0213 FAX (208) 938-1843 1 Q. Do you think that the losses of somewhere in Northside service area uses the groundwater 30 percent of 1 2 2 the time. So that's the number we used. the range of 30 percent in the Northside system are a Q. The 30 percent number, then, came through your 3 fairly reasonable or reliable figure to use -- 30 percent? 3 previous experience using the Model for mixed source A. I've heard it commonly used. I -- I don't --4 5 don't know if it's been measured, but I've heard it very 5 irrigation land -- mixed being ground and surface? 6 A. Yes. ĥ commonly. 7 Q. Do you know how those data were gathered with 7 Q. Would that surprise you that it would be as regard to the previous model runs? How long a particular 8 high or as low as 30 percent, or does that sound like a 8 9 well is run and how much -- surface water irrigation and \$09 reasonable number, in your experience, for canal losses? forth, how those data were collected? 10 A. Uh, I don't -- it didn't sound -- doesn't 10 11 A. Um, the -- we used the water duty number that, 11 sound shocking to me. 12 12 uh, it took about four acre-feet -- four feet of water per Q. Okay. To your knowledge, has there been any acre to adequately irrigate land in the Northside area. 13 study done of losses in the Northside Canal system? 13 14 And then, um, saw how much, uh, water was left over for the 14 A. None that I'm aware of. 15 15 mixed land, and then figured that they had to Q. The Model has been structured so that it can 16 evaluate the effects of seepage from canals and laterals on 16 make up the difference using groundwater. 17 Q. Based on a four-acre foot per acre delivery at 17 the aquifer; isn't that correct? the field --18 18 That's correct. 19 19 A. At the field headquarters, yes. Q. Could you describe to us how the Model looks 20 THE RECORDER: (inaudible comment.) 20 at canal seepage? 21 MR. DREHER: Mr. Fereday, if you could pause 21 A. During calibration? 22 for a moment, we're not sure we're picking up Dr. Wylie's Q. Well, first during calibration and then 22 23 23 responses here. through an -- a sample model run. 24 (To the Recorder): Okay. So we don't have 24 A. During calibration we took a -- just a 25 the digital recorder anymore? percentage of the water delivered, much the way the canal Page 116 ACCURATE COURT REPORTING, INC. ACCURATE COURT REPORTING, INC. (208) 938-0213 FAX (208) 938-1843 (208) 938-0213 FAX (208) 938-1843

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A. Yes.

THE RECORDER: (Inaudible comment.)

A. We did an analysis on the Northside Canal, companies, uh, figure it. So just from the delivery map 2 1 that's correct. out, the trace of the canal, and, uh, subtract off the 2 2 Q. Do you recall how much water was used in the 3 percentage -- that percentage over that reach of the canal. 3 Once it got to the service area, then, uh, we Northside Canal, or diverted into the Northside Canal for 4 4 5 that exercise, at least according to your model work? typically did not put in the -- the canals and laterals, 5 A. I think we were looking at a potential because water lost in the service area was much like, uh, 6 6 7 recharge of right around 300 cfs diversion. And there was 7 deep percolation during irrigation. Q. So the Northside Canal was modeled in that 8 some assumption about how far that water would make it down 8 9 context as part of the calibration exercise for the Model? the canal. 9 10 Q. Do you recall what the results of that model 10 A. That's right. Q. And I take it, then, that the Model 11 run were -- how much recharge occurred? 11 A. Uh, it would -- it was all of it. Uh, there 12 calibration was assuming that losses in the main canal of 12 was some assumption that the 300 cfs, it would get so far whatever number was accepted -- let's take 30 percent --13 down the canal. I don't remember how far. But all of it found its way into the aquifer? 14 14 15 15 A. That's correct. was recharge. Q. And the amount of water that was delivered out 16 Q. With regard to the groundwater districts' 16 conversions and acreage reductions that we have been 17 of the main canal into the network of laterals and on to 17 discussing today, you've heard, haven't you, the testimony actual irrigated lands, that was a second subset of loss, 18 19 concerning the fact that the Department did not extend any 19 if you will; is that correct? seepage credit as recharge for the deliveries to 20 A. That's correct. 20 Q. And that subset of loss was subject to another 21 conversions, for example, and to the Sandy Pipeline and 21 22 coefficient. Whether it was 30 percent or 15 percent, it 22 Ponds Project? Have you heard that? 23 was another coefficient; is that right? A. I have heard that, yes. 24 A. No. Once it reached the service area, in most 24 Q. Do you know why the Department did not extend 25 cases we just took, uh, the water that reached the service 25 that credit for seepage losses for the water carried to Page 117 Page 119 ACCURATE COURT REPORTING, INC. ACCURATE COURT REPORTING, INC. (208) 938-0213 (208) 938-0213 FAX (208) 938-1843 FAX (208) 938-1843 area less ET. And then the rest of that went in as aquifer 1 those projects? 1 2 recharge. 2 A. I -- I'm afraid you would have to look pretty 3 3. hard to find somebody more ignorant on policy than me. Q. Okay. 4 Q. I take it that's a "no"? 4 A. Less ET and precip. Q. Yes. Moving forward from calibration, the 5 5 I have no idea. calibration exercises of the Model, have you used the Model 6 Q. And because that's a policy question, is that 6 or seen it used to evaluate the effects of seepage losses 7 right? 8 from canals, laterals, or surface water irrigation; the 8 A. That's right. 9 9 effects on the aquifer? Q. I'd like to ask you a hypothetical question 10 A. Surface water irrigation, I've not done it 10 about a hypothetical well a few miles back from the canyon 11 with canals. 11 rim in an area that would be relevant to the Blue Lakes or 12 12 Q. Okay --Clear Springs facilities that we're discussing today. 13 13 A. Well, uh, this spring we looked at potential If that well is shut off for one year it will 14 recharge operations on canals. 14 have a certain predictable effect, according to the Model, 15 Q. Could you describe that exercise this spring 15 correct? 16 with regard to using the Model to predict recharge from 16 A. Correct. 17 Q. On those spring flows? 17 canals? 18 A. Just, uh, took a shape file and laid it 18 A. Uh-huh. 19 Q. Is that a "yes"? 19 over -- of the canal, laid it over the Model grid, and 20 selected all the cells in the Model grid that intersected 20 A. That's a "yes." Sorry. 21 Q. And if that well is kept off for a period of 21 the canal shape file. And extracted that information and 22 vears, that -- what will be the effect of that -- of that 22 put in, uh, a uniform linkage value and -- and ran the 23 Model. 23 shutoff on the spring? 24 24 Q. Is the Northside Canal included in that A. It will slowly increase. Q. With regard to the 9400 acre-feet that you've analysis this spring? 25 Page 118 Page 120 ACCURATE COURT REPORTING, INC. ACCURATE COURT REPORTING, INC.

