STATE OF CALIFORNIA

CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY

STATE WATER RESOURCES CONTROL BOARD

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Public Hearings to Determine Whether to Adopt Cease and Desist Orders against:

Woods Irrigation Company, Middle River in San Joaquin County.

JOE SERNA JR./CalEPA BUILDING

1001 I STREET

SIERRA HEARING ROOM

SACRAMENTO, CALIFORNIA

VOLUME I

MONDAY, JUNE 7, 2010

9:01 A.M.

LINDA KAY RIGEL, CSR CERTIFIED SHORTHAND REPORTER LICENSE NUMBER 13196

A P P E A R A N C E S

CO-HEARING OFFICERS

Walter G. Pettit

Frances Spivy-Weber, Vice-Chair

HEARING TEAM:

Marianna Aue, Staff Counsel Ernest Mona, Water Resource Control Engineer Charles (Larry) Lindsay, Hearings Unit Chief Jane Farwell, Environmental Scientist

PROSECUTORIAL TEAM:

David Rose, Staff Counsel State Water Resources Control Board 1001 I Street Sacramento, CA 95814 APPEARANCES continued

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CENTRAL DELTA WATER AGENCY, SOUTH DELTA WATER AGENCY

Harris, Perisho & Ruiz By: Dean Ruiz, Esq. 3439 Brookside Road, Suite 210 Stockton, CA 95219 dean@hpllp.com

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	P R O C E E D I N G S
2	000
3	CO-HEARING OFFICER PETTIT: Good morning. I
4	guess the time has come, and we're ready to start.
5	This is the time and the place for the hearing
6	to receive evidence relevant to determining whether to
7	adopt with or without revision a Draft Cease and Desist
8	Order that was issued against Woods Irrigation Company.
9	I'm State Board member Walter Pettit. And
10	co-chair of this hearing is our Board Vice Chair,
11	Frances Spivy-Weber.
12	The staff assisting us and Marianna Aue, our
13	staff counsel; Ernest Mona, our staff engineer; and Jane
14	Farwell, our staff environmental scientist.
15	I think you've probably all heard this before.
16	If we have a fire drill or any other emergency that
17	requires us to evacuate the building, head for the
18	nearest exists which are behind you or to my right there
19	and go down the stairs and reassemble at the Cesar
20	Chavez park diagonally across the street from the
21	building entrance.
22	And if anyone needs any assistance, please
23	raise your arms, yell at us, or do something so we can
	we have a weather that and a share we are the lar
24	make sure that we are able to give you any help.

1 CO-HEARING OFFICER PETTIT: This hearing is 2 being webcast to the public. It will be recorded by 3 both audio and video.

In addition, a court reporter is present to prepare a transcript of the proceedings. Anyone who wishes a copy of that transcript will have to make their own arrangements with the reporter.

8 And when you speak here today, as we've just 9 proven, please make sure your microphone is on and 10 obviously you have to be pretty close to these things to 11 be heard.

As a reminder, please silence all your communications, noisemakers, so they don't disrupt the process as we're going along. And I have mine disconnected, I think.

This hearing is being held in accordance with the Public Notice dated April 7, 2010. The hearing will afford the participants who have filed a Notice of Intent to Appear an opportunity to present relevant oral testimony and other evidence that addresses the following key issues:

22 Number one, should the State Board adopt the 23 Draft CDO?

If the Draft CDO is adopted, should any
modification be made to the measures in the draft order,

1 and what is the basis for any such modifications?

2 With regard to policy statements: Before we 3 begin the evidentiary proceeding, we will hear from any 4 speakers who wish to make a nonevidentiary policy 5 statement.

6 If you wish to make a policy statement, please 7 fill out a blue card and hand it to our staff if you 8 have not already done so.

9 The Board will also accept written policy 10 statements. If you have a written statement, please 11 give it to staff also.

12 A policy statement is a nonevidentiary 13 statement. Persons making such policy statements must 14 not attempt to use their statements to present factual 15 evidence, either orally or by introduction of written 16 exhibits. Policy statement will be limited to five 17 minutes or less.

18 We received a Notice of Intent to Appear to 19 present a policy statement from the San Joaquin Farm 20 Bureau.

21 Is anyone else present who wants to just make a22 policy statement?

When I call your name, please come up -- and it appears we only have the Farm Bureau. Is the Farm Bureau representative here?

1 MS. GILLICK: I don't see anyone. 2 CO-HEARING OFFICER PETTIT: Okay. We can skip that, and if someone arrives we can get back to them. 3 Now the order of proceedings. We will move to 4 the evidentiary portion of the hearing. 5 6 Before hearing the parties' cases-in-chief, we will hear opening statements from any parties who have 7 not submitted testimony and do not intend to present a 8 9 case-in-chief. Next we'll hear the parties' cases-in-chief. 10 11 Parties will present their cases-in-chief and conduct cross-examination in the following order: 12 First, the Division of Water Rights Prosecution 13 14 Team. 15 Second, Woods Irrigation Company. And third, Modesto Irrigation District, State 16 Water Contractors, and San Luis & Delta-Mendota Water 17 18 Authority. And my understanding is they will make a 19 combined presentation. 20 And the parties who intend to cross-examine and present rebuttal testimony only, as I understand, are 21 22 South Delta Water Agency, Central Delta Water Agency,

23 and the San Joaquin County and San Joaquin Flood Control 24 and Water Conservation District.

25 Are there any parties participating that I have

1 not called?

2 Seeing none, at the beginning of each case-in-chief, the party may make an opening statement 3 briefly summarizing the party's position and what the 4 party's evidence is intended to establish. 5 6 After any opening statement, we will hear 7 testimony from the party's witnesses. 8 Before testifying, the witnesses should identify their written testimony as their own and affirm 9 that it is true and correct. 10 11 Witnesses should summarize the key points in 12 their written testimony and should not read the entire testimony into the record. 13 Direct testimony will be followed by 14 15 cross-examination by the other parties, Board staff, and the Hearing Officers. 16 17 Redirect testimony and recross-examination 18 limited to the scope of the redirect testimony may be 19 permitted. 20 After all the cases-in-chief are completed, the parties may present rebuttal evidence. Except when I 21 22 approve a variation, we will follow the procedures set 23 forth in the Board's regulations and the hearing notice. 24 The parties' presentations will be subject to the following limitations: Opening statements will be 25

1 limited to five minutes for each party, and oral 2 presentations and direct testimony will be limited to 20 3 minutes per witness and a total of one hour.

4 Cross-examination will be limited to one hour
5 per witness or panel of witnesses. Additional time may
6 be allowed upon showing of good cause.

7 Oral closing arguments will not be permitted 8 today. An opportunity will be provided for submission 9 of written closing briefs, and I'll set the briefing 10 schedule and discuss the contents of the briefing near 11 the end of the hearing.

Before we begin, are there any procedural issues that need to be addressed?

MR. O'LAUGHLIN: Mr. Pettit, are we -can we -- should we wait until the party putting in evidence to make motions striking testimony and/or excluding testimony, or would you like to make those evidentiary motions beforehand?

19 CO-HEARING OFFICER PETTIT: I would suggest we
20 do it later when that information is right in front of
21 us.

We'll now invite appearance by the parties and the evidentiary portion of the hearing. Will those making appearances state your name, address, and whom you represent so that the court reporter can enter this

1 information into the record?

2 First the Division of Water Rights Prosecution3 Team represented by Mr. Rose.

4 MR. ROSE: David Rose, Division of Water Rights 5 Prosecution Team, 1001 I Street, Sacramento, California 6 95814.

7 CO-HEARING OFFICER PETTIT: Woods Irrigation8 Company.

9 MR. HERRICK: John Herrick representing Woods 10 Irrigation Company, 4255 Pacific Avenue, Suite 2, 11 Stockton, 95242 -- 95240. 95247.

12 (Laughter)

MR. HERRICK: One of those is correct.
CO-HEARING OFFICER PETTIT: Thank you,
Mr. Herrick. That's okay. I hadn't been in this
hearing room before, and I had to find it today.
Modesto Irrigation District, State Water
Contractors, and San Luis & Delta-Mendota Water
Authority.

20 MR. O'LAUGHLIN: Tim O'Laughlin representing 21 Modesto Irrigation District, 117 Meyers Street, Suite 22 110, Chico, California 95928.

23 MR. POWELL: Stan Powell representing the State 24 Water Contractors, address is 400 Capitol Mall, 27th 25 Floor, Sacramento, California 95814.

MR. RUBIN: Diepenbrock, Harrison by Jon Rubin
 and Valerie Kincaid, 400 Capitol Mall, Suite 1800,
 Sacramento, California 95814.
 CO-HEARING OFFICER PETTIT: San Joaquin County

5 and San Joaquin County Flood Control & Water 6 Conservation District.

MS. GILLICK: DeeAnne M. Gillick, Neumiller &
8 Beardslee, 509 West Weber Avenue, Stockton 95201.

9 CO-HEARING OFFICER PETTIT: Thank you, 10 Ms. Gillick. I'll now administer the oath. Will all 11 those persons who may testify today please stand and 12 raise your right hand.

Do you promise to tell the truth in this proceeding?

15 THE PROSPECTIVE WITNESSES (collectively): Yes.
16 CO-HEARING OFFICER PETTIT: Thank you. Be
17 seated, please.

18 MR. RUIZ: Mr. Pettit, Dean Ruiz for Central 19 Delta Water Agency and South Delta Water Agency. 20 Harris, Perisho & Ruiz, 3439 Brookside Road, Suite 210 21 Stockton, California 95219.

22 CO-HEARING OFFICER PETTIT: Thank you,
23 Mr. Ruiz. Ms. Aue just pointed that out to me. Okay.
24 We're now going to hear opening statements from
25 the parties who will not be presenting a case-in-chief,

and the first is South Delta Water Agency. Mr. Herrick.
 MR. RUIZ: Mr. Pettit, that is me again, Dean
 Ruiz for Central Delta Water Agency and South Delta
 Water Agency.

5 CO-HEARING OFFICER PETTIT: Oh, I'm sorry.
6 MR. RUIZ: That's fine.

7 I make this policy statement on behalf of the
8 Central Delta Water Agency and South Delta Water
9 Agencies. Both agencies are opposed to the CDO
10 proceedings.

It's clear that the Board is so actively focusing your efforts on diverters in the South Delta without a logical or without a legal basis.

It is well understood that the diversions of water onto lands on the Delta, as opposed to letting those lands to go fallow, would result in their turning into tule and swamplands resulting in a net gain of overall water that would otherwise occur and that the water used in the Central and South Delta remains in the system.

21 More specifically, it's well understood that 22 the agricultural use in the South and Central Delta 23 result in a savings of not less than two acre feet per 24 acre per year as compared to the amount of water which 25 would be consumed by weeds, tule, and swamp.

1 It is therefore obvious that the supposed 2 benefits of reducing or eliminating supposed alleged 3 illegal diversions in the South Delta, if even there 4 were any -- which there are not -- would result in no 5 benefit to anybody.

6 Similarly, to the extent reduction of so-called 7 unauthorized or illegal diversions could result in a 8 benefit to the State, any such benefits could be 9 received by focusing on diversions in other parts of the 10 system.

The Board issued a Draft CDO pursuant to Water Code Section 1831 and Section 1052. A basic reading of those sections of the Water Code make it clear that these sections do not apply to diverters who have claimed and have provided evidence to support and substantiate riparian and pre-1914 water rights.

The Board's own literature posted on its website states that only the courts, not the Board, have the jurisdiction to determine the validity and extent of riparian and pre-1914 water rights, and there is no precedent for the Board to use CDOs against individuals or in the case of Woods Irrigation Company who have provided evidence of its pre-1914 water rights.

24 It must be understood that through this and 25 other pending CDO proceedings focussed on the South

1 Delta the Board is doing much more than investigating.

You are pursuing a path to specifically
determine the validity of riparian and pre-1914 water
rights, and this Board simply has not provided a valid
legal basis for these actions.

In response to a recent legal challenge brought by respondents to these CDO proceedings and by our agencies, the Board has still failed to provide a valid legal daily basis to explain why it can proceed in this manner and why the Board's own literature is wrong.

11 Yet this Board continues to proceed without 12 jurisdiction in an effort to determine the validity of 13 certain water rights in the Delta while the agricultural 14 activities pursuant to those water rights literally 15 result in a water savings to the system. This makes no 16 sense.

17 Subsequent to the CDO being issued in this 18 matter, Woods Irrigation Company has submitted 19 substantial evidence of its own water right, and there's 20 nothing to prevent Woods from having its own rights 21 along with those of shareholder members.

To fully ascertain these water rights necessarily requires that you make findings in determination of the rights of Woods Irrigation Company shareholder members who aren't parties to this

proceeding. This raises serious due process questions
 and is simply illogical.

This fatal due process flaw has been pointed out to you in recent months and weeks, yet we are here going forward at this point.

6 This hearing should have been and should be 7 postponed until such time as all Woods Irrigation 8 Company shareholder members are parties and present at 9 this proceeding. To do otherwise is a mistake that will 10 result in further hearings and further litigation that 11 could otherwise be easily avoided.

12 Thank you.

CO-HEARING OFFICER PETTIT: Thank you,
 Mr. Ruiz.

As you pointed out, those subjects have been discussed at some length here over the last few weeks, and I think we have some disagreement about the Board's ability to proceed. And to make a short conclusion, I think we will proceed today. Thank you.

20 Your objection, of course, will be noted.
21 You're proceeding with -- Ms. Gillick -- with
22 Central Delta?

MS. GILLICK: Good morning. DeeAnne M. Gillick on behalf of the County of San Joaquin and the San Joaquin Flood Control & Water Conservation District.

1 The County would like to joint in the comments 2 and concerns expressed by Dean Ruiz on behalf of the 3 Delta agencies and would also like to point out several 4 other issues and would like to support the water right 5 diverters and those who benefit from Woods Irrigation 6 Company, the property owners and farmers in the Delta.

7 The parties have consistently argued that the 8 property owners and farmers in the Delta hold valid 9 riparian and pre-1914 water rights.

10 And as you are aware and you just commented on, 11 the parties believe that the State Board has no 12 jurisdiction to go forward with the Cease and Desist 13 Orders as presently put forth today.

And I would like to incorporate and renew those legal arguments recently filed in a writ of prohibition filed on behalf of other property owners in the Delta and the Central and Delta Water Agencies.

But particularly, the Woods Irrigation Company Cease and Desist Order is invalid and cannot go forward today.

The Prosecution Team does not dispute that Woods Irrigation Company holds a pre-1914 water right. They may dispute the amount. However, they do not dispute that there's a pre-1914 water right.

25 Therefore, the State Board has no ability to

1 regulate the pre-1914 water right. It's not subject to 2 Division 2 of the Water Code, and that's the basis of 3 your Cease and Desist Order under Water Code Section 4 1052.

5 Specifically, in your Cease and Desist Order, 6 it states: Woods shall submit a statement of water 7 diversion within 60 days.

8 On December 28, 2009, statements of water 9 diversion were completely voluntary. It wasn't until 10 February 2010 the law was effectively changed, and now 11 the deadline is July 1st, 2010 to report your 2009 12 diversion.

13 There's just no legal authority for the State 14 Board to require this pre-1914 water right holder to 15 issue a statement of use and submit that information to 16 the State Board.

Furthermore, the Cease and Desist Order states that Woods Irrigation Company should provide evidence of the riparian property served by Woods Irrigation Company.

This is exactly why the State Board should not be holding this proceeding and water right adjudication and determining for pre-1914 water rights or riparian water right holders should be held in the court as the Water Code requires.

Those riparian water right holders aren't here.
 Their due process is completely being violated. Woods
 Irrigation Company has no obligation or no right to
 assert other parties' riparian water rights.

5 And Woods Irrigation Company by law can't hold 6 riparian water rights unless they've been assigned or 7 something, and it flows to property owners, those 8 riparian water rights.

9 So again, the terms of the Cease and Desist 10 Order are just completely without legal basis.

11 And third, the requirement that Woods 12 Irrigation Company document the amount of water diverted 13 and install measuring devices? Again, there's 14 absolutely no authority for the State Board to require 15 pre-1914 water right holders to measure their water 16 diversion.

17 In addition, the State Board acknowledges that 18 there's riparian water right holders being served by 19 Woods Irrigation Company and asks for documentation on 20 that.

21 Well, you can't. You have no authority to look 22 at riparian water right holders.

The law changed. And in 2012, riparian and pre-1914 water rights holders are going to have to start reporting the measured amount. That burden to report

1 won't be effective until July 1st, 2013.

2 The Cease and Desist Order by its very terms is 3 completely without merit.

Now, I'd like to talk about what the evidence
will show if we do go forward with the hearing and
evaluate Woods Irrigation Company's water right.

First of all, the evidence will be presented that all lands within Roberts Island are riparian -there are several factors to support this -- regardless of the patent and chain of title in the property.

11 That is based upon the nature of Roberts Island 12 being located within the Delta; and without the work of 13 these property owners and their predecessors, this land 14 would be under water and be swamp and overflow land 15 completely subject to riparian water right.

16 The federal government and state government and 17 swamp and overflow law -- act, and specifically the 18 Arkansas Act, said that this land can be reclaimed if 19 it's put into cultivation within three years.

20 Well, I think consistent with the federal and 21 state law intent, cultivation requires the retention of 22 a water right in order to put that land to cultivation. 23 It is inconsistent that there could be any other use to 24 that land if the water right did not remain attached to 25 the property.

In addition, the property's located within the Delta pool. It's a lake. It doesn't matter where the water is withdrawn from; there is always water in that lake.

5 In addition, there is evidence in the record of 6 seepage that is occurring. Even if you're diverting not 7 necessarily adjacent to a watercourse, that diversion is 8 most likely coming from the surface water stream.

9 So by nature, all the land on Roberts Island is 10 riparian.

11 Second of all, specifically as to Woods 12 Irrigation Company's pre-1914 water rights, we have 13 articles of incorporation dated 1909 that says the 14 purpose of the Woods Irrigation Company is to acquire 15 water and water rights.

We have 1911 agreements recorded in chains of title between the property owners of this land that states that the irrigation company will furnish water.

19 The irrigation company was incorporated to 20 acquire water rights, and in 1911 the contracts say they 21 will furnish water.

In addition, the contracts and later minutes of the District indicate all water within the district was being served except for 370 acres which didn't have facilities to it, and the evidence in the record

indicates that 370 acres was removed from the obligation
 to deliver water. Again, that was in 1913.

In addition, to supplement this, there's a 1957 verified complaint in the record. It's Woods Irrigation Company 4-G. That indicates since 1911 all lands within the Woods Irrigation Company have been irrigated by Woods Irrigation Company.

8 The Prosecution Team doesn't dispute there's a 9 valid pre-1914 water right.

10 The prosecution doesn't dispute that there's 11 riparian lands that are being served.

12 The nature, extent, details cannot be 13 restricted by a Cease and Desist Order.

Woods has a valid pre-1914 water right. There's riparian landowners that are being served by Woods. Those riparian landowners aren't here. It would be completely improper for the State Board to issue the Cease and Desist Order that's before them here today.

19 Thank you.

20 CO-HEARING OFFICER PETTIT: Thank you,21 Ms. Gillick.

I have a couple of thoughts with regard to your statements; but before I say anything, I will ask Ms. Aue if she would like to respond to any of the legal points in hopefully fairly brief form.

1 STAFF COUNSEL AUE: The State Board is very 2 aware that there are hotly contested legal issues 3 concerning the extent of riparian rights, concerning the 4 extent of our jurisdiction to hear riparian and pre-1914 5 water right cases.

6 We have made several interim decisions. We 7 have the briefing in response to the case that was filed 8 regarding those issues.

9 Those issues are ongoing. It's our position 10 that we do have the authority to address these issues, 11 and, you know, that's the authority that this will 12 continue under that, you know, as we've said in prior 13 rulings, we will hold this.

14 Whether or not the rights of other landowners 15 would be affected by the CDO has also been addressed. 16 We pointed out that that depends on how the CDO is 17 issued.

One of the hearing issues here is whether the ODO should, if it does issue, should be changed and in what way.

21 So these are issues that we feel are 22 appropriate to address in a hearing. We do not feel 23 this will affect anyone's rights.

And insofar as, you know, your interpreting the evidence, you know, that's what the hearing is for. So

1 we appreciate your summation and your perspective and 2 sort of characterization of that evidence, but that's 3 what the hearing is to determine.

4 CO-HEARING OFFICER PETTIT: Thank you, Ms. Aue. 5 She's pretty well covered my general reaction 6 to your comments. I guess as a nonattorney, it seems to 7 me fairly apparent that if there is a question about the 8 courts becoming involved in these issues there has to be 9 some sort of investigative procedure to decide whether 10 that's an appropriate way to proceed.

And when I, as -- again, as a nonlawyer, when I read the existing, pre-existing, long-standing statutes and put them together with the recent legislation from last fall, it seems to me like this is a proper investigatory tool for the Board to proceed.

And again, as has been stated many times, the people who are not the direct recipients of the CDO cannot have their rights affected without further due process in any event.

20 So I will overrule your objection. Again, it's 21 noted. And thank you for a very coherent statement 22 about the reasons for it.

I think it has -- do we have a witness yet from the Farm Bureau who wanted to make a policy statements? Would you please identify yourself, sir?

Before you came in, I did ask people to limit
 these policy statements to five minutes.

3 MR. BLODGETT: That will not be a problem. I 4 apologize for being a little bit late getting here from 5 Sacramento to Stockton back to Sacramento this morning.

6 My name is Bruce Blodgett. I'm with the San 7 Joaquin Farm Bureau Federation, 3290 North Ad Art Road 8 in Stockton, California.

9 The San Joaquin Farm Bureau represents farmers 10 and ranchers throughout the county. That means Delta 11 farmers, that means farmers south of the Delta, east of 12 the Delta, and all points in between.

We have serious concerns with this process and serious concerns with the questions that are being asked of Delta agriculture that don't seem to be asked of any other water district statewide or any other area statewide.

We would like to recognize Woods Irrigation and their long-time service to our members in the Delta. Their long-time service to providing water for Delta agriculture is an extremely important part of our economy here in the San Joaquin County.

As we move forward, we have to recognize that Delta agriculture -- it's an interesting process. We've had farms in that have been in existence since the

1 1800s. My own family's operation was in business since 2 the 1800s until we sold recently in the '90s. And now 3 those water rights are being challenged for whatever 4 reason.

5 And we sincerely question the sincerity of this 6 process when we have farmers that have been there for 7 generations upon generations who are now finding that 8 their water rights are being challenged.

9 I won't take too much of your time. We have 10 some serious concerns. Delta agriculture has been the 11 backbone of our agriculture economy since the late 12 1800s. That much we can tell you. So water rights are 13 absolutely essential to maintaining that viable 14 agricultural economy.

15 Any questions?

16 CO-HEARING OFFICER PETTIT: I have no 17 questions.

18 CO-HEARING OFFICER SPIVY-WEBER: No.

CO-HEARING OFFICER PETTIT: Staff? Thank you,
 Mr. Blodgett.

I believe we're ready to proceed with the cases-in-chief now. Is that it? Mr. Rose. MR. ROSE: Good morning, Vice-Chair Spivey-Weber, Board Member Pettit, members of the

1 hearing team.

Again, my name is David Rose for the Division of Water Rights Prosecution Team for this matter here today.

5 Briefly, the Prosecution Team's evidence will 6 show Woods Irrigation Company submitted evidence to the 7 Division of Water Rights claiming a 1911 statutory --8 nonstatutory appropriative water right to divert water 9 from Middle River to lands on Roberts Island at a rate 10 of up to 77.7 cubic feet per second.

Division staff then performed their own independent review of the materials and determined there was sufficient evidence to conclude it was likely that 77.7 cfs was developed under the claimed right.

15 Staff conducted a site inspection, and at the 16 time of the site inspection Woods was diverting 17 approximately 90 cfs.

18 Woods was asked to present a list of riparian 19 parcels to which Woods provides water under those 20 riparian claims of right among other claims.

21 Woods did not submit the requested information, 22 so the Division issued the subject Draft Cease and 23 Desist Order which would order Woods to cease and desist 24 from diverting more than 77.7 cubic feet second until 25 Woods provides satisfactory evidence establishing a

valid basis of right or contract to serve additional
 water.

3 Woods filed statements of water diversion and 4 use for all of its points of diversion and it developed 5 a monitoring plan and installed measuring devices to 6 ensure compliance with the limits of its water rights. 7 In spite of or in light of Board Member 8 Pettit's letters dated May 24th and June 1st, 2010, the

9 Prosecution Team believes that the Draft Cease and 10 Desist Order can be issued as written without violating 11 the due process of any landowner in the Woods service 12 area.

13 The Prosecution Team has not, based on the 14 evidence present so far, made any determination as to 15 whether Woods holds a claimed pre-1914 water right or 16 simply manages the distribution of water pursuant to the 17 rights of its shareholders.

18 Yet because Woods has not shown it holds or is 19 exercising rights in addition to the 77.7 cfs claimed 20 right, it would be appropriate for the Board to issue 21 the Draft Cease and Desist Order.

At this time, I'll call my witnesses, MarkStretars and Charles Arnold.

24 ///

25 ///

1	
2	CHARLES ARNOLD
3	MARK STRETARS
4	Called by PROSECUTION TEAM
5	DIRECT EXAMINATION BY MR. ROSE
6	
7	MR. ROSE: Would you please state your names
8	and places of employment for the record.
9	MR. ARNOLD: Charles Arnold, Division of Water
10	Rights.
11	MR. STRETARS: Mark Stretars, also with the
12	Division of Water Rights.
13	MR. ROSE: And you submitted copies of your
14	resumes for these proceedings?
15	MR. ARNOLD: Yes, I have.
16	MR. STRETARS: I did, yes.
17	MR. ROSE: Are those resumes still current and
18	accurate?
19	MR. ARNOLD: Yes, it is.
20	MR. STRETARS: Mine is, yes.
21	MR. ROSE: Have you reviewed your written
22	testimony for this hearing?
23	MR. ARNOLD: Yes, we've reviewed the testimony.
24	I have.
25	MR. STRETARS: I have.

1 MR. ROSE: Would you say it's true and 2 accurate? 3 MR. ARNOLD: Yes. MR. STRETARS: Yes, it is. 4 MR. ROSE: Is there anything you'd like to 5 6 change in your written testimony? 7 MR. ARNOLD: No. MR. STRETARS: Not that I'm aware of. 8 MR. ROSE: Start with Mr. Arnold, a few 9 questions. What information led you to conclude that 10 11 the basis of right claimed in this proceeding, the 77.7 cfs pre-1914 water right, does in fact exist? 12 MR. ARNOLD: Review of the information 13 submitted by Woods. Articles of incorporation. 14 1911 15 agreements. Other information submitted associated with those specifying the right and quantity of 77.7 cfs. 16 17 MR. ROSE: Did you only look at materials 18 submitted by Woods, specifically materials submitted March 4, 2009 identified as Prosecution Team Exhibit 05? 19 20 Did you only look at those exhibits? 21 MR. ARNOLD: There's other information that we 22 looked at within the Delta. 23 MR. ROSE: What else did you look at to 24 corroborate or support the information submitted by 25 Woods?

MR. ARNOLD: Maps, historical information,
 aerial photographs, reports. Numerous reports that were
 submitted.

MR. ROSE: Has all the evidence you relied upon
been provided as either testimony and exhibits of the
Prosecution Team or of Woods Irrigation Company?

7 MR. ARNOLD: Yes. With respect to the quantity 8 of water, water right, yes.

9 MR. ROSE: Okay. Mr. Arnold, did you do a site 10 inspection?

11 MR. ARNOLD: I did do a site inspection.

MR. ROSE: And what were the results of your site inspection?

MR. ARNOLD: Well, we confirmed that they were -- that the area provided the -- the area upon which 77.7 cfs was being provided was in fact developed agriculture irrigation, and there was pumping and drainage facilities out there.

19MR. ROSE: Did you find that more water than2077.7 cubic feet per second was being diverted?

21 MR. ARNOLD: Not during my inspection, but Mark 22 did a subsequent inspection, and I think he can speak to 23 that.

24 MR. ROSE: Mr. Stretars, you did a subsequent 25 inspection?

1 MR. STRETARS: Yes, I did.

2 MR. ROSE: What were the results of that 3 inspection?

MR. STRETARS: During that inspection, we did some measurements of flow in the two major canals supplying the Woods Irrigation District area, and we came up with a flow of about 90 cubic foot per second in those two canals.

9 MR. ROSE: I suppose either of you could answer 10 this question. What did you or did the Division do with 11 that information?

MR. STRETARS: That was evaluated in -- with respect to the documents that we had reviewed and found to be somewhat in excess of the amounts they were claiming.

And so as a result of that, we evaluated and asked for additional information as to where that water basically, the basis of right for that water, was coming from.

20 MR. ROSE: What was Woods' response to your 21 request for additional information?

22 MR. STRETARS: We did not receive a specific 23 response. I believe we wrote two letters to them and 24 received a response in return.

25 One was asking -- we were asking for sufficient

1 evidence of the riparian usage or additional claim of 2 pre-14 rights, something to substantiate the difference 3 in those quantities.

And at the point in time we ultimately went to the Draft CDO on it, we had not received any information.

7 MR. ROSE: Did you receive -- I suppose either 8 of you could answer this question. Did you receive any 9 additional information after the Draft Cease and Desist 10 Order was issued?

MR. ARNOLD: I don't believe we did receive information.

MR. STRETARS: We didn't relative to information regarding a claim of right.

We did receive some information from Modesto 15 indicating there was a question of whether the District 16 17 had any claim of right whatsoever, and they presented --18 let me get a date here -- a Supreme Court ruling dated 1958 in which there was a discussion of Woods' rights in 19 20 which there was an indication that they held no rights. 21 MR. ROSE: That's the Woods Irrigation Company 22 via the Department of Employment case?

23 MR. STRETARS: That's correct.

24 MR. ROSE: Did that information change your 25 conclusions regarding the Draft CDO?

1 MR. STRETARS: It does not.

2 MR. ROSE: Just to be clear, have you formed an opinion, either of you, as to who is the owner of the 3 4 pre-1914 water right? MR. STRETARS: I don't think we have an 5 6 opinion. Basically, either -- the water right goes with the land. So whether it's provided through Woods or 7 individual parties, the water is attached to the 8 9 appropriate extent of the property and the rights are there attached. 10 11 MR. ROSE: Has Woods submitted any evidence to 12 support it, Woods, holding riparian or other 13 appropriative water rights? 14 MR. STRETARS: They have not submitted evidence 15 relative to holding riparian rights. 16 We did receive from numerous parties within the District statements of water diversion and use in which 17

18 they identified their own pre-14 and riparian claim, but 19 no additional evidence was presented.

But then on their statements, they identified they were receiving water from Woods Irrigation Company, which is why we directed our investigation more towards Woods. They are the primary supplier operating the pumps and providing the water to the farmers in the area.

MR. ROSE: So just to be clear, has Woods 1 2 submitted any evidence of it, Woods itself, holding any rights in addition to the claimed 77.7 cubic feet per 3 second? 4 5 MR. STRETARS: They have not to this point in 6 time. 7 MR. ROSE: In your opinion, Mr. Arnold, if only Woods' own rights will be determined at this hearing, 8 9 does that change your opinion regarding the appropriateness of the Draft Cease and Desist Order? 10 11 MR. ARNOLD: If only Woods' rights are --12 MR. ROSE: If only Woods' own rights will be determined at this hearing, does that change your 13 opinion regarding the appropriateness of the Draft Cease 14 and Desist Order? 15 16 MR. ARNOLD: No. 17 MR. ROSE: Thank you. 18 And Mark, I think these questions will probably 19 be directed mostly at you. 20 What's your position in the Division in 21 relation to Mr. Arnold? 22 MR. STRETARS: I'm Mr. Arnold's immediate 23 supervisor. 24 MR. ROSE: Did you review the Draft Cease and Desist Order prior to issuance? 25

1 MR. STRETARS: I did.

2 MR. ROSE: Did you agree with that draft order? MR. STRETARS: I do. 3 MR. ROSE: And I believe you already answered 4 that you've seen additional information in the Woods 5 6 case. 7 What's the Division's normal process for investigating water rights compliance? 8 9 MR. STRETARS: Typically, we seek information 10 from the party. And during the interim, while we're 11 waiting for information, we're looking at information 12 available to us, other records, documents, maps, so 13 forth and so on, to have an opinion, I guess you'd say, 14 of our own. 15 Once the information is received, we evaluate 16 that information in light of all the various aspects that have been presented. And if we have additional 17 18 questions, we will basically write back to the parties 19 asking for additional information to clarify the points. 20 Beyond that, if we still are unable to resolve 21 the situation or the situation is not moving forward as 22 it should, we go to a draft cease and desist order. 23 MR. ROSE: Do you look into the reliability of 24 information submitted by parties? 25 MR. STRETARS: We do to the extent possible, in

1 the case of maps, whatever else we evaluated, where they 2 came from, determine the validity of them.

In the case of writing, typically, as in any case, you're going to get hearsay information. But documents that are presented, you know, specific documents are pretty reliable.

7 MR. ROSE: How do you weigh that information? MR. STRETARS: Hearsay evidence is, just as it 8 implies, it kind of assists in understanding it, but not 9 necessarily provides specific facts and finality to it. 10 11 Documents beyond that point, again, provide more specific information, again not necessarily, you 12 13 know, completely in the end. There's always information we may not be aware of. 14

MR. ROSE: Have you seen the testimony for
 Chris Neudeck submitted by Woods Irrigation Company?
 MR. STRETARS: Yes, I reviewed that.

MR. ROSE: Do you see any good reason, after having read that testimony, to modify the numbers from the initial 1911 Woods Irrigation Company agreement -that's the 77.7 cubic feet -- to some other number? MR. STRETARS: No, not really.

23 MR. ROSE: Do you see in good reason to apply a 24 one cubic foot per second per 80 acres calculation 25 versus the calculation you used in the agreement or the

1 numbers specifically used in the agreement?

2 MR. STRETARS: No. The 1-to-80 is a common number used by the Division to get an idea of what's in 3 4 the ballpark, so to speak, of being a reasonable number 5 for irrigation. There's no specifics to it per se. 6 MR. ROSE: Was the 1911 Woods Irrigation 7 Company agreement specific as to the amount of water 8 that was discussed? 9 MR. STRETARS: It was very specific. 10 Separate and apart from the acreage that was 11 evaluated, the amount was specifically identified. Ιt wasn't a calculation that was made. It was identified 12 13 directly in the document. 14 Therefore, since again we're talking about a 15 19 (sic) document, the calculations, or the adjustment, I think, would be appropriate to say that by 1914 they 16 used more, if they could provide that evidence. 17 But 18 that evidence was not provided. 19 MR. ROSE: One final question, Mr. Stretars. 20 If only Woods' own rights will be determined at this 21 hearing, does that change your opinion regarding the 22 appropriateness of the Draft Cease and Desist Order? 23 MR. STRETARS: Other than one point, no. The 24 point being whether or not they would need to file a 25 statement.

MR. ROSE: Can you elaborate briefly on that? MR. STRETARS: If it's found that Woods itself holds no -- which it doesn't hold any riparian land that we're aware of -- then a statement may not be appropriate then, from that standpoint.

6 MR. ROSE: Would somebody still have to file a 7 statement?

8 MR. STRETARS: Yes. It would fall basically to 9 all the individual landowners with the service area to 10 file their individual statements, which is kind of why 11 we asked Woods basically to step in front and take it. 12 Because they do provide all the irrigation

13 water. They operate the pumps and what have you.

14 It would be much simpler for them to provide 15 one statement covering all the issues and providing the 16 quantity of water served by the company as opposed to 17 having each individual party, thinking ahead to 2012, 18 put individual meters on all their pumps for all the 19 points of siphon and diversion off the main canals. It 20 becomes a much larger process.

21 So we were looking to Woods to kind of step up 22 and take the ball and run with it in this case.

23 MR. ROSE: So Mr. Stretars, just other than who 24 submits the statements, can the rest of the Draft Cease 25 and Desist Order as written be issued in your opinion?

MR. STRETARS: I think it should be issued as
 it stands.
 MR. ROSE: Okay. Thank you.

4 No further questions.

9

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5 CO-HEARING OFFICER PETTIT: Mr. Rose, you 6 presented your witnesses as a panel. If there's no 7 objection, I suppose we should do the cross in the same 8 manner. Any problem with that?

Mr. Herrick, please proceed.

10 MR. HERRICK: Thank you Mr. Chairman, Board

11 Members. John Herrick for Woods Irrigation Company.

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13 CROSS-EXAMINATION BY MR. HERRICK

14 FOR WOODS IRRIGATION COMPANY

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16 MR. HERRICK: Mr. Stretars, let me pick up on 17 the last line of questioning before I get into my normal 18 stuff.

In your Exhibit PT-5 which is, I believe, the submittal by Woods Irrigation Company on March 4th; is that correct?

22 MR. STRETARS: That's correct.

23 MR. HERRICK: And at that time, they noted that 24 they were objecting to the submittal of a statement of 25 water use; were they not?