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A. Um, my -- my opinion is that, you know, it was heard us discuss at some length already today, do you have 1 measured as being delivered to the field, uh, it ought to 2 an opinion as to where that 9400 acre-feet went that was 2 3 be put in at the field. diverted into the Northside Canal and then was not 3 Q. Okay. Do you agree that the dry-up of even a delivered to actual diversions out onto the ground at the 4 4 very small parcel of irrigated land on the ESPA that's 5 conversion sites or into the Sandy Pipeline? 5 irrigated with groundwater would have a positive effect on 6 A. There -- I think there are three possible 6 aquifer recharge, or would result in a decrease in 7 fates: one would be evaporation, one would be deep 7 percolation, and the other would be returns. 8 depletions of the aquifer, if you will? 8 9 A. It would. 9 Q. Deep percolation would be recharge to the 10 MR. FEREDAY: No further questions. aquifer? 10 MR. DREHER: Okay. Mr. Steenson. 11 A. Recharge to the aquifer, yes. 11 Q. Would you expect that that 9400 acre-feet 12 12 **CROSS-EXAMINATION** would have a fate any different from any other similar 13 13 14 BY MR. STEENSON: 14 component of water in the canal over that irrigation 15 Q. Mr. Wylie, I'm Dan Steenson. I represent 15 season? Blue Lakes Trout Farms. We haven't met. A. No. 16 16 Q. With regard to the 1380 acre-feet, do you 17 A couple of guestions. You just mentioned 17 that you lobbied for a certain way in model calibration or recall what that number was referring to? 18 19 treating water delivered to converted acres, correct? 19 A. The amount of water delivered to the 20 A. That was a model use not calibration. 20 conversion acres. 21 Q. Calibration? Q. That was excess of the duty of water four 21 A. Yes. acre-feet per acre? 22 22 A. Yes. 23 Q. Can you describe -- you know, explain that 23 lobbying process that you just mentioned to me, what did Q. Do you recall that testimony to the effect 24 25 that that water was recognized as having recharged the you mean by that lobbying for (inaudible)? Page 123 Page 121 ACCURATE COURT REPORTING, INC. ACCURATE COURT REPORTING, INC. FAX (208) 938-1843 (208) 938-0213 FAX (208) 938-1843 (208) 938-0213 aquifer? Do you recall that? 1 A. I just said that, you know, if, uh, the 1 2 A. Yes. groundwater users had, uh, leased that water and that it Q. Did you have a role in determining that -- or 3 was delivered to that field, then they ought to get full 3 4 credit for it. 4 evaluating it? 5 Q. How much have you lobbied for that would you 5 A. I, um, had a role discussing -- involved in discussing what to do with it, as well as doing the 6 explain? 6 7 A. I believe, um, Mr. Spackman, Mr. Luke, 7 evaluation, yes. 8 Cindy Yenter, and the Director were involved in those Q. Could you describe what the substance of 8 9 those considerations were, with regard to the 1380 or the 9 discussions. excess water? Why was it determined, for example, that 110 Q. Was that a frequent occurrence that with 10 would be spread through the Northside system? regard to some particular use of the Model or some -- other 11 12 other issues related to the Model there were issues that 12 A. There was some concern, because it was above were the subject of some opinion and debate and resolution the four acre-feet of common water duty in the area. There 13 13 14 through group discussion (inaudible)? were some, uh -- I guess I can say I lobbied that that 14 water should be put back -- put in, uh -- into the Model at 15 A. No. 15 16 Q. Were there any other issues where you or 16 the spot where the well was. 17 Now, there was, uh, some concern that it was 17 someone else would have lobbied one perspective against above the four acre-foot water duty, so it shouldn't be put 18 another perspective and another one lobbied by somebody 18 19 in like that. And the resulting, as you saw, was that it else used in developing the Model? 19 20 was spread over the surface-water irrigated lands within 20 A. During development, yes, there were extensive. 21 the Northside surface area. 21 But that's not the focus of this. Q. And scientifically which is more reliable, in 22 Q. (Inaudible.) 22 23 your view, in terms of evaluating the recharge effect, to . 23 A. Uh, during model development there were many 24 discussions about how to go about developing the Model. calculate it as having been spread, or calculate it at the 24 25 Q. Okay. And by that do you mean people would 25 site of the converted acre? Page 122 Page 124 ACCURATE COURT REPORTING, INC. ACCURATE COURT REPORTING, INC. (208) 938-0213 (208) 938-0213 FAX (208) 938-1843 FAX (208) 938-1843

have varying opinions and agreements, disagreements about are you familiar with that process? 4 2 issues between the Model? A. Yes. 3 3 A. I'd say -- I could give you an example. Would Q. And it's already hearing (phonetic), after 4 that --4 that wetting process, three quarters or more with capacity, 5 Q. That would be fine. 5 isn't it fair to say that the incremental addition of water 6 A. Okay. During model development, um, we 6 to that canal results in a lower percentage seepage than 7 were -- we discussed how to handle tributary underflow. 7 the percentage loss from a less full canal? 8. 8 That's, uh, flow into the aquifer from, uh, surrounding A. So what you're asking is if we add a little aguifers. So we debated how to handle that. And there 9 9 bit to an almost multiply full canal are we substantially 10 was -- there was an extensive debate. 10 going to change the leakage? No, we aren't going to 11 Some people wanted to have, uh, a seasonal 11 substantially change it. change in that signal, so that nearing, say, spring maybe 12 Q. So would it be fair to say that there would be 12 13 the recharge coming in through the tributary basins would 13 somewhat of a gradient, if you will, in loss from a hundred 14 be higher and in the fall it would be lower. And some 14 percent in an empty canal to -- as a percentage --15 people thought we really don't know what it looks like, 15 A. Uh-huh. Q. -- to something closer to zero in the 16 and, uh, assigning so much detail to it might erroneously 16 17 lead somebody to conclude that we know more about the flow 17 incremental addition to a full canal? 18 into the aquifer than we do. In the end, we wound up 18 A. Probably not zero, but you would ositonially changing it during wet years up and dry years down, but 19 19 (phonetic) approach some value, in the Northside presumably 20 leaving it on a annual basis was flat. 20 pretty close to 30 percent. 21 Q. And so as a result in this particular example 21 Q. And the 30 percent number is a number -- I 22 the consensus conclusion, I would take it, may or may not 22 guess I would suggest to you that it's a received number. 23 represent reality. It represents debate, discussion, and 23 as far as you're concerned, not one that you know of any 24 24 basis for? 25 But I take it there's a level of uncertainty 25 A. That's right. Page 125 Page 127 ACCURATE COURT REPORTING, INC. ACCURATE COURT REPORTING, INC. (208) 938-0213 FAX (208) 938-1843 (208) 938-0213 FAX (208) 938-1843 1 in terms of knowing whether or not your consensus decision 1 Q. So I'll represent to you that the Department 2 represents reality? Director issued an order entitled "Order regarding IGWA 3 A. That's correct. Replacement Water Plans," with reference to the Blue Lakes 4 Q. And that was an example of other circumstances water delivery call, and it's dated June 7th, 2005, in 5 in which that kind of discussion and resolution of issue which it was suggesting that -- or it was stating that it 6 process in total; is that correct? 6 needed, quote, "technical analysis of the actual additional 7 A. That's correct. 7 seepage losses in the North Snake." R Q. Okay. Now, with respect to canal seepage, 8 Now, North Snake and the NSCC delivery system, considering a canal in cross-sections it looks kind of 9 9 resulting from the delivery of additional surface water, 10 like a -- generally a canal would look somewhat "U" shaped 10 further suggested that the Department cannot credit IGWA 11 with banks on the outer edges of the "U" and with a body? 11 with replacement gains unless the gains are computed based 12 A. That's correct. 12 on actual seepage data or the surface water added to the 13 Q. Now, the amount of water lost, I take it, from 13 NSCC delivery system," close quote. 14 the 300 cfs example we discussed, isn't it correct that the 14. So doesn't that sound reasonable that to amount of water lost from a half-flow canal would be a 15 assign a value to the incremental addition to the canal at 16 greater percentage of the water in that canal than the 16 some amount of water, rather than just use some received 30 17 amount of water lost from a three quarters flow of a full percent figure, there needed do be some technical basis for 17 18 canal? 18 that incremental addition of seepage? 19 A. For instance, a hundred percent of the 300 cfs 19 A. Yes. Uh, I think that's saying that the 20 we thought would have been lost. 20 Department needs to know what's happening to that water in 21 Q. And that would occur because the canal can 21 order to give anybody credit for it. 22 carry a whole lot more than that amount of water, correct? 22 Q. Now, 30 percent is a figure, then, when you 23 A. That's correct. have calculated, uh -- done all the runs to calculate the 23

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effect of irrigation deliveries on aquifer levels over

time. As I note, you're done getting a description that

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Q. So if you have a canal that's already had that

initial wetting to begin part of the irrigation season --

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 A. I would have included that in the evaporation, you can work with here to understand in terms of working. 1 but yes, that's it. I take it you've used 30 percent as the figure for 2 Q. Okay. Secondly, um, I want to address your 3 contributions to the aquifer from canals such as the 3 term -- your use of the word "lobbied." 4 Northside Canal. When you have modeled the effect of 4 Wouldn't a better description of what you irrigation over the last hundred years or so on the ESP, is 5 6 described be you had a proposal? that the loss figure that you used; 30 percent? 6 7 A. I had a proposal, yes. A. Yeah. Over the calibration period. 7 8 Q. Okay. And in terms of that process, for the Q. And you have done -- as a result of these 8 model runs -- you developed information to suggest the sake of the record, I want to make it clear that when you 9 were describing the discussions in consideration of various 10 impact of irrigation on aquifer levels over time; is that 11 proposals for handling tributary underflow, that was not correct? 11 12 discussions within the Department, per se, that was 12 A. That's correct. Q. But, again, it's based on a 30 percent figure discussions amongst the technical modeling committee that 13 13 included consultants representing various interests; is about which you have no technical basis; is that correct? 14 15 that not correct? 15 A. Yes. They're -- they're received numbers. A. That -- yes. It was the Eastern Snake 16 MR. STEENSON: Thank you. I have nothing 16 17 Hydrologic Modeling Committee where those discussions took 17 further. 18 place. 18 MR. SIMPSON: Mr. Simpson. 19 Q. And then related to that, when you 19 MR. SIMPSON: I have no questions. 20 described -- you were asked the question who was involved 20 MR. DREHER: Mr. Fereday, Redirect. in the deliberations about what to do with the excess water MR. FEREDAY: Just one moment, please. 21 21 22 beyond the four acre-feet per acre, you mentioned 22 23 REDIRECT EXAMINATION Mr. Spackman, Mr. Luke, and Ms. Yenter, and you mentioned 24 BY MR. FEREDAY: me. But I didn't make the decision as to how to spread 25 that excess water, as I recall; did I? 25 Q. Dr. Wylie, with regard to the 30 percent loss Page 129 Page 131 ACCURATE COURT REPORTING, INC. ACCURATE COURT REPORTING, INC. (208) 938-0213 FAX (208) 938-1843 (208) 938-0213 FAX (208) 938-1843 in the Northside Canal, and that being a received number, 1 A. I don't remember, um -- I guess all I remember is that it wound up getting dispersed. isn't it a fact that the Model development and calibration 3 Q. And in a related question, when I ask you to 3 used that number? 4 simulate some particular set of circumstances using the 4 A. Um, I don't remember the actual number used, 5 Model, I don't tell you how to do that, do I? 5 but I, uh, suspect that Bryce Contour, who set that up, 6 consulted with Ted Diehl and got an order from Mr. Diehl. 6 A. No. 7 MR. FEREDAY: No further questions. 7 Q. One last point of clarification. This morning Ms. Yenter testified that when water was -- and I'm 8 MR, DREHER: Okay. Thank you. 8 9 9 Dr. Wylie, I do have a couple points of paraphrasing it as best as I can remember it, when water 10 clarification. was delivered to conversion acres that were served with the 11 supplemental well, then the amount of groundwater pumped or 11 12 withdrawn through that supplemental well was subtracted 12 VOIR DIRE EXAMINATION BY MR. DREHER: 13 from the credit that was given for the surface water 13 14 Q. First off, I missed what you said you thought conversion, and I didn't remember that that's the way that would be the fate of the 9450 acre-feet of water. What was 15 was done. 15 16 the fate that you had said? 16 A. No, I took the amount of water that was 17 17 A. I said there were three possible things. It delivered to the acres -- the conversion acres. I didn't 18 subtract the pump water. 18 could be loss to evaporation, it could, uh, be loss to deep 19 percolation, and it could, uh, go to returns -- a return to 19 Q. So if -- if, in fact, the -- there were the river. supplemental wells that were -- that were used during the 20 21 year when surface water was being delivered for purposes of Q. Okay. Isn't there a fourth possibility 22 wherein that water may have been diverted by the canal and 22 conversion, we didn't -- we just presumed that that didn't wasn't lost to evaporation; deep percolation? And what 23 have any effect; is that correct, number one? And number 23 24 two, is that a valid way to address that? 24 didn't return to the river would have been distributed to 25 other shareholders on the Northside Canal system? 25 A. In a sense the water that is pumped -- or the Page 132 ACCURATE COURT REPORTING, INC. ACCURATE COURT REPORTING, INC. FAX (208) 938-1843 (208) 938-0213 FAX (208) 938-1843 (208) 938-0213

other members of the district? the fact that it has been discussed. So we'll introduce 4 1 2 A. Somewhat, ves. 2 that as Exhibit 9. 3 Q. Could you tell us how you interact with those MR. DREHER: Mr. Steenson, Mr. Simpson, I 3 assume there's no objection to this? 4 members, generally? 4 5 A. Uh, by answering, uh, phone calls, interacting MR. STEENSON: No. 5 with them at meetings with questions, and talking with them MR. SIMPSON: No objection. 6 6 7 about their concerns and -- and, uh, stuff in the areas 7 MR. DREHER: And we'll admit Exhibit 9 together with the previous eight exhibits that have already 8 concerning water. 8 Q. How often do you have meetings for your been admitted. 9 9 (Exhibit No. 9 was admitted 10 membership? 10 11 A. Uh, for the total membership we have an annual into evidence.) 11 meeting, uh, plus an annual budget meeting, and we have had 12 MR. DREHER: Dr. Wylie, I think we're done. 12 13 two or three emergency or, uh, other meetings. 13 You're excused. 14 Q. Do you have open meetings periodically, 14 Mr. Fereday. 15 MR. FEREDAY: Mr. Director, at this time I 15 though, for the members to attend if they wish? 16 would like your indulgence in allowing Brad Sneed to A. We have, uh, monthly board meetings that 16 examine the next two witnesses from the groundwater 17 anyone can attend. 17 18 Q. Do you know approximately how many members 18 districts. 19 belong to the North Snake Groundwater District? 19 MR. DREHER: Certainly. 20 20 There is approximately 400 to 410. Mr. Sneed. 21 Q. And do you know how many acres are 21 MR. SNEED: Mr. Director, I will now ask that Mr. Rex Minchey take the stand as IGWA's next witness. 22 collectively held by the members within the North Snake 22 23 MR. DREHER: Mr. Minchey, will you raise your 23 **Groundwater District?** 24 right hand, please. 24 A. To the best of my recollection, it's around 25 25 105- to 110,000. Page 145 Page 147 ACCURATE COURT REPORTING, INC. ACCURATE COURT REPORTING, INC. (208) 938-0213 FAX (208) 938-1843 (208) 938-0213 FAX (208) 938-1843 1 1 JOHN REX MINCHEY. Q. Do you recall last spring and early summer 2 having been duly affirmed under oath testified 2 when the Department issued its two delivery call Orders 3 as follows: with respect to the Blue Lakes delivery call and the 4 MR. DREHER: Thank you. You may be seated. 4 Clear Springs delivery call? And please begin by stating your name and address for the 5 5 A. Yes, sir. 6 Q. And did there come a time when you discussed 7 7 MR. MINCHEY: My name is John Rex Minchey, those Orders with members of your groundwater district? 8 245 Ranchview Road East, Jerome, Idaho. 8 A. Yes, sir. 9 9 Q. And what was their general reaction to those DIRECT EXAMINATION 10 two Orders? 10 11 BY MR. SNEED: 11 A. Well, their general reaction was, uh, how can 12 Q. Good afternoon, Mr. Minchey. 12 this be, but we'll, uh -- we'll do what we have to do to 13 What do you do for a living? 13 mitigate so that we can continue to farm. 14 A. I'm maintenance manager of Jerome Cheese. 14 Q. And what specifically did those two Orders 15 Q. Are you involved at all with the North Snake 15 require your members to do last year in order to avoid 16 **Groundwater District?** involuntary curtailments? 16 17 17 A. Yes. A. Uh, voluntary curtailment. 18 Q. Could you tell us how you're involved with the 18 Q. Anything else? 19 North Snake Groundwater District? 19 A. Uh, continuing with the, uh, conversions and, 20 A. Well, in one aspect I'm a representative for 20 uh, basically that's it. 21 Jerome Cheese as a member of the North Snake Groundwater 21 Q. Did the Orders after the total acres that your 22 District, as well as Unit 3 water users. And the other 22 members were allowed to farm last year? 23 Not to my recollection. 23 aspect I'm on the Board of Directors. 24 Q. As a member of the Board of Directors for the 24 Q. Did the Orders require that -- or was it a North Snake Groundwater District do you interact with the result of those Orders that some of your members converted 25 Page 146 Page 148 ACCURATE COURT REPORTING, INC. ACCURATE COURT REPORTING, INC. (208) 938-0213 FAX (208) 938-1843 (208) 938-0213 FAX (208) 938-1843