1 MR. STRETARS: I believe so, yes. 2 MR. HERRICK: And they referenced you a code section that dealt with an exemption they felt applied 3 to themselves; is that right? 4 5 MR. STRETARS: Yes. 6 MR. HERRICK: And did you ever respond to, or 7 anyone from your office, ever respond to that objection regarding the exemption? 8 9 MR. STRETARS: I don't believe so specifically. 10 MR. HERRICK: Okay. Mr. Stretars, what is your 11 assignment when you investigate water rights? How is your job description constituted? 12 13 MR. STRETARS: I'm not sure where you're going exactly. 14 15 The Compliance Unit looks into issues 16 regarding, in this case, the last five or so years, watershed areas that are of concern, for whatever 17 18 reason. 19 Our assignment came as a result of the -- let 20 me get the numbers exactly here -- the workshop in June, 21 July 16, 2008, with the Board's Strategic Plan setup 22 activities to look into the Delta operations, use of 23 water. 24 MR. HERRICK: And you're referring to the work plan referenced in your testimony that says preventing 25

unauthorized diversions of water; is that correct? 1 2 MR. STRETARS: That's correct. 3 MR. HERRICK: And did you take that to mean unauthorized diversions pursuant to permits or licenses, 4 or any unauthorized diversions? 5 6 MR. STRETARS: Any unauthorized diversions. 7 MR. HERRICK: Okay. So you believe that you have authority to investigate riparian rights and make 8 9 rulings on riparian rights? MR. ROSE: Objection. That calls for a legal 10 11 conclusion of Mr. Stretars. 12 MR. HERRICK: I'm not asking for the Board's 13 position, Mr. Chairman; I'm just asking for Mr. Stretars' understanding of his job when he's 14 15 investigating water rights. 16 MR. STRETARS: My understanding is that we look at unauthorized diversions of water. 17 18 In order to accomplish that, we need to 19 evaluate whether pre-14 or riparian right exists. And 20 to the extent that we cannot cover that quantity or that 21 amount or that basis, then our authority extends to that 22 portion that would be considered unauthorized. 23 MR. HERRICK: And -- okay. Excuse me. And you have other cases where you've 24 25 recommended and CDOs have issued telling someone they

1 are not a riparian water right holder? 2 MR. STRETARS: We have in the past, yes. 3 MR. HERRICK: And you feel that the CDO then would bind any of those parties? 4 MR. ROSE: Objection. It's unclear whether Mr. 5 6 Herrick is talking about the Draft Cease and Desist 7 Order or a cease and desist order issued by the Board. Maybe if he could be a little more clear? 8 9 MR. HERRICK: That's okay. Mr. Stretars, you said that your investigation 10 11 included other things than just reviewing the 12 information provided by the party; is that correct? 13 MR. STRETARS: That's correct. 14 MR. HERRICK: And so you've done other 15 investigations in the area of South Delta; is that 16 correct? 17 MR. STRETARS: Yeah. Yes. 18 MR. HERRICK: And those include observations of 19 whether some parcel actually touches a main channel, 20 stuff like that? 21 MR. STRETARS: That's correct. 22 MR. HERRICK: And did you do any search of 23 title records or anything like that? 24 MR. STRETARS: We did not. 25 MR. HERRICK: And a title record might give you

1 an indication of whether or not a particular parcel of 2 land has a water right; is that correct?

MR. STRETARS: Most cases it would, yes. MR. HERRICK: And is it correct that none of the landholders within the Woods Irrigation service direct have received notice or any request asking them to produce any title documents or information regarding their own personal rights?

MR. STRETARS: All but one.

9

MR. HERRICK: All but one have received notice? MR. STRETARS: All but one have not received notice.

MR. HERRICK: And in your investigation, I note that in your memorandum, which is PT-6, you note the physical characteristics of the area. And by that, I mean the elevation of land and the depth of the groundwater; is that correct?

18 MR. STRETARS: I don't know if I spoke to 19 groundwater.

20 MR. HERRICK: Okay. I'm sorry, but --21 MR. STRETARS: I did note the elevation of the 22 land, yes.

23 MR. HERRICK: And on page 1 of that where you 24 say that the farm land elevations range from plus five 25 feet in -- near Woods' point of diversion on Middle

River to minus five feet of the drain, does that give 1 2 you an indication of how the land relates to the level of water in the channels? 3 MR. STRETARS: I don't follow your line of 4 5 questioning. 6 MR. HERRICK: If the land is below five feet, what does that mean? Below five feet of what? 7 8 MR. STRETARS: We're talking about the USGS data, elevation, basically of. 9 MR. HERRICK: Of what? 10 MR. STRETARS: Sea level. 11 12 MR. HERRICK: Sea level. So the land is then five feet below sea level? 13 14 MR. STRETARS: That's correct. 15 MR. HERRICK: Now do you have any information or knowledge regarding the groundwater in the area? 16 MR. STRETARS: Not specifically, no. 17 18 MR. HERRICK: You have not done any 19 investigation to see whether or not the groundwater is in fact connected to the surrounding channels? 20 21 MR. STRETARS: No. 22 MR. HERRICK: You have not heard any 23 discussions or participated in any discussions regarding 24 that relationship? 25 MR. STRETARS: I have heard discussions. We

1 have not done anything around it, no.

2 MR. HERRICK: Do you have any opinion on whether or not the groundwater in the area is directly 3 connected to the surrounding channels? 4 MR. STRETARS: I would say to some extent 5 6 possibly. It would take some groundwater testing to determine the -- basically the difference, the -- what 7 we call a Stiff diagram which shows the difference in 8 9 minerals, what's in the surface flowing water to what would be perking through potentially or coming up in the 10 interior of the island. 11 12 0 Well, you and I have had a number of site visits out there? 13 Yes, we have. 14 А 15 And in those site visits, we've viewed lands 0 that had large drainage ditches; is that correct? 16 17 That's correct. А 18 And is it your understanding those drainage 0 19 ditches fill with water regardless of whether or not 20 there's irrigation on the land? 21 That's my understanding, yes. А 22 So that water continually seeps into those 0 23 drainage ditches. Would you conclude that's because the 24 ground is below sea level? 25 I would say differential pressure, yes, forces А

1 that water to come up, come in.

2 Q So there's some sort of hydraulic connection then between the rivers and the groundwater? 3 4 MR. ROSE: Objection; I think that calls for a legal conclusion inasmuch as Mr. Herrick is talking 5 6 about hydrologic connection for purposes of groundwater connected to a surface channel. 7 8 If I'm wrong, then I'm wrong. MR. HERRICK: I don't believe that's correct. 9 The witness just testified there has to be some sort 10 11 of -- I don't want to use the wrong words -- some sort 12 of pressure connection. Whatever you said, Mark. I don't recall. 13 14 MR. STRETARS: I think I said differential 15 pressure. 16 CO-HEARING OFFICER PETTIT: I'm going to allow that, Mr. Rose. 17 MR. HERRICK: So the differential pressure 18 19 you're talking about is some higher level of water in 20 relation to the water in the ground; is that correct? 21 MR. STRETARS: Yes. 22 MR. HERRICK: And that higher level of water 23 would be where? 24 MR. STRETARS: The surface drainage around near the tides. 2.5

1 MR. HERRICK: Okay. And whether or not there's 2 some pressure -- I'm not saying it to be facetious -some pressure from the Sierra Nevada, some long pressure 3 4 or something else, it's a higher level of water that's 5 exerting pressure? 6 MR. STRETARS: Correct. 7 MR. HERRICK: And that causes the water to seep into the drainage ditches of the lands below sea level; 8 9 is that correct? MR. STRETARS: That's correct. 10 11 MR. HERRICK: Now if the landowners did not 12 pump water out of those drainage ditches, how high would 13 the water get? 14 MR. STRETARS: Hard to say. Over time, they'd 15 at least come to the surface, maybe above the surface. 16 MR. HERRICK: Depends on the elevation --17 MR. STRETARS: Yeah. 18 MR. HERRICK: -- right? So if it's at the low end, minus five feet, the 19 20 water would actually be above the elevation? 21 MR. STRETARS: That's correct. 22 MR. HERRICK: Okay. Now, what sort of water 23 bodies can a piece of land be riparian to? 24 MR. STRETARS: Riparian to surface body of water. Surface flowing stream. 25

MR. HERRICK: It has to be a flowing stream? 1 2 It can't be riparian to a lake? 3 MR. STRETARS: I said surface body of water, then I said surface flowing stream. 4 MR. HERRICK: Or. 5 6 MR. STRETARS: Or. Or. Excuse me. MR. HERRICK: So could you be riparian to a 7 stream -- excuse me -- a channel that's connected to a 8 9 main channel in the Delta that runs through an interior island? 10 11 MR. STRETARS: You could, yes. 12 MR. HERRICK: And you said you could be riparian to a lake; is that correct? 13 14 MR. STRETARS: Yes. 15 MR. HERRICK: Does it matter what size the lake 16 is? 17 MR. STRETARS: Has to be a natural body. 18 MR. HERRICK: Okay. And so we just talked 19 about what would happen if the drainage ditches weren't 20 in existence or weren't pumped out, so a natural body of 21 water would exist on all these lands below five feet, 22 would they not, without the operation of the 23 agricultural landowners? 24 MR. STRETARS: They would, but you wouldn't be able to operate as an agriculture landowner because 25

1 you'd be under water, unless you're going to

2 aquaculture, something like that.

3 MR. HERRICK: But you could use the water on 4 your land, couldn't you?

5 MR. STRETARS: Not if it's underwater, I don't 6 see how you could.

7 MR. HERRICK: And we already said that some of 8 the land is higher, some of the land is lower so that 9 there would be a large -- there would be a significant 10 area, I'll say, of lands that would have water on them, 11 some would have water just near the surface, some would 12 have water just below the surface; is that correct?

13 MR. STRETARS: That's correct.

MR. HERRICK: So can one be riparian to that body of water that would naturally occur absent the activities of the landowners?

17 MR. STRETARS: Yes, one could.

MR. HERRICK: And if those waters are connected to -- this is a hypothetical -- if those waters are connected to the surrounding streams, would that be one body of water to which a landowner might be riparian? Or would you consider those separate bodies of water?

24 MR. STRETARS: I would consider them separate 25 bodies of water.

1 MR. HERRICK: Is that because there's levees up 2 right now?

3 MR. STRETARS: There's levees there. 4 MR. HERRICK: And if there were no levees, it would be one body, wouldn't it? 5 6 MR. STRETARS: Yes. 7 MR. HERRICK: And we just established, I think, that even though we have levees, the channel water 8 9 causes water to pond on lands that are below sea level; is that correct? In this area, in the Delta? 10 11 MR. STRETARS: Yes. 12 MR. HERRICK: Okay. Now what if we just had an old remnant slough in the middle of an island that 13 wasn't connected to a main channel? Could somebody be 14 15 riparian to that? 16 MR. STRETARS: To that slough specifically, 17 yes. 18 MR. HERRICK: Is your reasoning or is your conclusion based on the fact that if the bottom of that 19 20 slough was low enough and it always has water, it's a 21 body of water to which one could be riparian? 22 MR. STRETARS: If it has natural water, then 23 you're riparian to it. 24 MR. HERRICK: Okay. And that natural water could be just the regular seepage that could come in to 25

1 that as we describe in drainage ditches; is that 2 correct?

3 MR. STRETARS: Yes.

4 MR. HERRICK: In your analysis of determining 5 whether or not there were sufficient water rights in the 6 area, did you take into account that lands could be 7 riparian to this large body of water under the land?

8 MR. STRETARS: No, because the potential is a 9 lot of that land, all that water is saline in nature 10 which is not usable. And therefore we looked at 11 basically the surface streams and the levees -- in this 12 case, the levees acted to some extent as you would a 13 natural high point, basically looking at its topography 14 and reversing it.

The levee acts as the watershed boundary, so those lands inside would be entitled to waters inside and in the case of being saline were probably not usable.

19 So we were looking for the connection. The 20 more reliable source is the surface streams outside the 21 levees and the connection is the connection through the 22 levee, basically.

23 MR. HERRICK: So a couple things in what you 24 just said. You're assuming that the quality of water 25 determines whether or not it could be riparian?

1 MR. STRETARS: No. Not whether it could be 2 riparian but whether you could use that quantity -- that 3 water in and of itself.

MR. HERRICK: I believe the question was: Could those lands -- did you look at whether or not lands that would naturally be connected to the large body of water we talked about, the riparian, I thought you said no because the water is not good. I'm not trying to misstate you; I'm just --

10 MR. STRETARS: Essentially yes.

11 MR. HERRICK: Okay. So the quality of water 12 then in your opinion does depend on -- does determine 13 whether or not there's a riparian right?

MR. STRETARS: No, doesn't depend on whether a riparian right. Whether you could use the water. Mhether there's a reasonable basis developed to use it.

MR. HERRICK: In your investigations, is your focus on whether or not someone should or may use the water, or whether or not the land would have a water right?

21 MR. STRETARS: Primarily the latter, but a 22 little bit of the first.

I mean we're looking at is the right there, basically. And then is the -- if the right is there, if they can use that water, that's great. In most cases,

water's coming from somewhere else though. 1 2 MR. HERRICK: Do you know why the groundwater is of bad quality in the South Delta? 3 MR. STRETARS: Tidal influence. Years and 4 years of tidal influence on it. 5 6 MR. HERRICK: Do you know whether or not it has 7 anything to do with the bad water quality coming down 8 the San Joaquin River for the last 40 years? 9 MR. STRETARS: I have no idea. MR. RUBIN: I object to the question; lacks 10 11 foundation. 12 MR. HERRICK: Well, rather than lay a tremendous foundation, I'll just move on. 13 14 So Mr. Stretars, let's kind of back out. We 15 were talking about this land within Woods Irrigation 16 District. 17 Has your staff, has the Division examined this 18 issue of whether or not lands in the Delta lowlands 19 should be considered riparian because they overlie a 20 huge pool of water that would naturally inundate their 21 lands absent farmers' activities? 22 MR. RUBIN: I'm going to object to the --23 MR. ROSE: I -- Mr. Rubin's probably going to 24 do the same as me. 25 I have to object to this line of questioning.

In Woods Irrigation Company's testimony, there's nothing suggesting that Woods itself holds any land. So we're talking about the riparian status of individual landowners, which has already been determined would not be a conclusion or a determination in this proceeding.

So this line of questioning goes directly to aconclusion that we're not going to make here.

9 MR. RUBIN: My objections are on different 10 grounds.

11 The question calls for speculation.
12 Mr. Herrick characterized the groundwater in a manner
13 that I don't believe has been testified by the witness.
14 It also assumes facts not in evidence. There's
15 been a number of questions that have been asked that
16 were very general. Mr. Herrick's question is now
17 specific.

18 MR. HERRICK: Well, the question I asked was
19 have you --

20 CO-HEARING OFFICER PETTIT: I'll sustain both 21 of those objections.

22 MR. HERRICK: I appreciate that.

I would like to say, Mr. Chairman, that the question was not asking for speculation. I asked him specifically did he take into consideration that these

1 lands might be.

2 And so there's no speculation involved. Не either took it into consideration, or he didn't. 3 But to Mr. Rose's point, the testimony by 4 Mr. Stretars talks about their investigation and their 5 6 request for Woods Irrigation Company to justify any 7 pumping over 77.7. 8 In his investigation, he states that he looks 9 into whether or not there are pre-1914 riparian claims of other parties which would allow them to pump that. 10 11 So if we cannot explore his thought process or what we did or put on evidence that supports that 12 13 additional pumping, there's no purpose for us to be here. We would have to just stipulate that there's 14 15 nothing we can do, and we have to accept their ruling. 16 We have to able to dispute his statement, his conclusions. 17 18 Now it's very clear from his testimony they 19 asked us, and they still want something to support diversions above 77.7. That's what he's asking for in 20 21 his testimony. 22 CO-HEARING OFFICER PETTIT: I think part of the 23 issue that I have -- perhaps Mr. Rose did, perhaps 24 not -- is I thought things were getting a little bit

25 fuzzy there as to the distinction between establishing a

1 water right and what a landowner has to consider in 2 deciding whether he can make adequate use of that water. 3 I was having a little trouble differentiating 4 where you were going with that in your questioning. 5 Perhaps if you can clarify that, we might proceed. 6 MR. HERRICK: Let me try again. I appreciate 7 that, Mr. Chairman.

8 Mr. Stretars, it's my understanding, and I 9 believe your testimony, in writing and today, clarifies 10 that when an issue arises, however it arises, you 11 investigate to see whether or not in the Division's 12 opinion, if I can use that word, evidence exists to 13 establish sufficient water rights such that you'll move 14 on, you'll do something else. Is that correct?

15 MR. STRETARS: That's correct.

MR. HERRICK: And part of that is just a general investigation to see whether or not there's a license. There's a permit. Is it obviously riparian? Is it not obviously riparian? Is there information supporting a pre-1914 water right?

21 That sort of analysis; is that correct?22 MR. STRETARS: That is correct.

23 MR. HERRICK: So that's what I'm trying to 24 explore with you now when I talk about the Delta pool 25 and whether or not lands are or could be riparian to

1 that Delta pool.

I'm trying to see if, indeed, you went through that analysis and then if you ever considered that analysis.

5 So my question to you is: In your discussions 6 amongst yourselves, the staff, in their evaluation of 7 the Woods situation, have you determined amongst 8 yourselves whether or not what I described as this Delta 9 pool, which lands may be riparian to, was one of the 10 things you considered?

MR. STRETARS: I would say in that case no. MR. HERRICK: Okay. Now do you have a reason why you wouldn't take that into consideration, discuss it, and make your own conclusion about whether or not those lands are indeed or could be riparian to a Delta pool?

MR. STRETARS: I would say probably two or 18 three things.

Again, from discussions, the fact that the ditches were there, basically were providing drain water which means the water is not necessarily of the greatest quality.

23 Second of all, evaluation of the operations of 24 most of the systems come from the major surface streams 25 exterior to the levees and not lands interior. You find

maybe a few small domestic wells but no irrigation wells really drawing from the interior island, so the water's coming from the external surface streams. Therefore the connection would have to come from there, basically, as far as we're concerned.

6 MR. HERRICK: And just so we don't mislead 7 ourselves, there are a few instances where people are 8 actually using a -- I'll call it a well, but some sort 9 of catch basin and irrigating from that; is that 10 correct?

MR. STRETARS: That's correct.

11

12 MR. HERRICK: Okay. Now I'm not asking for 13 your legal conclusion; I'm asking for your evaluation of 14 this.

Is it your understanding that if someone is riparian to a water source they can take water from any place on that source as long as they don't interfere with or adversely affect some other person who is lawfully entitled to divert?

20 MR. STRETARS: In general, I would say yes, you 21 are correct.

22 MR. HERRICK: So the reason I bring that up is 23 your discussion about they don't use the groundwater 24 because it's bad, if it's all one pool of water, have 25 you ever considered that someone taking water from the

channel then would be an illegal appropriator because
 he's just switching his place of diversion from his own
 groundwater over to the channel? You're under oath.
 MR. STRETARS: I know. I know. Thank you for
 that.

MR. HERRICK: And you're a nice guy.

6

7 MR. STRETARS: Run that question by me again, 8 please.

9 MR. HERRICK: In your analysis of evaluating 10 whether or not there are legal diversions, have you 11 taken into consideration that someone diverting from the 12 channel may just be switching his point of diversion 13 from the same pool of water rather than just groundwater -- and it either is or is not having an 14 15 effect on any other legal user of that channel? 16 MR. STRETARS: I would say we probably did. 17 MR. HERRICK: Okay. And did you make a 18 conclusion on that? 19 MR. STRETARS: In some cases we have, some 20 cases we haven't. 21 MR. HERRICK: Okay. How about this case? 22 MR. ROSE: Objection since we're talking about 23 riparian lands, and I don't believe we've established

24 that Woods owns any land. So I don't think that that 25 direct question, not hypothetical, is relevant to this

1 case.

2 MR. HERRICK: I appreciate that. I do need to 3 comment apparently we're going to have to go through 4 this many times.

5 The evaluation was not just to see Woods' 6 pre-1914 right. The evaluation was specifically to see 7 if there was any justification for pumping over 77.7.

8 And so I feel we have to have the need to 9 explore the evaluation by Mr. Stretars because that is 10 indeed what he did. He evaluated more than just a 11 pre-1914 right.

12 In fact, he asked for more information than 13 that.

14 MR. O'LAUGHLIN: Mr. Pettit, on behalf of MID,15 I'd like to object.

16 This is very convoluted and confusing from the 17 standpoint that I understand Mr. Herrick's assertion 18 regarding other water rights that may entitle Woods to 19 deliver more than 77.5 or whatever it is.

20 But the problem is Woods can't assert that 21 because those aren't rights held by Woods.

The landowners within Woods may be able to have those rights and may ask Woods to pump above 77.5 based on those rights, but those aren't Woods' rights. And they're especially not riparian rights

because it's already established and it's already been concluded that Woods owns no lands, claims no riparian rights.

So all of these questions are irrelevant.
And granted, the CDO is poorly drafted. I'll
give Mr. Herrick that. But that doesn't mean we're
going to go and look at individual water right holders
because that has no bearing on what rights Woods has.

9 MR. HERRICK: I'm sorry, Mr. Chairman. I don't 10 mean to drag this out.

11 You know, it would not be -- how should I put 12 this -- equitable to create that box. And the box is: 13 Woods is alleged to divert more than a pre-1914 right. We have four months of, five months of discussion with 14 15 staff about, okay, what do we need to show you so you agree that it's reasonable for us to pump more. Then we 16 17 get to a hearing on that and say you can't talk about 18 that.

19The whole purpose of this hearing is to find20out whether or not they can pump more than 77.7.

We have told you -- not you particularly -- we have told the Board that you should have those other landowners here. But they're not here.

24 So all Woods can do is present evidence as to 25 why it reasonably believes it can deliver any particular

1 amount of water.

If we can't show that or even explore the analysis of staff who went through that analysis, if we can't explore that, I don't know how we can do anything here today or any day.

6 CO-HEARING OFFICER PETTIT: Okay. Let's keep 7 going a while longer, Mr. Herrick, and see where this 8 leads.

9 I agree you may be getting into something we 10 can't revolve today, so I don't have any objection to 11 you asking Mr. Stretars what his rationale was as long 12 as it doesn't involve legal conclusions.

But let's try and keep it moving.
MR. HERRICK: I'll move on. Thank you very

15 much. Okay.

16 Mr. Stretars, is the point of finding and 17 stopping illegal diversions to -- what is the point of 18 finding and stopping illegal diversions?

MR. STRETARS: The point of finding and stopping illegal diversion basically is to make them either legal or eliminate them from the system such that the water's going to the appropriate party that would have legal rights to use the water.

24 MR. HERRICK: So it's to make sure that water 25 for other uses is protected or maintained; is that

1 correct? Or not diminished.

2 MR. STRETARS: To protect all water rights. 3 MR. HERRICK: Have you --4 MR. STRETARS: Sorry. MR. HERRICK: Have you reviewed Mr. Nomellini's 5 6 testimony and attachments to it? 7 MR. STRETARS: I have, yes, to some extent. MR. HERRICK: I'm just going to hand over table 8 8 from his testimony. 9 And I am sorry; I don't know if that's an 10 11 exhibit. Is your -- Mr. Nomellini, is your consumptive use chart an exhibit number? 12 13 MR. NOMELLINI: Yes. 14 MR. HERRICK: For the record, could you please 15 let us know; I'm sorry --16 MR. O'LAUGHLIN: Did you take the oath? MR. NOMELLINI: I did. And I'll take it again, 17 18 and I'll tell the truth in response to any questions I'm 19 asked. 20 MR. HERRICK: We'll get that for the record. 21 Mr. Stretars, are you familiar with this chart? 22 MR. STRETARS: Yes, I've looked at it. MR. HERRICK: And it's from the old CVP Delta 23 24 Lowlands Service Area Investigation Reports? 25 MR. STRETARS: Yes.

MR. NOMELINI: It's WIC-8B. 1 2 MR. HERRICK: WIC-8B as in boy. Thank you. Now Mr. Stretars, you note that, as you've --3 4 if you've read Mr. Nomellini's testimony, but you note that the point made and the point of this chart in this 5 6 proceeding is to show that tule and swamp lands consume approximately 5.82 acre feet per year? 7 8 MR. STRETARS: Yes. 9 MR. HERRICK: And that's near the bottom there, 10 third from the bottom. And even if you go to native 11 vegetation, lush, medium, and dry, it's 4.02 acre feet 12 per year for lush. You see that? 13 MR. STRETARS: Yes. 14 MR. HERRICK: And those two numbers are all 15 above the crops in the Delta, aren't they, the yearly 16 acre foot use? 17 MR. STRETARS: That's correct. 18 MR. HERRICK: So let's just make a hypothetical 19 that Woods Irrigation Company is told to shut down as an 20 illegal diverter, and would you conclude then that the 21 amount of supply in the Delta is less or more if it 22 returns to native vegetation? 23 MR. RUBIN: I'm going to object to the 24 question. Hypothetical -- incomplete hypothetical. 25 MR. HERRICK: Well, let me back up and complete

1 the hypothetical.

2 Mr. Stretars, let's assume that the Woods 3 Irrigation District is ordered to stop diversions, and 4 so the land is not available for agriculture use 5 anymore.

6 Let's also assume that current laws prevent the 7 development of that land as being part of the primary 8 zone of the Delta.

9 And then let's assume that the artificially 10 maintained groundwater levels are no longer artificially 11 maintained, and the waters reach their normal levels.

And then let's assume that because of those high water levels that the native vegetation returns such that we have either lush native vegetation or we have tule and swamp vegetation.

16 That's the hypothetical, okay?

Now, under that scenario, would there be more or less water in the system than there is now?

19 MR. STRETARS: There would be less.

20 MR. HERRICK: So in fact if we -- from that 21 hypothetical, then -- if we shut down local diverters 22 such that their land returns to native vegetation, it's 23 actually counterproductive to the goals of the State 24 Water Resources Control Board; is that correct? Some of 25 the goals.

MR. STRETARS: Okay. Some of the goals. I'll
 buy that.

3 MR. HERRICK: And those goals being sufficient 4 water for water quality for other users, fish, for Delta 5 outflow, those kinds of things, right?

6 MR. ROSE: I'm going to object inasmuch as 7 Mr. Herrick is asking about policy considerations for 8 the State Water Board and not just opinions of

9 Mr. Stretars.

10CO-HEARING OFFICER PETTIT: And I think we're11getting somewhat far afield from Mr. Stretars'

12 responsibility to give us his best estimate of whether 13 or not these are legal diversions or not, Mr. Herrick, 14 so I'd ask you to drop that.

MR. HERRICK: I will. I will not askMr. Stretars to take positions on the Board.

Mr. Stretars, I noted you were asked on direct questions about the two 1911 agreements, and I'll get to more description about that, even though that discussion was not in your direct testimony.

21 Do you recall those questions?

22 MR. STRETARS: Yes.

23 MR. HERRICK: And I believe Mr. Rose asked you 24 whether or not a review of Mr. Neudeck's testimony would 25 lead you to a different conclusion with regards to the

1 amount of water which constitutes a portion of Woods' 2 pre-1914 right? 3 That was a horrible question. But you may understand it. 4 5 MR. O'LAUGHLIN: Wow. That's scary. 6 MR. HERRICK: Been a rough week. 7 MR. STRETARS: My answer would be maybe. 8 MR. HERRICK: Anyway, specifically, as you 9 know, Mr. Rose was talking about the discussion in Mr. Neudeck's testimony about the Woods Irrigation Company 10 11 agreement with E.W.S. Woods to furnish water; is that 12 correct? 13 MR. STRETARS: That's correct. 14 MR. HERRICK: And I just wanted to explore that 15 with you briefly because it's a point we'll make later 16 and it's a point you were asked. 17 MR. STRETARS: Okay. 18 MR. HERRICK: The second paragraph -- do you 19 have a copy of the agreement? Sorry. 20 MR. STRETARS: I can find one here. 21 MR. HERRICK: In your PT-5. Woods Irrigation 22 District. 23 MR. STRETARS: The one starts out on the 29th 24 of September? 25 MR. HERRICK: They all start on the 29th of

1

September. 2 MR. STRETARS: Okay. 3 MR. HERRICK: But it's between Woods and --4 here. 5 MR. STRETARS: I think I've got it. MR. HERRICK: E.W.S. Woods. 6 MR. STRETARS: E.W.S. Woods. 7 8 MR. HERRICK: And it does say contract to 9 furnish water. 10 MS. GILLICK: For the record --11 MR. HERRICK: I'll do that. I'm sorry. I was just going to clarify that the confusion is that in --12 which will be testified to later -- in 1911, there were 13 many agreements, agreements for canals and maintenance, 14 15 agreements for providing water. 16 So one of the four main agreements is the one I'm trying to question him on. 17 18 MR. STRETARS: Okay. 19 CHIEF LINDSAY: I want to try to put this up. Is this PT-5? 20 21 MR. STRETARS: Page 41, top right-hand corner 22 of it. 23 MR. HERRICK: But that 41 is the page number 24 from the recording --25 MR. STRETARS: Document itself. There isn't

1 any other page number otherwise.

2 MR. ROSE: I think it's about two-thirds of the 3 way through.

4 (Discussion off the record)

5 MR. O'LAUGHLIN: Would now be a good time to 6 take a break?

CO-HEARING OFFICER PETTIT: Let me ask8 Mr. Herrick how much longer do you have?

9 MR. HERRICK: I actually don't have that much 10 longer. I'll be done by 10:30.

11 CO-HEARING OFFICER PETTIT: Let's go ahead and 12 finish at this time.

13 MR. HERRICK: Thank you.

Mr. Stretars, we now have the agreement up on the board and a copy in front of you, and I just want to go through with you this issue.

17Now the second paragraph at the very end talks18about 44.80 cubic feet per second. You see that,

19 correct?

20 MR. STRETARS: Correct.

21 MR. HERRICK: And that's the amount of water 22 specified in that paragraph to be supplied to the lands 23 contained in this particular document?

24 MR. STRETARS: Right.

25 MR. HERRICK: And it appears that that number

1 comes from the bottom of the second page --2 MR. STRETARS: Right. 3 MR. HERRICK: -- of the document where it talks about containing 4,480 acres more or less? 4 MR. STRETARS: That's correct. 5 6 MR. HERRICK: Okay. Now, without pulling up 7 the other document, the other document is similarly constituted in that it gives a cubic feet per second as 8 9 being 1/100 of the acreage listed. Right? The other 10 document. I'm sorry. I'm confusing you. Let's stay 11 here. I'll just stay here. 12 Now, that appears then, the 44.80 cubic feet 13 per second, to correspond to 4,480 acres; is that 14 correct? 15 MR. STRETARS: Yes. 16 MR. HERRICK: So it looks like when they wrote the agreement they were anticipating -- again, it's 17 18 approximate -- but they were anticipating delivering 100 19 acre feet of water per acre under the agreement, 20 correct? 21 MR. STRETARS: Yes. 22 MR. HERRICK: Now, let me walk through this 23 because it's a big messy document with a lot of legal 24 descriptions. The 4480 acres is at the end of the third legal description, correct? 25

1 MR. STRETARS: Yes. 2 MR. HERRICK: And the other two legal descriptions which precede it on page 1 and page 2 also 3 list total acreages; is that correct? 4 5 MR. STRETARS: They do. 6 MR. HERRICK: And they list acreages of -- help 7 me out here. 12 point? 8 MR. STRETARS: 74. 9 MR. HERRICK: 12.74. And then 769 dash 32/100s. 10 11 MR. STRETARS: Yes. 12 MR. HERRICK: And again, I'm not trying to be 13 argumentative; I'm just trying to go through this. 14 So to me, the two possibilities are: When they 15 calculated the cfs, somebody mistakenly only went to the 16 bottom acreage number thinking it was the total, or they 17 intended to only deliver water to the 4480, not the 18 other two parcels. 19 Would you agree those are -- I'm not trying --20 MR. STRETARS: Those would be two options. Ι would think there would be a third, though. 21 22 MR. HERRICK: Okay. What would you say the 23 third is? 24 MR. STRETARS: The third is they identified an 25 amount separate and apart from the acreage that was

1 considered.

MR. HERRICK: Okay. 2 3 MR. STRETARS: Shows up here. Then let's indeed go to the other 4 MR. HERRICK: 5 This is P. And go to O please, WIC. one. The one right before it. I believe it was WIC-60? 6 7 MR. ROSE: I think 6 --8 MR. HERRICK: 6P then. I apologize. 9 MR. ROSE: .8 or 9 cubic feet per second is on 60, 6P is the other agreement. 10 11 MR. HERRICK: That's it. 12 Mr. Stretars, we now have the similarly dated 13 September 29, 1911 agreement between Woods Irrigation Company, but this one's between it and Wilhoit and 14 15 Douglass. Do you have that in front of you? 16 MR. STRETARS: Okay. I have it. MR. HERRICK: And the last line, second 17 18 paragraph says, after going to provide water: 19 Not exceeding at any one time 32.86 cubic 20 feet per second. 21 MR. STRETARS: Correct. 22 MR. HERRICK: And then below that, it talks about the description of the land, and it's a long 23 24 description going through -- going to page 2. 25 MR. STRETARS: Right.

1 MR. HERRICK: And about a third of the way up 2 from the bottom of page 2, it says: 3 Containing 3286.37 acres, more or less. Correct? 4 MR. STRETARS: Correct. 5 MR. HERRICK: So -- and there were no other 6 7 separate legal descriptions that identify additional 8 Those are the gross acreages for this agreement; lands. 9 is that correct? 10 MR. STRETARS: Right. 11 MR. HERRICK: So it looks like when they put 12 this agreement together they ascribed one cfs per 100 13 acres; is that correct? Would you agree with that? 14 MR. STRETARS: This agreement, yes. 15 MR. HERRICK: That's why when we go back to the first agreement we're talking about, I said one of the 16 17 possibilities is that somebody took the 4480 acreage 18 thinking it was the total acreage when in fact it was 19 not. 20 MR. STRETARS: (Witness nodding head) 21 MR. HERRICK: Now, you concluded in your questions from Mr. Rose that, you know, you're not 22 23 changing your mind. 24 I would just like to explore why don't you think it's more reasonable that the agreement with 25

E.W.S. Woods meant to include all the lands actually described rather than just some of the lands actually described?

4 MR. STRETARS: I think that would require 5 speculation on our part.

Basically, we looked at the specifics and the quantities defined and from the standpoint of our evaluation would say that is the amount they intended to develop regardless of the true acreage maybe.

10 And from that standpoint, I'm open to have it 11 explored or expanded. But that was the amount that was 12 defined in that right.

13 So if they actually served more than that, then 14 there needs to be some documentation that shows that in 15 fact they served 62.5 as opposed to 44 something.

Which we have -- again, one of the things we asked for. So still the rationale, the consideration of it could have been 1 to 100 and they should have been serving -- what was the final amount Mr. Neudeck had? 5200 acres, something like that? I forgot what his number was.

That amount could be adjusted, but somewhere in the documentation it's got to show in fact that's the quantity they served.

25 MR. HERRICK: Again, I'm not trying to trick

1 you on this.

It's -- it depends on which point you start at. If you say first they came up with the water they were going to serve, then they describe acreages. Or they had acreages, and they were trying to get a hundred acre feet per acre. Is that correct? Excuse me. One cfs per hundred acres.

8 MR. STRETARS: Yes. But all I can say, in the 9 documents they do not find that. So we look at the 10 quantity first.

MR. HERRICK: And the documents then would be inconsistent, under your interpretation, in that one would ascribe one cfs per 100 acres, whereas the other one would be -- would not do that?

15 MR. STRETARS: That's correct.

16 MR. HERRICK: Okay.

Mr. Stretars, in your testimony you assert that -- and I don't want to overstate this, but I think you did -- you assert that Woods claims 77.7 cfs; is that correct?

21 MR. STRETARS: Yes, that's what the information 22 they provided to us in our March 4th letter, whatever it 23 was.

24 MR. HERRICK: But in your PT-5 which is that 25 March 4th letter, they don't make any claim specifically

1 in the letter with regard to an amount of diversion 2 right. They simply provided you with the materials, and you concluded there was evidence substantiating 77.7 3 cfs? 4 5 MR. STRETARS: Okay. Yes. 6 MR. HERRICK: Okay. And just to sum up real briefly, you do believe that sufficient evidence has 7 8 been shown to justify a pre-1914 right of 7717 cfs; is 9 that correct? MR. STRETARS: I think there is sufficient 10 11 evidence, yes. 12 MR. HERRICK: I have no further questions. 13 Thank you. 14 CO-HEARING OFFICER PETTIT: Thank you, 15 Mr. Herrick. Mr. Rose, are you going to have any 16 redirect? 17 MR. ROSE: I'll have brief redirect. I assume 18 that the other parties might have some cross, but I'll have very brief redirect. 19 20 CO-HEARING OFFICER PETTIT: Thank you. 21 Let's take a break and try and be back here in ten minutes. 22 23 (Recess) 24 /// /// 25

1 CO-HEARING OFFICER PETTIT: Mr. O'Laughlin is 2 already in place. 3 CROSS-EXAMINATION BY MR. O'LAUGHLIN 4 FOR MODESTO IRRIGATION DISTRICT 5 -----6 7 MR. O'LAUGHLIN: Good morning. My name is Tim 8 O'Laughlin. I represent Modesto Irrigation District in 9 the matter. Mr. Arnold, my questions will be directed to 10 11 you. In your five years of working for the Division of Water Rights, how many determinations have you made of a 12 13 pre-1914 water right? 14 MR. ARNOLD: An exact number, I don't recall. 15 But I would say several. 16 MR. O'LAUGHLIN: More than one and less than 17 five? 18 MR. ARNOLD: That would be appropriate. 19 MR. O'LAUGHLIN: Okay. And can you give us 20 some scope and extent or insight into one that stands 21 out in your mind of a determination that you made 22 regarding a pre-1914 water right? 23 MR. ARNOLD: Right off the top of my head, 24 probably not. We've looked at hundreds and hundreds of 25 cases.

1 MR. O'LAUGHLIN: Okay. Do you have any formal 2 legal training in regards to water right issues? 3 MR. ARNOLD: Formal legal training meaning? 4 MR. O'LAUGHLIN: Have you taken any law classes or any extension courses in ascertaining water rights, 5 6 learning about water rights? 7 MR. ARNOLD: I've had in-office, internal training. 8 9 MR. O'LAUGHLIN: And who is the internal training done by in your office? Is it done by 10 11 attorneys or is it done by other staff engineers? MR. ARNOLD: Well, some of our attorneys have 12 13 offered courses with interpret -- how to interpret data, the hearing process, et cetera. 14 15 MR. O'LAUGHLIN: Okay. Let's talk -- one of the issues in this case is the claim of a right to 16 divert pursuant to an appropriation. 77.5 cfs. Can you 17 18 tell me what the elements of an appropriation are, an 19 appropriative right? 20 MR. ARNOLD: Do you mean a pre-14 or a post-14? 21 MR. O'LAUGHLIN: Pre-14. 22 MR. ARNOLD: The right had to have been a place 23 of use, a purpose of use. The right had to be put to 24 beneficial use. There is a quantity associated with it. And that's... 2.5

MR. O'LAUGHLIN: Any other elements?
 MR. ARNOLD: There are other minor elements.
 Those are the basic elements.