Q. And I think you said earlier that there was. 1 groundwater irrigated acres to surface water irrigated 1 roughly, 40,000 acre-feet that were diverted for conversion 2 acres last year? 2 3 projects and the Sandy Pipeline; is that correct? A. I believe that helped to facilitate some of 3 the additional conversions that happened in 2005. The 4 A. That's correct. 4 5 Q. And do you remember what proportion of that largest thing that the Orders did is facilitate a voluntary 5 was diverted for the conversion projects and not the curtailment of around 8,000 some acres, I believe. 6 6 7 Q. With respect to the conversion water last 7 Sandy Pipeline, roughly? year, who sold that water to North Snake Groundwater 8 8 A. There was, uh, about 10,000 delivered -- uh, diverted -- probably 15,000 -- 13,000 diverted for the 9 9 District? 10 A. It was a, uh -- different places. Water was 10 Sandy Pipeline, considering the losses and all. And there 11 was -- the balance of that was delivered -- was diverted rented from Bell Rapids. From, uh -- surface water users 11 up in the, uh, 110, 120 Water District area, uh, rented 12 for the conversions. 12 some water, I believe, from Pocatello. Different places 13 Q. Okay. So, roughly, 26- to 27,000? 13 A. 27 something -- 28,000. like that we worked with Idaho Groundwater Appropriators 14 14 15 Q. And so out of that 26- or 27,000, you said 15 for that water. Q. Do you know how many total acre-feet your 16 roughly about 20,000 was delivered to --16 members purchased last year in surface water for their 17 A. Our accounting was about 20,400 and some, I 17 18 believe, actual delivery. conversion projects? 18 19 19 A. It seems to me like it was in excess of Q. Do you have an idea what happened to the difference: the 6.000 or so difference between the two 20 80,000, but for just the conversions --20 Q. Yes, just last year's conversions. 21 21 numbers? 22 A. Um, yeah. We're charged a 30 percent, uh, A. For just the conversions and the 22 23 seepage fee on any water that's put in the canal -- all 23 Sandy Pipeline was 40 thousand plus. 24 farmers are. All irrigators are charged a 30 percent loss 24 Q. Do you recall roughly how much you paid or fee. When it's diverted from Milner to wherever you 25 your members paid per acre-foot for that replacement water 25 Page 149 Page 151 ACCURATE COURT REPORTING, INC. ACCURATE COURT REPORTING, INC. (208) 938-0213 FAX (208) 938-1843 (208) 938-0213 FAX (208) 938-1843 just for the general range? divert, you lose 30 percent. 2 A. To the best of my knowledge -- and we didn't 2 Q. Is that pretty standard? 3 pay the same amount per acre so it varied somewhere between 3 A. That's standard as far as everything I know. 8, and 10 and 11 an acre-foot. Do you know whether the Department gave 4 4 5 Q. How was the surface water delivered to your 5 Northside Groundwater District, through the North Snake members conversion projects last year? ĥ 6 Groundwater District, any mitigation credit for those 7 A. Northside Canal Company canals. 7 losses in the canal? 8 Q. Did you have a contract with them to do that 8 A. Not in anything I have been able to tell in 9 or was it --Э the documentation. 10 Α We have an agreement, yes. 10 Q. And when did you first discover that they were Q. Was it a handshake agreement or a written 11 11 not giving any credit for those losses? 12 agreement? A. Sometime between May 12th and May 16th, when 12 A. Well, it's more in writing, because, uh, they 13 13 we received the, uh, compiled data from the Department 14 require us to request that they deliver our water, and they 14 telling us what the conversions and the, uh, idled acres request from the Department the approval of the Department 15 15 had contributed to the mitigation plan. On the 16th we 16 to deliver the water, so it's all writing. 16 discussed that in a Board meeting at length. Q. And how much did Northside Canal Company 17 17 Q. And that's May 16th of this year? charge the Water District for delivery of that surface 18 18 A. May 16th, 2005. 19 water to conversion projects? 19 Q. 2006? A. That's called a "willing fee" and that's three 20 20 '06. Thank you, I'm not nervous. 21 dollars per acre-foot. 21 Q. And when you said we discussed this at length, 22 was that the Board members discussed it or --22 Q. Do you know how many acre-feet of surface water were actually delivered by Northside Canal Company to 23 A. The members of the North Snake Groundwater 23 24 the conversion projects in your district? 24 District Board, yes. 25 A. There was somewhere close to 2,500. 25 Q. Were there any of the members present at that Page 150 Page 152 ACCURATE COURT REPORTING, INC. ACCURATE COURT REPORTING, INC. FAX (208) 938-1843 (208) 938-0213 (208) 938-0213 FAX (208) 938-1843

#### meeting?

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- A. Yes, there was.
- Q. And do you recall how some of them may have reacted to that information that the Department was not going to give credit for those seepage losses?

A. Well, I don't understand why that wouldn't be. They're going into what's believed direct recharge. And -and that's going directly into the aquifer. I mean, that's the whole thing here is building up the aquifer.

Why wouldn't we get credit for it? We paid for it, paid dearly for it, and got zero credit for it as far as we knew. It was -- it was very -- very -- I wouldn't say contentious among the group, but very contentious toward the decision.

- Q. Last year did your members or any of your members convert any acres to surface irrigation which received no mitigation credit, because they weren't in a formal conversion project submitted to the Department?
- 18 19 A. Personally, I only know that I have been told there was some -- some independent conversions, and those 20 20 21 were not handled by North Snake Groundwater District as conversion projects. More so they was handled by the 22 23 independent farmer and -- who had availability to either 24 rent water or had water from other places that he would 25 move from Northside Canal Company and dry up his well.

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6 PCCs, because of booster pumps and stuff. 7 Q. So after Ms. Yenter told you about these issues and you put -- did you say flowmeters? 8

was having problems with these measuring devices?

A. Yes, she did. And she sent letters out and,

uh, in particular, uh, we had to install hour meters on two

of our wells, in particular at Jerome Cheese, because, uh,

of the conversion projects and not being able to use the

A. Hour meters.

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- Q. Hour meters on these wells, to your knowledge, did Ms. Yenter or the Department revisit those locations to try to make an assessment of whether credit could be given?
- A. I don't know that our site was revisited at all, no. I don't remember -- I know I submitted a letter to North Snake Groundwater District that, uh, we would, in fact, do what she requested.
- Q. Do you know, roughly, what time of year you did that?
  - A. That was after the first of July sometime.
- Q. Okay. Now, moving on to the voluntary curtailments last year, do you know approximately how many acres your members voluntarily curtailed in 2005, in an effort to provide water to Blue Lakes and Clear Springs?
- A. Well, I do know that there was some 8,000 plus acres of Northside Canal -- or North Snake Groundwater

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- They weren't very well documented, uh, or they would have been in the, uh -- in the, uh, conversion, uh, information 2
- 3 we submitted.
  - Q. Do you know if any of your members accidentally submitted acres as voluntary curtailments, when, in fact, they should have been submitted as conversions?
- 8 A. I believe that, uh, through the records, uh, that there was some case of that -- limited; very, very, 9 10 very limited, though.
  - Q. To your knowledge, did anyone at the Department contact any of the members of the North Snake 12 Groundwater District to inform them of these potential problems with the data that they submitted?
    - A. Not to my knowledge.
  - Q. Moving on to the voluntary curtailments -- or, excuse me, I'm going to ask a couple other things about the, uh, conversion projects.

Did you hear Ms. Yenter testify earlier this morning that she had some difficulties trying to assess credit for certain acres in the district because they had inaccurate measurement devices?

- A. Yes.
- 24 Q. And did Ms. Yenter ever tell you that she 25 was -- or any of the groundwater district members, that she Page 154

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- District acres that we submitted to the district as -- to
- 2 the Department as curtailed acres.
- 3 Q. And do you know how many of those acres --4 roughly, 8,000 acres were accepted by the Department as 5 voluntary curtailment mitigation?
  - A. A ridiculous 25 percent.
  - Q. Why do you say "ridiculous"?
  - A. Because, very personally, I worked with "Angie" Leavitt side by side putting those together -- the information that we got from the farmers -- checking water rights, checking maps -- checking these and putting them all together. And to only get 25 percent credit on the work that what did, that -- we must be really off base on checking everything out. Now, there were some mistakes made, but for the whole of it, I think that Angie put a very complete package together and a lot more of that acreage should have been accepted.
  - Q. When did you first discover that the Department was not going to give credit for roughly 75 percent of those?
  - A. Well, it was brought to my attention on about the 13th of May when Angie brought me to my work a printout and says "Help me. We only got credit for 25 percent of everything we did. What can we do?"
    - Q. And did you take that information to the

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#### members?

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A. That information -- uh, we had a meeting -- a Board meeting on the 16th, discussed it in depth and, uh, then there was a meeting called -- a special meeting called within a week or two of that. I can't remember the exact date of that meeting.

#### Q. Do you recall how any of your members reacted to that news?

A. Well, I know how some of the members reacted during the Board meeting that we had. Some of them says "Well, if this is the way we're going to be treated, we 12 won't dry up another acre for this because we don't get 13 credit for it." Others said "What do we do? We don't know 14 what to do? If we do everything we're asked, we don't get 15 credit. Why should we dry up?"

Q. Did you hear questioning testimony earlier today regarding the unusually wet spring last year?

A. Yes.

Q. And are you aware yourself of any instances within the North Snake Groundwater District where a crop20 20 might have fully matured on voluntarily curtailed acres 21 21 22 22 without any artificial irrigation?

23 A. Yes.

Q. And did you hear Ms. Yenter's testimony 24 earlier this morning that she tried to assess those 25

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Q. And did you, at some point, inform your £ membership that they were not going to receive credit for 2 those acres they dried up last year if they were dry in 2004, as well? 4

5 A. I believe that information was given in the, uh, meeting after the 16th of May.

Q. And do you recall how some of your members 7 reacted to that news?

A. I could only speak by hearsay. I wasn't at that meeting.

Q. Okay. Do you recall hearing after the fact how some of the people reacted? A. Not very happy. In -- in -- in an instance

where I sat in a meeting on the CREP, uh, it was -- it was 14 very plain that there was people who had not irrigated 2004 15 and 2005, for the purpose of mitigation. And if they 16 17. didn't irrigate 2004, 2005, CREP wouldn't be available to them. And that upset some of the members visibly in the 18 meeting. And the advice there from FSA was "You better get 19 some land wet. You better get pumping on it this year."

Q. So if your members had known or had realized last spring that they would receive no credit for drying up acres in 2005, if those same acres were dry in 2004, do you think some of them would have potentially irrigated those acres last year?

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situations and had some difficulties doing that?

A. Yes.

Q. To your knowledge, did Ms. Yenter contact any of your members where those situations might have arose to try and gather some additional information about whether those acres had been artificially irrigated?

A. Not to my knowledge.

Q. Did your members -- generally, did any of them voluntarily curtail acres in 2004?

10 A. Yes.

Q. What about in 2003? 11

A. I believe so. I'm not positive on that. I 12

13 believe they did.

Q. And did you hear testimony earlier this morning, uh, about the Department not getting credit for acres that were dry in 2005, if they were also dry in 2004?

A. Yes, I did.

25 would receive credit.

17 Q. And at the time that your members and yourself 18 19 left acres dry last year in 2005, or determined that's what you were going to do, did you believe that these acres 21 would receive curtailment credit even if they had not been 22 irrigated in 2004? 23 A. It was -- it was my understanding that any 24 acres that was part of a mitigation plan that was dried up

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A. Absolutely.

2 Q. So now that your members are aware that the 3 Department is likely not going to give credit for acres

that have been left dry for consecutive years or the years

prior to a mitigation plan being filed, do you think some

6 of those members will begin irrigating those acres again

7 with groundwater? 8

A. Yes.

9 Q. Did you hear Ms. Yenter's testimony earlier 10 today with respect to endguns?

11 A. Yes.

12 Q. And did you hear her testify -- and I'm

summarizing here -- that, in her opinion, turning off the 13

endguns does not cause any less water to be diverted from 14

15 the pump?

17

16 A. I heard that.

Q. And do you agree with that testimony?

18 A. Not entirely.

19 Q. And can you tell me why you do not agree with 20 that entirely?

21 A. Well, in -- in -- in the, uh, fact of our

pivots at Jerome Cheese, which I'm very familiar with, uh, 22

some of the packages on them that we have put on allow a 23.

certain GPL. And, uh, when the pivots on -- when the

endguns are on or off, they don't change. So the net water

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which there's a sentence that says "Both districts are in going out of the pivot changes. It decreases when the question to written notices that all district members endgun is off. That means there's less water put out, I 2 2 reduce their groundwater-irrigated acres by 10 percent as 3 3 compared to their 2004 irrigated acres to provide MR. SNEED: Thank you, Mr. Minchey. That's 4 all the questions I have for right now. 5 documentation." 5 Doesn't that say that plans are submitted 6 THE WITNESS: Okay. 6 proposes as an alternative for involuntary curtailment, 7 7 MR. DREHER: Mr. Steenson. voluntary curtailment of acres that were actually irrigated 8 8 9 **CROSS-EXAMINATION** 9 10 A. The – yes. With the caveat that once acreage BY MR. STEENSON: 10 Q. Mr. Minchey, you are a representative of the 11 is put into mitigation it's -- it's accounted for, it's 11 12 credited. North Snake Groundwater District, correct? 12 Q. And how many of the 6,000-some acres are you 13 13 A. Yes, sir. contending were -- should have gotten credit for, and that Q. And not, in any respect, a representative of 14 14 you didn't, because they were in mitigation plans in 2004? the Magic Valley Groundwater District? 15 A. I don't remember the exact number of acres. 16 16 A. That is correct. Um, if I could look at the, um, sheet that explains the 17 17 Q. So when you talk about 25 percent of the acres being recognized, you're referencing 2,144 acres recognized detail, I could tell you. Is it an exhibit? 18 19 MR. SNEED: Look at Exhibit 1, Mr. Minchey. of approximately 8,500 submitted acres, correct? 19 20 It's Attachment A. 20 A. I'm speaking of the North Snake Groundwater 21 THE WITNESS: It would be, uh, item No. 5 --21 District submitted acres. 22 eligibility code No. 5, where there was, uh, 1,010 acres Q. And you have been asked a number of questions 22 23 submitted that was not given any credit. 23 and given a number of answers about your members 24 Q. (BY MR. STEENSON) There were in mitigation 24 understanding -- their reactions -- your members, I take it 25 plans, then, in 2004; is that correct? that you understand that their groundwater rights are 25 Page 163 Page 161 ACCURATE COURT REPORTING, INC. ACCURATE COURT REPORTING, INC. FAX (208) 938-1843 (208) 938-0213 FAX (208) 938-1843 (208) 938-0213 1 A. I do not know that all 1,010 was in mitigation hydrologically connected to the Thousand Springs plans, but there was acreage in that that was in mitigation 2 (inaudible), correct? 3 A. I would believe that's a common knowledge. plans, to my knowledge. 4 Q. Have you, or someone else with the Northside 4 Q. And I take it your members are aware that my clients, Blue Lakes Trout Farms, and others I represent, Canal Company, tabulated the number of acres that were in 5 have water rights to those springs below Milner? 6 mitigation plan in 2004, that you believe should have 6 7 A. Yes. 7 received -- should have been eligible? Q. And you're aware that a number of those 8 A. We -- we have started to look at that, but we 8 9 springs are substantially short in their delivery to the 9 just got the information the, uh, 13th -- the 12th of May, water (inaudible)? 10 and it takes a little while to decipher all of it. 10 11 Q. So I take it that that information verifying 11 A. That's what the Orders tell us. 12 Q. Now, in the questions you were asked about 12 the acreage from 2004, not irrigated during that year in 13 your members' motivation in terms of they understood they 13 the data mitigation plan, that wasn't clear from your prior 14 submission to the Department? 14 wouldn't get credit if they wouldn't dry up acres -- if I 15 could ask this: Do your members understand and believe A. To my knowledge, I — I don't know for sure 15 that if they don't perform mitigation they will be in 16 whether it was clear or not; not by what I did. But it 16 17 could have been clarified by what "Angie" did. voluntary curtailment -- or at least in some groundwater 17 18 Q. And you are going through the process now of 18 (inaudible)? 19 A. That's, uh -- that's the word that we try and 19 developing some kind of information to tabulate or clarify, again, the number of acres in the mitigation plan in 2004 20 encourage them to understand, yes. 21 and not irrigated that year 2005? 21 Q. Now, with respect to 2004 use or nonuse I've asked previous witnesses -- and I'll ask you as well --22 A. Our plan is to go through every one of these 22 and see what we can do on every one of them that was turned about this portion of the groundwater users plan for 23 providing replacement water. And you've probably heard me 24 down -- every acres. Now, whether it's being done right 24 ask these questions. And this is at Page 5 of that plan in now or not -- we're in the middle of budget, so, uh, we're ACCURATE COURT REPORTING, INC. ACCURATE COURT REPORTING, INC.