4 MR. O'LAUGHLIN: Is there a difference in your 5 mind between a pre-1914 right that occurs under the 6 civil code and a pre-1914 right that does not occur 7 under the civil code?

8 MR. ARNOLD: Yes, there are differences. 9 MR. O'LAUGHLIN: Okay. Did you find in this 10 matter in regards to Woods Irrigation Company if in fact 11 the civil code statutory filing had been accomplished by

12 Woods Irrigation Company prior to 1914?

MR. ARNOLD: I didn't see the filing in the documents submitted.

15 MR. O'LAUGHLIN: Have you made any independent 16 determination if in fact an appropriative filing had 17 been made under the civil code?

18 MR. HERRICK: Objection. That presupposes that 19 a filing is necessary for the Woods water right case.

20 MR. O'LAUGHLIN: No. It doesn't assume 21 anything. It's just asking if he got the civil code. 22 I'll get to the next part next.

23 MR. HERRICK: He asked if the filing was24 appropriately made under the civil code.

25 MR. O'LAUGHLIN: I asked if a filing had been

1 made under the civil code to appropriate water by Woods 2 Irrigation Company.

MR. ARNOLD: I looked through some county records and didn't see a notice of appropriation. However, we assumed that the records they submitted to us, that was not noticed or they would have submitted it.

8 MR. O'LAUGHLIN: Okay. So as you as you sit 9 here today, as far as you know, there has been no filing 10 under the civil code for an appropriative right to 77.5 11 cfs for Woods Irrigation Company that was filed in San 12 Joaquin County; is that correct?

MR. ARNOLD: I'm sorry. I didn't get the question. Would you repeat it? I'm sorry.

15 MR. O'LAUGHLIN: She'll read it back.

16 (Record read)

MR. ARNOLD: I'm not aware of any notice. MR. O'LAUGHLIN: Okay. All right. So then let's go to the documentation that you relied upon in your initial work. How many hours did you work on this case, total?

22 MR. ARNOLD: I don't know the exact number to 23 that question, but many hours over time. There was 24 correspondence back and forth, so we were on and off the 25 project.

1 MR. O'LAUGHLIN: Other than receiving documents 2 from Woods Irrigation Company, did you do any independent investigation by yourself as to the scope 3 and extent of the Woods right? 4 5 MR. ARNOLD: I did some independent review of 6 historical information in the area, Delta area. MR. O'LAUGHLIN: What historical -- and I 7 gathered that. You said earlier in your testimony that 8 9 you relied on other information. What other information 10 have you relied upon? 11 MR. ARNOLD: I can't say that I -- I would like to clarify what do you mean by relied upon? 12 13 MR. O'LAUGHLIN: Used. 14 MR. ARNOLD: To do? 15 MR. O'LAUGHLIN: To ascertain the appropriative right of 77.7 cfs. Just so we're clear, all my 16 questions are only related to 77.7 cfs. They have 17 18 nothing to do with anything else. 19 MR. ARNOLD: For the most part, I relied upon 20 the pre-1914 agreements and documentation that was put 21 together --22 MR. O'LAUGHLIN: Okay. 23 MR. ARNOLD: -- and submitted to us. 24 MR. O'LAUGHLIN: Now would you say it's correct or would you say it would be a correct statement that 25

1 the pre agreement in the articles of incorporation 2 established an element of an appropriative right? 3 MR. ARNOLD: The element of an appropriative 4 right? 5 MR. O'LAUGHLIN: Yeah. What elements --6 MR. ARNOLD: With respect to quantity, yes. 7 MR. O'LAUGHLIN: No. What elements do you think it establishes? You believe it establishes as to 8 9 quantity? 10 MR. ARNOLD: It states an agreed-upon quantity 11 to provide water. 12 MR. O'LAUGHLIN: Okay. So let's talk about that. So that -- would you characterize that as an 13 intent to provide that, or is that an actual 14 15 determination of the amount of water to be provided? 16 MR. ARNOLD: Well, that's -- it's an agreed-upon amount of water to be provided, to furnish. 17 18 MR. O'LAUGHLIN: I know, but you can have 19 agreements and have all the best intentions of the world 20 to supply water of a certain amount and not provide that 21 amount. You could proceed less, and you could provide 22 more, correct? 23 MR. ARNOLD: Well, based on what I reviewed, it 24 appears from the documentation and language in there that they had developed the right. 25

MR. O'LAUGHLIN: They had actually developed it 1 2 already? MR. ARNOLD: They were furnishing water in 3 several documents. 4 MR. O'LAUGHLIN: Wait. 5 MR. ARNOLD: 1911, 1909, 1911. 6 MR. O'LAUGHLIN: Okay. Well, the 1909 document 7 is only an article of incorporation; is that correct? 8 9 MR. ARNOLD: I believe so. MR. O'LAUGHLIN: Okay. Is there anything in 10 11 the articles of incorporation that sets forth the amount of water that is actually provided in Woods Irrigation 12 Company? The lands? 13 14 MR. ARNOLD: No. That would be the agreement. 15 MR. O'LAUGHLIN: Okay. So the agreement has a notation of how much water is to be provided, correct? 16 77.7 cfs. 17 18 MR. ARNOLD: Yes. MR. O'LAUGHLIN: Okay. Now -- and you've taken 19 20 that as an actual measurement; is that correct? 21 MR. ARNOLD: As to quantity that appears to be 22 developed. I don't know if it measured it. 23 MR. O'LAUGHLIN: Let's --24 MR. ARNOLD: I did measure later on, later measurements. But at that point in time. 25

MR. O'LAUGHLIN: Well, let's go back in time. 1 2 Actually, what -- you said it was developed at the time. What evidence do you have that you relied 3 upon that in 1909 or 1911, take your pick, either one, 4 5 that in fact 77.7 cfs had been developed and was being 6 delivered to the lands within Woods Irrigation Company? MR. ARNOLD: I looked at a series of 7 information, not only the 1911 agreements but subsequent 8 9 information in the Delta area. MR. O'LAUGHLIN: Okay. What other information 10 11 is that? 12 MR. ARNOLD: Aerial photographs. There is historical reports for the -- put together by Bureau of 13 Reclamation and DWR, and these indicate the development. 14 15 MR. O'LAUGHLIN: But you said developed at the 16 time. Are you saying now that this had been developed 17 after the time period of the agreement or developed when 18 the agreements were actually in existence? 19 MR. ARNOLD: No, I didn't say that it was 20 developed after that. I said --21 MR. O'LAUGHLIN: It was --22 MR. ARNOLD: -- information --23 (Interruption by the reporter) 24 MR. O'LAUGHLIN: It was developed at the time? 25 MR. ARNOLD: What I said is that the

1 information I looked at, later information, aerial 2 photographs and reports, corroborate the water right that was documented in the 1911 agreement. 3 4 MR. O'LAUGHLIN: Okay. Well, what is the earliest aerial photo that you reviewed? 5 MR. ARNOLD: 1937 or '40. 6 7 MR. O'LAUGHLIN: Okay. MR. ARNOLD: I believe one of those years. 8 MR. O'LAUGHLIN: So you're assuming that from 9 10 1909 or 1911 all the way through 1940 that everything 11 remained the same at the place that you were reviewing; is that correct? 12 13 MR. ARNOLD: Well, I assumed the water right --I don't know if I understand your question. Everything 14 15 remained the same? What do you mean by --16 MR. O'LAUGHLIN: Here's --17 MR. ARNOLD: -- everything remained the same? 18 MR. O'LAUGHLIN: -- my problem: You keep using 19 the word you assumed, okay? You assumed, you assumed, 20 you assumed. 21 What I want to know is what is the basis of 22 your assumptions for you to assume that in fact 77.7 cfs 23 existed prior to 1914. 24 MR. ARNOLD: That specified those documents --25 MR. O'LAUGHLIN: Okay.

1 MR. ARNOLD: -- those pre-1914 documents. They 2 were furnished and also specified there was development --3 4 MR. O'LAUGHLIN: Okay. MR. ARNOLD: -- that occurred. The language is 5 6 such that it would lead you to believe that those rights 7 were there. 8 MR. O'LAUGHLIN: Well, isn't one of the 9 absolute prerequisites of having an appropriative right 10 determining the quantity of water that is actually put 11 to use? 12 MR. ARNOLD: Determining the quantity? MR. O'LAUGHLIN: 13 Yeah. 14 MR. ARNOLD: I suppose it would depend on 15 what's written in the notice. 16 MR. O'LAUGHLIN: Yeah, but even -- have you 17 reviewed other previous California Supreme Court cases 18 and others where in fact notices have been provided both 19 under the civil code and nonstatutory in which the 20 courts have found that even though an amount is specified that that may specify an intent but not the 21 22 actual amount of water put to use under a pre-14 right? 23 MR. ARNOLD: I think that may have occurred, 24 yes. 25 MR. O'LAUGHLIN: Okay. So what was the

1 elevation -- how many diversions did Woods Irrigation 2 District have in -- prior to 1914 for Middle River? 3 MR. ARNOLD: How many diversions? MR. O'LAUGHLIN: 4 Yeah. MR. ARNOLD: I don't think that's clearly 5 6 spelled out. But in the agreement --7 MR. O'LAUGHLIN: No. I'm asking you because you've made the assumption that they have an 8 9 appropriative right. 10 I want to go through the elements of the right 11 to determine what in fact you know regarding the right. 12 So let's start with points of diversion. How 13 many points of diversion did Woods Irrigation District have for Middle River prior to 1914? 14 15 MR. ARNOLD: I'm not certain how many points 16 they have. 17 MR. O'LAUGHLIN: Okav. 18 MR. ARNOLD: They have two, three now. 19 MR. O'LAUGHLIN: No, no, no. Prior to 1914. 20 Not now. Because now isn't pre-1914. You said that 21 they had a right developed prior to 1914, so I want to know the basis. 22 23 So answer my question: What knowledge do you 24 have of diversions prior to 1914 on Middle River? 25 MR. ARNOLD: All I know is the amount

1 specified --

2 MR. O'LAUGHLIN: No, no, no, no. Wait. You know, I'm going to ask -- my question, 3 Mr. Chairman, is very specific. And it specifically 4 asks how many points of diversion exist. I'm not asking 5 6 anything else. 7 He can tell me one, two, or I don't know. Ι don't care. But he can't keep evading the question. 8 9 And not only that, I'd object as well, Mr. Stretars has not been asked this question. 10 11 Mr. Stretars is not testifying. I'm asking these 12 questions specifically of Mr. Arnold, and I'd appreciate it that he's not being coached during the time that he's 13 being cross-examined. 14 15 CO-HEARING OFFICER PETTIT: Okay. I think, if I understand it correctly, your question is very 16 specific at the moment as to how many points of 17 18 diversion there were prior to 1914 and, if Mr. Arnold 19 can give you an answer, how he arrived at that answer. 20 Is that --21 MR. O'LAUGHLIN: That's it in a nutshell. 22 CO-HEARING OFFICER PETTIT: Okay. 23 I think you should try to answer that. 24 MR. ROSE: Board Member Pettit, if I could weigh in briefly as to the questions being directed 25

1 specifically to Mr. Arnold.

The testimony was presented on behalf of both witnesses, and they're being cross-examined as a panel. I understand Mr. O'Laughlin's point, but coaching from Mr. Stretars, this is -- it's not as though this is me coaching them.

7 This is the two of them who worked on all of 8 these documents together. And unless Mr. O'Laughlin is 9 going to ask Mr. Stretars the same question, the answer 10 from only one of them is really required because, as 11 we've gotten to this point, they've already made the 12 conclusions and assumptions that they've made.

13 CO-HEARING OFFICER PETTIT: I think I'm going 14 to allow that.

MR. O'LAUGHLIN: You know, if Mr. Stretars thinks he has a better answer, I don't care. But I don't want a nonresponsive answer.

18 CO-HEARING OFFICER PETTIT: And I think I've
19 already said they should respond.

20 MR. ARNOLD: I'll respond. Let me clarify. 21 I didn't think of the earlier maps that came 22 with the agreements, but there is a map that shows the 23 area that -- the Wilhoit and Douglass tract with canals 24 leading to a point on Middle River, two main canals, and 25 that is a point of diversion I think that they

1 documented they were using and are using today. MR. O'LAUGHLIN: Okay. And that is the map 2 3 that's attached to the agreement, 1911 agreement, correct? 4 I believe it is. I believe so. 5 MR. ARNOLD: 6 MR. O'LAUGHLIN: Okay. Now I get back to my 7 original question. How many diversions prior to 1914 8 does Woods Irrigation Company have on Middle River? 9 MR. ARNOLD: Based on that map, one. 10 MR. O'LAUGHLIN: Thank you. Okay. 11 Did Woods Irrigation Company have any diversions from the main system of the San Joaquin River 12 13 prior to 1914? 14 MR. ARNOLD: Not that I am aware of. 15 MR. O'LAUGHLIN: Did Woods Irrigation Company have any diversions prior to 1914 from Burns Cutoff? 16 17 MR. ARNOLD: Not that I am aware of. 18 MR. O'LAUGHLIN: Are you aware of any 19 diversions by Woods Irrigation Company from Duck Slough 20 prior to 1914? 21 MR. ARNOLD: I'm not aware of that, no. 22 MR. O'LAUGHLIN: Okay. Now in regards to this 23 single diversion point prior to 1914, do you know what 24 elevation the canal was situated at on the inboard side 25 of the levee?

MR. ARNOLD: I don't know exactly what the 1 2 elevation is, no. 3 MR. O'LAUGHLIN: Do you know what the elevation 4 of the channel was where they were taking water from on Middle River? 5 6 MR. ARNOLD: I think Mark may have done some --MR. STRETARS: No. 7 MR. ARNOLD: -- measurements out there -- no. 8 9 MR. O'LAUGHLIN: How high was the levee that separated the actual diversion in the river from the 10 11 inboard side of the canal? 12 MR. ARNOLD: The levee at the -- I'm not sure. 13 MR. O'LAUGHLIN: At the diversion point. 14 MR. ARNOLD: There's a concrete structure 15 there. 16 MR. O'LAUGHLIN: No, no, no. 1914. I'm not asking about what's out there now. What was out there 17 in 1914? 18 MR. ARNOLD: I don't know. 19 20 MR. O'LAUGHLIN: So you have no idea what was 21 out there in 1914; is that correct? 22 MR. ARNOLD: That's correct. 23 MR. O'LAUGHLIN: All right. 24 Now, do you know how far that canal went inland, the main canal went inland prior to 1914? 25

1 MR. ARNOLD: Based on those earlier maps I 2 referred to earlier, it appears to go almost to Burns Cutoff, close to -- almost or to Burns Cutoff. 3 4 MR. O'LAUGHLIN: Do you know what the elevation rise, if anything, is from Middle River to Burns Cutoff 5 6 on that canal? 7 MR. HERRICK: Objection. Are you specifying at 1914 or at today's date? 8 9 MR. O'LAUGHLIN: 1914. MR. ARNOLD: I wouldn't know 1914. 10 11 MR. O'LAUGHLIN: Do you know if there were any 12 pumps on that canal in order to pump water into the -over the levee? Do you know -- let me -- wait. Sorry. 13 That assumes something not in evidence. 14 15 Do you know if the -- how the diversions were made from Middle River into the canal in 19 -- prior to 16 1914? 17 18 MR. ARNOLD: No, I don't. 19 MR. O'LAUGHLIN: Do you know if the system on 20 that canal was a pump system or a gravity system? 21 MR. ARNOLD: I'm not certain, but it may have 22 been a gravity system. I can't recall as to every 23 detail. 24 MR. O'LAUGHLIN: Okay. 25 MR. ARNOLD: May have been a gravity system.

1 MR. O'LAUGHLIN: So if one of the components of 2 an appropriative right is a quantification, how is it, 3 other than the statement in a document, that you arrived 4 at a quantification of a right prior to 1914?

If you don't know the elevation of the invert, you don't know how the water is diverted, you don't know the slope of the canal, you don't know the size of the canal, and you don't know how it's diverted, how do you guantify what water was delivered prior to 1914?

10 MR. ARNOLD: Well, based on -- as I said 11 earlier, it's based on the language in the agreement. 12 MR. O'LAUGHLIN: Okay.

MR. ARNOLD: Also it's based on the map thatshowed development and actual measurements out there.

MR. O'LAUGHLIN: So the measurements you made were made last year, right?

MR. ARNOLD: Right, but all together. I'm just saying all the information together would lead me to conclude the right exists. Was developed.

20 MR. O'LAUGHLIN: Okay. Now are you -- has the 21 Division made -- or the Prosecution Team made any 22 determination as to what lands were in Woods Irrigation 23 District that were riparian prior to 1914?

24 MR. ARNOLD: Made a determination, did you ask?
25 MR. O'LAUGHLIN: Yes.

1 MR. ARNOLD: No. MR. O'LAUGHLIN: Why don't you explain for me 2 or tell me how this would work. Riparian rights attach 3 to the natural flow of water in the watercourse, 4 correct? 5 6 MR. ARNOLD: Yes. 7 MR. O'LAUGHLIN: So what is it that leads you to believe -- let's say hypothetically all the lands in 8 Woods Irrigation District were riparian prior to 1914. 9 Okay. Do you have that in your mind? 10 11 MR. ARNOLD: Okay. 12 MR. O'LAUGHLIN: Okay. How is it that those 13 lands would then get an appropriative right if water was being diverted to them? 14 15 What is the nature of that appropriative right? Now remember, they have riparian rights so they can take 16 17 all the water of the stream, the natural flow, for their 18 reasonable and beneficial use. 19 So tell me what it is about this appropriation 20 by Woods prior to 1914 that conveys an appropriative 21 right? What is the element? 22 MR. ARNOLD: Under your hypothetical here, 23 you're assuming it's riparian. 24 MR. O'LAUGHLIN: I'm assuming all the lands are riparian in Woods. 25

1 MR. ARNOLD: Well, I would say that under that speculation I wouldn't be able to determine whether or 2 not -- I mean I would say maybe Woods had a separate 3 landholding where they owned the canal. 4 5 MR. O'LAUGHLIN: No, they don't --6 MR. ARNOLD: That would have been a separate point of diversion off the riparian. But I don't 7 8 know -- the hypothetical, I can't say. 9 MR. O'LAUGHLIN: What I'm confused about is if a riparian is entitled to divert all the water that they 10 11 wish for the reasonable and beneficial use on their land, how is it that an appropriative right also 12 attaches to those lands? 13 14 MR. STRETARS: If I may, you can have 15 overlapping rights. There are many claims out there 16 that overlap pre-1914 riparian. Until the courts 17 ultimately decide which is the higher, which is the more 18 important, those rights would both be available to claim 19 because they both start pre-1914 and would also be 20 riparian. 21 MR. O'LAUGHLIN: Okay. What is it about this 22 claim by Woods that denotes an appropriative right? 23 Is there -- let me ask the question more 24 specifically. Is -- in your investigation, is Woods claiming a right to store water? 25

1 MR. STRETARS: No.

4

2 MR. O'LAUGHLIN: Did Woods go upstream and dam 3 water for storage?

MR. STRETARS: No.

5 MR. O'LAUGHLIN: Okay. Has Woods Irrigation 6 District claimed a right to receive foreign waters from 7 elsewhere?

8 MR. STRETARS: No.

9 MR. O'LAUGHLIN: Okay. So is there some 10 development that they did which would convey an 11 appropriative right prior to 1914 where water is 12 actually nonriparian in nature?

MR. STRETARS: It doesn't have to be the waterto be nonriparian. The property may be nonriparian.

MR. O'LAUGHLIN: Okay. So let's assume -- that doesn't answer my question because the overlapping right that you're talking about would only be an overlapping right if there was no riparian right, and then in which case there is no overlap. Because --

20 MR. HERRICK: Mr. Chairman, I'm going to have 21 to object to this --

22 MR. O'LAUGHLIN: No. My question --

23 MR. HERRICK: -- legal argument that assumes so 24 many factual and legal issues that it's undiscernible to 25 the public.

1 MR. O'LAUGHLIN: No, it gets to the specific 2 point which is --

3 CO-HEARING OFFICER PETTIT: Let's make it
4 specific, Mr. O'Laughlin, because --

5 MR. O'LAUGHLIN: I'm talking generally about 6 Woods Irrigation District. All my questions are Woods 7 Irrigation Company. So I'll go back and make them 8 specific.

9 Did Woods Irrigation Company store water prior 10 to 1914?

11 MR. STRETARS: No, they didn't.

12 MR. O'LAUGHLIN: Okay. Did Woods Irrigation 13 Company bring foreign water into the San Joaquin River 14 for diversion?

15 MR. STRETARS: No, they didn't.

MR. O'LAUGHLIN: Okay. So did Woods Irrigation District -- if in my hypothetical all the lands are riparian, by nature they are not lands that can receive appropriative water because they are riparian, right? MR. HERRICK: Mr. Chairman, the hypothetical misstates the law, so I don't know what the purpose of it is.

23 CO-HEARING OFFICER PETTIT: I think the 24 question has already --

25 MR. O'LAUGHLIN: Okay, but now --

CO-HEARING OFFICER PETTIT: -- been answered. 1 2 (Interruption by the reporter) 3 CO-HEARING OFFICER PETTIT: Proceed please, 4 Mr. O'Laughlin. 5 MR. O'LAUGHLIN: Do you ever read, Mr. Arnold 6 or Mr. Stretars, Hutchins on Water? Do you ever go to 7 that source? 8 MR. STRETARS: We rely on that source, yes. 9 MR. O'LAUGHLIN: Okay. I want to read a quote 10 to you and ask your opinion about how this applies to 11 this matter: 12 Whether the owners of such water rights make a single diversion and use a common 13 14 conduit made with common funds without 15 formal organization or whether they form 16 a corporation for such purpose, their 17 water rights remain several and remain 18 private property. 19 So in this case, how is it that you determined 20 that the 77.7 cfs was in fact Woods property as opposed 21 to not a landowner's property or not a riparian right 22 prior to 1914? MR. HERRICK: I'll have to object for 23 24 foundation. The quote starts in the middle, references 25 these rights.

1 This is a complicated legal discussion. The 2 witnesses may have knowledge of something, but picking out a part of a sentence to read to someone and asking 3 4 them whether or not that applies here is unfair and inappropriate. 5 6 CO-HEARING OFFICER PETTIT: I agree. I think that's --7 8 MR. O'LAUGHLIN: Okay. I'll read the entire 9 quote then: Page 152, Hutchins. And this is citing the Supreme Court case 139 Cal 2d, 29: 10 11 It cannot be held that the meaning of the 12 constitutional provision should be so 13 broadened as to cover the proposition 14 that all water which is distributed among 15 a number of persons is from that fact 16 alone to be considered as devoted to 17 public use. Where a number of persons 18 owning land are each entitled to take 19 water from a common stream or source for 20 use upon their respective tracts of land, 21 either about virtue of appropriation of 22 the civil code or by prescription or as a 23 riparian owner, the water right of each 24 is individual and separate and must be 25 considered as private property, and not

1 the subject of the public use, although 2 the persons so owning such interest in 3 the stream are very numerous and their lands include a large neighborhood. 4 MR. HERRICK: Again, Mr. Chairman, I'm sorry. 5 6 I'm going to have to object. 7 We're all familiar with these quotes because we've read them too. 8 9 This isn't whether or not a public use of the 10 water issue is going forward. It's in relation to 11 mutual water companies. 12 There may be legal arguments to be made later, but the witnesses have no idea of the context and the 13 basis of these cases of which they are being asked. 14 15 It's just not appropriate. CO-HEARING OFFICER PETTIT: I would tend to 16 agree, but I would ask Mr. Stretars: Do you think 17 18 there's anything in there that you are gualified to 19 answer as far as the question goes? 20 MR. STRETARS: Some. Maybe some point, yes. 21 MR. O'LAUGHLIN: Well, yeah. 22 But here's my point, Mr. Pettit. On page 4 of 23 their document, the Prosecution Team opines that this is 24 much akin to a mutual company service or mutual water company and goes on to say that, you know, it doesn't 25

1 matter whether Woods holds it or the shareholders own 2 it, somebody has this right to 77.7 cfs.

Well, we fundamentally disagree with that. 3 4 The case cited by Hutchins clearly sets out you can deliver water in common to people on land, but those 5 6 rights are still several from what is -- it may be 7 delivered. And they have to be individually proven. 8 Now I get it that Woods claims a right overall 9 to 77.7. But that's an appropriative right and hasn't been determined -- what my question is to the 10 11 Prosecution Team is: How do you tease out the rights 12 that were being delivered by Woods to the individual landowners that are the individual landowners' rights as 13 opposed to the appropriative rights? 14 15 CO-HEARING OFFICER PETTIT: I understand what 16 you're getting at, and I think Mr. Stretars has also pointed out several moments ago that it was his belief 17 18 the parties could claim a riparian right and an 19 appropriative right until the court determined what the

20 sum total of those two was.

21 And I think you've made your points, and he's 22 probably answered as best he can.

23 MR. O'LAUGHLIN: Okay.

24 CO-HEARING OFFICER PETTIT: Let's move on.25 MR. O'LAUGHLIN: Okay.

Now if Woods is delivering a pre-1914 water 1 right under its claim of right of 77.7, and Woods is 2 also supposedly delivering other water to other lands 3 4 under their rights -- let's say a riparian right to some 5 landowner within Woods -- how is it that the Prosecution 6 Team determined the quantity of water that was under an individual right as opposed to Woods' right? 7 8 MR. STRETARS: I don't believe we did. 9 MR. O'LAUGHLIN: Thank you. In your discussion on page 4, did you find 10 11 any -- in the formation of the Woods Irrigation Company, 12 did you find any transfers or deeds or contracts where an individual landowner situated within Woods Irrigation 13 Company gave their water rights or transferred their 14 15 rights to Woods Irrigation Company? 16 MR. STRETARS: No. We -- that's part of what we were asking for prior to issuing the CDO. We had not 17 18 enough information to evaluate that. 19 MR. O'LAUGHLIN: As you sit here today, would 20 you say then that Woods is a mutual water service 21 company? 22 MR. HERRICK: Objection. I believe that would 23 call for some sort of legal conclusion. 24 CO-HEARING OFFICER PETTIT: Sustained. 25 MR. O'LAUGHLIN: What -- do you know if in the

issuance of -- for the company when it commenced operation whether or not water rights were transferred from any of Woods, the original four, to the company or whether the company was started based on a dollar amount?

6 MR. HERRICK: Mr. Chairman, I'm sorry for 7 objecting. These questions are muddying up the record 8 by not laying any sort of foundation.

9 I know we have different rules here, but "the 10 original four" -- most of the people here are not 11 familiar with the specifics of the articles of 12 incorporation.

I think the record needs to have clarity when we're discussing the original four, transferring their documents, their references, the people's names. And without putting those forward, we're going to have both confusing questions and answers.

18 MR. O'LAUGHLIN: Okay. I'll withdraw my 19 question.

20 Was -- when the shares were issued under the 21 original articles of incorporation, were they issued 22 based on money or were they issued based on water 23 rights?

24 MR. STRETARS: I believe issued based on money.
25 MR. O'LAUGHLIN: Okay. Did you review any

1 documents received from Woods Irrigation District as to 2 the amount of money spent each year in the development of the claimed right to 77.7 cfs? 3 MR. STRETARS: No. That information was not 4 submitted to us. 5 6 MR. O'LAUGHLIN: Have you reviewed any of the 7 minutes from Woods Irrigation Company since its 8 inception discussing the scope and extent of their use 9 of water?

MR. STRETARS: There was some submitted recently, testimony. Beyond that, no.

MR. O'LAUGHLIN: I'd like to get your opinion on this use of water.

14 In addition -- when you have an appropriative 15 right in addition to a quantity, you said there is a 16 place of use, correct?

17 MR. STRETARS: That's correct.

MR. O'LAUGHLIN: And in this case, you would -the statement would be is that you -- did you use the map that was supplied under the 1911 agreement?

21 MR. STRETARS: That was one of the maps 22 reviewed, yes.

23 MR. O'LAUGHLIN: Have you made any independent 24 determinations as to what lands have been added to Woods 25 Irrigation District since 1911?

1 MR. STRETARS: Not specifically, no. 2 MR. O'LAUGHLIN: Have you made any specific determinations as to what lands have left Woods 3 Irrigation District -- Woods Irrigation Company, excuse 4 5 me, since 1911? 6 MR. STRETARS: No. 7 MR. O'LAUGHLIN: I'm going to read from a special meeting of the board of directors of Woods 8 9 Irrigation Company January 25th, 1940, rules and regulations of Woods Irrigation Company which were 10 11 adopted. 12 In addition to that diversion right, is there a season of use that is normally tied to an appropriative 13 14 right? 15 MR. STRETARS: There can be. 16 MR. O'LAUGHLIN: Have you made or has the Prosecution Team made a determination as to the season 17 18 of use of the Woods Irrigation Company's claimed right? MR. STRETARS: We did not. 19 20 MR. O'LAUGHLIN: Do you have any information upon which you could make such a determination? 21 22 MR. STRETARS: Specific to the documents, no. 23 MR. O'LAUGHLIN: Okay. 24 MR. STRETARS: Specific to operations, 25 typically summer season.

1 MR. O'LAUGHLIN: Well, I want to read to you
2 rule number 4:

3 No water shall be furnished by the company for irrigation purposes nor will 4 any water be maintained in any irrigation 5 6 ditches between January 1st and 7 April 15th of each year unless special permission of the board of directors. 8 9 Now, would that seem to limit the season of use by Woods Irrigation Company so as to not take water from 10 January 1st through April 15th? 11 12 MR. STRETARS: I would say only after 1940 and 13 only to the extent someone didn't ask for special 14 compensation or whatever. 15 MR. O'LAUGHLIN: Do you know if there were actually irrigations that were occurring prior to 1940 16 17 during the time period of January through April of any 18 vear? MR. STRETARS: No, I can't speak to that 19 20 specifically. 21 MR. O'LAUGHLIN: In fact, you can't speak specifically as to any amount of quantity of water used 22 by Woods Irrigation District prior to your actual 23 investigation that occurred last year; is that correct? 24 25 MR. STRETARS: Specific to the amount, no.

1 MR. O'LAUGHLIN: And specific to a season of 2 use; is that correct?

3 MR. STRETARS: No. 4 MR. O'LAUGHLIN: In this document as well, rule number 11, it says -- rule number 11 from the special 5 6 meeting of the board of directors, Woods Irrigation 7 Company held January 25th, 1950, says: 8 Seasonal irrigation shall be deemed to be 9 four irrigations per season. If more 10 irrigations be desired or requested, 11 additional irrigation charges will be 12 assessed at 30 cents per hour for the time water is actually diverted from the 13 14 ditch. 15 Do you know what four irrigations per season 16 means? 17 MR. STRETARS: Means they're going to apply 18 water four times during the irrigation season. 19 MR. O'LAUGHLIN: And what is the irrigation

20 season if this document says that you can't divert water 21 from January 1st through April 15th?

22 MR. HERRICK: Objection. The document does not 23 say you can't. It says what they will generally do 24 unless there are other specific requests.

25 CO-HEARING OFFICER PETTIT: I'll sustain that

because I think the witness has already said that they have not done any investigation into the actual season of use.

MR. O'LAUGHLIN: Well, this gets to an interesting question for when the company says it's not going to deliver water, how is it that the individual landowners can demand water? Under what right are they demanding water?

9 MR. STRETARS: The assumption would be they are 10 probably demanding under riparian rights or their own 11 pre-14 right which has not been established.

MR. O'LAUGHLIN: In this document as well --13 just a second. Couple questions.

Did you, either one of you, ever review the previous Water Right Order 2004-004 in the matter of civil liability complaint for violation of Phelps, Ratto, Conn, and Silva?

MR. STRETARS: Yes, we have.

18

19 MR. O'LAUGHLIN: I'm going to read to you a

20 quote from page 13, and this talks about -- it says:
21 On redirect examination, the respondents'
22 engineering expert testified that
23 groundwater has a high salt content that
24 makes groundwater unusable for
25 irrigation. The difference in quality of

1 the groundwater and the surface water 2 does not support and actually tends to contradict the assertion that the 3 groundwater is the under flow --4 underground flow of Middle River or the 5 6 San Joaquin River. In the absence of 7 other evidence, the respondents' factual contention is unfounded and provides no 8 9 support for the legal contention. 10 Since Mr. Neudeck supplied exactly the same 11 testimony in this matter that he did in the Phelps and Ratto matter, would you opine that once again the 12 determination should be made that there is in fact a 13 14 difference in the surface water as opposed to the 15 groundwater? 16 MR. STRETARS: Yes, we would. 17 MR. HERRICK: I'd like to object. Difference 18 in what? Difference in quality? Difference in source? Difference in connection? Difference in elevation? 19 It needs clarification. 20 21 CO-HEARING OFFICER PETTIT: Can you clarify 22 that? 23 MR. O'LAUGHLIN: No, I'm fine with my question. 24 He can clarify what he wants to on recross. 25 CO-HEARING OFFICER PETTIT: Okay.

1 While I've interrupted you, I note that we're 2 about halfway through the allotted 60 minutes for 3 cross-examination. Assuming you and your colleagues 4 have a plan to finish.

5 MR. O'LAUGHLIN: What -- I'm going to take my 6 time. I don't know how much time Mr. Rubin has.

We coordinated our testimony in regards to submittal for direct testimony, but we have not coordinated any of our cross-examinations because we're actually each individual parties, and we filed separate intents and notices to appear separately.

12 I don't know how many questions Mr. Rubin has.
13 CO-HEARING OFFICER PETTIT: Your understanding
14 is what I was attempting to get clarified. Thank you.
15 MR. O'LAUGHLIN: Thank you.

Once again also as well in Water Right Order 16 2004-004, there is a statement on page 11. It says: 17 18 If a parcel has been severed from of --19 if a parcel of land is reclaimed from 20 swamp and overflow land and is not 21 severed from the adjacent watercourse, it 22 will include a riparian right because it 23 is adjacent to the watercourse. 24 Would you agree with that, Mr. Stretars? 25 MR. STRETARS: I do.

1	MR. O'LAUGHLIN: Okay.
2	If a parcel has been severed from
3	watercourse, however, its history of
4	having been flooded does not make it
5	riparian because it could not have
6	exercised its riparian rights when it was
7	under water.
8	Do you agree with that as well?
9	MR. STRETARS: Yes.
10	MR. O'LAUGHLIN: Okay. And then there is
11	actually a cite here to Lux v. Haggin, 1886, Cal. 255
12	413.
13	Further, the California Supreme Court
14	reasoned that an owner of swamp and
15	overflow land did not have a riparian
16	right if either there was no watercourse,
17	i.e., no channel to which a riparian
18	right to attach, or the land was on the
19	bottom of and not adjacent to the stream.
20	Would you agree with that as well?
21	MR. STRETARS: Yes.
22	MR. O'LAUGHLIN: One more just a second.
23	Were you aware of in the matters of Silva,
24	Conn, Ratto, and Phelps that there were in fact claims
25	of diversion prior to 1914?

1 MR. STRETARS: I believe so, yes. 2 MR. O'LAUGHLIN: Do you know what the State Water Resources Control Board said in regards to the 3 4 evidence that was submitted to support those rights? 5 MR. STRETARS: I don't recall exactly. 6 MR. O'LAUGHLIN: In the 1911 agreement, there 7 are lands described as high land or dry lands. Were you 8 familiar with that? 9 MR. STRETARS: That's correct, yes. MR. O'LAUGHLIN: Prior to 1914, do you know if 10 11 in fact those lands were served with water from Woods 12 Irrigation Company? MR. HERRICK: I'll have to object, Mr. 13 Chairman. There are two agreements, and we need to be 14 15 specific as to what lands we're talking about and when. 16 MR. O'LAUGHLIN: Yes. CO-HEARING OFFICER PETTIT: Mr. O'Laughlin --17 18 MR. O'LAUGHLIN: Yes. I would agree with that. I'm forgetting which one it's -- it's marked as 19 41 in the clerk's book. Is that 0 -- 60, or is that 6P? 20 MR. ROSE: I believe that's 60. 21 22 MR. O'LAUGHLIN: Okay. 60 and it says on 23 page 47, stamped clerk copy 47: 24 It is mutually understood that the waters cannot under the present extent of the 25

1 canal system be spread upon the surface of 1300 acres of land but can be from a 2 3 contemplated extension of the company's 4 canals. Okay. So prior to 1914, do you know if in fact 5 6 the canals were extended to provide water to the 1300 7 acres? 8 MR. STRETARS: No, we don't. 9 MR. O'LAUGHLIN: Okay. Do you know at any time 10 from 1911 to the present when in fact water was actually 11 delivered to the 1300 acres? 12 MR. STRETARS: If we're looking -- I'm thinking 13 we're looking at the map on page 49; is that correct? 14 MR. O'LAUGHLIN: Yes. 15 MR. STRETARS: The darkened area? 16 MR. O'LAUGHLIN: Yes. 17 MR. STRETARS: Some of that area was served 18 beginning about 1925 for certain. MR. O'LAUGHLIN: How was that land served in 19 20 1925? MR. STRETARS: Through a separate agreement 21 22 under the Woods, Robinson, Vasquez corporation or mutual 23 water company, whatever they formed themselves to be. MR. O'LAUGHLIN: But it wasn't served from 24 25 Woods Irrigation Company, correct?

MR. STRETARS: Not that we're aware of. 1 2 MR. O'LAUGHLIN: Right. It was served by 3 Woods, Robinson, Vasquez, correct? MR. STRETARS: Correct. 4 5 MR. O'LAUGHLIN: Okay. Other than that one 6 instance in 1925, can you tell us when in fact the rest of the property that was not served by Woods, Robinson, 7 8 Vasquez in 1925 received water from Woods Irrigation 9 Company? 10 MR. STRETARS: No. 11 MR. O'LAUGHLIN: Prior to 1914, what amount of 12 water in the San Joaquin River basin was being stored 13 upstream? 14 MR. STRETARS: What was the question again? 15 MR. O'LAUGHLIN: Yes. Prior to 1914, what water in the San Joaquin River basin was impounded 16 upstream in storage? 17 18 MR. STRETARS: I have no knowledge. 19 MR. O'LAUGHLIN: Do you, Mr. Arnold? 20 MR. ARNOLD: I'm not aware of how much was 21 stored. 22 MR. O'LAUGHLIN: All right. 23 Do you know if in fact the topography that is 24 currently within the Woods Irrigation Company is what it was in 1914, topographical elevations? 25

1MR. STRETARS: I would assume it's changed2some.