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just to my knowledge there -- but that's not to say that correct number. It's in one of these exhibits, I think. 4 she didn't with the individual members. 2 Q. Hold on a second. I'm going to take a look at 2 Q. Did any of your members voluntarily curtail 3 the exhibit to verify that. 3 So when you discovered that the Department was 4 acres in 2004? 4 going to give you credit for, roughly, 38 percent of those A. Yes. 5 5 Q. And what about in 2003 or 2002? acres, did you convey that information to your members? 6 6 A. Some of that's been conveyed to the membership 7 A. Yes, Starting in 2002 and 2003, we were under 7 the stipulated agreement, which was a two-year agreement, 8 that all of it was not -- all of the curtailment was not 8 and at that time we had to cut power consumption -- well, 9 9 accepted. Q. And how did you go about telling your members 10 we had to cut water use and it was tied -- we either had 10 11 to find the replacement water, which we were not able to 11 about that? find, and then we -- so we had to cut water usage, which A. Well, we've - because we had been going 12 12 through trying to determine each one, we announced it at 13 was tied to power consumption. And quite a few folks, uh, 13 one of our meetings that we didn't have all of the 14 turned off some, you know, pivot corners and a few things 14 like that to decrease their power consumption. 15 curtailment from the previous year accepted. 15 Q. And how did your members react to that news? 16 Q. And did you hear testimony earlier today and 16 from the Department witnesses this morning about the 17 A. Well, not real well, but -- but they, you 17 Department's decision to not give credit for any acres that know -- but we told them we were going to try to look into 18 18 were left dry in 2005, if they were also left dry in 2004? 19 it farther and try to work to getting it more accepted. 19 20 A. Yes. 20 Q. Did you hear questioning in testimony earlier 21 Q. And at the time that your members made that today, and just a few minutes ago with Mr. Minchey, 21 decision last year to keep those acres dry in 2004, did you 22 regarding the unusually wet spring last year? 22 believe that they were going to receive credit --23 A. Yeah. It was exceptionally wet. 24 A. We -- we were -- as to what the Director had Q. Are you aware of any instances within the 24 read, we were under the assumption if they had laid out in 25 25 Magic Valley Groundwater District where a crop might have Page 173 ACCURATE COURT REPORTING, INC. ACCURATE COURT REPORTING, INC. (208) 938-0213 FAX (208) 938-1843 FAX (208) 938-1843 (208) 938-0213 fully matured on voluntarily curtailed acres without any the -- for their mitigation in, uh, 2004, which was the year we had our agreement - let's see. 2002, 2003, was 2 artificial irrigation? A. Yes. Because most of that -- a lot of the 3 the stipulated agreement. Then we had had agreement from 3 the Hall of Mirrors from 2004, during those years. And so 4 acres were planted before an Order came out, so there was we -- you know, we assumed that's what we had been doing some acres that came out fairly well with the -5 5 6 Q. I think those Orders came out in mid-May --6 during that time. 7 Q. So your assumption, then, or your 7 A. Right. understanding was, then, uh -- um, in accordance with the 8 Q. -- and June. So the crop was already in the 8 9 ground? 9 language that the Director --10 10 A. Right. And -- and with an exceptional wet A. Right. 11 Q. -- read a few minutes ago? 11 period there's . . . 12 A. Right. Except that for the 2002, 2003 -- see, 12 Q. Did you hear Ms. Yenter's testimony earlier today that she had some difficulty assessing some of those 13 those weren't tracked by acres. They came back to the --13 14 situations --14 they came back to the power usage on those years. Q. And what was your understanding of those acres 15 A. Yes. 15 16 with respect to mitigation in 2005? 16 Q. -- because it was a wet spring? 17 A. Well, we understood that if you laid the acres 17 A. Yeah. And that -- yeah, I can have -- I can 18 out to save -- because when you lay the acres out you're 18 see where that would be difficult. 19 Q. To your knowledge, did Ms. Yenter ever contact 19 not lifting the water -- you know, you're not doing that. any of your members when these situations arose on their 20 And that's how we achieved our -- that's how we achieved 20 our -- our, uh, reduction in pumping. 21 ground to maybe try and gather some additional information 21 about whether those acres had been artificially irrigated 22 Q. Just to clarify, when you say "laid the acres 22 out," you're referring to not irrigating? 23 23 or not? 24 A. Right. 24 A. Um, to my knowledge she hadn't -- I know she 25 did -- I know there was some on-the-ground inspections, but 25 Q. As a Board member for the Magic Valley ACCURATE COURT REPORTING, INC.

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Groundwater District, did you have occasion to tell your members that they were not going to receive credit for -or did not receive credit for certain acres that they laid out in 2005, which were also dry in 2004?

A. We -- we have not -- that hasn't been communicated to all the members yet, because of the -- the time we have been working at it. But that's an issue that if -- if, uh, the membership knows they're not getting credit in '05, and there's not credit on it until they get them wet, then . . .

Q. So with respect to the members you have 11 12 spoken with or the Board has spoken with, what has been 12 13 their reaction to that information? 14

A. Well, some of the folks say if we're not going 15 to get credit then -- then we'll get 'em wet. If we're not getting credit for the mitigation then we might as well irrigate them -- or get them in a position where we can get mitigation for 'em.

Q. So if your members had known last spring that 20 they were not going to receive credit for drying up acres in 2005, that may have also been dry in 2004, you think some of them would have irrigated last year?

A. Oh, definitely. Most definitely. We heard enough -- we heard enough from our membership about -about the land out of the ground that they most definitely

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Q. So shutting off the endgun would not result in additional water coming out of those nozzles?

A. It shouldn't, you know, theoretically mixed. 3 I'm not a -- Idaho Power doesn't think so, because they pay 4 5 to have those replaced. But the pressure nozzles are in place to take into compensate for different elevations in 6 7 ground, also. So that's why, theoretically, they'll maybe shut off an endgun. The water -- your main system stays 9 constant with -- with a low pressure system. 10

MR. SNEED: Thank you, Mr. Stevenson. Those are all the questions I have for now.

MR. DREHER: Mr. Steenson.

CROSS-EXAMINATION

15 BY MR. STEENSON:

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Q. You can turn off the endgun and what happens to the pump?

A. You build pressure.

Q. This changes the amount of water (inaudible) --

A. Right. Or you will be -- under a center pivot, if you shut the endgun off, if you're -- you have the pressure regulators on each drop, and they hold it in a constant range. So you'll shut off the -- you'll shut off the endgun and build pressure -- you'll build more pressure

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would have. 1

2 Q. Did you hear Ms. Yenter's testimony earlier 3 this morning about the effects of shutting off the 4 endguns?

A. Yes.

Q. And did you hear her testify that, in her experience, shutting off the endguns does not have any effect on the amount of the water diverted from the pump? 8

A. Yes. I heard that -- I heard that testimony.

Q. And do you generally agree with that testimony or disagree with that testimony?

A. I would probably disagree, uh, for two reasons. One of them is an endgun -- most big endguns are a hundred gallons a minute. Uh, they'll cover, uh -- you know, they will cover a portion of each corner.

For example, a standard pivot with a long endgun picks up 127 acres. If you shut the endgun off, you pick up 119 -- 18 or 19, depending on the overhangs. But they -- so you do cut some acreage out of each corner.

When you shut off the pivot most -- now, I'm 21 not saying this -- this isn't inclusive of all pivots, but most pivots have low-pressure packages so each -- each 22 23 outlet has a pressure regulator on it. So if you increase the system pressure they're set -- they're designed to, uh, put the -- put a constant pressure with a nozzle.

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ACCURATE COURT REPORTING, INC.

(208) 938-0213 FAX (208) 938-1843 at the pump, but the regulator should take in compensation

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Q. And that's with that kind of a system?

A. Right.

Q. With what percentage of --

A. In Magic Valley I would say it's probably 98 percent of the systems, or what they call a "low pressure drop system."

Q. And I didn't bring it, and it seems like so long ago that I can't remember what -- in the 2004 agreement -- Hall of Mirrors --

A. Yeah. Hall of horrors, or whatever you call them.

Q. I forget what Magic Valley agreed they'd provide --

 We agreed to provide mitigation. We agreed, as part of a -- you were all there. We were looking for kickers at that time to -- and we agreed to curtail some acreages. So what we did is, we met with our membership. And we don't have the ability to mandatorily say we have got to dry ex number of acres. So we asked our membership voluntarily to get us over the hump.

Q. How many acres would you say?

24 We ended up -- I think a little over 6800 25

acres.

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1 Modeling Committee. in 2000. In fact, the Department gets those -- that 2 Q. Did you hear Dr. Wylie speak about the 2 information before we do from Idaho Power. 3 relative benefits of shutting off a well and keeping it off 3 MR. SIMPSON: That's all the questions I for one season, as opposed to keeping it off for multiple 4 4 have. 5 MR. DREHER: Mr. Sneed, Redirect. 5 seasons? 6 A. I did hear that, yes. 6 MR. SNEED: I have nothing further. 7 7 MR. DREHER: All right. The witness is Q. I note that we have Exhibit 6 here that I 8 excused. 8. believe relates to that. 9 Can you tell us what that is? Let me make 9 So if I understand, you have got one more to go. We will take a ten-minute break and then we'll finisho sure you have the . . . 10 A. This is an example of the effects of drying up 11 11 up. 12 (A recess was taken.) some land down in the -- near the Clear Springs Snake River Farm area up on the rim. Water right WR367508 B was one 13 MR. DREHER: All right. Mr. Fereday. 13 that was not allowed as credit as a dry-up acre, because it 14 Mr. Rassier, Mr. Steenson, we're ready to 14 wasn't irrigated in 2004 or -- and wasn't in a plan in 15 begin. 15 16 All right. Mr. Fereday. 16 2004. Those were the numbers that -- or those were the 17 MR. FEREDAY: We call Dr. Charles Brendecke.17 reasons stated for not allowing it. 18 MR. DREHER: Dr. Brendecke, if you could raise 8 And so the -- the point of this analysis was 19 simply to demonstrate the benefit that it has to that your right hand. 20 20 reach -- the Buhl's Thousand Springs Reach. If it had been 21 CHARLES M. BRENDECKE. 21 irrigated in 2003, but then dried up in 2004, but not put 22 22 in a plan in 2004, it would -- and it wasn't irrigated in having been duly affirmed under oath, testified 23 as follows: 23 2005. 24 24 So if it continued to not be irrigated it 25 MR. DREHER: Thank you. You may be seated 25 would have the accumulated benefit shown in the -- on the Page 189 Page 191 ACCURATE COURT REPORTING, INC. ACCURATE COURT REPORTING, INC. (208) 938-0213 FAX (208) 938-1843 (208) 938-0213 FAX (208) 938-1843 Begin by stating your name and address, please. 1 green line on this graph, uh, versus what would be the case 2 DR. BRENDECKE: My name is if it were just curtailed this year. And the point being 3 Charles M. Brendecke. My work address is 1002 Walnut that something that's been off for three years has a Street, Boulder, Colorado. 4 4 greater benefit to the Reach than something that's been off 5 5 for only a year. 6 DIRECT EXAMINATION 6 If we looked at the actual cfs, or flow rate, 7 BY MR. FEREDAY: 7 rather than the cumulative gain, it would have a similar sort of trend, but there would be more amplitude changes on 8 Q. Dr. Brendecke, Exhibit 5 is your resume. Is 8 9 that reasonably current? 9 it because it would be going on and off in more relation to 10 A. It's reasonably current. It's probably from a 10 the pumping during the irrigation season and being off in 11 submittal of a year ago or so. I have a Idaho professional 11 the wintertime. You can see that's in a subdued form on 12 registration, at this point, that's not shown on here. 12 this graph, because it's a cumulative graph. 13 Q. And what is that Idaho registration? 13 Q. Did you hear the testimony by several 14 A. Professional Engineer registration. 14 witnesses concerning this 2004 issue? That is to say the 15 Q. Okay. What is your familiarity with the 15 issue as to the disqualification of a well for credit subject matter of the Blue Lakes and Clear Springs delivery 16 16 unless it was being pumped in 2004? 17 calls and the orders that have been issued in those cases? 17 A. Yes. There has been quite a bit of discussion 18 A. I've been involved in, uh, I would say the 18 about that. 19 process of looking at these Orders and helping the 19 Q. And the comments by, I believe, Mr. Minchey 20 groundwater districts develop their response to them over 20 and Mr. Stevenson concerning their efforts to more 21 the last several years. 21 accurately, perhaps, catalog the wells that have been off 22 for a period of time and, therefore, were not irrigated in Q. Were you involved, also, in the development of 22 23 the Model or the Model calibration effort that Dr. Wylie 23 2004? Do you remember that? 24 discussed earlier? 24 A. Yes. It sounds like they -- there's at least 25 A. Yes. I was one of consultants present on the 25 the possibility of better documenting that some of those Page 190 ACCURATE COURT REPORTING, INC. ACCURATE COURT REPORTING, INC. (208) 938-0213 (208) 938-0213 FAX (208) 938-1843 | FAX (208) 938-1843

that were off were in mitigation plans or set-asides.

Q. If the groundwater users are able to document 2 3 some of those, I take it, then, that depending on the length of time that those wells actually had been off, they4 would be shown along this green line? 6

Or something similar to it, yes.

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Q. Okay. I'd like to have you refer to Exhibit 7.

#### Could you tell us what this is, please?

A. Exhibit 7 is an excerpt of the Water District 01 storage report for 2005. I downloaded this from the District 01 Website, I think, on Thursday last week. This is not the entire report. It's the report that -- it's the portion of the report that speaks to storage allocations and storage deliveries to surface water users in the Blackfoot to Milner Reach.

About three pages back is Table 23. It's a similar stored water accounts table that's prepared every 19 year for various Reaches. This particular table, No. 23, contains those surface water users in the Blackfoot to 21 Milner Reach. And if you look on the left, there are the names of those diversions, and you'll see "Northside Twin F" at the bottom, which is the Northside Canal Company.

And if you then read across on this table

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assigned to Northside Canal for Water District 130 conversions.

And then there's another adjustment of 249 acre-feet that's a natural flow correction. I haven't really dug into that too much. But the 40,982 was delivered to the Northside Canal Company so that it could provide water to the conversion acres in the Sandy Pipeline down in Water District 130.

Q. Okay. Have you reviewed Exhibit 3? And maybe you'll want to take a look at Exhibit 3.

#### I take it there is a relationship between Exhibit 3 and Exhibit 7?

A. Yes, there is. If you look at the last column on Exhibit 3, down near the bottom where it sums up the deliveries in acre-feet are 31,481, then there applies a 30 percent loss ratio, and it gets to 40,926, roughly, acre-feet total with the loss. That corresponds generally with the note "AR" on the storage account table that showed 40,982 exchanged to IGWA and assigned to Northside for conversions. I can't tell you exactly why it's 49,082 instead of 49,025.

Q. Okay. So the figure of 9,400 some odd acre-feet of delivery losses is reflected in Exhibit 3. Is it also reflected somehow in Exhibit 7? I take it, it is not?

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- 1 you'll see that at the beginning of the season the
- 2 Northside Canal Company was allocated 838,530 acre-feet of
- 3 storage water. This is what accrued to their storage water
- 4 rights in 2005. They then -- a couple columns over to the
- 5 right from that you'll see that they diverted -- or they
- 6 used 514,262 acre-feet out of that allocation, which would
  - leave them 324,267 over about the 6th column.

Then there's a column called "adjustments," and in that column it says "40,733 acre-feet." And there's a note "AR" that explains what that forty thousand plus acre-foot adjustment is.

- Q. Now, is this the kind of information you 13 routinely rely on in carrying out your duties for the groundwater users?
  - A. Yes. I've looked at a lot of these stored water accounts tables back to earlier years, as well.
    - Q. Have you found them to be reliable?
  - A. That's what we all rely on are these accounting records from Water District 01.
- 20 Q. And what is AR? What is its significance to 21 you?
- 22 A. If you go back a couple more pages, then, 23 there's an explanation of each of these footnotes. And on 24 the last page, if you go down to note AR, that adjustment 25 consists of 40,982 acre-feet of water provided by IGWA and

ACCURATE COURT REPORTING, INC. (208) 938-0213 FAX (208) 938-1843 1 A. Well, 40,000 -- in Exhibit 7, what Exhibit 7

- 2 tells me is that 40,982 acre-feet were diverted by
- Northside for delivery to conversions. What Exhibit 3
- tells me is that 31,481 acre-feet were actually delivered 4
- to conversions in Sandy Pipeline. And the difference,
- 6 which would be, roughly, 9,500 acre-feet of water,
- 7 disappeared somewhere between the Northside Canal headgates
- 8 on Milner Lake and the diversion points -- or the delivery
- 9 points at Sandy Ponds and the conversion sites.
- 10 Q. So what, in your opinion, happened to that, 11 roughly, 9500 acre-feet?
- 12 A. Well, I would expect that the vast majority of 13 it became a conveyance loss and seeped into the ground 14 through the bottom of the canal.
  - Q. Okay. Does it appear to be delivered to other shareholders for consumption by those shareholders?
- 17 A. Not according to these delivery records by the 18 Northside Canal Company. I don't have any information that 19 suggests it was delivered to somebody else. I have not 20 seen any information that suggests it was delivered to 21 anybody else.
  - Q. And before we go on to Exhibit 8, let's revisit Exhibit 6. Was this exhibit prepared at your direction or by you?
  - A. Yes.