3 MR. O'LAUGHLIN: But you can't sit here today 4 and testify to any scope and extent, can you?

5 MR. STRETARS: We haven't looked at it specific 6 relative to -- I know we looked at the 1911 map, but we 7 haven't -- no specifics, no.

8 MR. O'LAUGHLIN: If you give me just one 9 30-second pause, let me run through my notes real quick, 10 and I should be done.

Due -- this goes back to another thing. Either one, doesn't matter: What crops were being grown within Woods Irrigation Company prior to 1914?

MR. ARNOLD: I don't think we know the exact crops that were specified or if any were specified.

MR. O'LAUGHLIN: Okay. And if you don't know the cropping patterns, can you make an ascertainment then of how much water is being applied to an individual parcel within Woods Irrigation Company prior to 1914?

20 MR. ARNOLD: Well, that's a separate question 21 as to what's being diverted. Applied water versus 22 what's specifically being used for a specific crop.

23 MR. O'LAUGHLIN: Do you know if any portion of 24 Woods Irrigation Company was dry -- what is called 25 guote/unquote dryland farmed prior to 1914?

MR. ARNOLD: I don't know. 1 2 MR. O'LAUGHLIN: Do you know what dryland 3 farming is? MR. ARNOLD: I assume you mean farming without 4 5 irrigating. 6 MR. O'LAUGHLIN: I'm not -- I'm just asking you 7 if you know. 8 MR. ARNOLD: That's my assumption in your 9 question. MR. O'LAUGHLIN: Okay. Do you know what 10 11 portion of lands within Woods Irrigation Company were growing wheat, barley, or oats prior to 1914? 12 13 MR. ARNOLD: No, I do not. 14 MR. O'LAUGHLIN: Do you know the cultivation 15 practices that were used within Woods Irrigation Company prior to 1914 to plant wheat, barley, or oats? 16 17 MR. ARNOLD: Do I know the cultivation 18 practices? MR. O'LAUGHLIN: Yeah. What they were actually 19 20 doing out on the ground prior to 1914 on growing wheat, 21 barley, or oats. 22 MR. ARNOLD: I don't know what the specifics of 23 what the crops were. 24 MR. O'LAUGHLIN: Do you know when wheat was actually planted? What time of year it was planted in 25

1 Woods Irrigation Company prior to 1914?

2 MR. ARNOLD: Like I said, I don't have 3 specifics as to the crops prior to 1914.

MR. O'LAUGHLIN: Well, let me ask you a question. If you don't understand the -- if you don't have the specifics as to the crop, how do you make a determination as to the amount of water that's been put to reasonable and beneficial use prior to 1914?

9 MR. ARNOLD: Well, I think I answered earlier 10 that based on the agreements and other information we 11 looked at. And I also specified that the amount of 12 applied water may be different from what's actually 13 drawn from the ditches. That's reasonable to conclude 14 that the right was developed.

MR. O'LAUGHLIN: But what I want to know is: If you don't know what crops -- let's say rice was being grown out in the Delta prior to 1914 as opposed to dryland farming for wheat: Would you agree that the water duty for those two crops would be different?

20 MR. ARNOLD: Yes, if that were the case. 21 MR. O'LAUGHLIN: Okay. But since you don't 22 know, you can't make a determination as to what amount 23 of water was actually put to beneficial use prior to 24 1914?

25

MR. ROSE: Objection; asked and answered.

Mr. Arnold already said that he made a determination based on the information reasonably available. Mr. O'Laughlin is asking the same question again.

5 CO-HEARING OFFICER PETTIT: And I think the 6 witnesses have fairly repeatedly mentioned that they 7 have not done that kind of detail and don't have that 8 information.

9 I'll ask you to move on, Mr. O'Laughlin.
10 MR. O'LAUGHLIN: I will. I'm done. Thank you.
11 CO-HEARING OFFICER PETTIT: Thank you, sir.
12 Mr. Rubin, I take it you're going next?
13 MR. RUBIN: Yes.

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15 CROSS-EXAMINATION BY MR. RUBIN
16 FOR SAN LUIS & DELTA-MENDOTA WATER AUTHORITY
17 --000--

14

18 MR. RUBIN: Good morning. My name is John 19 Rubin. I'm an attorney that represents San Luis & 20 Delta-Mendota Water Authority.

Good morning, Mr. Arnold. I do have just a few questions, I hope, to ask of you looking for some additional clarification. And I apologize; I will try not to repeat questions that have been previously asked. I am looking for some clarification.

In your written testimony, I believe Exhibit 1 2 PT-1, again it's your conclusion that Woods Irrigation Company diverts water pursuant to a pre-1914 water 3 right; is that correct? 4 5 MR. ARNOLD: Yes, it is. 6 MR. STRETARS: Yes. 7 MR. RUBIN: And is it your conclusion that that right is a Woods Irrigation Company right, or is that a 8 9 right that is associated with the landowners within 10 Woods? 11 MR. STRETARS: I don't believe we drew a conclusion there. 12 13 MR. RUBIN: Your conclusion regarding the right pursuant to which Woods Irrigation District -- excuse 14 15 me -- Woods Irrigation Company diverts is based upon information that's been submitted to the Division by 16 17 Woods on or about March 4th, 2009? 18 MR. STRETARS: That's correct. 19 MR. RUBIN: And if I understand your testimony 20 today correctly, you based your conclusion on the 21 March 4, 2009 information, but you believe your 22 conclusion is supported by additional information; is 23 that correct? 24 MR. STRETARS: Yes. 25 MR. ARNOLD: Yes.

MR. RUBIN: And the additional information that you believe supports your conclusion are aerial photographs; is that correct?

4 MR. ARNOLD: That's part of the information. 5 MR. RUBIN: And the other part of the 6 information that you identified are some reports the 7 United States Bureau of Reclamation and California 8 Department of Water Resources prepared?

9 MR. ARNOLD: That's part of the information 10 also.

MR. RUBIN: Is there any other information? MR. ARNOLD: Detailed reports that -- other reports I don't have a recollection of at this point. There are numerous reports out there that led us to believe there was more development. I just can't recall all of them.

MR. RUBIN: Can you recall any of them? MR. ARNOLD: Yes. One of them is a 19 -- I think it's a 1964 Bureau of Reclamation report. Forgot the name of it, but I think it's a Delta lowlands report.

22 MR. RUBIN: And do you recall any of the aerial 23 photographs or reports that have been prepared that you 24 relied upon demonstrate a water use prior to 1914? 25 MR. ARNOLD: I don't think that -- your

1 question was did the aerials demonstrate water use prior 2 to 1914?

3 MR. RUBIN: Let's go with that question first. MR. ARNOLD: There's no aerials dated prior to 4 1937, so it wouldn't be able to. 5 6 MR. RUBIN: Did the other information that you 7 referenced that supports your conclusion provide direct 8 evidence of water use prior to 1914? 9 MR. ARNOLD: Not -- no. No. MR. RUBIN: Did -- Mr. Arnold or Mr. Stretars, 10 11 did you review the testimony that was submitted by parties other than the Prosecution Team in this 12 13 proceeding? 14 MR. ARNOLD: Yes. 15 MR. STRETARS: We've seen those. 16 MR. RUBIN: Did you review the testimony 17 submitted by Woods Irrigation Company in this 18 proceeding? 19 MR. ARNOLD: Yes. 20 MR. STRETARS: Yes, we did. 21 MR. RUBIN: Did you review the testimony 22 submitted by the Modesto Irrigation District, State Water Contractors, and San Luis & Delta-Mendota in this 23 24 proceeding?

25 MR. ARNOLD: Yes.

1 MR. RUBIN: Is it possible that your conclusion 2 would change if additional information were provided to 3 the Division regarding Woods Irrigation Company's water use? 4 5 MR. ARNOLD: Yes. We actually said that in a 6 letter, if we had additional information. 7 MR. RUBIN: Thank you. 8 Now taking a little bit of a step back. The 9 Division issued a Draft Cease and Desist Order against Woods Irrigation Company; is that correct? 10 11 MR. ARNOLD: Yes. 12 MR. RUBIN: And that was issued in approximately December of 2009? 13 14 MR. ARNOLD: I think that's the date. I'd have 15 to check. 16 MR. RUBIN: Approximately. 17 MR. ARNOLD: Yes. 18 MR. RUBIN: Did Woods Irrigation Company 19 respond to the Draft Cease and Desist Order? 20 MR. ARNOLD: I don't believe they did. Did 21 they? Oh, they requested a hearing. Right. That's the 22 only response we got. 23 MR. RUBIN: And is their response marked as a 24 Prosecution Team exhibit? 25 MR. ARNOLD: PT-08, Request For Hearing.

MR. RUBIN: So Prosecution Team Exhibit 8 is 1 2 the response that you received from Woods Irrigation 3 Company to the Draft Cease and Desist Order that was issued by the Division? 4 5 MR. ARNOLD: Yes, it is. 6 MR. RUBIN: Is there anything in Prosecution Team 8 that provides direct evidence of a pre-1914 or 7 8 riparian water right? 9 MR. ARNOLD: You're asking for the direct 10 evidence of a right in the Request For Hearing? Is that 11 your question? 12 MR. RUBIN: Let me rephrase the question. In Prosecution Team Exhibit 8, is there any 13 direct evidence that Woods has provided to you that 14 15 evidences either a pre-1914 water right or a riparian 16 water right? 17 MR. ARNOLD: Oh. No. 18 MR. RUBIN: In fact, their response to the 19 Draft Cease and Desist Order indicated that they are 20 conducting an investigation and a historic review; is 21 that correct? 22 MR. ARNOLD: That's correct. 23 MR. RUBIN: I have a question regarding some of 24 the discussion from earlier regarding the connection or potential connection between a surface stream and 25

1 groundwater. Do you recall having that discussion 2 earlier today?

3 MR. ARNOLD: Yes. I think Mark made most of 4 that.

5 MR. RUBIN: Would an engineering report be the 6 sort of evidence upon which a reasonable person would 7 rely in the conduct of serious affairs if they were 8 trying to determine whether there was a connection 9 between groundwater and surface water?

10 MR. STRETARS: I would assume so, yes.

11 MR. RUBIN: In Prosecution Team Exhibit 8, did 12 Woods Irrigation District indicate that it had engaged a 13 consultant engineer to investigate the riparian 14 diversions that were asserted in the January 11, 2010 15 letter, PT-8?

16 MR. STRETARS: Yes, I believe it did.

MR. RUBIN: Did Woods Irrigation District ever provide the Prosecution Team a report from the engineer that was retained?

20 MR. STRETARS: No, we have not seen that.

21 MR. RUBIN: Thank you.

The information that was provided to the Prosecution Team that's marked as Exhibit PT-5, that does not demonstrate the method of diversion that cccurred prior to 1914, does it?

MR. STRETARS: I don't believe so. 1 2 MR. RUBIN: And the information that is contained within Exhibit PT-5 does not demonstrate the 3 amount of land irrigated with surface water prior to 4 1914, does it? 5 6 MR. STRETARS: It's a 1911 document, no. So it wouldn't show -- wouldn't tell you what was 1914. 7 8 MR. RUBIN: The information contained within 9 Exhibit PT-5 does not demonstrate the amount of land irrigated with surface water prior to 1911 either, does 10 11 it? 12 MR. ARNOLD: No. MR. STRETARS: No, it defines the area. 13 14 MR. RUBIN: I'm sorry? 15 MR. STRETARS: I think it defines an area to be -- could be three or four served; we don't know 16 17 which. 18 MR. RUBIN: Okay. Well, in fact, the documents within Exhibit PT-5 do tell you that not all of the 19 20 lands were irrigated in 1911, correct? 21 MR. STRETARS: That's correct. 22 MR. RUBIN: The information in Exhibit PT-5 23 does not demonstrate the season surface water was 24 diverted prior to 1914, does it? 25 MR. STRETARS: Does not.

MR. RUBIN: Do you know how much water Woods Irrigation Company furnished to lands within its service area prior to 1914?

MR. STRETARS: We do not.

4

5 MR. RUBIN: I believe at some point in time 6 after 1914 and before today Woods Irrigation Company 7 furnished at least 77.7 cubic feet per second to lands 8 within its service area?

9 MR. STRETARS: Yes, that's our general 10 assumption based on the information we looked at.

11 MR. RUBIN: And what was the first year in 12 which you believe Woods Irrigation District furnished at 13 least 77.7 cubic feet per second of water to lands 14 within its service area.

MR. STRETARS: I don't think we defined the year.

17 MR. RUBIN: Do you have a decade?

MR. STRETARS: The -- well, what we're looking at, 1964 for certain, the area was served. The aerials from 1937, 1940 indicate that a large percentage, as much as maybe 90 percent of the area, was under service based on the aerial shot in time.

And we have indication from the 1911 and 19 --1913 documents to indicate they were serving some extent of the lands but not specifically the amount.

1 MR. RUBIN: And the 1937 paragraphs that you 2 have just referenced, they wouldn't indicate whether Woods Irrigation Company is delivering surface water. 3 It would reflect whether lands are in agricultural 4 production; is that correct? 5 6 MR. STRETARS: That would be correct, yes. 7 MR. RUBIN: One second. 8 Just one more question. There has been some 9 discussion about a 1911 agreement between Woods Irrigation Company and E.W.S. Woods. Do you recall that 10 11 discussion? 12 MR. STRETARS: Yes. 13 MR. RUBIN: Is it your understanding that in that agreement there is a provision that addresses the 14 potential for insufficient water to be available for 15 Woods Irrigation to furnish lands that are covered 16 17 within the agreement? 18 MR. HERRICK: Objection; misstates the document. The document he's referring to as dryland 19 20 doesn't say insufficient water. It talks about the 21 distribution system. 22 MR. RUBIN: My question didn't reference the 23 dryland. 24 I questioned whether their agreement contemplated a circumstance where there would be 25

1 insufficient water to supply lands covered within the 2 agreement.

3 CO-HEARING OFFICER PETTIT: I think Mr.
4 Herrick's distinction was whether you were talking about
5 insufficient water or insufficient delivery capability,
6 if I understood it correctly.

7 MR. RUBIN: My question did not reference the 8 ability to divert, just insufficient water, quantity of 9 water.

10 MR. HERRICK: My objection may have been -- I 11 may have misunderstood. If he will please point to a 12 portion of the document --

MR. RUBIN: After all this, let me rephrase my question and see if we get an objection.

Is it your understanding that the 1911 agreement includes a provision that contemplated the inability of Woods Irrigation Company to supply water to lands within the service area of Woods Irrigation Company?

20 MR. RUIZ: I would just object. If he could 21 just point to the portion of the document that he's 22 referencing, we could all follow along better.

23 CO-HEARING OFFICER PETTIT: I would agree,24 Mr. Rubin, if you could point us to that.

25 And also, based on the wording you read, I'm

1 not sure that question is going to be answerable.

MR. RUBIN: Mr. Arnold and Mr. Stretars, I ask 2 that you turn to page -- I believe it's 46 in the 3 4 document. I have -- I'm not looking at the copy that's 5 part of Prosecution Team Exhibit 5. And again, it's 6 about halfway through or so of that exhibit. 7 There is a provision three paragraphs under the heading, Use of Water. Do any of those three paragraphs 8 9 contemplate a circumstance where Woods Irrigation Company may not have sufficient supply of water to 10 provide water to lands within -- covered by the 11 12 agreement? MR. STRETARS: We don't find a reference where 13 it suggests that they would not be able to supply water. 14 15 MR. RUBIN: Let me read to you the third paragraph under the section that's entitled Use of 16 17 Water. I believe it reads quote: 18 Should the supply of water be diminished so that quantity available would not 19 furnish all of the lands within the 20 21 amount desired, then in that event the 22 quantity available shall be prorated 23 according to the acreage of each 24 customer. 25 Period, close quote. Do you see that

1 provision?

2 MR. STRETARS: Okay, yeah. 3 MR. RUBIN: Does that provision contemplate a circumstance where Woods Irrigation Company may not have 4 sufficient water to supply all of the lands that are 5 6 covered within the agreement? 7 MR. STRETARS: Okay, yeah. MR. O'LAUGHLIN: Thank you. 8 I have one more -- just one last line of 9 questioning. If I understand your testimony, it's your 10 11 belief that in 1914 and prior Woods Irrigation Company used a gravity-fed system to supply water? 12 13 MR. ARNOLD: They may have. 14 MR. RUBIN: But you don't know if they did? MR. ARNOLD: We don't know for certain. 15 16 MR. RUBIN: Let me ask that you assume a gravity system was used to irrigate lands within Woods 17 18 Irrigation Company. Would the ability to use that 19 system be affected by the location of the diversion 20 facility? 21 MR. STRETARS: Yes. 22 MR. ARNOLD: Certainly the construction of it. 23 MR. RUBIN: And not only would the location of 24 the diversion facility affect the ability to divert into the gravity-fed system, but the elevation of the 25

watercourse from which diversions were occurring? 1 MR. STRETARS: Yes. 2 3 MR. ARNOLD: Yes, of course. 4 MR. RUBIN: So that in dry years, if the 5 watercourse had little water in the channel, it may not 6 be possible to divert water using the gravity system? 7 MR. STRETARS: On a normal stream, potentially. But we're also dealing with tides in this case. 8 9 MR. RUBIN: And if tides are influencing the 10 ability to divert, that may affect the quality of water 11 as well? 12 MR. STRETARS: To some extent, yes. 13 MR. RUBIN: I have no further questions. Thank 14 you. 15 CO-HEARING OFFICER PETTIT: Thank you, Mr. Rubin. Mr. Powell, I assume you'll have some 16 17 questions? 18 MR. POWELL: No. CO-HEARING OFFICER PETTIT: Are we done with 19 20 MTD? 21 MR. RUIZ: Mr. Pettit, there is some limited 22 cross by the Agencies and by the County. If we could 23 just have a few moments, we could probably streamline 24 that and make it quicker and more efficient. 25 CO-HEARING OFFICER PETTIT: Before we break for

1 lunch, you mean? If it's going to be short, let's go 2 ahead and do that. MR. RUIZ: I'm sorry. If we could take a lunch break now, we could streamline our cross when we come back and be much quicker. CO-HEARING OFFICER PETTIT: Let's be back in an hour. (Lunch recess)

1	AFTERNOON SESSION
2	
3	CO-HEARING OFFICER PETTIT: We can go back on
4	the record. Ms. Gillick is up.
5	MS. GILLICK: DeeAnne Gillick on behalf of
6	County of San Joaquin and the flood control district. I
7	have some cross-examination questions for staff.
8	Mr. Stretars, can the State Board regulate
9	pre-1914 water rights?
10	MR. STRETARS: No.
11	Well, I should I think we can to the extent
12	of unreasonableness.
13	MS. GILLICK: Is it correct that if there's a
14	possibility that water under a pre-1914 water right is
15	not being used reasonably or wastefully, the State Board
16	could regulate that?
17	MR. STRETARS: Yes.
18	MS. GILLICK: Absent reasonable use or waste,
19	can the State Board regulate a pre-1914 water right?
20	MR. STRETARS: No.
21	MS. GILLICK: Absent reasonable use or waste,
22	as to riparian water rights, can the State Board
23	regulate the riparian water right?
24	MR. STRETARS: No.
25	MS. GILLICK: During direct examination as well

as during cross, you made a statement, and it might have 1 2 been Mr. Arnold as well, that the State Board has not received any additional information from Woods 3 Irrigation Company after the Cease and Desist Order was 4 5 issued. Do you recall that? 6 MR. STRETARS: Yes. MS. GILLICK: After the Cease and Desist Order 7 was issued, there is an indication that you did receive 8 9 correspondence from the company requesting the hearing? 10 MR. STRETARS: That's correct. 11 MS. GILLICK: Absent that, didn't you in fact 12 have numerous, more than one, conversations with Counsel 13 Herrick regarding the Woods Irrigation Company? 14 MR. STRETARS: Yes, we spoke with Herrick. 15 MS. GILLICK: Okay. Didn't you in fact have meetings with Counsel Herrick and other representatives 16 17 of Woods Irrigation Company after the Cease and Desist 18 Order was issued? 19 MR. STRETARS: Right. We met with them to 20 clarify what we were looking for. 21 MS. GILLICK: Where did those meetings take 22 place? 23 MR. STRETARS: In Stockton. 24 MS. GILLICK: Was that at the office of Kjeldsen Sinnock & Neudeck, the engineer --25

MR. STRETARS: That's correct. 1 2 MS. GILLICK: -- involved in this case? 3 MR. STRETARS: That's correct. 4 MS. GILLICK: Okay. And at the meeting regarding Woods Irrigation Company that occurred after 5 6 the Cease and Desist Order was issued, was the existence of riparian lands within the irrigation company 7 8 boundaries discussed? 9 MR. STRETARS: It was. MS. GILLICK: Did you review any information at 10 11 that meeting regarding the existence of riparian land within Woods Irrigation Company? 12 13 MR. STRETARS: There was preliminary 14 information provided to us. 15 MS. GILLICK: Were there any documents that you were provided at that meeting? 16 17 MR. STRETARS: There were some preliminary 18 documents provided that we looked at. 19 MS. GILLICK: Did the documents consist of maps 20 indicating property that was riparian or not riparian at 21 that -- based upon the information available to Woods at that time? 22 23 MR. STRETARS: The maps I believe identified nonriparian properties per se. I don't recall whether 24 they specifically had riparian properties or not. 25

1 MS. GILLICK: So it's your recollection sitting 2 here today that the maps provided at that meeting indicated property that was not riparian? 3 MR. STRETARS: I remember that more 4 5 specifically than whether there was riparian properties. 6 MS. GILLICK: Do you have a copy of those maps? 7 MR. STRETARS: I do not at this point in time. They are preliminaries, so the District kept them. 8 9 MS. GILLICK: Were you prohibited from --MR. STRETARS: No. We just --10 11 MS. GILLICK: So it wasn't the --12 MR. STRETARS: We were expecting a formal 13 submittal of it which we never got, basically. 14 MS. GILLICK: Generally, do you recall was a 15 large portion of the lands within the Woods Irrigation Company depicted as riparian lands at that meeting? 16 17 MR. STRETARS: Yeah, probably better than 18 60 percent. MS. GILLICK: More than 50 -- 60 percent of the 19 20 lands within Woods Irrigation Company --21 MR. STRETARS: Appeared to be. 22 MS. GILLICK: -- were provided to you as 23 riparian --24 MR. STRETARS: Yes. 25 MS. GILLICK: -- lands?

Does the Cease and Desist Order, the Draft Cease and Desist Order, require Woods Irrigation Company to provide evidence to support a pre-1914 water right up to 77.7 cfs?

5 MR. STRETARS: It does not.

MS. GILLICK: Is it your position in presenting this case on behalf of the State Board that you as staff were satisfied that the District held a pre-1914 water right to the extent of 77.7 cfs?

MR. STRETARS: I would say staff was satisfied that between the riparian properties and the claim of the pre-1914 right there was probably sufficient water to cover the district -- not district, company.

MS. GILLICK: Okay. Do you believe that -- you just indicated two things. One, that based upon both riparian water rights as well as pre-1914 water rights, did that support an amount of 77.7 cfs or an amount greater than 77.7 cfs?

MR. STRETARS: Because you can't put a limit on riparian rights. I don't know where that would lay, basically. But it would be sufficient -- it would appear to have sufficient -- the documentation appeared there probably would be probably sufficient water to cover those lands.

25 MS. GILLICK: Could a property owner enjoy a

riparian water right as well as a pre-1914 water right? 1 2 MR. STRETARS: From our standpoint, yes. 3 MS. GILLICK: In preparing this case or 4 reviewing the information presented to you, you -- I want to confirm, and correct me -- you made a conclusion 5 6 that there was sufficient evidence to support a pre-1914 water right to the extent of 77.7 cfs; is that correct? 7 8 MR. STRETARS: Mm-hmm. Yes. 9 MS. GILLICK: And in making that determination, 10 you relied upon a variety of documents; is that correct? 11 MR. STRETARS: Yes. 12 MS. GILLICK: And that included information 13 submitted by Woods Irrigation Company in March of 1909; 14 is that correct? 15 MR. STRETARS: That's correct. MS. GILLICK: And some of that information that 16 was submitted by Woods Irrigation Company is depicted as 17 18 Prosecution Team PT Exhibit 5; is that correct? MR. STRETARS: That's correct. 19 20 MS. GILLICK: And that information included among other things the 1909 articles of incorporation; 21 is that correct. 22 MR. STRETARS: Yes. 23 24 MS. GILLICK: It also included two contracts to furnish water by the Woods Irrigation Company; is that 25

1 correct?

2 MR. STRETARS: That's correct. 3 MS. GILLICK: Okay. Did that information also 4 include a map depicting the property that was to be 5 served by Woods Irrigation Company? 6 MR. STRETARS: It did. 7 MS. GILLICK: Was that map attached to the 1911 8 agreement? 9 MR. STRETARS: In the manner we received it, 10 yes. 11 MS. GILLICK: And did that map depict -- you 12 indicated that that map depicted the property to be served. Did it also depict irrigation and distribution 13 canals and pipelines? 14 15 MR. STRETARS: It does, yes. 16 MS. GILLICK: Did the information that you relied upon included in Prosecution Team Exhibit 5 17 18 include a 1957 guiet title action? MR. STRETARS: It did. 19 20 MS. GILLICK: And in that 1957 quiet title 21 complaint, are you familiar with the statement that 22 indicates -- let me, so I don't paraphrase -- that the 23 district has been serving certain identified lands since 24 1911, since its existence, creation in 1911? 25 CO-HEARING OFFICER PETTIT: If you could please

1 put --

4

2 MS. GILLICK: It's on page 5 of the quiet title 3 action. Here we go.

MR. HERRICK: Page 8 of PT-5.

5 MS. GILLICK: Page 5 of the complaint entitled 6 Complaint to Quiet Title of Corporate Stock and For 7 Declaratory Relief filed in San Joaquin Superior Court 8 March 29, 1957.

9 If you look at page 5, lines 2 through 10, does 10 that indicate that the property within the Woods 11 Irrigation Company has been served by irrigation water 12 by the Woods Irrigation Company since 1911?

13 MR. ARNOLD: That's what it states.

MS. GILLICK: Was this the type of information and documentation that you relied upon to support your conclusions that an evaluated pre-1914 water right existed to the extent of 77.7 cfs by Woods Irrigation Company?

MR. ARNOLD: Yes, that's some of the information.

21 MS. GILLICK: You also in direct testimony 22 indicated that you reviewed the exhibits submitted by 23 the parties to this proceeding; is that correct? 24 MR. ARNOLD: Yes, we did.

25 MS. GILLICK: Have you reviewed the testimony

1 of Landon Blake on behalf of the Woods Irrigation 2 Company?

3 MR. ARNOLD: I believe I saw that. 4 MS. GILLICK: And do you recall a 19 -- what was depicted as Exhibit SJ, a 1909 map indicating the 5 6 Woods brothers property? 7 MR. ARNOLD: Of the top of my head, I'm not sure what specific map you're talking about. I believe 8 9 if you put the exhibit up --MS. GILLICK: It's fine if he doesn't recall. 10 11 I don't have it. 12 You want to look at it, it's Exhibit SJ. So Woods Irrigation Company Exhibit SJ. 13 14 CHIEF LINDSAY: Would you like that up? Is it SJ or 2J? 15 MS. GILLICK: 6J. How is that? Exhibit 6J. 16 17 That's it. Sorry. 18 That map indicates it's a map of the property, the Wood brothers lands; is that correct? 19 20 MR. STRETARS: What it indicates, yes. 21 MR. ARNOLD: Yes, for the most part. 22 MS. GILLICK: And the testimony of Exhibit 6 of 23 Woods Irrigation Company indicates that was a 1909 map; 24 is that --25 MR. ARNOLD: That's what they designated as. I

1 didn't see a date on the map, but that's what it was 2 assigned to be. 3 MS. GILLICK: Are you also familiar with what

has been presented as Woods Irrigation Company 4 Exhibit 6K which is a 1914 map? 5 6 MR. RUBIN: I'm going to object to the question. I believe it assumes a fact that's not in 7 8 evidence. 9 MS. GILLICK: I'll ask. Well, I don't know 10 what your fact is, but. 11 Have you -- in preparing for your testimony today, did you review this exhibit, this map that's 12 depicted Exhibit SK? 13 14 MR. ARNOLD: We looked at it, yes. 15 MS. GILLICK: Does this map designate a water distribution system within the land? 16 MR. ARNOLD: Which land? 17 18 MR. RUBIN: I'm going to object to the 19 question. It's ambiguous. 20 CO-HEARING OFFICER PETTIT: What's the basis, 21 Mr. Rubin? 22 MR. RUBIN: The question asked whether the map 23 reflects the distribution system on land without being 24 specific as to what lands the distribution system may 25 exist on.

MS. GILLICK: Lands within Woods Irrigation
Company: Does the map depict a water distribution
system?

MR. ARNOLD: Yes. It appears -- the canals that appeared on the 1911 maps appear to be the canals there on that map also. Some of it.

MS. GILLICK: Either Mr. Stretars or Mr. Arnold: Is -- the historic documentation that we just reviewed, the 1909 map, 1911 map, 1914 map, the 1911 contracts, the quiet title complaint which was -- is that the type of documentation that you would normally rely upon to establish a pre-1914 water right?

MR. ARNOLD: In the absence of any other data,yes.

MS. GILLICK: Is this -- is it typical that given the passage of time since 1914, which is almost 17 100 years now, that this is the typical type of evidence 18 that would support a pre-1914 water right?

MR. ARNOLD: Not alone, but yes, it could. MS. GILLICK: Is it reasonable to determine the amount of a pre-1914 water right based upon the quantity of land to be served by the 1914 water right?

23 MR. ARNOLD: You can make estimations based on24 land use.

25 MS. GILLICK: Well, not particularly land use,

1 but by the actual acreage of land that is being served 2 by that pre-1914 water right?

3 MR. ARNOLD: You could make estimations of 4 evapotranspiration based on crops and quantity of land. 5 That doesn't always correlate with the amount of water 6 needed, the applied water needed to get it there.

MS. GILLICK: Mr. Stretars, in your experience in riparian water rights, does a -- would an agreement to deliver water show intent to preserve a riparian water right?

11 MR. STRETARS: Yes, it would.

MS. GILLICK: Based upon your experience and knowledge of the Woods Irrigation Company and the Delta, is there always water in the channels adjacent to the Moods Irrigation Company?

16 MR. STRETARS: Yes, there would be.

MS. GILLICK: More specifically, is there always water in the channels in which Woods Irrigation Company diverts from?

20 MR. STRETARS: Yeah, Middle River always has 21 water in it regardless of quality because it's a tidal 22 river. It would have both inflow and outflow because of 23 the tides.

24 MS. GILLICK: Does a pre-1914 water right 25 depend upon a certain quality of water?

1 MR. STRETARS: Doesn't depend on quality, no. 2 MS. GILLICK: Does a riparian water right 3 depend on a certain quality --MR. STRETARS: 4 No. MS. GILLICK: -- of water? 5 6 MR. STRETARS: It does not. 7 MS. GILLICK: Is it required to have a storage facility in order to have an appropriative water right? 8 9 MR. STRETARS: No, it's not. MS. GILLICK: Does that include a pre-1914 10 11 appropriative water right? 12 MR. STRETARS: Original pre-14s, there isn't a quantification or means of describing storage, so most 13 of the rights were described in some type of diversion 14 15 amounts to people's -- what they need in the place of 16 storage. 17 MS. GILLICK: That's all I have. Thank you. 18 CO-HEARING OFFICER PETTIT: Thank you, Ms. Gillick. Mr. Ruiz? 19 ------20 21 CROSS-EXAMINATION BY MR. RUIZ 22 FOR CENTRAL DELTA WATER AGENCY, SOUTH DELTA WATER AGENCY 23 --000--24 MR. RUIZ: Good afternoon, Mr. Stretars, Mr. Arnold. Ms. Gillick went through most everything, so I 2.5

1 just have a couple of questions for you on cross. 2 Mr. Stretars, I believe earlier today you testified that the elevation in the area of question, 3 4 the Woods area, was between you say plus five and plus minus -- plus five and minus five; is that what you 5 6 said? 7 MR. STRETARS: Basically, yes. MR. RUIZ: Okay. And you also testified that 8 you weren't necessarily -- or you weren't aware of a 9 second point of diversion; is that right? From the 10 11 Woods system out of Middle River? 12 MR. STRETARS: Under the pre-14 maps it appears 13 there's a single point. There are now three that I am aware of. 14 15 MR. RUIZ: Okay. In looking at a map that's part of Woods Irrigation Company's Exhibit 6P -- do you 16 17 have that? 18 MR. STRETARS: Find it. 19 MR. RUIZ: That's part of the 1911 agreement 20 between Woods and Wilhoit Douglass. Do you see that? 21 MR. STRETARS: Okay. 22 MR. RUIZ: And in the bottom of the map it 23 indicates the single point of diversion, at least on 24 this map; do you see that? 25 MR. STRETARS: That's correct, yes.

1 MR. RUIZ: Is there -- it's possible in looking 2 at that there very well could have been -- or isn't it possible that there very well could have been more 3 4 than one pump or more than one gate? 5 MR. STRETARS: Very possibly, yes. 6 MR. RUIZ: In fact, there could have been 7 multiple pumps and multiple gates in connection with 8 that single diversion; isn't that right? 9 MR. STRETARS: Yes. MR. RUIZ: And wouldn't that tend to support 10 11 your conclusions or part of your conclusions in looking at this matter that Woods IC, the Woods Irrigation 12 13 Company, was capable of and was able to furnish up to at 14 least 77.7 cfs to its member area? 15 MR. STRETARS: Yes, it's possible. 16 MR. RUIZ: And you have seen in connection with 17 looking at this matter, you looked at other exhibits and 18 other maps submitted which indicate existence of canals 19 throughout the Woods Irrigation Company area; is that 20 right? 21 MR. STRETARS: That's correct. MR. RUIZ: And that would tend to further 22 23 support your conclusions that you've reached in the 24 matter thus far that Woods has the ability and the right to furnish at least up to 77.7 cfs? 25

MR. STRETARS: Yes. 1 2 MR. RUIZ: And have you seen any evidence in your investigation so far to indicate that Woods 3 Irrigation Company wasn't able to furnish at least the 4 77.7 cfs? 5 6 MR. STRETARS: No, we haven't. MR. RUIZ: That's all I have. 7 8 CO-HEARING OFFICER PETTIT: Thank you, 9 Mr. Ruiz. Mr. Rose, do you have any redirect? 10 11 MR. ROSE: A few brief questions. 12 CO-HEARING OFFICER PETTIT: Please proceed. REDIRECT EXAMINATION BY MR. ROSE 13 14 FOR PROSECUTION TEAM 15 MR. ROSE: Either of you can answer these questions, Mr. Arnold or Mr. Stretars. 16 17 First of all, in your experience, does a high 18 groundwater level necessarily reflect hydrologic connection to a surface stream? 19 MR. ARNOLD: No, it doesn't. 20 21 MR. ROSE: So a high groundwater level wouldn't 22 necessarily allow somebody to move a point of diversion from a groundwater well on their land to a surface 23 24 stream? 25 MR. STRETARS: It would not.

1 MR. ROSE: Okay. Again, either of you can 2 answer this question relating to some questions that 3 have been asked of you on cross-examination. 4 If an illegal diversion were to apply water to a better or -- let's just use "better" in quotes as the 5 6 term here -- a better use than the absence of that illegal diversion, does that make the diversion legal? 7 8 MR. STRETARS: No, it does not. 9 MR. ARNOLD: No. MR. ROSE: Okay. I think I just have a few 10 11 more lines of questioning here. 12 Specific to the 1911 agreements that you have been discussing, Exhibits 60 and 6P and also PT-5, do 13 those 1911 agreements specify a specific diversion rate 14 15 per acre? 16 MR. STRETARS: They do not. MR. ROSE: Can somebody specify a diversion --17 18 does a diversion rate have to be directly tied to a 19 specific amount of acreage? 20 MR. STRETARS: No, it doesn't. 21 MR. ROSE: Finally on this line of questioning, 22 are the 1911 documents in any way unclear as to the 23 diversion rate claimed per the agreement? 24 MR. STRETARS: No, they're very specific. 25 MR. ROSE: Okay. Mr. Arnold or Mr. Stretars,

1 if you think this is better for you: There has been 2 some discussion on cross-examination from agreements that there was a limit to four irrigations per season in 3 4 the -- in several different Woods agreements. Does that 5 ring a bell to you? MR. ARNOLD: Yes, I recall that. 6 7 MR. ROSE: Now is it possible that four irrigations per season could allow a full use of the 8 9 claimed amount of water based on the service area and 10 potential crop type? 11 MR. ARNOLD: Yes. MR. ROSE: Okay. I don't have any other 12 13 further questions at this point. 14 CO-HEARING OFFICER PETTIT: Thank you, 15 Mr. Rose. Mr. Herrick? 16 --000--17 RECROSS-EXAMINATION BY MR. HERRICK FOR WOODS IRRIGATION COMPANY 18 --000--19 20 MR. HERRICK: Thank you, Mr. Chairman. John Herrick again for Woods Irrigation Company. 21 22 Very briefly Mr. Stretars, the first questions 23 you were asked dealt with the connections between a 24 stream and high groundwater, and you said the fact that you have a nearby stream that's higher than the 25

1 groundwater doesn't necessarily mean they're connected; 2 is that correct?

MR. STRETARS: That is correct.

3

MR. HERRICK: So in this case, it would be 4 important to determine whether or not that groundwater 5 6 is directly connected to the surface stream; wouldn't 7 it? 8 MR. STRETARS: It may, yes. 9 MR. HERRICK: Because if they are directly connected, that may affect your conclusion about whether 10 11 or not the two water sources are in fact the same 12 source? 13 MR. STRETARS: Yes. 14 MR. HERRICK: Okay. And whether or not the 15 groundwater has some sort of contamination, does that affect your conclusion? Would that affect a conclusion 16 17 whether or not they are connected? The surface stream 18 and the groundwater? 19 MR. STRETARS: I quess the extent which you 20 talk about contamination, I would say probably no, it 21 wouldn't affect it. 22 MR. HERRICK: Okay. Then there were a couple 23 questions with regard to four irrigations and whether 24 that was sufficient -- might be sufficient to supply all of the water under this specified 77.7 cfs. Do you 2.5

1 recall those, those questions?