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Q. And what data was used to generate this chart? 4 Q. Is that 30 percent a reasonable estimate of 1 2 seepage losses from the Northside Canal, in your opinion? A. We used the data from the -- actually, from 2 3 A. Well, based on the other information I've 3 the spreadsheet that was prepared by the Department 4 seen, it probably underestimates the losses in the 4 describing the evaluation of the conversions. And we applied the same methodology the Department has done for 5 Northside Canal. 5 Q. What other information have you evaluated? 6 6 evaluating dry-ups, which is to calculate the consumptive 7 use as the difference between precipitation and ET in that 7 A. Well, there's a table in this report that gets 8 model cell. to this specifically, if I can find it in here. Page 33. 9 Q. What does that table address? 9 This happened to be a handy example, because 10 this entire parcel lies within the single model cell so it 10 A. Well, based -- if you do the background was an easy one to do. So it's a combination of 11 reading in the document, this is a water budget analysis 11 12 that was done as part of preparation of this report. 12 information from that spreadsheet and from the basic model 13 files that we obtained from the Department for various 13 Q. Was that Table 32 in the report? 14 A. Table 32 is what I'm looking at, yes. And the 14 purposes. 15 Q. So your firm runs the ESPA model for these 15 water budget analysis was done for three different example kinds of purposes? years; a wet year, an average year, and a dry year. And 16 17 A. We do. 17 this is sort of a summary of that water budget analysis. 18 18 Q. Would you refer to Exhibit 8, please, and And if you compare the amounts delivered there 19 19 identify that? in the third row to the amounts diverted up in the top row, 20 A. Exhibit 8 is a Water Management and 20 you'll see that the loss is somewhere near half of what's 21 Conservation Plan for the Northside Canal Company prepared 21 diverted. 22 22 by the company with some help from the Water User Now, some of that goes to groundwater 23 Association and CH2MHILL. It's dated December 2003. We 23 recharge. That's explained elsewhere in the report. The 24 obtained this document as part of the disclosure process 24 21,000 goes into some recharge ponds. That's really -in -- in our looking through various documents in the still ponds that contribute to recharge. So that might Page 197 Page 199 ACCURATE COURT REPORTING, INC. ACCURATE COURT REPORTING, INC. (208) 938-0213 FAX (208) 938-1843 (208) 938-0213 FAX (208) 938-1843 delivery call matter involving the Surface Water Coalition. 1 have to come off the top of that calculation. 2 Q. Okay. Does this document address canal 2 But, if anything, the data in this table 3 seepage, conveyance losses, spills; issues like that? 3 indicates to me that the losses in the canal system are 4 A. It does. There are a few tabulations and sufficiently high that it's reasonable to think that none 5 discussions in here about those aspects of canal operation. of that 30 percent -- the 9,500 acre-feet that we have been 5 6 And we might just look in particular at a couple of those. 6 talking about here that disappeared between the headgate 7 If you want to go to Page 40, there's a discussion on 7 and the deliveries, I think it's vastly more likely that 8 Page 40 in the middle on management of return flows. And 8 that disappeared in the form of canal losses than got 9 it talks about the canal company's goal to reduce return 9 delivered to other shareholders in the system. Because the 10 flows to the Snake River by using sediment ponds and 10 deliveries here -- uh, the losses, based on the information 11 wetlands, pump EX systems, and the like. 11 in this table, are actually higher than that 70 -- or that 12 And it indicates that the canal company 12 30 percent figure. 13 13 measures return flows that are discharged into the Q. Is it reasonable to think that this entire 14 Snake River at 13 locations. And it states that in 2002 14 amount of loss -- this 30 percent, or 94- and 9500 feet. could have been spilled back to the river? 15 return flows that were not intercepted by these sediment 15 16 ponds and wetlands approximated 45 cfs. And over a 200 day 16 A. Uh, no. They would have measured that. And 17 irrigation season that's about 18,000 acre-feet. 17 it's not in Northside's interest to have that kind of spill 18 Q. That compares to how many acre-feet diverted 18 going on. They have indicated that their spills, in 2002 into the canal? 19 19 anyway, were on the order of a couple percent of their 20 20 diversion. A. Roughly, a million. 21 Q. You have looked, haven't you, at the 21 Q. Others today have talked about the water being 22 documentation -- or the -- at least references to the 22 commingled in the canal. If there were spills of this 23 30 percent conveyance loss number that has been discussed 23 conveyance loss figure, what would you expect them to be? 24 in this hearing today? 24 A. Well, I would think -- you know, the water

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molecules are all mixed in the canal. It's not some

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A. Yes.

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selective molecules that are spilled. You know, what molecules are spilled are the ones that are spilled. And so I would apply the same fractional spill percentage to that number as I would to the rest of the water from the system, which is, you know, one or two percent.

- Q. Is one or two percent based on the 18,000 acre-foot versus one million --
  - A. Roughly, that's correct.
  - Q. -- acre-foot? Okay.

10 There have been references today to the Order issued by the Director on June 7th, 2005, and specifically1 to the statement that -- I'll quote here "When the canals 12 and ditches of Northside are fully charged and water is already seeping into the ground, the addition of surface 14 water on top of the existing surface water flowing in the 15 canals and ditches will not significantly increase the seepage from the canals and delivery ditches." 17

Do you remember that?

A. Yes.

Q. Do you have an opinion about whether that 20 assumption cancels your conclusion earlier that the vas21 majority of this 9500 feet seeped into the aquifer?

23 A. Uh, no. The molecules are all commingled in 24 the canal. There's no way to selectively have the 25 conversion deliveries floating on top of the other

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goes on to say that they, the Department, cannot determine the amount of replacement credit, if any, attributable to seepage.

Do you have any comment about that conclusion in the Order?

A. Well, it would be physically impossible to distinguish the seepage that occurs from the water diverted for conversions from the seepage that occurs from any other water going down the canal. So it's just not possible to measure which of those molecules that have seeped out the bottom of the canal are from the conversion delivery and which are from the rest of the water running in the canal.

- Q. So is it, in your opinion, a reasonable request, or would it be a reasonable request to require the groundwater users to go beyond the kinds of materials that you've already identified here to conduct some sort of a seepage study on that 40,000 some odd acre-feet?
- A. Well, first of all, they couldn't do the seepage study without the cooperation of the Northside Canal Company. They're not -- they're just not in a position to be able to go do their own seepage study of the Northside Canal, because it requires all the information of all the water that was ever delivered -- that was delivered to any of the delivery points on the Northside, and all of the spill numbers, and whatever was put in the spill pond.

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- molecules. When a canal leaks, it will leak all the 1 2 molecules equally. It doesn't discriminate. 3
  - Q. Well, one of the things that I'm wondering about is just the concept that both Ms. Yenter and Dr. Wylie testified to, which is the concept that this 94- -- or 9500 acre-feet was put into the canal. And the question, then, was "Where did it go?" And I didn't feel like have a complete answer to that.

Do you feel that your view is any more accurate based on what you have reviewed?

A. Well, in -- I think it does. We know that some of it got delivered, because that was measured. So we know where some of it went. And since all the waters in the canal -- or all of the molecules of water in the canal 14 15 are commingled, I would expect that those -- that 9400 16 acre-feet suffered the same fate that the, roughly, 400,000 acre-feet suffered between the total supply and that delivered to the farm here in Table 32, which is largely seepage into the ground.

Q. In the June 7th Order in the Blue Lakes 21 delivery call case, the Department also states that IGWA did not provide any information about the actual physical seepage of surface water from the Northside Canal to groundwater resulting from delivery of surface water to the 24 conversion acres in the Sandy Pipeline. The Department

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And this is information that the groundwater districts

generally don't have. So there's one obstacle to doing anything more on their own.

4 And it's not clear why they would want to do 5 that, because this kind of information is already here in 6 this report. The Northside Canal Company could conceivably 7 have other seepage studies that they've done. I've asked 8 Ted about that and been unable to locate them. But they

9 have done them in the past. 10 I guess the, uh -- then the second point, to

11 sort of get to the rest of the question, it seems like it's 12 just not feasible -- technically feasible -- for the 13 groundwater districts -- even if they did have the complete

14 cooperation of the canal company, all they would be able to

15 do is calculate the total loss from the canal. They could

16 not differentiate the loss associated with the water that

17 they've provided for delivery to conversions from any of

18 the other losses, or any other water that's being lost in 19 the canal.

20 MR. FEREDAY: No further questions. 21 MR. DREHER: Mr. Steenson.

CROSS-EXAMINATION

BY MR. STEENSON:

Q. Dr. Brendecke, you downloaded this Exhibit 8

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