2 MR. ARNOLD: Yes.

3 MR. HERRICK: All right. The discussion regarding those dealt with rules and regulations of 4 5 Woods Irrigation Company; did they not? MR. ARNOLD: I recall there was a memo. 6 7 MR. HERRICK: Are you familiar with the minutes of Woods Irrigation District wherein those rules and 8 9 regulations were contained? 10 MR. ARNOLD: I'm not familiar with those. 11 MR. HERRICK: So we don't really know from the 12 questions presented so far whether or not that was a 13 practice in fact undertaken by the company? 14 MR. ARNOLD: No. I didn't know until today. 15 MR. HERRICK: And of course -- sorry -- and of course the language quoted talked about unless somebody 16 17 asks for use of water outside of that period, correct? 18 MR. ARNOLD: Yes, correct. 19 MR. HERRICK: And you would agree, would you 20 not, that Woods Irrigation Company was constituted to 21 supply irrigation water to certain lands, correct? 22 MR. ARNOLD: Yes. 23 MR. HERRICK: So it would be reasonable to 24 assume on your part that they would deliver water when the agricultural lands needed water absent something 25

1 that would prevent it?

2 MR. ARNOLD: That sounds correct. 3 MR. HERRICK: So when you make your conclusions that 77.7 cfs of water has actually been applied before 4 or after 1914, you are using some of that reasoning we 5 6 just went through to support that conclusion, are you 7 not? 8 MR. RUBIN: I'm going to --9 MR. ROSE: Object; I think we're beyond the 10 scope of the redirect. 11 MR. RUBIN: I'm going to object as well on the grounds it assumes facts not in evidence. 12 MR. HERRICK: Must have been a hell of a 13 14 question. 15 CO-HEARING OFFICER PETTIT: Restate it. 16 MR. HERRICK: I'll let it lie. Thank you. 17 CO-HEARING OFFICER PETTIT: Okav. -----18 RECROSS-EXAMINATION BY MR. O'LAUGHLIN 19 FOR MODESTO IRRIGATION DISTRICT 20 21 -----22 MR. O'LAUGHLIN: Mr. Arnold, in regards to your 23 answer that the right may be fulfilled using the four 24 applications in the irrigation season, if lands are riparian within Woods in 1911, how do you make a 25

1 determination that the water being diverted is 2 appropriative rather than riparian in order to fulfill 3 that seasonal obligation? MR. ARNOLD: I didn't make that 4 determination --5 MR. O'LAUGHLIN: You didn't? 6 7 MR. ARNOLD: -- as to whether they -- our determination was based on the appropriative right. 8 The 9 77.7 is based on the appropriative. Anything additional, we didn't make a determination on as far as 10 11 riparian. 12 MR. O'LAUGHLIN: Let me ask it a different way. Wonder if it's not additional but subsumed in 13 the 77.7 that was delivered? In other words, 77.7 cfs 14 15 is diverted from Middle River, and let's say hypothetically half of that is riparian water, then the 16 appropriative right would only be the other half, 17 18 correct? 19 MS. GILLICK: I'm going to object the question 20 is exceeding the scope of cross-examination. 21 MR. O'LAUGHLIN: Well, it all goes to the 22 ability to fulfill the seasonal requirement. 23 MS. GILLICK: I don't believe that was asked 24 on --25 MR. O'LAUGHLIN: Yeah, it was. It was four --

applications of four in an irrigation season; I'm just 1 2 trying to get clarification of what that means. 3 CO-HEARING OFFICER PETTIT: I'm not sure that 4 question can be answered without distinguishing things 5 like seasons to split the --6 MR. O'LAUGHLIN: Right. 7 CO-HEARING OFFICER PETTIT: -- riparian from the appropriative rights, so I'm --8 9 MR. O'LAUGHLIN: Right. CO-HEARING OFFICER PETTIT: -- not sure how I 10 11 would be able to answer that question, so --MR. O'LAUGHLIN: And I'll get to that. 12 That's 13 one of my follow-up questions. Thanks. 14 CO-HEARING OFFICER PETTIT: Let's try it. 15 MR. O'LAUGHLIN: Okay. Let's try it. So how did you -- how would you distinguish --16 how would you distinguish that 77.7 right had been 17 18 fulfilled as opposed to riparian rights being delivered? MR. ARNOLD: I think Mark talked about 19 20 overlapping rights. And the specific as to the 21 hypothetical, I can't address except overlapping rights. 22 Overlapping rights. 23 MR. O'LAUGHLIN: Okay. Do you know -- when you 24 were talking about seasonally you thought the right could be fulfilled, do you know at what point in time 25

Woods Irrigation District -- well, let me ask it a 1 2 different way. 3 You say in your -- in the CDO that it's your opinion they have a pre-1914 right. What's the season 4 5 of that pre-14 right? 6 MR. ARNOLD: That wasn't specified in the 7 agreement, but we assumed --8 MR. O'LAUGHLIN: Another assumption? 9 MR. ARNOLD: Well, without a season, it's an 10 entire year.

MR. STRETARS: Without a season, it would be an entire year.

MR. O'LAUGHLIN: So just so we're clear on your Vour CDO basically is that Woods Irrigation District has a right to divert 77.7 cfs year around?

16 MR. STRETARS: I think that's reasonable, yeah. 17 That's -- the original document did not define the 18 season.

MR. O'LAUGHLIN: Okay. Since the original document didn't define, would you look at other documents that would help define the season? Did you find any? The season of use.

23 MR. STRETARS: Would we?

24 MR. O'LAUGHLIN: Yeah. Or did you?
25 MR. ROSE: I'll object. I think we're getting

1 beyond the scope of redirect here.

2 MR. O'LAUGHLIN: Well, no. You asked him whether or not in the seasons they could fulfill the 3 77.7 based on the applications. I'm trying to figure 4 5 out what seasons we're talking about. 6 MR. ROSE: I think the answer was that it's 7 possible that four irrigation per season could 8 constitute the entire amount, then that answers the 9 question. MR. O'LAUGHLIN: What -- well, let me break it 10 11 down. 12 Let's go to the winter. Is it your assertion that 77.7 cfs was being applied from December 21st 13 through February 21st of any year? And if so, what do 14 15 you base that on? 16 CO-HEARING OFFICER PETTIT: Mr. O'Laughlin, if I could interrupt, I'm sorry. I don't want to cut you 17 18 off unnecessarily. 19 My recollection is that they testified during 20 the direct testimony they had very little or no 21 information about the actual quantities that were 22 applied or the seasons. So it seems to me like we might 23 be rehashing old ground. 24 MR. O'LAUGHLIN: Yeah. Which gets to my point: How do you make a determination that you have a right 25

1 when you haven't defined the season and you can't
2 allocate the use?

I know this is tedious, and I'm sorry, but unfortunately given the scope of what we're going to be talking about today, my expectation is fairly high that this will probably not stop here, and we'll probably get a writ of mandate, and we'll probably go to the appellate court.

9 So I just want to make sure that the record's 10 absolutely clear that they have absolutely no evidence 11 upon which to base their testimony today about seasons. 12 And so we're going to go through it, if you don't mind. 13 MR. RUBIN: Hearing Officer Pettit, if I may.

I agree with your characterization some of the information that came out on direct, but on redirect this specific question was asked whether Woods Irrigation Company could divert 77.7 cfs with four applications.

And the answer at the time, I believe, was yes. And so I think the questions that Mr. O'Laughlin are asking are questions that I intended to ask that go to the basis for the answer that was provided on redirect specific to the question that I just summarized.

25 CO-HEARING OFFICER PETTIT: Thank you for

1 narrowing that down.

2	Mr. O'Laughlin, I'm not concerned about
3	tedious. I'm willing to go through this.
4	MR. O'LAUGHLIN: Okay.
5	CO-HEARING OFFICER PETTIT: I just wanted to
6	define what you might get out of this that hasn't
7	MR. O'LAUGHLIN: Right. I'm going to try to
8	limit it because they've already answered about the
9	summer months, but I'm going to get to the fall, winter,
10	and spring.
11	So let's start with the winter. What amount of
12	water what evidence do you have that 77.7 cfs was
13	being diverted from Middle River for beneficial use
14	within Woods Irrigation Company? December 21st through
15	February 21st?
16	MR. STRETARS: Historically, asparagus crops
17	were growing. And historically, asparagus crops are
18	irrigated in February, probably not to the extent of
19	77.7 per second foot.
20	I think relative to Mr. Arnold's statement
21	about four seasons, or four applications, the capacity
22	of the canal apparently was sufficient enough to deal
23	with the 77 and therefore could be done at any time
24	during the year.
25	In our evaluation of this right leading into

1 the original letters that went out, we were looking at 2 what we considered probably a reasonable irrigation season which would be April to November. And so we 3 have --4 5 MR. O'LAUGHLIN: Okay. 6 MR. STRETARS: -- reasonable development during 7 that period of time. 8 We wouldn't say there was any water necessarily 9 other than we did find out they did irrigate asparagus 10 crops in February. Other than that, I don't know that there was 11 12 any --13 MR. O'LAUGHLIN: Okay. 14 MR. STRETARS: -- water use the winter season. 15 MR. O'LAUGHLIN: Okay. So let's talk about asparagus. How many acres of asparagus were planted in 16 Woods Irrigation Company prior to 1914? 17 18 MR. STRETARS: Have no knowledge. 19 MR. O'LAUGHLIN: All right. You don't know, do 20 you? 21 MR. STRETARS: No, I don't know. Seriously, we don't know. 22 MR. O'LAUGHLIN: This is entirely speculation 23 24 on your behalf because let's get to the next one. 25 You assume again what the capacity of the canal

1 is, right? You just answered that you assumed what the 2 capacity of the canal was sufficient to support the 3 77.7. Okay? What was the Manning coefficient of that canal? 4 MR. STRETARS: We assumed on the basis of the 5 2009 measurement which said there was --6 7 MR. O'LAUGHLIN: No, from the pre-1914. MR. STRETARS: I realize that. 8 9 MR. O'LAUGHLIN: I know. What I'm asking you 10 is what --11 MR. STRETARS: I'm sorry. I --12 (Interruption by the reporter) CO-HEARING OFFICER PETTIT: One at a time. 13 14 MR. O'LAUGHLIN: If you don't -- if you 15 don't -- if you weren't there, what are the direct documents that you have for the capacity of the canal 16 prior to 1914? 17 18 MR. STRETARS: There are none. 19 MR. O'LAUGHLIN: Okay. So you --20 MR. STRETARS: That I'm aware of. MR. O'LAUGHLIN: You have no direct evidence to 21 22 support your assumption that the canal had the capacity 23 to support 77.7 cfs; is that correct? 24 MR. STRETARS: That's correct. MR. O'LAUGHLIN: Well, I'd like to -- I'm going 25

1 to make a motion.

I'd like to move to strike all the Prosecution Team's direct testimony. Because what is clear is it's based upon assumptions.

5 There is no direct testimony that has been 6 offered by the Prosecution Team as to the basis for the 7 pre-1914 right. The best that they can come up with is 8 that there was an intent to divert and supply 77.7 cfs 9 pursuant to the articles of incorporation and pursuant 10 to the agreement.

But as you know under California law, they have to show a season of use. They have to show a timing of use. They have to show that it was put to reasonable and beneficial use in that time period.

15 There is no documentation anywhere in their 16 evidence that's been submitted to support such a basis, 17 and I move that all the testimony of the Prosecution 18 Team that states that Woods Irrigation Company has a 19 pre-1914 water right be stricken because you can't --20 and this Board is very clear about this.

21 One second.

When we went through this is that the -- in the previous case, when we went through this with Phelps, the State Board opined and said very clearly that there has to be direct, nonhearsay evidence in the record to

1 support the assertions being made.

2 All we have -- we have no direct testimony here of actual water use, actual diversion, actual 3 consumption, or beneficial use by the Prosecution Team. 4 So all they are doing is making hearsay or 5 6 assumptions and conclusions without direct evidence. And as such, that is not the type of testimony upon 7 which the Board can rely. 8 9 And you said that very specifically in your 10 previous rulings. 11 So -- it says here: 12 Further, to the extent that the presented evidence may be considered nonhearsay --13 14 And this is nonhearsay. It's not the sort that 15 can be relied upon. Their testimony needs to be stricken because it 16 leads to a fundamental problem in this case -- and 17 18 actually, I agree with Mr. Herrick on this. 19 This way the CDO is currently drafted causes a 20 major problem. Are we talking -- are we sitting here 21 today talking about the 77.7 cfs right, pre-1914 right 22 that's being asserted by Woods? 23 If so, that right may be entirely different 24 than the underlying landowners rights who may have pre-14 water rights, appropriative rights, and/or 25

1 riparian rights.

2 And just because it goes through one spigot, as 3 Hutchins said, you still have to delineate who has what 4 right.

5 And that's the problem that we're having here 6 today because the Prosecution Team has made no such 7 delineation. They have made none.

8 They are saying 77 may have gone through the 9 pipe, but we've made no determination as to what it is. 10 Well, if they can't make a determination as to what 11 water right it is, then they can't support a water 12 right.

Because a fundamental purpose of an A appropriative right is quantification of that right. In fact, that's what makes an appropriative right so unique.

And in this case, the flip on that is, if it's a riparian right, there is no quantification. They get to use their entire reasonable and beneficial use.

20 I'm going to follow up with some --

21 MR. ROSE: Board Member Pettit and Vice-Chair 22 Spivy-Weber, I'm not sure if you need a response, but 23 I'd be happy to give one.

24 CO-HEARING OFFICER PETTIT: Keep it short, Mr.25 Rose. I was about to reach a conclusion anyway.

1 MR. ROSE: It seems as though Mr. O'Laughlin's 2 issue goes to the weight that you may give to the 3 Prosecution Team's testimony, not the admissibility of 4 it.

5 This is the type of information that we 6 regularly rely on in the conduct of our business. And 7 inasmuch as he's suggesting that the Prosecution Team 8 has made a determination, that's different than the 9 Board making a determination.

All we've done is render an opinion that we're presenting to you. So we have already presented our case as to what we believe the outcome of this could be specific to Woods and not the other shareholders within that land.

So we're happy to go forward with what we've already put on.

MR. O'LAUGHLIN: Yeah, but the problem is - CO-HEARING OFFICER PETTIT: I think --

MR. O'LAUGHLIN: -- you can't have an opinion based upon no direct testimony.

21 CO-HEARING OFFICER PETTIT: Mr. O'Laughlin, I'm22 going to cut this short.

23 MR. O'LAUGHLIN: Sure.

24 CO-HEARING OFFICER PETTIT: I think I largely25 agree at least with your statement of what the Board

1 needs to reach a conclusion.

2	The staff conclusion and the staff opinions in
3	this case don't constitute any Board decision. It's up
4	to the Board to decide how much weight they're going to
5	give to the evidence and whether it's adequate or not.
6	I'm going to allow it to stand.
7	MR. O'LAUGHLIN: Okay. Well, let me then
8	two quick follow-up questions then.
9	Would your answer be the same for water
10	diverted in the fall that you have no knowledge as to
11	how much water was diverted and to when it was applied
12	in Woods Irrigation District?
13	MR. ROSE: Are you talking about prior to 1914?
14	MR. O'LAUGHLIN: Yep. Prior to 1914.
15	MR. STRETARS: Yes. Would be the same answer.
16	MR. O'LAUGHLIN: Okay. And would that answer
17	be the same in the spring?
18	MR. STRETARS: Yes.
19	MR. O'LAUGHLIN: Okay. And actually, you have
20	no knowledge as to how much was actually diverted and
21	delivered in the summertime, do you?
22	MR. STRETARS: No.
23	MR. O'LAUGHLIN: Thank you.
24	No further questions.
25	CO-HEARING OFFICER PETTIT: Thank you.

Mr. Rubin. 1 2 --000--3 RECROSS-EXAMINATION BY MR. RUBIN FOR SAN LUIS & DELTA-MENDOTA WATER AUTHORITY 4 --000--5 MR. RUBIN: Good afternoon. John Rubin for San 6 Luis & Delta-Mendota Water Authority. I just have, I 7 8 think, a few questions. Maybe only one. 9 Mr. Arnold, I believe you answered a question this afternoon that has been the focus of a lot of 10 11 attention that -- you were asked whether it's possible that Woods Irrigation Company could divert 77.7 cubic 12 feet per second with four applications. 13 14 Do you recall that question? 15 MR. ARNOLD: Yes. MR. RUBIN: And your answer to that question 16 17 was: It's possible. 18 MR. ARNOLD: Yes, it is. 19 MR. RUBIN: It's also not possible that Woods 20 Irrigation Company could divert 77.7 cubic feet per 21 second with four applications; isn't that correct? 22 MR. ARNOLD: At some point --MR. ROSE: I'll object. The question is 23 24 confusing. MR. ARNOLD: It is. 25

1 MR. ROSE: Is it not possible or possible that 2 it could not?

3 MR. RUBIN: My question is: Is it possible that Woods Irrigation Company could not divert 77.7 4 5 cubic feet per second of water with four applications 6 and still put that water to beneficial use? 7 MR. ARNOLD: I think you're asking with respect to enough water in Middle River to be provided to the 8 9 gates? MR. RUBIN: I'm asking in terms of Woods 10 11 Irrigation District putting to beneficial use, whether 12 it's possible that they -- that within Woods Irrigation 13 Company they -- 77.7 cubic feet per second of water could not be put to beneficial use with four 14 15 applications. 16 MR. HERRICK: Mr. Chairman, could I just object? I think I understand the question, but 77.7 is 17 18 a rate. And so to say four applications putting a rate 19 to use --20 MR. RUBIN: I'll rephrase the question. 21 MR. HERRICK: -- Mr. Rubin's getting --22 MR. RUBIN: I will rephrase my question. 23 MR. HERRICK: -- at more of a total amount, not

24 a rate.

25

CO-HEARING OFFICER PETTIT: Mr. Herrick's point

1 is a good one.

2 MR. RUBIN: I agree. 3 CO-HEARING OFFICER PETTIT: If you can rephrase 4 it to differentiate between a rate and quantity, it would probably help. 5 6 MR. RUBIN: Let me ask my question a bit 7 differently. 8 Do you recall the question asked of you on 9 redirect regarding the ability of Woods Irrigation Company to divert at the 77.7 cubic feet per second 10 11 rate? 12 MR. ARNOLD: Yes, I do. 13 MR. RUBIN: And you answered the question indicating that they, Woods Irrigation Company, probably 14 could divert at that rate? 15 16 MR. ARNOLD: Yes. 17 MR. RUBIN: Is it equally true that in 1914 it 18 was possible that it could not divert at that rate? MR. ARNOLD: I'm not sure I understand your 19 20 question. I'm sorry, but not possible that it could not 21 divert it? Do you mean --22 MR. RUBIN: Let me --23 MR. ARNOLD: -- did not divert it or physically capable of being diverted? I'm not clear on your 24 question. 25

MR. RUBIN: Again, when you were asked the question on redirect, you were asked whether it was possible for Woods Irrigation Company to divert at a rate of 77.7 cubic feet per second. And you said it's possible that it could. MR. ARNOLD: I don't recall if I said possible,

7 or -- the terminology, but did you -- yes. Okay. 8 MR. RUBIN: Do you think Woods Irrigation 9 Company was diverting at 77.7 cubic feet per second in 10 1914?

11 MR. ARNOLD: Yes. We've already testified to 12 that with respect to the agreements and data subsequent 13 to that.

14 MR. RUBIN: I understand what you testified to, 15 and part of my frustration is I think I'm hearing 16 different answers out of you for the same question. 17 The question I'm asking you is to clarify a 18 point that was -- that Mr. Rose tried to make on

19 redirect.

He asked you whether it's possible that Woods Irrigation Company was diverting at 77.7 cubic feet per second in 1914. Is that what you recall the question being?

24 MR. ARNOLD: I believe that's -- I believe that 25 was the question. I'm not sure.

MR. RUBIN: How would you answer that question
if I were to ask it right now?

3 MR. ARNOLD: I would say that based on the 4 arrangement of the canals that we see today, based on 5 what we saw on the map from 1911, the canals appear to 6 be the same configuration so I have no reason to believe 7 those are different canals with different elevations; 8 and yes, it is possible that they could divert the same 9 amount in 1914 as they are today.

10 I don't have any direct evidence that those are 11 the same canals, but they do appear on the maps to be 12 the same position, same location, and they may have the 13 same construction. But I'm not certain.

MR. RUBIN: So you don't know if the canals that exist today are constructed the same way as the canals that existed in 1914?

17 MR. ARNOLD: That's correct.

18 MR. RUBIN: And you don't know how many acres 19 of land were in production and being irrigated with 20 surface water in 1914?

21 MR. ARNOLD: No, we don't know the exact.

22 MR. RUBIN: Do you have an estimate?

23 MR. ARNOLD: Yes. In the agreements, they

24 specify approximately 77.7 cfs plus or minus.

25 MR. RUBIN: Well, let's turn to the agreements

1 because maybe I'm confused with the testimony that's
2 been given.

3 Can you point to anywhere in the agreements 4 that say in 1914 the amount of acreage that was being 5 irrigated with surface water in Woods Irrigation 6 Company?

7 MR. ARNOLD: No, I'm sorry. The amount of --8 not the amount irrigated, but the amount to be 9 furnished, they specified acreages. So our answer is 10 no, there is nothing in the agreement that says they 11 were watering specific acreage.

MR. RUBIN: And your answer just now was that the agreements indicate the amount of acreage that would be irrigated?

MR. ARNOLD: That was agreed upon. There was an acreage agreed upon to be furnished, water be furnished to.

MR. RUBIN: And your testimony today has been that you don't know when -- if and when those acreage were ever furnished with surface water, correct?

21 MR. HERRICK: Objection; misstates the 22 testimony.

I believe Ms. Gillick pointed out evidence that talked about delivering all the lands in 1911 which is evidence that they reviewed.

MR. RUBIN: I don't believe that was the testimony that was provided. I think the testimony of the two witnesses that are before us was that their estimate was possibly in 1960s when 77.7 cubic feet per second of water were diverted by Woods.

6 CO-HEARING OFFICER PETTIT: Correct me if I'm 7 wrong, Mr. Rubin, but I thought they had repeatedly said 8 that they do not know exactly how much water was 9 diverted or when it started.

10 MR. RUBIN: I've heard the same testimony that 11 you heard, Hearing Officer Pettit.

12 It's part of their -- I'm trying to understand 13 how an answer could be provided that in 1914 it's 14 probable or possible that 77.7 cubic feet per second of 15 water was being diverted by Woods with that prior 16 testimony.

17 But with that, let me -- I think I have made my 18 point and I'll have no further questions.

19 CO-HEARING OFFICER PETTIT: Thank you.

20 Mr. Powell, do you have anything?

21 MR. POWELL: No questions.

22 CO-HEARING OFFICER PETTIT: Okay. Mr. Ruiz?

23 MS. GILLICK: No questions.

24 CO-HEARING OFFICER PETTIT: Thank you. Does
25 that cover everybody then, I think?

1 Mr. Rubin -- or Mr. Rose, did you have 2 something to say? 3 MR. ROSE: We would move our exhibits into evidence. 4 CO-HEARING OFFICER PETTIT: Okay. Thank you. 5 6 We haven't missed anybody? Any objection? Okay. (Whereupon the Prosecution Team's were 7 accepted in evidence.) 8 9 CO-HEARING OFFICER PETTIT: That concludes -exhibits are in, and that concludes the case-in-chief. 10 11 Thank you. For the prosecution, I should say. Not quite that far along yet. 12 13 Mr. Herrick? 14 MR. HERRICK: Thank you, Mr. Chairman, Board 15 Member Spivy-Weber. 16 Again, John Herrick for Woods Irrigation Company. I'll give a brief opening statement. 17 18 With regard to the authority of the Board, I 19 would just join in the statements made by San Joaquin 20 County and the two water agencies, Central Delta and 21 South Delta. 22 In addition, I also join in their comments with 23 regards to the matters upon which a CDO can issue. 24 I would like to note that we appreciate the Board's position and understand that they have made a 25

decision. However, it should be noted in the record that our request for the authority under which a CDO would issue or the State Board might order riparian or pre-1914 claimants to cease diversions has not been provided.

6 What we're doing here is we're substituting an 7 improper Board proceeding for the proper proceeding of 8 the other parties bringing a stream-wide adjudication.

9 And the upstream parties and exporters are 10 trying to attack water rights, that is their 11 prerogative; however, that's supposed to be in the 12 courts.

Because in order to make determinations about various water rights, including riparian rights, which both this and other proceedings, ongoing and proposed, will be directly making decisions and orders about riparian use and pre-1914.

18 I think it's clear that that's not within the 19 Board's authority.

Given that, we also renew our statement and our objection to the proceeding in that because we are forced to deal with riparian rights that may be part of the deliveries of Woods Irrigation Company, we have evidence, and we'll be putting on -- putting that evidence on regarding the riparian rights of others.

Regardless of whether or not the Board couches its eventual decision such that it states it will not affect those other rights, that still would appear to be a significant due process violation, not just that people might have a ruling that suggests their right is not there or insufficient, but actually that they have never been informed that the proceeding is going on.

8 So somebody may be sitting at home knowing that 9 they have a deed in their chain of title that absolutely 10 positively provides them a retained riparian water 11 right, and yet the Board may issue a decision that 12 prevents Woods Irrigation Company from providing them 13 with water until something else happens.

14 So that person has not had the ability to come 15 here and make sure any order you give does not adversely 16 affect them, and that obviously becomes very important.

Any interruption in the delivery of water, especially as we approach summer, although that's not the only time irrigation occurs, but any interruption of water, even a miniscule one, could have significant adverse effects to that party.

22 So it's not just an argument, it's not just a 23 legal principal that I'm asserting. And it's not a 24 method to get the hearings delayed or postponed. 25 It's a very real, and I think clear, due

process violation of all those other parties in the
 Delta who may be affected or related to the Woods
 Irrigation Company operations.

So I think that needs to be said.
Now, assuming based on the prior ruling of the
Chair and based on the discussions today, we're going to
go forward. So we just want to make sure that the whole
facts go forward.

9 CO-HEARING OFFICER PETTIT: Thank you, 10 Mr. Herrick. One of your comments I take particular 11 note of, and that's the fact that something this Board 12 might put out in the relatively near-term, while it 13 can't directly affect riparian or appropriative rights, parties who are not here represented, you make a point 14 15 that there could be some interim time frame in which that could cause confusion, and we certainly will be 16 17 sensitive to that because that's an aspect of it that we 18 need to be very careful of.

19 MR. HERRICK: Appreciate that.

To finish my opening statement, I'll be brief. The evidence will show that it's both impossible and illogical to assert that lands within the Delta lowlands could ever be severed from the waterways.

I don't know if this principle is well understood by the public at large, but I believe the

Board does understand it, and that is the Delta is not just a set of what islands or tracts surrounded by levees, but it's a large pool of water with streams going through that pool.

5 That's completely different than any other 6 watershed or location in the state in that, if there 7 were no flow in any of the rivers, the Delta channels 8 are full of water, and that water is directly connected 9 to the groundwater under the land.

Now, whatever the eventual decision by courts on how that may apply to specifics of the water right, it's important to understand that there's nothing that a landowner can do to separate his land from those waters.

Yes, you might come up with a -- you know, make an impermeable bowl shape and put the land back on that. But there is nothing they can do. What they can do is they control how much water ends up on their land, whether it's a levee stopping the surface waters, the surface flows, from entering their land or a drainage ditch which lowers the groundwater.

21 It's all the same pool of water, and it's only 22 not covering their lands because of their actions.

23 So it's not a legal argument, although we will 24 make a legal argument. It's not a legal argument that 25 you can't sever. It's a physics argument. There is no

1 way to separate the land from the water.

2 Now again, that's important in that it's 3 completely different than anywhere else -- not going to say anywhere else -- but anywhere else in the state we 4 have a flowing river going downhill somewhere with lands 5 6 abutting that, and there's either a little bit of groundwater into other lands or there isn't, and whether 7 8 or not they separate a piece and it can touch the river, 9 that's completely different than having your land sitting on a, what is it, 600,000-acre pool of water. 10 11 The pool never goes away.

12 The quality of that water, both in the channels 13 and the groundwater, changes over time. It never 14 changes radically over time. But it does change over 15 time. But that has nothing to do with your permanent 16 physical connection to those waters.

17 So we want to show that, and we think that 18 should hopefully clear up the factual situation.

19 It's also ridiculous -- that's not the right 20 word; I'm sorry. It's also inappropriate to conclude 21 that any transaction in the chain of the title of land 22 in the Delta was somehow meant to sever land from the 23 water or reclaiming lands that were sometimes, or most 24 times, covered with water for agricultural purposes 25 under the federal statute and moving forward to drain

1 the lands and irrigate them.

To suggest that some deed means that, oh, you didn't preserve the ability to get water onto your land doesn't make sense practically.

5 Now in any particular instance, it's a question 6 of what intent can you show. However, this one, there 7 is no intent for the severance.

8 You can't say somebody divided up a parcel of 9 land in the Delta because they wanted to build a 10 skyscraper on it and it had nothing to do with water 11 rights. Every person that sold these lands, generally, 12 they're farmers.

And even if somebody wants to dry farm, as we 13 heard before, they're not dry farming. They have got 14 15 water zero, one, two, or three, four feet below them. They're not dry farming. There is always water there. 16 17 So the last point I'd like to make on that is, 18 as we said before, we understand the distinction between 19 what may be alleged illegal and what may be not called 20 illegal. That's fine.

But the policy right now of the Board is to move forward to determine whether or not somebody should be diverting in the Delta, even though that will result in less water in the Delta.

25 Now we understand fully why the supporters and

upstream people want to pursue that policy, but it's
 beyond belief that that would be the policy of the State
 Water Resources Control Board.

Whether or not you think somebody's bad here,
shutting these people down gives you less Delta water.
There's no dispute of that.

Now, it may not be the instant that you shut
them down there's less water, but that's the natural
consequence.

10 So investigations into whether or not 11 sufficient flow is going to the Delta to do things would 12 focus upstream, not downstream.

13 The evidence will also show that Woods began 14 diverting well before 1914, thus establishing a pre-1914 15 right.

As the staff agrees, the evidence confirms that there was 77.7 cfs being put to use. Notwithstanding statements that there is no evidence, there is plenty of evidence.

20 Do we have daily records from 110 years ago?
21 No. We don't have that.

We have what we have, and it all adds up to two large farmers owned 6- to 8,000 acres of land at different times, and by 1905 -- we'll correct the date there -- there was an irrigation system to all the land.

1 So it's unreasonable to assume that people are 2 buying and using lands on an irrigation system and not 3 applying water.

4 Is there a measuring device that we found from 5 1904? No. We know that.

And so the staff has done what I think is appropriate, to a large degree, which is based on the viable information made some conclusions.

9 So anyway, we believe that the pre-1914 rights 10 exist with the company. That doesn't duplicate or 11 multiply the ability to divert amounts of water such that the individuals may have their own riparian rights, 12 which we believe. They may have their own pre-1914 13 rights, which we believe. But that duplication, that 14 15 overlapping of rights, has nothing to do with the amount of water to be diverted. 16

So with that, the first witness will be Mr. DonMoore.

MR. O'LAUGHLIN: Mr. Chairman, at this time before Mr. Herrick starts his case-in-chief, do we want to take evidentiary issues at this time, or do we want to wait?

We can run through them now before the witnesses come up, or we can wait when each one is called up.

And I also have a motion for Woods Irrigation
 Company generally that I'd like to make.

3 MR. ROSE: If it helps at all, we also have 4 some objection that, if sustained, might help speed this 5 up. But obviously, that would depend on the ruling.

6 So you can let us know whether now is the time 7 for all those.

8 CO-HEARING OFFICER PETTIT: I think what 9 counsel and I, I'll share with you, we're just trying to 10 balance and decide whether the specificity we might gain 11 by going ahead and dealing with them after the 12 information comes up might outweigh the advantage of 13 saving some time if we were to sustain an objection 14 right now.

So I think I'm inclined to say let's go ahead and raise them when they're more pertinent.

MR. O'LAUGHLIN: I'm happy with that, and I'll raise my motion at a later date.

I just want to make sure that when I make the motion I haven't made any ability, because my motion moves to exclude any testimony by Woods Irrigation Company that -- Woods Irrigation Company that they have an independent right. So I -- without waiving that, I'm fine to wait.

25 MR. RUBIN: Hearing Officer Pettit, as well, I

1 would acquiesce to your initial thought.

2 The only concern I do have is if you allow testimony in or if you allow a witness to testify right 3 4 now, ultimately determine the testimony should not be admitted, it does create a little bit of a difficulty in 5 6 terms of the record that you would have oral testimony 7 provided to you ultimately that needs to be stricken 8 from the record that you consider before you make a 9 decision.

10 You've faced that obstacle before. I just want 11 to make sure I preserve that issue in the event that you 12 accept your initial thought.

13 CO-HEARING OFFICER PETTIT: I think they're 14 both good points, and we will certainly keep them in 15 mind. I think I'll proceed the way I set forth.

16 MR. ROSE: And just to make it clear for the record, the Prosecution Team does object as to the 17 18 relevance of any of the evidence presented by Woods 19 regarding riparian rights unless Woods also presents evidence that it owns land within its service area in 20 21 light of your letter dated May 24 and also your letter 22 dated June 1st regarding whether or not there will be 23 determinations as to other parties' individual rights. 24 CO-HEARING OFFICER PETTIT: And as I recall, we

25 concluded in that letter we wouldn't determine other

1 people's rights.

2 MR. ROSE: Just make my objection as to the 3 relevance of riparian evidence presented in this hearing 4 in light of that letter.

5 CO-HEARING OFFICER PETTIT: Got it. Thank you. 6 MS. GILLICK: Mr. Chairman, just for the 7 record, I just want to point to the Cease and Desist 8 Order, it indicates that Woods Irrigation Company is 9 being requested to provide evidence for riparian water 10 rights and service to riparian water rights.

11 So, you know, if there is any evidence 12 presented by Woods Irrigation Company in response to the 13 Draft Cease and Desist Order, I think that's 14 appropriate.

MR. HERRICK: Mr. Chairman, I was going to say the same thing. Both the testimony presented today by the State and the Cease and Desist Order specifically ask Woods to provide information regarding riparian lands within the District.

20 So it's surprising that the prosecution would 21 try to limit the information they have asked for both 22 before and during the hearing.

23 MR. O'LAUGHLIN: Well, this may sound really 24 strange, but I agree with Mr. Herrick fully. You can't 25 have it both ways.

1 If they come in and they have asked in the CDO 2 for not only their pre-1914 but their riparian rights, 3 then the riparian rights should be an issue.

But this goes to the fundamental problem we just faced with the Prosecution Team. Since they never testified as to the quantity of water actually being diverted under any right, how do we go anywhere?

8 I mean there's no quantification that was put 9 in by the Prosecution Team as to between riparian and 10 pre-1914.

And the CDO says, well, we can't tell what you're diverting and under what right you're diverting, so quite frankly they say what amount and whose rights? Well, that's what we're here for. And I find it bizarre that we now move to exclude that.

16 You can't have it both ways. I'm perplexed. 17 CO-HEARING OFFICER PETTIT: I appreciate that, 18 but I think we'll be in a better position to judge 19 whether we want to let something stay in the record 20 specifically when we hear it specifically.

21 MR. O'LAUGHLIN: Okay.

MR. HERRICK: Thank you, Mr. Chairman. Ourfirst witness is Mr. Moore.

- 24 ///
- 25 ///

1	
2	DONALD MOORE
3	Called by WOODS IRRIGATION COMPANY
4	DIRECT EXAMINATION BY MR. HERRICK
5	000
6	MR. HERRICK: Mr. Moore, would you just
7	identify yourself and give your address, your business
8	address.
9	MR. MOORE: Yes. My name is Donald Moore. My
10	business address is 16433 Tee Place, spelled T-e-e, in
11	Weed, California 96094.
12	MR. HERRICK: Mr. Moore, WIC Exhibit 1, is it a
13	true and correct copy of your statement of
14	qualifications?
15	MR. MOORE: Yes, it is.
16	MR. HERRICK: And is it up to date generally?
17	MR. MOORE: Yes.
18	MR. HERRICK: And are you familiar with WIC
19	Exhibit 2?
20	MR. MOORE: Yes.
21	MR. HERRICK: And is WIC Exhibit 2 a true and
22	correct copy of your testimony provided for this
23	hearing?
24	MR. MOORE: Yes.
25	MR. HERRICK: Just for convenience, I believe

1 Mr. Moore's testimony provides text, then map, text, 2 then map. And so he'll probably want each map put up as 3 he discusses it.

With that, Mr. Moore, would you pleasesummarize your testimony presented here today.

6 MR. MOORE: Yes. My testimony is primarily in 7 regard to identifying the natural riparian features that 8 have been present in the Delta, and particularly the 9 Roberts Island/Woods Irrigation Company, basically 10 before the presence of man.

If everyone didn't hear at first, I'm identifying the geologic features that are present in the Woods Irrigation Company district that I feel -- I'm certain were present before man.

These are the aerial interpretations where we can identify the natural sloughs, the old streams, the meanders, the primary features that had connection from Burns Cutoff to Middle River.

And these are very clearly identifiable on the 20 '37, 1937 and 1940 aerial photos.

We have a number of maps. Some of them have already been displayed. And when these are registered and overlaid with those photos and the current maps, we can see clearly that these riparian features were natural, and the irrigation canals or systems that

1 followed were derived directly from these features.

In many of the 1937 photos, those features were natural, and you could see where they were being used as natural streams and water from natural streams, and they were just gradually morphed into the present system.

And so what I did was I took the photos, as I mentioned, the 1937 and the 1940s. I did basically a Geographic Information System, rectification, and registration so they're all scaled and matched.

We can put these together and see clearly the relationships between everything involved, the maps and the photos.

13 The interpretation from the photos, I used all 14 standard geologic procedures. I'm a registered 15 professional geologist and a certified hydrogeologist, 16 and I've been doing this for 35 years.

I have my own aerial photography company. I've been involved in drilling over thousands of wells, own my own drilling company, and I've located at least 2,000 wells using the analysis of geologic structure from stereo pairs of aerial photos.

This is the standard accepted practice in the industry, and this is what I followed that gave me the most detail.

25 For presentation, since we can't show people

stereo photos today, I used the enhancement techniques
 on the photos that basically simulate this so we can use
 them for demonstration.

But the primary things I'm looking at is showing the natural channels as they existed before man existed, as can be identified and then summarized from these photos.

8 CHIEF LINDSAY: Which exhibit do you want to 9 start with?

10 MR. MOORE: We'll just start right from the 11 beginning. We'll move fairly quickly since some of 12 these you've already seen. If you could go to 13 Exhibit 2A, 2, 2A.

Just saw this map a short time ago. This is the same map that I believe is around 1907. I've heard from no later than 1909, possibly as early as 1907. And on this map, we can identify a number of features, primarily the canal -- do you by chance have a laser?

What I did with this, and you've seen this I think in at least two other displays, is again this was registered in overlay.

22 MR. HERRICK: Let me interrupt you.

These two Hearing Officers have not seen any of these from prior hearings, so don't rush too quickly in explaining the maps.

MR. MOORE: Excuse me. I was just referring - this particular map was shown in one of the previous
 testimonies a half hour or so ago.

What I'm -- the primary future we're looking at is this central canal, slough slash canal, if we will coming up here.

We also have these other canals shown in the area. We'll also be referring to Duck Slough. But these are the main features we'll be looking at.

10 What I did with this one was -- you notice, the 11 other -- to explain a little bit, the other presentation 12 showed this map as black. That was the natural feature. 13 I just inverted in colors in Adobe Photoshop so I could 14 take it when it was registered and overlay onto the 15 aerial photos so we can see the relationship of this 16 canal to the natural riparian features.

MR. RUBIN: Hearing Officer Pettit, I don't want to interrupt the summarization of the testimony, but it is important for the witness to maintain a summary.

I believe the description you just heard about Woods Irrigation Company Exhibit 2, 2A exceeds the scope of the written testimony.

24 CO-HEARING OFFICER PETTIT: I haven't read the 25 written testimony in at least four or five days, but --

MR. O'LAUGHLIN: I've got it right in front of 1 2 me. Would you like me to read it? 3 CO-HEARING OFFICER PETTIT: I didn't hear anything outside of it, Mr. Rubin. Maybe I'm mistaken. 4 MR. RUBIN: This might not be the best example, 5 6 but the witness talked about the map being possibly as early as 1907. I don't see that as a statement that's 7 8 reflected in his written testimony. 9 And that's just one example. There were others -- excuse me -- there are others he described. 10 11 CO-HEARING OFFICER PETTIT: Okay. I'll ask the 12 witness to -- we don't want you to read your testimony, 13 obviously. But if you make a reference to a date or anything else, make sure it is something that's in the 14 15 testimony. 16 MR. O'LAUGHLIN: I'll refer to this as the 1909 map. That's what I did write in the testimony. 17 18 And as I said in the testimony, this was scaled 19 and registered so we could overlay it on the 1937 aerial 20 photos and see its relationship to the natural features. 21 Next exhibit, 2B. 22 Again, I'll make this quick. We saw this same 23 map about a half hour, an hour ago. And we use this. 24 It does show the, in 1914, the different irrigation 25 features.

1 And the point here is this is a combination of 2 the 1911 Holt and Stockton quadrangles. Whoever did 3 this map combined those two together.

The important thing we want to note on this is when we're coming up Duck Slough one of the features we'll be focusing on later is this little horseshoe kind of bend right there in the -- kind of towards the north end of Duck Slough.

9 Again, we can see from previous map, see some 10 of the canals and all that were shown on the 1909 map as 11 well as the straight lines and all the -- that indicate 12 irrigation features.

13 Next map.

Exhibit 2C. Okay. This -- we'll have to skip this one. There was a mistake on this. This only shows part of the whole Holt Quadrangle. So that won't be used.

We'll jump ahead to Exhibit 2D. This is the 19 1911 Stockton Quadrangle. You could pan down a little 20 bit in the left. That gets us there.

Again, this shows the features that we can see here, the irrigation channel that was shown on the 1909 map. The important thing here is down in the southwest corner here -- is it possible to zoom in in this area right here?

1 CHIEF LINDSAY: Sure.

2 MR. MOORE: A very important feature on this map also -- we can see on aerial -- this little feature 3 4 right here. We -- it appears there's a canal coming up here. It's straight and all which from this a person 5 might say it was manufactured. 6 7 Right at this end, we're seeing a natural feature, a slough feature. This thing widens out into 8 9 what was a natural feature. We see the same thing here that goes down just 10 11 Middle River, would be just barely off this map. We see the same feature here. 12 13 Later in the aerials, we can see natural features along this canal. 14 15 And this one, where it shows stream meanders 16 going through here, we can show on the aerials where 17 these stream meanders had connection to the San Joaquin 18 River. 19 MS. GILLICK: Hearing Officer Pettit, just for 20 the record, I'd ask for clarification for oral 21 description of the location on the map that the witness 22 is depicting. 23 Currently he's describing an area in the bottom 24 left-hand corner, orally describe that so the record is 25 clear.

MR. MOORE: Yes. We are referring specifically
 to the southwest corner of the Stockton 1911 -- or,
 excuse me -- 1913 Quadrangle map.

MR. RUBIN: Hearing Officer Pettit, I'm missing the section in the written testimony where the witness described the features on I think what he called the rigation canal that had some sort of natural features?

8 MR. MOORE: Yes. What I'm doing here, these 9 will be pointed out in the aerials since my testimony is 10 based on the combination, the presentation of the 11 registering of the old maps and aerials, the 1937 12 aerials.

I was just -- will be referring back to this because we can see this also on the aerials. So it's just a point of showing the common features identifiable on both displays.

MR. RUBIN: Hearing Officer Pettit, again, maybe the witness can identify where in the written testimony he's described this feature as he's described it orally today.

I have spent some time reviewing the testimony. It's possible I overlooked this description. I did not see it.

24 MR. MOORE: No, that -- if you're referring to 25 the written description specifically for 2D, it is not

1 written in there.

2 CO-HEARING OFFICER PETTIT: Okay. That's, I 3 think, the basis for Mr. Rubin's objection. And I guess 4 this is kind of a tiered assessment from my standpoint. 5 I think at some level, Mr. Moore I think is

6 trying to describe the process he went through to tie 7 these maps together.

8 And I don't know whether that's going to evolve 9 into a more detailed, specific point-by-point comment or 10 not. I'll just have to ask Mr. Moore about that because 11 I think the point about raising or making statements or 12 opinions that aren't reflected in the written testimony 13 is going to be a problem as far as straying from the 14 written testimony.

15 MR. MOORE: Well, I apologize.

16 CO-HEARING OFFICER PETTIT: As I said, I think 17 your explanation for the process you went through is 18 helpful. I don't know quite how we're going to balance 19 that out, but try to be sensitive to not expanding 20 anything in the written testimony.

MS. GILLICK: Hearing Officer Pettit. I'm sorry. I mean the exhibit is in evidence. It is submitted as part of his testimony.

24 So if the witness is describing to you the 25 exhibit which has been submitted as part of his

1 testimony, I think that that's appropriate and proper in 2 these proceedings.

3 MR. MOORE: And if I might add, in the 4 opening -- the whole purpose of this was to demonstrate 5 riparian natural features. And we are using both the 6 historic published maps and the 1937 and 1940 aerial 7 photographs.

8 And so in the opening statement, that's what 9 we're combining, the maps and the aerial photographs, to 10 demonstrate riparian features. So all I'm pointing out, 11 that there's two clear riparian features addressed on 12 this Stockton Quadrangle.

13 CO-HEARING OFFICER PETTIT: Okay, thank you.14 Let's keep going.

MR. MOORE: Okay. If we can move on to Exhibit 2E. We'll move fairly quickly here on these because we're going to go through -- I have three pairs of photos, a 1937 followed by a 1940.

19 They are identical displays. I'm just showing 20 you the originals, as they were, how I did the -- what 21 is called the linear enhancement on them. A directional 22 filter, excuse me.

And then a third paired set of the same photos for our final display to kind of give you an indication of what we did for stereo pairs.

1 The important features here -- this is the 1937 2 aerial photos. We can see how they are overlaid. If 3 you pan up just a little bit, just for confirmation. 4 That's good.

5 You can see how they're overlaid a bit. Here 6 is Burns Cutoff and so on. So that just demonstration. 7 Here's our date of the photos, 8-13-37.

8 The important features we'll be covering on 9 this, right in here, this is a feature on Duck Slough at 10 the railroad tracks. We notice there is an oxbow 11 meander that is a very positive identifiable feature 12 coming to the south.

An older oxbow feature looking up to the north. We can see the natural channel going up to its natural connection with Burns Cutoff.

16 And then if we could pan down please.

MR. RUBIN: Hearing Officer Pettit, I apologize for interrupting again, but it's -- again, I might have missed it, and maybe the witness or Mr. Herrick could point to me where in the written testimony it talks about this oxbow, frankly where in his written testimony he has anything specific about Duck Slough.

But the process that the State Board has set forth and always adhered to has been very clear, at least in my mind, and that the advantage or the

structure that you've set up is to have people submit their written testimony and allow people to prepare for cross-examination ahead of time to facilitate the process.

5 And part of the rule for that process is that 6 the witness is limited to the written testimony and is 7 supposed to provide a summary of what's on paper.

8 And I disagree with counsel for San Joaquin 9 County. The fact that you might have an exhibit that 10 depicts something that could provide some additional 11 explanation, if it's not provided in writing as part of 12 the testimony, it can't be admitted.

13 It provides a severe disadvantage to everyone 14 if a witness can come in, attach a bunch of documents to 15 the written testimony, and then be allowed to expand 16 beyond anything that's in the written testimony.

17 Therefore I object to this summary that we're 18 hearing because it's not a summary.

MR. HERRICK: Mr. Chairman, if I may justcomment briefly.

I don't see how we're going beyond the written scope of the testimony. Mr. Moore's testimony takes various maps, photographs, work done previously by he and Mr. Lajoie, puts them together, and makes some conclusions at the end.

As he's going through the maps, he's
 identifying to you those features which allowed him to
 make his conclusions.

I'm not trying to preempt his testimony here,
but he's saying we found all these historic features
matching canal features, and therefore we're -- he's
concluding they're same place, same thing.

8 I don't really see how his pointing out things 9 on a map that lead to his conclusions is going beyond 10 the scope of testimony. Nobody thought that this map, 11 someone would describe every line on it in order to 12 bring the map in.

13 I'm not following the objection, seriously. I 14 think he's within his testimony, and there's no problem. 15 MR. O'LAUGHLIN: Well, I understand that. And 16 I'd like to join in the objection.

17 The problem is this, is that -- I don't have a 18 problem he's testifying about what's on the aerial 19 photos and what he's using it for and the basis for his 20 opinion.

But that's supposed to be put into the written testimony. That's -- that is to tell us ahead of time what specifically it is about this exhibit that he's using to form his opinion and conclusion, and in the testimony, there is literally nothing about what he just

1 talked about.

2 So the whole point when we do these things ahead of time is so that you don't get surprises, 3 there's no sandbagging, we all have a change to prepare. 4 Now I have three things that came up on Duck 5 6 Slough that weren't mentioned. I don't disagree that 7 may have been an issue. But if it is, he needs to point 8 it out ahead of time and let us know that's part of his testimony and then testify to it. 9 10 But now we're going way beyond that. Now I 11 have to prepare cross-examination questions about Duck Slough where previously in his testimony in regards to 12 this exhibit there is none. 13 14 MS. GILLICK: Chairman Pettit, if I may, again 15 I want to object to this objection. The exhibits are there. And in addition, if 16 you see the testimony Mr. Moore later in his submitted 17 18 testimony, he does specifically identify colored 19 markings on his exhibits, and he indicates what those 20 blue lines are, what those red lines are. 21 So he does contain in his testimony a 22 description of where, based on his expertise and his 23 research, where these watercourses and water systems 24 are. 25 So maybe, you know, we need to look at other

1 places within that testimony. But I believe the 2 testimony that's being presented orally today is 3 consistent with that written testimony.

4 CO-HEARING OFFICER PETTIT: I guess, Mr. Rubin 5 and Mr. O'Laughlin, I'm trying to sort through this and 6 see what we can do because I think the explanation is 7 somewhat helpful.

8 I guess one alternative -- well, I don't think 9 it's a good alternative. But one thing would be that we 10 not have this summary and this kind of detail.

11 Then I suppose you folks would have to 12 cross-examine Mr. Moore and ask him how he came to the 13 conclusions he did. And I'm not sure that's a much 14 different point than the way we're now --

MR. O'LAUGHLIN: I'd be very happy if, like in other hearings, that he submit his testimony and there is no need for a direct.

Because his testimony has already been submitted. We have it. We've all read it. There's no need to summarize it. A summary is only a summary of the very testimony that's already been proffered under a declaration, so why do we need to repeat it twice?

My point is, let the direct come in. I have no problem with that. And then we can find out what is or isn't the basis of what he's come up with.

Because right now the problem is, from my viewpoint, he's going beyond what he said in his testimony. So I am -- and don't get me wrong. I can probably run around and get documents and prepare. But it does put us at a severe disadvantage.

I agree with you, it's very helpful in trying to understand how he comes up with his opinions and conclusions. I just wish I'd known about it ahead of time.

10 MR. HERRICK: Mr. Chairman, I've admonished the 11 witness to be as brief as his discussion in each 12 paragraph, and I think he can keep to that until he gets 13 to his conclusions, and then he'll give his conclusions. 14 CO-HEARING OFFICER PETTIT: Let's give it one

15 more then because I'm very sensitive to Mr. Rubin's and 16 Mr. O'Laughlin's concern that we've been pretty 17 consistent and specific about not allowing expansion 18 beyond the written testimony. So I'm going to be very 19 sensitive to that.

20 On the other hand, I hate to shut this down 21 unnecessarily. So let's go ahead.

22 Mr. Moore, did you have a comment? 23 MR. MOORE: Just one quick one. I just wanted 24 to reiterate the point that every photo from now on is 25 going to basically be the identical set of photos.

The reason I did dwell on this one beyond my 1 2 written testimony, I'm just pointing out some of the features that we're going to be bringing up later that 3 are in the written testimony, but when we get a whole 4 bunch of irrigation canals and everything overlaid on 5 6 this, this is going to be somewhat cluttered, and you won't be able to see as clearly some of the features I 7 just pointed out. 8

9 So my apologies for going beyond the testimony, 10 but we'll be seeing the identical, basically, photos as 11 we go. So I'll move rapidly through the next set.

12 This is our 1937 photos overlaid on the 2005 13 photos. Good enough. Let's go over to Exhibit 2 --14 CO-HEARING OFFICER PETTIT: Try and bear the 15 objections in mind, please.

MS. GILLICK: I'm sorry, Hearing Officer. Again, just for the record, the last exhibit was not identified by the exhibit number for the record for us to know which map we had before us.

20 MR. HERRICK: The last one was 2E, and I 21 believe he just said 2F now.

22 MR. MOORE: Yes. We're now on 2F. It was 2 23 echo, going to 2F. Correct.

Again -- this one needs to rotate 90 degrees to the right clockwise.

1 CHIEF LINDSAY: Sorry.

2

MR. MOORE: Yes. So this is similar to the

3 1937. These are the 1940 photos similarly stitched 4 together, GIS. You can see how they're registered at 5 Burns Cutoff and so on.

6 On these, I also overlaid the current Woods 7 brothers irrigation maps where we can see the current 8 layout of canals and their properties identified.

9 If you could just pan down to about the middle, 10 please.

And just to point out that the reason I used the two sets of photos instead of just dwelling on one is the difference in the years, three years, as well as the difference in the seasons, different features are readily identifiable on each set of photos.

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16 Next photo, 2G.
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Again, just briefly, this is just showing -you notice how the features are coming out. They appear to be in 3D. This is when I ran the directional filter. I mentioned it enhanced the features so you can see a little better what a person would see if they were viewing them with a stereo viewer as I did for the geologic interpretation.

24 2H, please.

25 We won't even rotate -- well, you just did.

1 Okay, that's fine. You just threw me a little bit. 2 Again, we're -- same thing as the previous 3 1937. This is Exhibit 2H. The digital filter does the 4 enhancement that brings out a three-dimensional effect as the stereo viewing does which is standard procedure. 5 6 We are able to -- what that does is brings out 7 more strongly -- again, we have our oxbow meanders, the 8 various features. Again, this is a demonstration tool. 9 Exhibit 21, please. This is what's leading again. We're talking 10 11 the same photos. Now what we've done is taken the -back to the '37s. Where I showed that directional 12 13 filter, you now see color in it because this enhances the photos even more for demonstration by dropping the 14

15 opacity so we can basically see through one layer. We 16 can see both the top and the bottom layers.

And this is just again for demonstration purposes. Now we can see more clearly the different features that we will be talking about like our oxbow, some of the different riparian features we'll be identifying, and then we'll be overlaying our canals and so on on this map.

23 Exhibit 2J, please.

Again, this is just going back, same photos. Now we're back to 1940 where we did the same thing.

This has the directional filter and the opacity
 dropped down so we can just see everything more clearly.

We have the Woods brothers map. You can now see how over here just as -- for illustration purposes, you see we have the sewage disposal ponds. If you were to zoom in here you could see behind them where some of the stream meanders, the course of the stream meanders where they went with the sewage ponds, now are as well as the other features.

10 2K.

11 Now we're getting into the meat of it. My 12 apologies. This is what I was saying with the first 13 photo, and I should have waited till now.

All the red you see on this, again we're talking the same photo we just saw previously, but now we've overlaid the work that Mr. Lajoie did in his previous testimony.

18 The red represents the channel -- the riparian 19 channels, the natural clastic sediments that were mapped 20 on the 1952 soils map.

Again, this was in the testimony previous from Ken Lajoie in the previous hearings. He also mapped on that the Atwater channels from the 1982 Brian Atwater map of the area.

25 And now we can see all of this in relation to

1 the riparian features and in relation to -- the blue 2 lines here represent different --

3 MR. HERRICK: Asking to pan down. 4 MR. MOORE: I have a tendency to talk too much. 5 I thought you were telling me to shut up. 6 MR. HERRICK: No, no. 7 MR. MOORE: Exactly. The map is extremely useful because when we're talking the connections to the 8 9 canal and the diversion routes for Woods Irrigation, where the red indicated those were the clastic 10 11 light-colored sediments that were left behind when natural channels were formed -- natural levees were 12 13 formed, excuse me, in the area. 14 What this demonstrates very clearly is we have 15 the natural channels following along where the irrigation canal is here, here, here. The most dominant 16 in the area, of course, is coming up Duck Slough. 17 18 The red lines, like in here, we see the A, B, 19 C, and D. That was from Mr. Lajoie's testimony and Mr. 20 Atwater's testimony. And all -- and these are also 21 showing the natural channels that they had identified. 22 So we are coming from the 1952 soils maps that 23 show us clearly where we had the clastic sediments left 24 behind and the levees were naturally formed. 25 We have channels here in red that were

1 identified on the Atwater report, I believe published 2 1982.

And then the blue lines are my interpretation of where I see just a position of the various channels. We can see how our clastic sediments are coming up. That's one of the irrigation canal areas here.

See where natural channels go over to the SanJoaquin River, and we can see many more.

9 If you pan down a little bit. Up, excuse me. 10 Again, what's really important here when we're 11 identifying the riparian features that connect from 12 Burns Cutoff to Middle River, this is where we're coming 13 up Duck Slough.

Again, we have our natural oxbow meander that's correlated near perfectly with the soils map showing natural levees.

17 See that continuing clear to Burns Cutoff, and 18 obviously that can be traced down all the way to the 19 Middle River for the continuous connection between the 20 two along Duck Slough.

21 We can see where this irrigation area again was 22 a natural levee. We can see how that connects into the 23 natural meander that, if you look at the 2005 photos 24 without anything else -- this is gone now.

25 But it's clearly here both 1937 and 1940, so we

1 have very strong evidence that this was a natural 2 riparian feature with connection to both Burns Cutoff 3 and Middle River.

Next, Exhibit 2L.

4

As I was saying earlier, for clarity here we see an overlay of the 1914 Holt. The heavy red lines here are the lines that were taken and enhanced for visual purposes from that 1909 irrigation map.

9 We can see how they connect to -- where they 10 are in relation to the current features and the 11 different riparian features that we can identify on the 12 1937 and 1940 photos.

Again the blue lines are where we're seeing many other riparian features. Now with the historic photos we can even see where the natural meanders flow under what is now the sewage ponds.

We can see the connections of these various
channels and meanders coming right down from Burns
Cutoff.

20 We can make a positive connection coming from 21 Burns Cutoff right down into the top of that 1909 map --22 canal as depicted on the 1909 map.

Go on to 2M.

Again, this is a repeat of the previous. On this, we are seeing on the 1937 photos the -- all the

1 different features that we could clearly identify as 2 being agriculturally related in the area. 3 So again, we have the same 1909 maps and 4 features mapped on that. And in the apple green colors, we're seeing additional canals that were being used as 5 6 we could identify in 1937. 7 MR. O'LAUGHLIN: What exhibit is that again? MR. MOORE: 2М. 8 9 MR. O'LAUGHLIN: Thank you. Sorry. 10 MR. MOORE: The important thing on this -- how 11 much could we zoom in? Could you zoom in on that? Right basically in the middle. Right in this area here. 12 13 Okay. That's -- yeah. Then just pan it down a little 14 bit. 15 CHIEF LINDSAY: Does that help? 16 MR. MOORE: That helps. That's coming in 17 reasonably good enough. 18 What was clear on the photos may not be totally 19 clear here. That's why I jumped on that original 1937 20 when I started incorrectly. 21 But what is identifiable is when we see these 22 features coming down where we have the map just sloughs 23 or canals, these are -- you can see the natural futures. 24 You can see where it followed natural features. 25 This canal or slough -- I mean this was a

1 canal. I'm using the word canal incorrectly here.

This was a natural water feature. On the 1937 photos, you can see the trees. This was a natural stream coming down roughly to this point here.

5 This was only about where you could see it --6 man started cleaning it up, maybe cutting trees, mucking 7 it out, whatever happened.

8 But from this point clear up to the Burns 9 Cutoff you can see that this was just a natural feature 10 there that was virtually unimproved by man at all.

We can see that in a number of other places along the photos where the canals followed one course and the meanders followed another.

14 And then we can go on to the last, 2N.

15 This we put in there, just a map from -- what 16 did we say that was again? 1909. If we look at the --17 this is mostly California. This is shown where areas of 18 artesian water.

This is a map in 1909 that demonstrated our area we're talking about, Roberts Island in the Delta, was mapped in an area that's artesian water which indicates, obviously, we had water at the surface or very near to the surface.

Is it possible to go back? If we could revert back and go to 2L again, please? If we could pan

1 down -- well, let's see. No. Go ahead and -- yes.
2 Stay up where you were. Excuse me. Go up towards the
3 top. If we could zoom into this area.
4 Okay. Okay.

5 Well, this was the problem I was trying to 6 correct when I started talking the original 1937.

7 Some of the features we're seeing in here where 8 there were natural features that we can identify the 9 original channels coming from the river, meandering 10 down, coming in through the area, coming down. This 11 again is the map trace of the 1909 map. Pan down just a 12 little bit, please.

13 Yes. We can see a little bit here. We'll 14 revert to one of the maps where we don't have as many 15 overlays. We can see the natural channel and meanders 16 even just on the outside of this.

17 And then bring it all the way down.

And here we can also see the features where we can see the connection to the Middle River. And actually when -- later on with the high res version, we can actually see two discharges from Middle River, one coming up this feature, the other coming up this feature.

This feature for this slough or canal is now no longer existent, but we can still see the traces on

1 the -- with using stereo viewing and all where this 2 feature was before it was eventually eliminated by man, 3 and the canal to the east was used.

We come up this feature -- right up in this area here when I was referring to that 1911 Stockton or 1913 quad when I was talking about that little feature on that, this is what I'm referring to.

8 Because this is where we can see a natural 9 feature on this portion of the canal. We can see one 10 down here. And from the photos, we can see a natural 11 stream meander that was mapped on the 1913 or 1911 12 Stockton quad, and we can trace that feature clear over 13 to the San Joaquin River where we had the natural 14 riparian feature.

15 If we could go back to the 19 -- excuse me --16 to Exhibit 2I.

Now that I have shown where I was going with this and what I -- and this is kind of falling more into the conclusion.

Here we can see again the various things we're talking about. When we take the -- when we remove all of the lines I put on for demonstration purposes -let's zoom in to this area now.

24 Okay. Got lost when you zoomed in. Okay.25 Right over here.

This again was the course of the 1909 canal as has been shown several times. What these photos demonstrate is here we can see where the natural meander was actually on the outside here where we had a natural feature coming to the outside of that canal -- or slough, I should say.

7 We can see so many other natural features in 8 the area. Most of these lines on this map are depicting 9 various riparian features from different stages of water 10 movement.

11 Whether it was a complete lake flooding or 12 anything else, we can just see hundreds of natural 13 features.

14 Those previous photos when I was showing all 15 the blue squiggly lines, I just quit at a certain point. 16 There would be so much blue demonstrating this, you 17 would lose the point.

18 If you could pan over to this area here. 19 This is what is probably the most telling part 20 of -- to demonstrate the entire process. This is the 21 Mussi parcel in here. Could we zoom in on this area a 22 little bit?

Excuse me. I was just referring to that. This is the west side of the map. Excuse me. What this shows -- thank you.

1 Right down -- go down a little bit more to 2 Middle River. Right here.

3 When we take this map with an enhancement -we're on Duck Slough now. My apologies for referring to 4 the thing. We're coming from Middle River and Duck 5 6 Slough.

7 This is where we can come right from the direct connection with Middle River. We can see a meander 8 9 here. We can see now this is the course -- you can see how we have the label of Inland Road there. 10

We have a meander of the old natural meander 11 12 coming out here.

13 We can come up to next parcel. See a natural meander here. Pan it up a little bit. Up. Thank you. 14 15 Here's another oxbow meander coming off of Duck Slough right here. We can come through this parcel. 16 17 These are point-bar deposits.

18 We see a natural meander coming off of this 19 point. There's another natural meander coming in here. 20 We can now come up. We see -- this is a 21 natural watercourse. There is actually water you can identify in this feature. Again this is to the east. 22 23 The water can come down. There's standing 24 water in the 1937 photos coming counsel here. Man diverted in this direction which you can see the natural

25

continuation of this slough basically paralleling Duck
 Slough with meanders I just pointed out.

Again if we could pan up, please. Again, we can now trace these natural features running to the east of Duck Slough. They follow up -again, if we go back to the original '37 photo where I started, we can show where there is actually standing water in these features.

9 Coming up where there was not standing water, 10 we can clearly see the traces of these natural features.

11 Pan up over to this area, please. Maybe go -12 there we go. Thank you.

Again, this is going back to my oxbow I referred to several times. We can also see where there was a tributary coming off that oxbow that is natural, and then it became manmade at this point. The '37s will even show there was a dam put on it.

We are seeing the natural trace of the slough. We can see where it flowed through this natural meander. This irrigation system connected with that natural

21 meander here.

And we can see the old meander. This is where they continue into Burns Cutoff.

Additionally, and this relates to the testimony of Mr. Lajoie, we can also see on that, going --

remembering our clastic sediments and our levees, this
 is where you can see this obviously sinuous channel
 coming here. The overlay of Inland Drive shows how that
 was straightened out.

5 But the additional thing here, we also have 6 homes and other evidence suggesting this was a natural 7 levee.

8 If we could go back. I'm going to be smart 9 here. Go back to 2E where we started. Again zoom into 10 this area here.

11 CO-HEARING OFFICER PETTIT: Mr. Herrick, if I 12 could interrupt for moment.

I don't want to shortcut the technology here. It's very interesting. But we are using time pretty fast. Have you got a plan for getting through all of your witnesses within the time we're allowing?

MR. HERRICK: No. We will end right here witha final sum up question.

As you can see, sometimes it takes longer than
planned.

21 The next witness would be Nomellini.

And then I would put on the panel of Chris Neudeck and Landon Blake. I can try to keep those guys each to 20 minutes, 15 minutes total per panel.

25 Then the final panel is very short which I

assume we'll get done today. But I do anticipate going
 over the time allotted. I apologize.

3 CO-HEARING OFFICER PETTIT: I don't want to 4 shortcut anything, but we have been going for two hours. 5 If Mr. Moore is going to finish up pretty directly, that 6 will probably be a good time to take a short break. 7 MR. HERRICK: I will ask him a final question

8 just so he can summarize his conclusions, and we can 9 take a break. How is that?

10 CO-HEARING OFFICER PETTIT: Sounds good. Thank
11 you.

12 MR. HERRICK: Thank you.

Mr. Moore, just as a summary here: Is it correct then that you took historical maps and aerial photography and identified features on the land that correspond to what you believe are historic channels in this area? Is that correct?

18 MR. MOORE: That's correct.

MR. HERRICK: And after that, you took other maps that identified surface features such as irrigation canals and drainage canals, and then you overlaid those, that information, on the previous developed information; is that correct?

24 MR. MOORE: That's correct.

25 MR. HERRICK: And from that, you concluded that

1 a number of these canals or channels continued not just 2 before man's presence in California but through approximately 1911, 1914 and beyond because the historic 3 channel matched the channel being used at the time of 4 5 the maps? 6 MR. MOORE: That's correct. 7 MR. HERRICK: And from that, you concluded there was no time when lands along those features were 8 9 not connected to the waterways of the Delta? MR. MOORE: That's correct. 10 11 MR. HERRICK: Thank you. 12 CO-HEARING OFFICER PETTIT: Complete, 13 Mr. Herrick? Are you completed Mr. Herrick? 14 MR. HERRICK: (Nodding head) 15 CO-HEARING OFFICER PETTIT: Let's try another ten minutes, and try to be back by a quarter after 3:00 16 17 please. 18 MR. HERRICK: Thank you. (Recess) 19 20 CO-HEARING OFFICER PETTIT: Ready to go, 21 Mr. Herrick? 22 MR. HERRICK: Yes. CO-HEARING OFFICER PETTIT: Didn't want to cut 23 24 you too short. 25 MR. HERRICK: Feel free to cut me off.

1 CO-HEARING OFFICER PETTIT: Pardon me.

2 MR. HERRICK: Feel free to cut me off any time. 3 CO-HEARING OFFICER PETTIT: I will. I gather 4 we've got Mr. Moore back again.

5 MR. HERRICK: For cross. We'll have this 6 witness crossed, then we'll bring up Nomellini and cross 7 him and then the panel, depending on time.

8 CO-HEARING OFFICER PETTIT: Okay. I thought we 9 were going in a little different order, but that's fine. 10 Mr. Rose, you're up.

MR. ROSE: No, we decline to cross Mr. Moore.
CO-HEARING OFFICER PETTIT: Thank you.

13 Mr. O'Laughlin?

MR. O'LAUGHLIN: Mr. Pettit, Mr. Rubin is prepared to cross-examine Mr. Moore and I'll go second, so I'll do my cross shorter.

17 CO-HEARING OFFICER PETTIT: Thank you.

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19 CROSS-EXAMINATION BY MR. RUBIN

20 FOR SAN LUIS & DELTA-MENDOTA WATER AUTHORITY

22 MR. RUBIN: Good afternoon, Mr. Moore. I'm Jon 23 Rubin. I'm an attorney with San Luis & Delta-Mendota 24 Water Authority. I have a few questions for you today. 25 Mr. Moore, is it your understanding that the

1 Woods Irrigation Company did not exist at least until 2 1909?

3 MR. MOORE: I never really got into the history 4 of Woods and their history. I wouldn't know that for 5 sure.

6 That's what I've heard in the testimony, but my 7 focus, my scope here, was to identify the riparian 8 features and all, so I really can't testify to the 9 history of Woods Irrigation Company.

10 MR. RUBIN: You testified that the Woods 11 Irrigation Company Exhibit 2-2A shows irrigation canals; 12 is that correct?

MR. MOORE: Yes. That indicates an irrigation 14 feature.

MR. RUBIN: You also testified that the irrigation canals or features you believe are depicted in WIC Exhibit 2-2A were used to convey water for irrigation throughout the existing with Woods Irrigation District; is that correct?

20 MR. MOORE: Well, I -- all I can testify from 21 this -- and again, when you mention the date, this 22 particular map didn't have a date on it. I understand 23 it's 1909, so I'm assuming Woods Irrigation Company 24 existed at that time.

25 Yes. These canals were used to -- but I --

1 again, I misused the word canal. I see these as natural 2 sloughs. They may have been morphed a little bit, but they were distributing water in the District. 3 4 MR. RUBIN: Mr. Moore, if you turn to your 5 written testimony, the -- and unfortunately, they're not 6 labeled or numbered, but I believe it's the second page. 7 There's a heading that says WIC Exhibit 2-2A, colon, 1909 Woods Brothers Map. Do you see that? 8 9 MR. MOORE: Yes. MR. RUBIN: In the last sentence of the 10 11 paragraph that appears on the second page, it reads 12 quote: 13 The man-made features on this 1909 map 14 were used to convey water for irrigation 15 through the existing Woods Irrigation 16 District. 17 Close quote. Do you see that statement? 18 MR. MOORE: Yes. That's a statement that I 19 made, correct. 20 MR. RUBIN: Okay. And again, it's your understanding that Woods Irrigation Company Exhibit 2-2A 21 22 is a map that was prepared in 1909? 23 MR. MOORE: To my understanding, yes. 24 MR. RUBIN: And therefore is it proper to assume that Woods Irrigation Company Exhibit 2-2A 25

1 depicts conditions that existed in 1909?

2 MR. MOORE: You could see what's on the map 3 there. There's additional features that are there now. But that's what I -- those are the conditions that 4 5 existed in 1909 as depicted on that map. 6 MR. RUBIN: Thank you. In 1909 was there a common method used to divert water for use on Roberts 7 8 Island? 9 MR. MOORE: I'm not aware of that. That's out of my scope of testimony. I wouldn't know that. 10 MR. RUBIN: Mr. Moore, in 1909, do you know how 11 12 many acres of land within Robert Irrigation District -excuse me -- within Roberts Island were irrigated? 13 14 MR. MOORE: No, I don't know that. 15 MR. RUBIN: Do you know when the season of diversion might have been? 16 MR. MOORE: 17 No. 18 MR. RUBIN: And therefore I assume it's safe to 19 conclude that you don't know what the peak demand might 20 have been during any particular irrigation season? 21 MR. MOORE: No, I don't. 22 MR. RUBIN: Now, turning to back to Woods 23 Irrigation Company Exhibit 2-2A, I took a look at this 24 map. I didn't see any feature that was depicted as an irrigation canal; is that correct? 25

MR. RUIZ: Objection; the question is a 1 2 statement and then asked if it was correct that the 3 statement was correct. I don't understand the question. MR. O'LAUGHLIN: You don't have to understand 4 The witness has to understand it. it. 5 MR. RUIZ: I don't think the witness could 6 7 understand the question. 8 MR. O'LAUGHLIN: You don't need to coach him. 9 MR. RUIZ: Well --MR. O'LAUGHLIN: That's not a proper objection. 10 11 MR. RUIZ: The attorney doesn't need to testify 12 in the question. MR. O'LAUGHLIN: That's not a proper objection. 13 If the witness understands the question, he can respond 14 15 to it. 16 MR. HERRICK: The objection is that the 17 question --18 MR. RUIZ: The attorney was testifying in the 19 question and confirming whether or not his understanding 20 of the testimony was correct. 21 CO-HEARING OFFICER PETTIT: Let's back up and 22 start again, Mr. Rubin. 23 MR. RUBIN: Mr. Moore, there are no features 24 depicted on Woods Irrigation Company Exhibit 2-2A that labeled irrigation canals, are there? 25

1 MR. MOORE: I don't see any.

2 MR. RUBIN: For purposes of your testimony, you 3 have in fact assumed canals depicted on Woods Irrigation 4 Company 2-2A are for irrigation?

5 MR. MOORE: No, I have to correct that last 6 answer. There are features on there. I forget -- what 7 you see here is just a little -- appears to be dots and 8 all going up. Those are labels on the map showing dams 9 and gates. They are labelled as gates and dams if you 10 are able to look closely.

11 So the combination of the connection with the 12 slough and the presence of dams and gates, some of which 13 we can still see on the 1937 photos, tell me that there 14 was a water conveyance feature.

MR. RUBIN: And there is a feature that runs in the middle of the island. Do you see a feature that runs in the middle of the island?

18 MR. MOORE: What can I point to? Where are you 19 talking about?

20 MR. RUBIN: There is a long nonlinear line that 21 bisects the map.

22 CHIEF LINDSAY: Is that the one?

23 MR. RUBIN: Yes.

24 MR. MOORE: Yes. That is the feature. And I 25 don't know if he can zoom in any more.

1 Where you see little text periodically 2 progressing up there, you will see those are labeled 3 gates down at the bottom. And up at the top they're 4 labeled dams.

5 CO-HEARING OFFICER PETTIT: Let's identify that 6 line more specifically.

7 MR. MOORE: Okay. Yeah. Getting -- try to 8 zoom up one more time. I think we may get where they --9 there -- yes.

Now can see on that same feature, we have "gate". We have a series of gates going up, when we get up near the top where on the 1937 photo it is clearly a natural slough or stream. Then there is labeled dams.

So those features there tell me that that was a water conveyance system.

MS. GILLICK: Again, Hearing Officer Pettit, just for the record, if we would orally describe the location on the map.

19 CO-HEARING OFFICER PETTIT: That's what I was 20 attempting to get at. I think you're referring to 21 basically the north-south meander line up in the middle 22 of the map?

23 MR. MOORE: That's correct.

CO-HEARING OFFICER PETTIT: Mr. Moore, that'sthe kind of description that would be very helpful

because when we read this in the transcript six months or two years from now, it won't be as clear as it seems right now.

4 So if you can identify those things a little 5 more specifically on the map, it would be helpful.

6 MR. O'LAUGHLIN: I think Mr. Rubin's been 7 calling this 2-2A. It's actually 2A.

8 MR. RUBIN: Mr. Moore, is it possible that the 9 gates exist on a drainage canal?

MR. MOORE: I'm not sure of your terminology
when you say drainage canal.

MR. RUBIN: If you're not sure, then I don't want you to answer my question. Let me try to be more specific.

A canal that is used to drain water from an area that has been used for irrigation: Is it possible that a canal that is used for that purpose has gates? MR. MOORE: Again, that's outside of the scope of my work. I really wouldn't know. I do know water flowed in both directions out there.

21 MR. RUBIN: Well, Mr. Moore, you testified that 22 because of a feature on the map that's been marked as 23 WIC Exhibit 2A has a reference to a gate you've assumed 24 it's used for irrigation rather than used for drainage. 25 MR. MOORE: I said water conveyance.

1 MR. RUBIN: So it could be used to convey water 2 for irrigation or used to convey water to remove excess 3 water?

MR. MOORE: That would probably be correct. 4 MR. RUBIN: Okay. Thank you. 5 6 Now, Mr. Moore, on this map, WIC Exhibit 2A, 7 does it depict the Honker Lake Levee? 8 MR. MOORE: That's outside the area I investigated, but I do see on the upper northwest corner 9 10 of this map it says Honker Lake Tract. I'm not -- I 11 didn't look specifically for Honker Lake Levee. 12 MR. RUBIN: Mr. Moore, if I draw your attention to the left side of the map, about halfway down, kind of 13 in the middle of the page, there is some writing. Does 14 15 that writing reflect the Honker Lake Levee being 16 depicted? 17 MR. MOORE: I can only see what you see myself. 18 I did not look at that area specifically or deal with 19 it, so --20 MR. RUBIN: Well --21 MR. MOORE: -- I can't even read that. I'm not 22 sure. 23 MR. RUBIN: So Mr. Moore, you analyzed the 24 exhibit, WIC Exhibit 2A, and were able to draw

25 conclusions about the features that were on this map as

1 it relates to Woods Irrigation District -- excuse me, 2 Woods Irrigation Company, but you can't tell me based upon your review whether the map depicts the Honker Lake 3 Levee? 4 5 MR. MOORE: I -- I can't read the writing on 6 that. I don't know. 7 MR. RUBIN: Okay. 8 MR. MOORE: I did not concentrate that -- to my 9 understanding, that is not in the Woods Irrigation District --10 11 MR. RUBIN: Okay. 12 MR. MOORE: -- I was working with, so I really 13 didn't look at that that closely. 14 MR. RUBIN: Okay. Thank you. 15 Mr. Moore, is there any feature on Exhibit WIC 2A that's labeled Duck Slough? 16 17 MR. MOORE: I don't -- might be up at the top 18 there, but I didn't look specifically on that. No. I'm 19 not aware of that. I didn't look specifically for that 20 label on that. 21 MR. RUBIN: Thank you. 22 MR. MOORE: I see -- well. 23 MR. RUBIN: Mr. Moore, turning to your 24 testimony regarding Exhibit 2B for Woods Irrigation 25 Company.

1 You testified that Woods Irrigation Company 2 Exhibit 2B shows irrigation canals that existed within 3 Woods Irrigation Company in 1914, correct? MR. MOORE: Correct. 4 MR. RUBIN: You also testified that the 5 6 irrigation canals you believe that are depicted on WIC 7 Exhibit 2B were used to convey water for irrigation 8 throughout the existing Woods Irrigation Company; is 9 that correct? 10 MR. MOORE: Correct. 11 MR. RUBIN: In 1914, was there a common method to divert water for use on Roberts Island? 12 MR. MOORE: I'm not aware of that. 13 MR. RUBIN: Okay. 14 15 MR. HERRICK: For clarity, are you asking for this part of Middle Roberts or for Robert in total? 16 17 MR. RUBIN: My question was not specific to a 18 It was the island generally. region. 19 Mr. Moore, in 1914, was there a point -- excuse 20 Let me rephrase my question. me. 21 Was there a point when pumps might have been used to divert water onto Roberts Island? 22 23 MR. MOORE: I'm not aware of that. I don't 24 know. I didn't address those issues. I don't know if they did or didn't. 25

MR. RUBIN: In 1914, do you know how many acres 1 2 of land within Roberts Island were irrigated? 3 MR. MOORE: No, I don't. 4 MR. RUBIN: And do you know what the season of 5 diversion might have been in 1914? 6 MR. MOORE: No, I don't. And again, in 1914, I assume that 7 MR. RUBIN: you don't know what the peak demand might have been 8 9 within a season of diversion? 10 MR. MOORE: No. 11 MR. RUBIN: Are you familiar with the crops 12 that might have been grown between 1909 and 1914? 13 MR. MOORE: I did not analyze these for crops. 14 MR. RUBIN: Are you familiar with cultivation 15 procedures used within Roberts Island during the period 16 1909 to 1914? MR. MOORE: 17 No. 18 MR. RUBIN: Mr. Moore, specific to Woods 19 Irrigation Company Exhibit 2B, are there any features 20 that are labeled irrigation canals on Exhibit 2B? 21 MR. MOORE: No. I -- not in the area I worked 22 in of the general area of Woods Irrigation Company. 23 I -- I don't see any labeled that way on this map. 24 MR. RUBIN: And based upon Exhibit 2B, you don't know if canals were used to supply irrigation 25

1 water within Woods Irrigation Company at the time? 2 MR. MOORE: Just based solely on this exhibit, I can just see the parallel lines and all that indicate 3 4 that. But I can't say that absolutely, no. MR. RUBIN: It's your opinion that the parallel 5 6 lines indicate that surface water was being used for 7 irrigation at the time the map was prepared? 8 MR. MOORE: That's correct, yes. 9 MR. RUBIN: Is it possible that the lines that 10 are depicted within Woods Irrigation Company were used 11 to drain Roberts Island? 12 MR. MOORE: Some of them were used for 13 drainage, and some of them were used to convey fresh water for irrigation. 14 15 MR. RUBIN: And you can tell by looking at the 16 map, Woods Irrigation Company 2B, that some were used for irrigation and some were used for drainage? 17 18 MR. MOORE: No, I can't tell that. I didn't 19 attempt to try and do that, discern that. 20 MR. RUBIN: Thank you. 21 Do you know if there's a feature depicted on 22 Woods Irrigation Company 2B that's labeled Duck Slough? 23 MR. MOORE: Looking here, I don't see -- I 24 don't see a label indicating Duck Slough. 25 MR. RUBIN: Thank you.

Now I ask that -- I'll be turning my attention, 1 2 if you have it in front of you, you could turn your attention to Woods Irrigation Company Exhibit 2E. 3 4 If I understand your testimony, your written 5 testimony, correctly, Exhibit Woods Irrigation Company 6 2E is a 1937 aerial photograph overlay? That's correct. That's a photo 7 MR. MOORE: mosaic of several of 1937 photos that were rectified and 8 9 computer stitched together using GIS-type technique so they overlaid the 2005 map base. So we had a common 10 11 base to overlay all of the features on. 12 MR. RUBIN: Thank you. 13 Now in response to the question I just asked, you indicated that when you prepared WIC Exhibit 2E you 14 15 rectified photographs that were taken in 1937; is that 16 correct? 17 MR. MOORE: That's correct. I used the 1937 18 photos, and I did the Geographic Information System 19 techniques to rectify these photos so they fit the map. 20 MR. RUBIN: And by rectify, you mean alter the photographs; isn't that correct? 21 22 MR. MOORE: Yes. 23 MR. RUBIN: And you also indicate that you 24 stitched together photographs when you prepared WIC 25 Exhibit 2E?

MR. MOORE: "Stitch" is a common term for 1 2 mosaic, and this is the common technique that's used when you have multiple photographs, if you're on Google 3 4 Earth or anything else. Once the photos are rectified so that you have 5 6 a map fit, then you can join all the photos together. 7 MR. RUBIN: And you're -- beg my indulgence here. You have indicated that you've stitched together, 8 you've "mosaic'd" the photographs. Those are terms that 9 you use interchangeably as meaning you joined together 10 11 the photographs? 12 MR. MOORE: The photos are joined together, 13 correct, yes. MR. RUBIN: And the photographs that you used 14 15 to prepare WIC Exhibit 2E, you didn't take those photographs, did you? 16 17 MR. MOORE: Not in 1937, I didn't. 18 MR. RUBIN: From where did you obtain the 19 photographs that you used to prepare WIC Exhibit 2E? 20 THE WITNESS: Those were supplied by Mr. Nomellini. 21 22 MR. NOMELINI: I didn't take them, either. 23 (Laughter) 24 MR. RUBIN: Mr. Moore, you have not provided the State Water Resources Control Board with the 25

original photographs that were used to prepare Woods
 Irrigation Company Exhibit 2E, did you?

3 MR. MOORE: No. The original photos, I did not 4 supply to them, no.

5 MR. RUBIN: The process you used to prepare WIC 6 Exhibit 2E is the same process you used to prepare WIC 7 Exhibit 2F; is that correct?

8 MR. MOORE: That's correct.

9 MR. RUBIN: The only difference between what 10 you did to prepare WIC Exhibit 2E and WIC Exhibit 2F is 11 that WIC Exhibit 2E is based upon photographs that you 12 believe were taken in 1937, and WIC Exhibit 2F were 13 based upon photographs that you believe were taken in 14 1940?

15 MR. MOORE: That's correct.

MR. HERRICK: I don't know if it's appropriate. I just -- 2F also includes additional information besides the 1940 map. I don't want that to -- the record to be unclear on that. It's not the same thing exactly.

21 MR. MOORE: Yes, we overlaid the current Woods 22 Irrigation District map onto the 1940. Again, it was 23 rectified so you can see --

24 MR. RUBIN: Again, Exhibit WIC 2F is the 25 exhibit that you just referred to as being -- having

been rectified and I assume as well as stitched 1 2 together? 3 MR. MOORE: Yeah, identical -- same techniques as were done on 2E. 4 MR. RUBIN: Mr. Moore, again, you didn't take 5 6 the photographs that you used to prepare WIC Exhibit 2F, 7 did you? 8 MR. MOORE: No way. 9 MR. RUBIN: And where did you obtain the photographs that you used to prepare WIC Exhibit 2F? 10 11 MR. MOORE: Those also came from Mr. Nomellini. 12 MR. NOMELINI: I didn't take them either. 13 MR. RUBIN: You have not provided the State Water Resources Control Board with the original 1940 14 15 photographs that were used to prepare WIC Exhibit 2F? 16 MR. MOORE: I did not, no. 17 MR. NOMELINI: For the record, I did. 18 I provided the same 40 CD to the State Board as 19 I provided pursuant to --20 MR. ROSE: To be clear, you provided those to the Division Prosecution Team or to the State Board? 21 22 MR. NOMELINI: Oh. Prosecution Team, excuse 23 me. 24 MR. ROSE: So you probably wouldn't have those. 25 MR. NOMELINI: You don't have them.

MR. RUBIN: Let me continue and assume that if 1 2 there are people that have other information to add they 3 can add them at the appropriate time, if there is an 4 appropriate time. 5 CO-HEARING OFFICER PETTIT: I was just 6 concerned whether our stenographer got all those side 7 comments. 8 THE REPORTER: I did. I shouldn't have, but I 9 did. 10 CO-HEARING OFFICER PETTIT: I was thinking the 11 same thing. 12 MR. RUBIN: Likewise. Let's continue. WIC Exhibit 2G, if I understand correctly, 13 attempts to enhance the image reflected in WIC 14 15 Exhibit 2E. 16 MR. MOORE: That is -- yes. That's correct. This is the identical photograph where it has a computer 17 18 enhancement to make it look more like the stereo viewing 19 that was used on the individual photos throughout this 20 analysis. 21 MR. RUBIN: Now let me explore that for a 22 second. WIC Exhibit 2G is a computer-enhanced image; is 23 that correct? 24 MR. MOORE: That's correct. 25 MR. RUBIN: And the enhancement is to try to

1 make the exhibit, Exhibit 2G, look more like an image 2 that is produced using stereo pairs?

3 MR. MOORE: Yes. A standard method of analysis 4 of geology in many things, but a geologic analysis using 5 a stereo viewer, that's where the original nonaltered 6 photos, all of the analysis was done on those. This 7 computer technique is called a directional filter that 8 enhances the contrast.

9 And as you can see, it makes it stand out a10 little bit more like it's 3-D.

11 The three-dimensional magnified image is what 12 you get when you view stereo pairs of photos. That's 13 how the analysis was done.

14 Those photos were not altered. This is for15 display.

16 MR. RUBIN: Let's parse through that a little 17 bit. You indicated that the analysis was done using 18 stereo pairs?

MR. MOORE: Yes, that's the overlapping -- when photos overlap, they're shot so they overlap about 60 percent. That's what was on the 1937 photos.

Those were printed as individual photos of the disc. They could be laid out and viewed under a standard stereo viewer. That's what was used for the analysis. That gives you a three-dimensional image.

MR. RUBIN: And I'm wondering where is that analysis? Is that part of your written testimony? MR. MOORE: No. That's what I said in the beginning in the part that that's how the analysis was done.

6 The results of that that are shown in the later 7 photos, back like on 2L and so on, is where that 8 analysis is indicated.

9 So when you see the various lines I'll show 10 later, that's where that analysis was identifying the 11 geomorphic features, if we want to get into it.

MR. RUBIN: Mr. Moore, can you show me where in your written testimony you indicated that maps that are attached to your written testimony were developed using stereo pair procedures?

MR. MOORE: I believe that was in the -- well, maybe I -- let's see.

18 Well, the photogeology is what we're referring 19 to on that. If I did not say it specifically, then I 20 goofed up.

21 MR. RUBIN: Again, the photographs that you 22 assert were used in a stereo pair analysis were not 23 provided during this procedure; is that correct? 24 MR. MOORE: No, they weren't.

25 MR. RUBIN: Thank you.

And Exhibit 2H for Woods Irrigation Company
 attempts to enhance the image reflected in WIC
 Exhibit 2F; is that correct?

4 MR. MOORE: Yes. What -- again, as I said 5 earlier, we have three pairs of photos. We started out 6 with 2F and 2G which are the 1937 -- excuse me. 2E and 7 F which are the '37 and '40s.

8 Those identical photos, 2G and 2H, again are 9 the '37 and '40 pairs with the directional filter. 2H 10 you can see a little more clearly how that works to make 11 features enhance.

12 Then this can also be used for the analysis 13 also. This is what is provided. And this is a similar 14 technique used.

MR. RUBIN: Now Mr. Moore, you indicated, if I recall correctly, in response to a question I asked a few minutes ago, that the stereo pair analysis allows you to appreciate three-dimensional features; is that correct?

20 MR. MOORE: Yes. That's similar to what you're 21 looking at on 2H and 2G. That gives you a similar type 22 of analysis.

23 MR. RUBIN: Well -- but it's not the same, is 24 it?

25 MR. MOORE: No. It's not the same technique.

I used both techniques on this. But the stereo viewing is impossible to demonstrate. You have to look at it with a stereo viewer.

4 MR. RUBIN: The computer-enhanced image does 5 not reflect three-dimensional features nearly as well as 6 the stereo pairs analysis, does it?

MR. MOORE: That's correct. The stereo is a
better analysis. But that's impossible to demonstrate,
so this is an alternate.

10 MR. RUBIN: Mr. Moore, in your written 11 description of WIC Exhibit 2G and 2H, I believe you 12 state, and I quote:

13 Linear features identified on this mosaic 14 are interpreted to be historic channels 15 and sloughs and in some cases manmade 16 ditches or channels.

17 Is that correct?

18 MR. MOORE: That's correct.

MR. RUBIN: By this statement, you don't mean all linear features depicted in Exhibits 2G and 2H are channels, sloughs, or ditches, do you?

22 MR. MOORE: Absolutely not. That's why I used 23 two techniques to make sure it wasn't identifying a road 24 or letters written on the photos.

25 MR. RUBIN: Let's talk about that because this

1 is an area of some additional questions I have. Let's look at Exhibit 2H, Woods Irrigation 2 Company Exhibit 2H. You have depicted features on 3 Exhibit 2H that are not channels, sloughs, or ditches; 4 isn't that correct? 5 6 MR. MOORE: That's absolutely correct. 7 When you use this feature, and that's why I use the alternate to it, you can even notice up there the 8 9 date on the photo, 5-26-40. It will enhance that. So --10 11 MR. RUBIN: It will also enhance roads? 12 MR. MOORE: It will enhance roads. It will 13 enhance anything on the photos. 14 MR. RUBIN: It will also enhance railways? 15 MR. MOORE: Railways, depending -- I emphasize the word directional. If it's run perpendicular, yes. 16 You can see the railway on here. 17 18 You can see the letters written on the photo. 19 It enhances everything on the photo. So you do use a 20 backup to make sure you aren't calling a railroad a 21 canal. That's correct. 22 MR. RUBIN: And Mr. Moore, in your written 23 testimony as you describe Exhibit 2G and 2H, you don't 24 make a distinction between linear features that may serve for irrigation from features that might serve 25

1 other purposes like drainage or transportation? 2 MR. MOORE: I'm not sure I follow you correctly. I thought I just said I was very careful to 3 make sure I didn't misidentify a railroad track for a 4 canal. 5 6 MR. RUBIN: Well, are you familiar with a 7 railway that runs through Roberts Island? 8 MR. MOORE: Yes, there's a railway that runs

9 through there. And you can see it clearly on the 10 photos. As I said, when you run the filter, everything 11 is enhanced.

12 MR. RUBIN: Thank you.

And Mr. Moore, if I understand correctly, WIC
Exhibit 2I attempts to enhance and blend the image
reflected in WIC Exhibit 2E?

MR. MOORE: Yes. Again, where we're talking about the pairs, 2I and 2J following, I took those identical exhibits that are 2G and 2H, and I just reduced the opacity.

That is, I allowed you to -- I dropped it down to about a 50 percent opacity so you could still see the enhanced features, for instance on 2H, but you could also see the background of the 2005 photos on it.

This just makes it a little more clear, and it makes it a little easier to understand. And you can --

1 then that makes it easier to separate out a railroad 2 track or a road from a natural feature.

3 MR. RUBIN: And Mr. Moore, I believe there's a 4 typographical error in your written testimony, in your 5 description of Exhibit 2J.

6 If I understand the process that you followed, 7 the enhanced -- reading the first sentence, the enhanced 8 1940 aerial photograph mosaic, and you reference Exhibit 9 2E. Is that reference supposed to be 2F?

10 MR. MOORE: That is probably correct. Let me 11 see. 2J.

12 MR. HERRICK: 1940.

13 MR. MOORE: So 2J is the 1940 which would be 14 the same as 2H. That is a typo there. That should have 15 been --

16 MR. RUBIN: 2H or 2F?

MR. MOORE: 2H. If we're talking -- the 18 1940 -- 2H is the 1940. It's the same thing with the 19 opacity, 60 percent or better.

20 MR. RUBIN: And again, Exhibit 2J of Woods 21 Irrigation Company attempts to enhance and blend the 22 image reflected in Exhibit 2H?

23 MR. MOORE: That's correct.

24 MR. RUBIN: Using the techniques you employed 25 to create 2G, 2H, 2I, and 2J, you are not able to

1 distinguish between natural versus manmade features?

2 MR. MOORE: No, I am.

3 MR. RUBIN: You --

4 MR. MOORE: I am able to distinguish between 5 natural and manmade features.

6 MR. RUBIN: Are you able to distinguish between 7 canals that are used to supply irrigation water versus 8 canals that are used to drain irrigated lands?

9 MR. MOORE: No. I was not able to determine 10 that.

11 MR. RUBIN: I apologize if I repeat a question 12 here, but WIC Exhibit 2K: That's based upon aerial 13 photographs that you rectified and stitched together; is 14 that correct?

MR. MOORE: Yes. That is basically the same exhibit as 2J or 2I where we overlaid the --Mr. Lajoie's testimony of the clastic sediments

18 representing the levees and all, the natural formation 19 of the levees, and registered and overlaid so we can see 20 their relationship to the other features.

21 MR. RUBIN: And Exhibit 2K was developed using 22 photographs from 1937?

23 MR. MOORE: That's correct.

24 MR. RUBIN: And again, you haven't provided the 25 State Water Resources Control Board with those original

1 photographs?

2 MR. MOORE: Not the originals, no. 3 MR. RUBIN: In your written testimony when you're describing Exhibit 2K, you used the term 4 "riparian features"; is that correct? 5 6 MR. MOORE: That's correct. That's riparian 7 features drawn by Brian Atwater, yes. 8 MR. RUBIN: And what do you mean by riparian 9 features? MR. MOORE: The fact that there was --10 11 basically, they contained water. They were 12 water-bearing features. 13 MR. RUBIN: And you based your conclusion that there are features that are riparian based upon 14 15 photographs that were taken in 1937 or 1940? 16 MR. MOORE: That's correct. 17 The scope of my investigation was just that, to 18 identify all the geomorphological evidence to pick out 19 the water-bearing -- indications of water features. 20 MR. RUBIN: Now Mr. Moore, in Exhibit 2K, Woods Irrigation Company Exhibit 2K, you depict with blue 21 22 lines features that you believe are riparian? MR. MOORE: 23 That's correct. 24 MR. RUBIN: And if I understand your testimony 25 correctly, you have stated that the blue lines represent

1 your interpretation of historic riparian features? 2 MR. MOORE: Yes. The blue squiggly lines are my interpretation of water-bearing features. 3 MR. RUBIN: I would like -- Mr. Lindsay, it 4 looks like you have Exhibit 2K on the overhead. 5 6 I would like to draw, Mr. Moore, your attention 7 to the left side of that figure about halfway down. Ι 8 believe there's an APN number appearing on the map, and 9 I believe the APN number is 131-170-03. Do you see 10 that? 11 MR. MOORE: Yes. 12 MR. RUBIN: To the right of the number 3 that represents the APN number that I just read, do you see 13 three blue lines that are depicted within one area 14 15 there? 16 MR. MOORE: Yes, I do. 17 MR. RUBIN: And you drew those three blue 18 lines; is that correct? MR. MOORE: That's correct. 19 20 MR. RUBIN: And it's your opinion based upon your interpretation of these maps that those three lines 21 22 reflect riparian features? 23 MR. MOORE: That's correct. And many of those 24 lines -- there was two things I was doing there. 25 I was identifying the major primary features

which are the ones that correlate with the red zones.
 And there was the secondary tributary, or sometimes
 referred to as micro features.

But I identified what I could as to the water-form features, correct.

6 MR. RUBIN: The three features that we're 7 looking at right now, they're not connected to any other 8 watercourses, are they?

9 MR. MOORE: I did not attempt to take the 10 analogy that far with those, no.

11 MR. RUBIN: Did you draw the features that are 12 depicted on Exhibit 2K that we've just discussed based 13 upon the image that appears in WIC Exhibit 2J?

MR. MOORE: I'm not sure I followed you, but that is the same -- the same photos, either 2I or 2J, was what was used for that.

MR. RUBIN: Let me ask my question maybe a little bit more specifically and ask Mr. Lindsay to place on the overhead Exhibit 2J and see if we can focus our attention on the same area within Roberts Island.

21 I believe right there. Further down.

22 MR. HERRICK: There.

23 MR. O'LAUGHLIN: There. Right there.

24 MR. RUBIN: Mr. Moore, do you see the depiction 25 on the overhead of the same parcel but what is depicted

1 on Exhibit 2J?

2 MR. MOORE: Yes.

3 MR. RUBIN: And if I understand correctly 4 what -- the parcel's a little bit to the right, Mr. Herrick, and up -- I believe the one that we've been 5 6 referring to. 7 MR. O'LAUGHLIN: With the three dashes. MR. RUBIN: If I understand correctly --8 MR. HERRICK: Just for the -- I'm not sure 9 10 which part of that map matches the other one. Could we

11 just clarify that? I'm sorry.

MR. RUBIN: Mr. Moore, I would -- drawing your attention to an image that I'm circling now on the screen, it corresponds to the same parcel of land we were talking about on Exhibit 2K.

16 Unfortunately, on Exhibit 2J there is no
17 reference to an APN number that helped focus our
18 attention.

MR. HERRICK: Perhaps -- if we could zoom in, the parcels either side to the left or right have numbers, and perhaps we could identify it that way.

Just zoom in a little bit, see if we can read those two numbers.

24Another good idea down the tubes.25Anyway, if I may try -- excuse me -- the word

"Inland" appears over there on the left on a loop on 1 2 that line. If you go over one field, and then up one field, and over one field is the area we're talking 3 about. 4 5 MR. RUBIN: If that helps? I appreciate it. 6 MR. HERRICK: Sorry. 7 MR. RUBIN: But Mr. Moore, what you did is you looked at the parcel, and you exercised your judgment to 8 9 determine whether what you saw on the exhibit represented riparian features; is that correct? 10 11 MR. MOORE: No, that's actually incorrect on 12 this. 13 If you go back to your questioning, the lines I drew were on Exhibit 2K which was the 2J exhibit. My 14 15 analysis for everything came from three different 16 sources. 17 It came from the 1937, the 1940s, and -- well, 18 and then the stereo interpretation. This is a good 19 point to drive that home. Let me -- could I see the 20 pointer please? 21 MR. RUBIN: Of course. 22 MR. MOORE: If we could go back for instance 23 to -- well, while we're here, let me show you an 24 example. 25 We're talking about this property here. We

1 don't see real good strong features. There's some
2 there.

3 If we go over here, we can see this clear dark 4 parcel. I'm not sure we can read this number.

5 But you notice there are features over on the 6 other side here like this that show up very clearly on 7 this particular exhibit, 2J.

8 Go back to Exhibit 2I which is -- these are the 9 1940s. Go back to Exhibit 2I. If we could pan down to 10 the same area.

11 Notice on 2I, we're talking here. But to show 12 you that comparison I just showed you on the previous, 13 those same features don't show up here because crops 14 were growing over them.

The importance of using both the '37 and the 16 1940s is some things showed up very clearly on one 17 series, and on the other they didn't.

Here, now you can start to see these features that I drew. So what I drew for these -- for the demonstration on 2K and subsequent ones came from the analysis of several different photos, not just one.

22 MR. RUBIN: But again, you looked at the photos 23 that you provided to the State Water Resources Control 24 Board for this proceeding and interpreted what you've 25 seen on the photographs and exercised your discretion or

1 expressed your view as to whether a riparian feature
2 existed there or not?

MR. MOORE: That's correct. And I used several 3 photos to do that. I used several of each set to make 4 The different features --5 those determinations. 6 MR. RUBIN: And again, the photographs you were 7 relying upon are the 1937 and 1940 paragraphs that are 8 exhibits to your testimony? 9 MR. MOORE: That's correct. 10 MR. RUBIN: Thank you. 11 Mr. Moore, I would like to bring you back to 12 Woods Irrigation Company Exhibit 2K. On that exhibit, you also depict riparian features based on soil 13 compositions of the lands that are depicted on WIC 14 Exhibit 2K; is that correct? 15 16 MR. MOORE: Yes. That's where I used the previous testimony from Mr. Lajoie who used the 17 18 Atwater -- that's where those came from. 19 MR. RUBIN: Now I'll get there in a second with 20 some more specific questions about that, the information 21 that was used. 22 But the riparian features that are depicted on 23 2K based upon soil compositions are reflected in red?

24 MR. MOORE: Yes. Those are the clastic 25 sediments indicative of natural levee deposits.

MR. RUBIN: Mr. Moore, did you conduct any 1 2 field surveys to support your written testimony 3 including the exhibit that we're discussing today? MR. MOORE: I did a field survey along Duck 4 5 Slough and portions of Middle River and so on, and I 6 visited features along that area, yes. 7 MR. RUBIN: Mr. Moore, when you did your field study and evaluated or viewed Duck Slough, or the area 8 9 that you believe Duck Slough existed, is there a levee 10 there now? 11 MR. MOORE: I guess you would call it a levee 12 that Inland Drive goes along, yes. MR. RUBIN: Is Inland Drive an elevated road? 13 14 MR. MOORE: Yes, it is. 15 MR. RUBIN: And what is the elevation of the road as compared to farmland on either side of the road? 16 MR. MOORE: I don't know. I didn't measure 17 18 It's not real high. 10, 15 feet. I'm not sure. that. 19 It's higher than the surrounding farmland. 20 MR. RUBIN: Again, I don't want you to 21 speculate, but your answer is: Inland Road is roughly 22 10, maybe 15 feet, higher in elevation than the farmland 23 on either side of the road? 24 MR. MOORE: That would be my quess. It is higher. It might be 5 feet. It might be 15. I don't 25

1 know.

2 MR. RUBIN: Okay. Mr. Moore, you did not 3 collect any soil samples to support your written 4 testimony including the exhibits that we're discussing 5 today?

6 MR. MOORE: No, I didn't collect any. I did 7 investigate the soils. I did get out and walk some of 8 the parcels, and I did note some of the soil changes 9 that can also be depicted that we see in the 10 photographs.

11 MR. RUBIN: But the exhibit that depicts 12 riparian lands in red, WIC Exhibit 2K, is not based upon 13 any independent study that you did. You relied upon 14 testimony -- excuse me -- studies conducted by others? 15 MR. MOORE: Yes, that's correct.

MR. RUBIN: And specifically, Exhibit 2K was based upon Brian Atwater and Ken Lajoie's work?

18 MR. MOORE: Well, Ken Lajoie used the 195219 soils map of San Joaquin County for that.

20 MR. RUBIN: And as part of your testimony 21 today, you haven't provided the State Water Resources 22 Control Board with either -- or any information prepared 23 by Mr. Atwater or Mr. Lajoie, did you?

24 MR. MOORE: I did not personally, no.
25 MR. RUBIN: Do you know when Mr. Atwater or Mr.

1 Lajoie conducted any soil sampling that was used by you 2 to depict the riparian features indicated in red in 3 Exhibit 2K?

MR. MOORE: I'm not aware of that, no.
MR. RUBIN: Mr. Moore, let me turn back to a
map -- or, excuse me -- an exhibit of yours, Exhibit 2H.
I'm looking at Exhibit 2H. Can you tell me if a piece
of land were elevated, how would it be depicted on
Exhibit 2H?

MR. HERRICK: I'm going to ask for a Clarification of the question. I'm not sure what you mean, elevated. You mean a bump in it, or the land happens to be higher than something or what? Absolute elevation? I'm just not --

MR. RUBIN: Mr. Moore, did you understand the question?

MR. MOORE: Yes, I understand the question.
And in that case, as I said earlier, the thing
with using -- everything is done and the key word here
is directional.

21 So when the directional filter is applied 22 properly, an elevated feature will appear to stand out. 23 When it runs in an opposite direction, it will actually 24 look like a depression.

25 So again, for the analysis on these, when I had

1 a specific area to analyze that I wasn't using for 2 display, I isolated that area and ran the filter in the 3 direction that correctly enhanced the features to show 4 elevated features as elevated.

5 But on either one of the two displays, 2H or 6 2G, you can go in and find reversals on it because it is 7 a directional filter. If you run it one direction, it 8 will show it elevated. If you run it the exact opposite 9 direction, it will show it depressed.

10 MR. RUBIN: Mr. Moore, on Exhibit 2H of the 11 exhibit we're speaking about -- I'm sorry. The same 12 exhibit.

13 Is the High Ridge Levee depicted?
14 MR. MOORE: Yes. High Ridge -- you're talking
15 the same as Inland Drive on Duck Slough?

16 MR. RUBIN: Yes.

MR. MOORE: Yes, you can see the portions along there, correct.

MR. RUBIN: And there's a very pronounced line that runs from the left side to the right side about a third of the way down on the map. Is that the railway? MR. MOORE: I believe that is the railway, correct. I know that's the railway, correct. MR. RUBIN: And just below that, there is

25 another line that's barely pronounced about an inch

1 below that. Do you see that line?

2 MR. MOORE: Yes. I believe that's Highway 4. 3 MR. RUBIN: Is there a place where Highway 4 4 intersects with the High Ridge Levee? MR. MOORE: I believe so. There again, I'm not 5 6 real sure about that. I think that's correct. 7 MR. RUBIN: If I'm tracking the High Ridge Levee from Burns Cutoff and follow the line that's 8 depicted by the High Ridge Levee, it crosses over the 9 line that you indicated is Highway 4? 10 11 MR. MOORE: I didn't indicate that. I would 12 assume that straight there below the railroad tracks is 13 Highway 4, I believe. 14 MR. RUBIN: Are you surprised to see that a 15 feature that's 5 to 15 feet in higher elevation than the lands to either side of it is not depicted more strongly 16 17 on this map? 18 MR. MOORE: Well, again, the answer to that 19 is -- I see where you are going with that being 20 elevated, which is not correct. Because again, this was 21 a directional filter where you run it in many different 22 directions as you analyze specific areas. 23 This -- and as well as the next, 2G or 2I, 24 whichever one is before it -- yeah. 2G and 2H were each 25 just an average. They were just put in here to show

1 this is where we're going with this.

2 Whenever this was used for any analysis, I took this specific area and ran the directional filter so you 3 got a correct display of the features. 4 MR. RUBIN: You haven't provided us with the 5 6 directional displays that you -- the multiple -apparently multiple directional displays? 7 8 MR. MOORE: No, I did not provide those. My lines indicated on 2K as I -- yes, when you 9 10 refer to 2K, those were the results of looking at each 11 of those areas specifically and stereo viewing, as I mentioned, on each of the '37 and the 1940 photos, and 12 isolating the areas and running the directional filter 13 in several directions so I got the best -- again, it 14 15 works best when it runs perpendicular to a feature. If I turn this around and ran it the exact 16 opposite direction I did, where it went across Highway 17 4, that would show as a depression instead of a rise. 18 19 Each parcel has to be done specifically and 20 independently. 21 MR. RUBIN: Mr. Moore, I now ask that you turn 22 to Exhibit 2K. There are a number of features that you 23 have indicated in red as riparian again; that's correct? 24 MR. MOORE: Yes. Those were the Atwater -those were from the Atwater report, correct. Are you 25

1 talking about the bold areas or the thin lines?

2 MR. RUBIN: I was referencing the bolded areas, 3 and I believe you answered assuming I was referencing 4 the bold areas; is that correct?

5 MR. MOORE: No, I -- no.

6 The bold red areas are from the 1952 soils 7 report that Ken Lajoie did.

8 The thin led lines where you see an A, B, C, D 9 and the ones going south of Middle River, those are from 10 the Atwater report. And again, that was from Ken 11 Lajoie's report.

MR. RUBIN: There is a feature that you've identified as a riparian feature that's at the bottom of the map. And it looks like the riparian feature covers an area that appears to be close to Middle River and extends northeast; is that correct?

MR. MOORE: Yeah. You are talking from rightat the bottom where the red's cut off?

MR. RUBIN: Yes. If you want to think of these as fingers, it would be the finger on the right side.

21 MR. MOORE: Yeah.

22 MR. RUBIN: It's a very small riparian feature? 23 MR. MOORE: The little finger sticking out to 24 the northeast. That is the clastic sediment soils map 25 from Mr. Lajoie.

1 MR. RUBIN: And again, you've identified the 2 feature, and there was some testimony today about that 3 feature being riparian, correct?

4 MR. MOORE: That's correct. From the analysis 5 of the photos, the analysis of the 1913 -- 1911 map 6 where I got into trouble for pointing out the riparian 7 features on it.

8 MR. RUBIN: Let me ask you a little bit about 9 the riparian feature that you pointed out.

10 If I understood your testimony earlier, you 11 indicated that there's a feature or an element of that 12 riparian feature in the northeast portion of that 13 riparian feature that begins to run more west to east 14 than the remainder of the riparian feature; is that 15 correct?

16 MR. MOORE: Are you referring to what I said 17 earlier on the -- from the 1911 map, 2D? Is that 18 correct?

MR. RUBIN: I would like to focus your attention on the -- let me ask --

21 MR. MOORE: We're talking -- we're talking this 22 feature. To make sure, talking about this area, 23 correct?

24 MR. HERRICK: Describe it. Not just "this."25 Far right red, whatever.

1 MR. MOORE: Yeah. We're talking to the far 2 right red area that proceeds northeasterly from Middle River and runs in a diagonal to the northeast. 3 4 MR. RUBIN: And it's your opinion that the riparian feature does not continue -- there's -- let me 5 6 ask my question again. 7 After you pass through the red shaded area --8 MR. MOORE: So we're going outside the red 9 area. MR. RUBIN: -- there's two features, one that 10 11 goes to the north and one that trails more to the east? MR. MOORE: Correct, yes. Talking about the 12 13 blue one going to the east. 14 MR. RUBIN: And the line above that? 15 MR. MOORE: And then this line up here. That's what you're talking about. I follow you. 16 MR. RUBIN: Can you please tell me what the 17 18 line that's on the north part depicts? MR. MOORE: That is the line that is also 19 20 depicted on the 1911 -- 1911 slash 1913, how we labeled 21 it, Stockton Quadrangle. That feature is shown that it 22 goes up to this point and continues on the Stockton 23 Quadrangle. 24 And the point I was making this morning is this end of it here where it appears to be a paralegal 25

1 manmade feature, when it gets up here, that diverges out 2 into more of an indicated natural feature as you can see 3 on Exhibit 2D.

4 MR. RUBIN: Thank you. That's what I was 5 trying to get at.

6 So it's your opinion that the line that 7 continues through the red shaded area that we're talking 8 about to the north is a riparian feature?

9 MR. MOORE: Yes. From my analysis of the 10 photos, I feel that's correct.

MR. RUBIN: And you also believe, because it's indicated in blue, that there is a riparian feature as well just to the south of that?

MR. MOORE: Correct. The blue line proceeding east would continue clear over to the San Joaquin River. I can -- that is clearly identified on the aerial photos, and that is also identified on Exhibit 2D as being a riparian waterway.

MR. RUBIN: And again, the blue line is a depiction that you say is clear, but it's based upon your interpretation of photographs.

22 MR. MOORE: It's my interpreting of the 23 photographs and their near-perfect coincide with the 24 mapped features that you see on Exhibit 2D which is the 25 Stockton 1911 Quadrangle.

1 MR. RUBIN: Mr. Moore, is it your opinion that 2 under natural conditions water flowed in the riparian 3 feature that we're talking about from the southwest 4 portion where the riparian feature meets Middle River 5 north and east?

6 MR. MOORE: We're talking from Middle River up 7 in this? I -- yeah, I would assume that again we 8 knew -- we were aware that water flowed both directions, 9 but the predominant direction would have been from 10 Middle River to the northeast from the general.

MR. RUBIN: What do you base your conclusion that the predominant flow would be from Middle River into the island and not the other direction?

MR. MOORE: I just base that on all the previous testimony and all the previous reports. The general considered direction is northward, south to north, from Middle River north, although we're also aware it flowed in both directions depending on tidal influence and so on.

20 MR. RUBIN: Is it possible that either of those 21 features is manmade?

22 MR. MOORE: They did not start manmade. They 23 started as natural sloughs, and they were slowly cleaned 24 out and morphed into features that appear -- that would 25 be considered -- that would appear to be manmade.

MR. RUBIN: Would your opinion change if you viewed a map that did not depict either feature? MR. MOORE: I -- I didn't quite follow your question.

5 MR. RUBIN: If I were to provide you a map 6 from, let's say, 1876 that did not show the feature 7 we're discussing --

8 MR. MOORE: I would not change my opinion, no. 9 MR. RUBIN: Now Mr. Moore, I ask that you turn 10 your attention to Exhibit 2L, and specifically to the 11 area -- roughly the area we were just discussing. It's 12 the southeast corner of the map.

13 If you may provide me with the pointer.

We were just discussing the riparian feature at the -- that was depicted in red at the southernmost point of where the riparian feature meets Middle River, and we were discussing how that feature divides. Part of it goes to the north, part of it goes to the south and to the east.

I would like to draw your attention to an area a little bit further south and off of the feature that you've identified as riparian that runs to the south and to the east.

And specifically, there's additional riparian features that depict possibly what one would say is a

1 flag shape. Do you see that?

2 MR. MOORE: Okay.

MR. RUBIN: Unfortunately, I don't -- is it 3 Howard Road that might be depicted on the map? 4 MR. HERRICK: That word is Howard Road. 5 MR. RUBIN: I'm speaking about the feature that 6 appears just to the north and a bit to the west of the 7 8 word "Howard" depicting Howard Road. 9 MR. MOORE: I see what you mean, but I still 10 don't see a flag. 11 MR. RUBIN: So let's stop looking for symbols and look at the word. 12 13 So it's your opinion that there's some riparian features that are depicted there; is that correct? 14 MR. MOORE: That's correct. 15 16 MR. RUBIN: Mr. Lindsay, could you please turn to 2K? 17 And again, we see Howard Road appearing on 2K; 18 is that correct? 19 20 MR. MOORE: Yes. 21 MR. RUBIN: And on this, we don't see the riparian features that we see on 2L; is that correct? 22 23 MR. MOORE: That's correct. 24 MR. HERRICK: I would like to clarify. You mean we don't see the blue lines. 25

1 MR. RUBIN: You are correct. There's no blue 2 lines that Mr. Moore has drawn to depict -- that he 3 believes depict riparian features?

MR. MOORE: That's correct. And that was not done deliberately, because quite honestly there are so many riparian features here that this map would have looked like a bird's nest if I had continued.

8 And if Mr. Lindsay could pan down lower on 9 that, we could -- we can see even where the 1937 or '40 10 photos stop, we can even see riparian features on the 11 current 2005 base map. We can trace all these 12 features -- maybe we could zoom in there one level.

Yes. We can trace meanders and features up there. This is where I got into trouble this morning. I wanted to show those on the nonoverlay photos where we're seeing a clear feature.

But you can see features coming up from the current 2005 photos. We can see features coming up along in here. We can see clear meanders coming up in this area.

We can see features -- and again, all of these with the display, some of them, like over here, they might stand up when we ran that one independently. It could go -- I mean it could be a depression.

25 Again, I couldn't show every one of these

1 because we'd end up with a bird's nest of features on 2 it.

3 MR. RUBIN: Thank you. Mr. Moore, we talked just now about a couple of 4 the riparian features that are depicted on 2L but that 5 6 are not depicted on 2K, correct? 7 MR. MOORE: Two -- yeah. 8 Is there a reason why you did not MR. RUBIN: depict on 2K features that were depicted on 2L? 9 MR. MOORE: Well, the reason I just stated of 10 11 keeping the exhibit clear. Plus, as I said earlier, you 12 could see some feature clearly on the '37 photos that you could not see on the 1940 photos and vice versa. 13 14 MR. RUBIN: Okay. 15 MR. MOORE: So it was both ways. And again, going between the two of them, all 16 of a sudden things would jump out on another set of 17 18 photos, and there was just too much to demonstrate on 19 one diagram. 20 MR. RUBIN: Mr. Moore, the land that's depicted 21 in the photographs that you used to develop your 22 exhibits has been farmed; is that correct? 23 MR. MOORE: Yes. 24 MR. RUBIN: And do you have an opinion as to when the land began production for agricultural 25

1 purposes?

2 MR. MOORE: Well, I could clearly see agricultural practices on the 1937 photos. And there 3 are earlier maps I viewed, all that indicate that. 4 MR. RUBIN: And you've indicated, I believe, in 5 6 your testimony that as a result of some of the 7 irrigation -- excuse me -- farming practices, natural features are essentially removed, that when a farmer 8 9 tends to his or her land -- as an example, the land may be graded -- and therefore what was a riparian feature 10 11 no longer can be seen in a photograph? 12 MR. MOORE: No, that's incorrect. 13 That was why I was just making the point when you come -- maybe if we zoomed out and panned to the top 14 15 of this photo, you can see it again. Because there are features -- and all the way up where we clearly go off. 16 We can see -- and go over into this area. 17 18 MR. HERRICK: Describe the very top of the map. 19 MR. MOORE: Go to the very top of the corner. 20 This wasn't the best. But when we get off, you can see 21 features on the 2005 where this land has been farmed 75 22 years or whatever, since the '37 photos, and we can 23 still clearly pick out those features. 24 On the 2005 photos, that oxbow meander that I pointed out earlier in Duck Slough, it takes very little 25

1 enhancement, and you can still see the traces of that
2 oxbow meander.

3 So in most cases, although these places have 4 been farmed for 75 years, the natural riparian features 5 were prevalent enough that they're still identifiable 6 today.

7 MR. RUBIN: Mr. Moore, as part of your 8 testimony for this proceeding, have you attempted to 9 determine the quality of water that may have been 10 available in any of the features depicted on any of your 11 exhibits to your testimony?

MR. MOORE: No, I didn't.

12

MR. RUBIN: And as part of your testimony for this proceeding, have you attempted to determine the quantity of water that may have been available for any of the features depicted on any of the exhibits to your testimony?

18 MR. MOORE: No, I didn't.

CO-HEARING OFFICER PETTIT: Mr. Rubin?
 MR. RUBIN: I just have a couple more
 questions. I think three more questions.

As part of your testimony for this proceeding, have you attempted to determine the quantity of water diverted and used within Woods Irrigation Company from any of the features depicted on any of the exhibits to

1 your testimony?

2 MR. MOORE: No, I didn't. 3 MR. RUBIN: I have no further questions. CO-HEARING OFFICER PETTIT: Thank you. 4 Mr. O'Laughlin, you're up next. 5 --000--6 CROSS-EXAMINATION BY MR. O'LAUGHLIN 7 FOR MODESTO IRRIGATION DISTRICT 8 9 ------MR. O'LAUGHLIN: Good afternoon, Mr. Moore. 10 11 I'm Tim O'Laughlin. I represent Modesto Irrigation 12 District. 13 You answered two questions in regards to the riparian features from Mr. Rubin regarding quality and 14 15 quantity. The question I have is: Can you tell at what time of the year water was in those riparian features? 16 17 MR. MOORE: No. 18 MR. O'LAUGHLIN: Do you know what the cultivation practices were before 1937 in Woods 19 20 Irrigation District -- lands within Woods Irrigation 21 District? 22 MR. MOORE: No, I made no attempt to discern 23 that. 24 MR. O'LAUGHLIN: When you talk about riparian features, can you give me a time frame in geologic time 25

1 as to when those features were developed?

2 MR. MOORE: Within the last 15,000 years, yes. 3 MR. O'LAUGHLIN: Okay. When you said a bird's 4 nest existed -- I believe that was in response to 5 item -- I believe it's K.

6 MR. MOORE: That was just an extreme example of 7 the displays were becoming so cluttered with information 8 that if I indicated every single riparian feature with a 9 blue line, it would just -- it would be an unusable 10 diagram and would just look like a cluttered bird's 11 nest.

12 MR. O'LAUGHLIN: Okay.

MR. MOORE: So basically we got to a point where we just quit. We showed the primary features. That was our first goal, was to show the primary features.

17 We started showing the secondary features as 18 they related to it, and there were so many of them, it 19 just -- it was beyond the scope of this investigation. 20 MR. O'LAUGHLIN: Okay. So if I understand your 21 testimony then, though, if you look at any blue line up 22 there, you cannot tell us the quality of water, the 23 quantity of water, or the timing of the water within 24 that riparian feature; is that correct? 25 MR. MOORE: No, I cannot.

1 MR. O'LAUGHLIN: Okay. Now did you make any 2 independent investigation as to whether or not any of 3 the riparian features described in 2K were severed or disconnected from the San Joaquin River due to the 4 construction of levees? 5 MR. MOORE: No, I did not make that 6 7 determination. 8 MR. O'LAUGHLIN: Would that be the same with 9 Middle River? MR. MOORE: Oh, I misunderstood your question. 10 11 You said on the first one the San Joaquin River? 12 MR. O'LAUGHLIN: Yeah. San Joaquin River 13 depicted --14 MR. MOORE: No, I did not investigate anything 15 on the San Joaquin River thoroughly other than the connection of a couple of those features. I 16 misunderstood you. I thought you said Middle River. 17 18 MR. O'LAUGHLIN: That's fine. Thank you for 19 clarifying your testimony. 20 In regards to Middle River, did you make any 21 determination as to when or if levees disconnected those 22 riparian watercourses from Middle River? 23 MR. MOORE: No. In fact, in my determination, there was no apparent disconnect. From what I could 24 analyze in detail off of the photographs, there was a 25

1 direct connection to the rivers, to Middle River.

2 MR. O'LAUGHLIN: From those riparian features? 3 MR. MOORE: The primary ones, the ones we were 4 talking about.

5 MR. O'LAUGHLIN: What are the primary ones? 6 MR. MOORE: This feature here that Mr. Rubin 7 concentrated his testimony in.

8 And then in looking at the whole area, and also 9 the other analysis where Duck Slough comes in, I could 10 see no separation from the rivers, those features.

11 MR. O'LAUGHLIN: Well, would you agree that 12 levees have been built between Middle River and the 13 depiction of those riparian features?

MR. MOORE: I have not been down there
personally on the features we're looking at right now,
so I don't know.

MR. O'LAUGHLIN: When you were doing your work, did you -- plus with the subsequent hearings that you've attended -- are you aware that there's been disturbance out in Woods Irrigation Company since 1860 to 1937 when you looked at these aerial photos?

22 MR. HERRICK: I'm just going to ask that be 23 clarified. Disturbance --

24 MR. O'LAUGHLIN: Oh, disturbance of the land or 25 changes to the geographic features out there. Are you

1 aware of that?

2 MR. MOORE: In addition to farming? I'm not quite following what you're looking for. 3 4 MR. O'LAUGHLIN: Anything. Any changes in 5 geographic features out there that you are aware of. MR. MOORE: Well, the farming practices are the 6 primary things. There's obviously been farming going 7 8 on, and the land's been enhanced for farming practices. 9 MR. O'LAUGHLIN: Did you rely at all in regards to your testimony and in regards to the testimony that 10 was offered by Mr. Neudeck in this matter as to the 11 location of Duck Slough? 12 MR. MOORE: No, I did not consult with 13 14 Mr. Neudeck on this. 15 MR. O'LAUGHLIN: Okay. If we could focus in on Duck Slough, whatever map you feel best testifying in 16 regards to Duck Slough is fine with me. 17 18 MR. MOORE: Probably 2E. 2E would probably be 19 a good -- the best place to start. 20 MR. O'LAUGHLIN: Okay. Why don't we start down 21 at Middle River and work up to Burns Cutoff. Thank you. That's wonderful. 22 23 Okay. This is a 1937 photo, right? 24 MR. MOORE: Correct. MR. O'LAUGHLIN: Okay. And can you with your 25

1 pointer point out to me where the High Ridge Levee is
2 located on this map?

3 MR. MOORE: High Ridge Levee is approximately 4 coming right down.

5 MR. O'LAUGHLIN: Okay.

6 MR. MOORE: That area for the lower portion, 7 yes.

8 MR. O'LAUGHLIN: Basically running pretty much 9 northerly from Middle River. Now, my question is: On 10 this '37 map, can you locate Duck Slough?

11 MR. MOORE: Yes, I can.

MR. O'LAUGHLIN: Okay. Good. Where is Duck Slough on this map? At least in regards from Middle River up?

MR. MOORE: The natural riparian Duck Slough parallels what I just pointed out there, which we call the Highland Drive, Inland Drive. It parallels just to the east.

19MR. O'LAUGHLIN: East or to the west?20MR. MOORE: East.

21 MR. O'LAUGHLIN: Okay. So if I'm understanding 22 your testimony correctly then, Duck Slough or the High 23 Ridge Levee is westerly of Duck Slough, and Duck Slough 24 is to the east. Is that correct?

25 MR. MOORE: The natural geologic course of Duck

Slough is just a very short distance to the east, what
 we now know as Inland Drive.

3 MR. O'LAUGHLIN: Okay. Now as Duck Slough goes 4 in a northeasterly direction and ultimately connects to 5 Burns Cutoff, does it always stay on the easterly side 6 of the High Ridge Levee?

7 MR. MOORE: Yes. Now I'm talking about the 8 geologic historical Duck Slough. If he could zoom in 9 this area here, we might make sure we're talking about 10 the same thing here.

11 And then back down.

What I'm talking here is we can see a direct connection, the water to Duck Slough. And as I was pointing out earlier, I'm talking about the historic channels which we can see clearly that are meandering out from the feature.

17 So in some of these, they are coincident. They 18 are right on. In other places, as we can see up on 19 these properties, these meanders and so on are just to 20 the east of Duck Slough, and we can see these features 21 in numerous places.

If we are to zoom in this area here, we see the probably most telling feature on the entire area.

24 MR. O'LAUGHLIN: Okay.

25 MR. MOORE: Here we're seeing the historic

natural course of Duck Slough. It has water in it in
 1937, coming down. Somebody diverted that water.

At this point, the natural course continues on to this parcel. You can see the natural historic geologic features that continue down.

6 You can see old meanders. There's even a 7 homestead on the meander as was characteristic.

8 So what I'm talking about is the historic 9 riparian Duck Slough is what I'm showing here. In some 10 places, it's coincident. In other places, the historic 11 channel's just a short distance to the east, 50 feet or 12 something. That would be a guess.

MR. O'LAUGHLIN: Okay. But if I understand correctly then, based on what you said, the historic Duck Slough channel was easterly of the High Ridge Levee, correct? Until Burns Cutoff?

MR. MOORE: Well, I'm talking historic. There could be the more recent feature that would actually be depicted on 2K on the soils map and all, so there's also -- it's a complex feature there, so there could be a more current feature that created High Ridge Levee as depicted from the soils maps.

But I don't have the information to say exactly what they did with engineering and all in building that to separate the natural and historic channels and what

1 was built 50 feet west of it. I don't have that 2 information.

3 MR. O'LAUGHLIN: Did you read Mr. Neudeck's 4 testimony in regards to the steamers coming down and 5 depositing -- taking a swath out of Duck Slough 30 feet 6 wide and 7 feet deep?

7 MR. MOORE: I didn't read that in his 8 testimony, but Mr. Nomellini related that story to me.

9 MR. O'LAUGHLIN: How would you differentiate 10 when you're doing your aerial photo interpretation of 11 someone coming in and digging that type of channel and a 12 natural channel?

13 MR. MOORE: Say that again? I wasn't sure --14 MR. O'LAUGHLIN: I'll skip that. I'll move on 15 to something else.

In regards to this -- when you're looking at the water in the channel on Duck Slough, do you understand what the topography, the elevation is in Duck Slough in the actual channels from your aerial photo interpretations?

21 MR. MOORE: No. With the average elevation out 22 there being near sea level and the variations only being 23 a few feet, that actually cannot be determined.

24 We can just see relative differences high to 25 low, but I could not determine three feet or five feet

1 changes.

2 MR. O'LAUGHLIN: Would that be true, say, for all of your aerial photo interpretation where you 3 depicted drains, canals, riparian features, that you 4 5 can't tell how deep they are? No, I can't. 6 MR. MOORE: 7 MR. O'LAUGHLIN: Nor can you tell how wide they 8 are, can you? 9 MR. MOORE: Wide, we can do some calculations and come up with something that would be fairly close, 10 11 but it would be virtually impossible to get an exact 12 measurement on it. MR. O'LAUGHLIN: Have you reviewed any 13 engineering drawings provided to you by Woods Irrigation 14 15 Company depicting the elevations of various drains or canals within their system? 16 17 MR. MOORE: No, I haven't. 18 MR. O'LAUGHLIN: Are you aware of any borings 19 done to support your findings of where these riparian 20 zones were? 21 MR. MOORE: Not along that slough, I'm not, no. 22 MR. O'LAUGHLIN: Okay. Now looking at this 23 map, you said earlier that you can see water in this 24 map; is that correct? 25 MR. MOORE: That's correct.

1 MR. O'LAUGHLIN: Okay. How -- where on this 2 map that's presently up can you show us where water is 3 located?

4 MR. MOORE: One of the main areas, right 5 through these features right here.

6 MR. O'LAUGHLIN: Okay.

7 MR. MOORE: That's the primary one. We can see 8 it in a number of the ditches.

9 MR. HERRICK: Going to have to describe where 10 you're pointing.

MR. O'LAUGHLIN: So basically about, if we're looking at 2K and there appears to be a darkened area immediately to the west, you are on the High Ridge Levee slash Duck Slough, you appear to find some water there; is that correct?

16 MR. MOORE: Yes. I'm finding it north of the 17 strong kind of horseshoe meander coming in there.

18 MR. O'LAUGHLIN: Okay. How is it when you're 19 doing this photo interpretation that you depict water as 20 opposed to shadows in those canals or ditches?

21 MR. MOORE: Because on the same photos, when 22 you look at the various individual photos, we have a 23 whole series that start from Middle River and go up 24 through here where we can see sunlight reflection off 25 the water that was caught in the cameras.

1 I avoided putting those in these demonstration 2 photos because they were somewhat objectionable. I do have another series that weren't submitted for this, but 3 we can actually see very strong sunlight reflections off 4 the water that definitely would not be shadows. 5 6 MR. O'LAUGHLIN: Okay. Can you tell what the 7 depth of the water is in the canal? 8 MR. MOORE: No, I cannot. 9 MR. O'LAUGHLIN: Can you tell the flow rate of the water in the canal? 10 11 MR. MOORE: No, I can't. 12 MR. O'LAUGHLIN: Now looking -- you've pointed 13 out a very interesting area to me. It appears that coming off of Duck Slough about right past the 14 15 horseshoe, there appears to be an inlet from Duck Slough 16 into a --17 MR. MOORE: Talking here? 18 MR. O'LAUGHLIN: Keep going up. Right there. 19 And you've denoted that there was water in that 20 channel coming out of Duck Slough, correct? 21 MR. MOORE: That's correct. The -- this area 22 This whole thing. I confirmed that with the here. 23 sunlight reflections and a number of ways of 24 investigating photos. I can clearly -- I can say positively this is water coming all the way on this 25

1 course here.

2 MR. O'LAUGHLIN: Now let me ask you a question 3 in regards to that specific watercourse that you're 4 denoting.

5 In the photo is a large what appears to be a 6 white block, and then it appears that the channel runs 7 in a southeasterly direction from Duck Slough. Does the 8 channel terminate in that parcel, or does it continue 9 to --

10 THE WITNESS: Talking here?

MR. O'LAUGHLIN: Right there. Does it terminate in that parcel or does it go someplace else? MR. MOORE: This channel -- I -- I'm not sure. I think it connected with this channel right through here. I would have to zoom in on that to say definitely whether it does or does not.

MR. O'LAUGHLIN: Okay. What time of year was the 1937 photo taken?

MR. MOORE: Pan up to the top, and it will tell you. I believe May 13th, I believe -- there it is. No. August 13th.

22 MR. O'LAUGHLIN: Okay. Let's go back down 23 again to the same section.

24 Since you can see water, I want to look at that 25 little inlet again that you have been talking about

1 coming off Duck Slough. What is planted in that field 2 there that's taking water from Duck Slough? 3 MR. MOORE: I don't know. 4 MR. O'LAUGHLIN: Did you -- when you had these maps up, these maps, these aerial photos -- I find them 5 6 fascinating. Since you're able to see water, were you 7 able to differentiate what crops were planted out there? 8 MR. MOORE: No, I was not. 9 MR. O'LAUGHLIN: Were you asked to look at what 10 crops were planted out there? 11 MR. MOORE: No I wasn't. 12 MR. O'LAUGHLIN: Are you an expert in 13 determining what crops would have been planted out there at the time? 14 15 MR. MOORE: No, I am not. 16 MR. O'LAUGHLIN: This gets to an interesting question. You have in your other photos all these 17 18 water-bearing features that you discussed. And I look 19 at this 1937 photo. I don't see a lot of water, do you? 20 MR. MOORE: No, actually I do see quite a bit 21 in the different channels, yes. 22 MR. O'LAUGHLIN: Okay. What channels 23 specifically do you see water in in this photo from 24 1937? 25 MR. MOORE: Well, again, from what I'm seeing

here and what I see with the matching pairs of them where we see the different sunlight reflection, we see water, as we mentioned here. We see it all the way through this area.

5 We see it coming down. We have all these 6 irrigation ditches running along these parcels. This 7 parcel in particular here has numerous sunlight 8 reflections where the water was following in the 9 parallel rows of the crops.

I can see water in this ditch here. You can see a little bit right here coming down on this parcel. And if we pan up, we can see water in numerous parcels, and much of that is confirmed with the sunlight reflections.

15 We have another channel up here coming off of 16 Duck Slough. We have water running down in through 17 here. These were all coming off of these features that 18 are to the east of the Inland Drive area.

MR. O'LAUGHLIN: Can we go down to the -where -- if you don't mind scrolling down to where the main canal is. Do you see water in the main canal from -- in this photo?

23 MR. MOORE: Talking right here?

24 MR. O'LAUGHLIN: That --

25 MR. MOORE: Yes. But -- the answer to your

1 question is yes. I can see water.

2 MR. HERRICK: Let me just -- the question was main canal. You said right here and there was no 3 4 answer. I just want to clarify what you think you're 5 pointing at. 6 MR. O'LAUGHLIN: What are you pointing at? 7 MR. MOORE: I was pointing at the main canal coming down. I was -- "canal" I was interpreting as 8 9 Duck Slough. 10 MR. O'LAUGHLIN: Duck Slough. Okay. Is --11 MR. MOORE: Were you saying I --12 MR. O'LAUGHLIN: Is there another diversion 13 facility to the south and to the east depicted on this 14 aerial photo? 15 MR. MOORE: South and east? 16 MR. O'LAUGHLIN: On Middle River. 17 MR. MOORE: I really wasn't investigating 18 anything to the south of meander River. 19 MR. O'LAUGHLIN: Okay. No, I mean south on 20 Middle River. South and east on Middle River. Is there 21 another diversion facility there for Woods Irrigation 22 Company? 23 MR. MOORE: Yes, we have the one that we talked 24 earlier with Mr. Rubin over there, but --25 MR. O'LAUGHLIN: Is there water in that canal?

MR. MOORE: Yes, there is. 1 2 MR. O'LAUGHLIN: Okay. Do you know, based on this 1937 photo -- it's in August -- how many acres were 3 under irrigation in August of 1937 in Woods Irrigation 4 5 Company? MR. MOORE: No, I don't know that. 6 7 MR. O'LAUGHLIN: Have you ever heard of a flume being built in Burns Cutoff? 8 9 MR. MOORE: A flume? Flume, f-l-u-m-e. 10 MR. O'LAUGHLIN: 11 MR. MOORE: No. I did not really investigate 12 the engineering aspects of this. MR. O'LAUGHLIN: How do you differentiate when 13 you are looking at these photos between a natural levee 14 15 that may be adjacent to a watercourse in which man has come along and dumped additional material on, and how do 16 you make that distinction? 17 18 MR. MOORE: Because what I was concentrating on 19 was finding the natural historic geologic features of 20 these channels. This is something I've been doing over 21 three years, and that's what I was concentrating on. 22 So when I was investigating Duck Slough, I was 23 seeing the feature, as I pointed out earlier, and I was 24 concentrating on these type of features here and here. 25 And I wasn't concentrating a whole lot on Duck

Slough, only into its relationship to the natural
 features that I was identifying.

3 MR. O'LAUGHLIN: Okay. Do you have -- have you 4 reviewed any maps prior to 1875 depicting the geographic 5 features on Middle Roberts Island?

6 MR. MOORE: No. When I was working with Mr. 7 Lajoie on the previous testimony, I think I believe 1876 8 was the earliest map. And it was later maps where the 9 survey accuracy became better and we could better tell 10 essentially where the features were.

11 MR. O'LAUGHLIN: Do you know why the 1952 soil 12 maps were used instead of the 1940 soils maps?

MR. MOORE: I don't know. Mr. Lajoie did that.I don't know exactly why he chose those maps.

MR. O'LAUGHLIN: Do you know if there -- if there were any culverts put underneath the railroad when it was constructed to convey water within Woods Irrigation Company?

MR. MOORE: I don't have engineering evidence of that, but if you'll pan up to that area, there's enough detail on this photo you can see -- stop -- you can see features right in here and all.

23 So when we look at the high resolution versions 24 of these, we can see water flowing under the railroad 25 tracks. But that's all the information I have, I don't

1 know what kind of engineering feature it was.

2 MR. O'LAUGHLIN: If I understand your testimony correctly, are you saying that Duck Slough was in 3 4 existence and conveying water in a natural state prior 5 to any manmade development? 6 MR. MOORE: Yes. I feel that definitely. 7 MR. O'LAUGHLIN: Once again, when you were talking about Duck Slough, do you have a quantity of 8 9 water that was in there, that channel? MR. MOORE: No, I don't. 10 11 MR. O'LAUGHLIN: A timing. 12 MR. HERRICK: Mr. Chairman, I mean we're all getting tired, but that's about the fifth time that's 13 been asked by this cross-examination. 14 15 MR. O'LAUGHLIN: No -- I know, but I said generally. This one was specific to Duck Slough. 16 There's a reason. You'll see it in a second. 17 18 Just one more question: The timing on -- the 19 timing in regards to water in Duck Slough? 20 MR. MOORE: Timing what? Again, I said earlier within 15,000 years. I mean this is an old natural 21 feature. There's been a lot of water flowed down there 22 23 to create that type of feature. And I can't tell you if 24 it was 6,000 or 9,000 years. 25 MR. O'LAUGHLIN: Would you -- I'm going to hand

1 those out. Thank you.

2 We'll have marked for identification purposes3 MSS 2.

Looking at this map, it shows the location of cross-levee proposed irrigation. I blew that section up. It's from the heading on the map behind it which appears to depict the High Ridge Levee. Do you agree with that?

9 MR. MOORE: We're talking about -- I'm not sure 10 where you are here. Point out on the photos where you 11 are. I'm not sure --

MR. O'LAUGHLIN: You can look on the second page if you want and see the entire map.

14 MR. MOORE: This is which portion now?

15 MR. O'LAUGHLIN: The lower portion.

16 MR. MOORE: The cross -- okay. Down towards 17 the Middle River. Okay.

18 MR. O'LAUGHLIN: See that?

19 MR. MOORE: I see what you mean.

20 MR. O'LAUGHLIN: Okay. So this depicts the 21 cross-levee, correct?

22 MR. HERRICK: I'd like to object to that.

The map speaks for itself, and appears to be a line with elevations for the proposed ditch to be built, not the levee, although it mentions where the levee is.

1 But the map speaks for itself.

2 MR. O'LAUGHLIN: I'm just asking a simple 3 question: Does this depict the cross-levee that we've 4 been talking about?

5 MR. MOORE: The general shape of it appears to 6 be something like what we're talking about, but I have 7 no idea beyond that.

8 MR. O'LAUGHLIN: Do you know why there's a 9 proposed irrigation ditch proposed along the base of the 10 levee?

11 MR. MOORE: No, I don't.

MR. O'LAUGHLIN: Do you know why if Duck Slough was in existence there would be a need to propose an irrigation ditch along the base of the levee?

15 MR. MOORE: I don't know what their reason was 16 in 1924.

MR. O'LAUGHLIN: Okay. Do you have any understanding -- would this -- does this change your mind at all that maybe in fact Duck Slough doesn't exist and that it's only something that was comprised of an irrigation canal that was built later?

22 MR. HERRICK: Objection; the question doesn't 23 ask when it would exist, just whether it existed or not. 24 MR. O'LAUGHLIN: 1924.

25 MR. MOORE: You're -- okay. This map was made

1 in 1924, so say again your question.

2 MR. O'LAUGHLIN: Yes. So is Duck Slough in 3 existence in 1924?

MR. MOORE: Absolutely.

4

5 MR. O'LAUGHLIN: Okay. So my question to you 6 is: Why if Duck Slough is conveying -- oh. Here's my 7 other question. Never got clear from you.

8 Which way is water flowing in Duck Slough? Is 9 it flowing from Burns Cutoff to Middle River or Middle 10 River to Burns Cutoff?

MR. MOORE: The accepted flow direction is from Middle River to Burns Cutoff, but it's also known to flow both directions.

MR. O'LAUGHLIN: How does water flow in both directions? I'm confused about that.

MR. MOORE: From tidal influence to -- the gradients here are so low that just tidal influence can affect whether the water is moving one way or the other.

MR. O'LAUGHLIN: But if you were looking at Duck Slough in stereo, you wouldn't be able to tell what the changes in elevations were at the bottom of the channel anyway, could you?

23 MR. MOORE: No. Because you cannot determine 24 those elevations from any of those photos within several 25 feet, and it only takes a few inches to change the flow

1 direction in that area.

2	CO-HEARING OFFICER PETTIT: I think that's
3	getting pretty repetitive, Mr. O'Laughlin. I'm not sure
4	this witness can say more than he has about it.
5	MR. O'LAUGHLIN: Well, maybe you can answer
6	another question. Have you pondered this question: If
7	all these riparian features are existing in Woods
8	Irrigation Company, why is there a need to divert water
9	from Middle River?
10	MR. MOORE: Because many of those features, as
11	I mentioned earlier, were secondary features, and they
12	were probably working with the primary features.
13	You're getting me to guess a little bit where I
14	did the geology on that, so I'm really not going to
15	pursue that because now I'm having to guess farming
16	practices.
17	MR. O'LAUGHLIN: Do you know when and if a
18	diversion was built from Duck Slough on Middle River to
19	supply water to Woods Irrigation Company?
20	MR. MOORE: No, I'm not familiar with that.
21	MR. O'LAUGHLIN: Are you aware
22	MR. HERRICK: I have to object for facts not in
23	evidence. Without testifying, there's been no
24	allegation by anybody that the diversion where Duck
25	Slough meets Middle River was used for Woods Irrigation

1 Company.

CO-HEARING OFFICER PETTIT: I think the first 2 part of that question was whether the witness was aware 3 if it had been connected, and he can answer that. 4 MR. HERRICK: I agree, but it's confusing the 5 6 witness to say for Woods Irrigation Company if in fact that's not true. 7 8 So if Mr. O'Laughlin has some foundation that that diversion was ever used for Woods Irrigation 9 10 Company, I think it would be an appropriate question. 11 MR. O'LAUGHLIN: Do you know when the main canal that diverts water from Middle River to Woods 12 13 Irrigation Company was constructed? 14 MR. MOORE: No, I don't. 15 MR. O'LAUGHLIN: Okay. Do you know how it was constructed? 16 17 MR. MOORE: No. 18 MR. O'LAUGHLIN: Do you know -- do you have any idea what elevations on -- in the canal were back in 19 19 - - 1898?20 21 MR. MOORE: No, I don't know what the 22 elevations were. 23 MR. O'LAUGHLIN: I have one other quick one, if 24 we can go to 2A real quickly, and I'll be done. 25 That's fine.

You've previously shown on this map what you believe is a slash canal slash slough. Does that canal slash slough that goes up the center of this map, does that connect, actually connect, to Middle River in this map?

6 MR. MOORE: That particular -- you're -- on the 7 map, it is shown as ending into this area here, so no. 8 On this map, that feature ends here. It does connect to 9 Burns Cutoff.

10 MR. O'LAUGHLIN: Okay. So I'm looking at this 11 map, 2A, and this main canal is running in a north-south 12 direction, and it stops before it get to Middle River; 13 is that correct?

MR. MOORE: That's what's depicted there.
MR. O'LAUGHLIN: I thought you said earlier
that water generally ran from Middle River to Burns
Cutoff?

18 MR. MOORE: No, what you're missing on this, if 19 they zoomed in --

20 MR. O'LAUGHLIN: Okay.

21 MR. MOORE: -- the depiction "gates" is right 22 here. And then on later maps -- on later maps, or maybe 23 on this one. Oh, it is on here faintly. There is 24 another canal, so this actually connects.

25 MR. O'LAUGHLIN: Where?

MR. MOORE: The word gates. Two gates. If you
 could zoom in here, see they say gates.

MR. O'LAUGHLIN: Where is the canal though?
MR. MOORE: Then this also shows another canal
coming from Middle River, right up -- right up there.
We see on the other ones.

7 Then this feature comes down, and that says 8 gates where it connected into this feature that takes 9 you to Middle River.

10MR. O'LAUGHLIN: I'm perplexed by your11testimony then because what you're saying then is that12kind of shaded line that appears to be quarter of an13inch away from the end of that run is actually a canal?14Where is the canal? I don't see the line that15you're depicting on this map.16MR. MOORE: The line we're referring to --

17 MR. O'LAUGHLIN: Yes.

18 MR. MOORE: -- depicted on 1909, this one 19 running up here. It has gate, gate, gate.

20 MR. O'LAUGHLIN: I got all the gates.

21 MR. MOORE: That's what I was testifying -22 MR. O'LAUGHLIN: Okay.

23 MR. MOORE: -- with Mr. Rubin on --

24 MR. O'LAUGHLIN: Right.

25 MR. MOORE: -- comes down and connects to

1 another canal here --

2 MR. O'LAUGHLIN: Wait, wait. That's --3 MR. MOORE: Gates are right there. 4 MR. O'LAUGHLIN: -- what I'm talking about. There's two gates at the end of that canal. 5 6 Where is the canal it connects to on this map? I don't 7 see it. 8 MR. MOORE: You can see it faintly here, and 9 then if you want to go to --MR. O'LAUGHLIN: Faintly here? Where? 10 All I 11 see is a gray splotch. 12 MR. MOORE: There is a line coming from Middle 13 River that proceeds nearly northly that comes up right past where it says gate, gate on --14 15 MR. O'LAUGHLIN: Okay. MR. MOORE: -- canal, cuts off to the northwest 16 and then proceeds north. You can see that on several of 17 18 the other diagrams. 19 MR. O'LAUGHLIN: Okay. Now, is --20 MR. MOORE: Go over -- if you go over to like 21 2J where -- if you go to 2J or something, the one we're 22 talking about is shown more clearly. 23 MR. O'LAUGHLIN: Okay. I'm looking at 2K. Ιt 24 appears to me that you depicted it as a blue line which would be riparian and not a canal. So is it a slough or 25

1 is it a canal?

2 MR. MOORE: You're on --MR. O'LAUGHLIN: 3 2к. MR. MOORE: 2K. Not a real good one to depict 4 this. 5 6 MR. O'LAUGHLIN: Pick one that you like. 7 MR. MOORE: Go back to like to 2J. MR. O'LAUGHLIN: Okay. 8 9 MR. MOORE: Yes. Okay. Then pan down just a little bit. 10 11 MR. HERRICK: Other way. 12 MR. MOORE: Pan up. Stop. Okay. Here -- this is the area. This the feature 13 where we're seeing gate, gate, although this is showing 14 15 the current feature. 16 The old feature we're talking about is no longer there, but we can see indications of it. It 17 18 connects right here and where it says gate, gate, joins this feature. This is that faint line that is on that 19 20 map that we can see clearly on this map and comes down 21 and connects into Middle River. 22 MR. O'LAUGHLIN: Okay. So at this map -- I 23 don't care which map you want to connect -- how many

24 connections were there?

25 You have a canal, appears to be a canal, a

drainage course, and a riparian course all intersecting
 right before they get to Middle River.

3 MR. MOORE: When you get to Middle River, when 4 you look closely at the '37 and '40 aerials, there is 5 actually two very close channels that connect to this 6 northbound feature here and more northeastbound feature 7 here. We can see two clear channels that connect 8 directly to Middle River.

9 MR. O'LAUGHLIN: Is that through the levee or 10 over the levee?

MR. MOORE: There was no levee there that I could identify at that time.

13 MR. O'LAUGHLIN: No further questions. Thank14 you.

15 CO-HEARING OFFICER PETTIT: Thank you. When we 16 resume, I suppose we'll start with Mr. Ruiz will have 17 some questions.

18 MR. RUIZ: Yes. When we resume -- when are we 19 going to resume?

20 CO-HEARING OFFICER PETTIT: We will have to let 21 you know those dates.

22 Anything else before we recess?

23 MR. O'LAUGHLIN: Is the State Water Resources 24 Control Board Hearing Team going to put out additional 25 dates as we discussed earlier so all parties will be

1 advised of that?

CO-HEARING OFFICER PETTIT: You mean the dates we discussed just before we convened this afternoon? MR. O'LAUGHLIN: Yeah. The 24th, 25th and 28th. CO-HEARING OFFICER PETTIT: We'll put out an official notice, so --MR. O'LAUGHLIN: Thank you very much. Appreciate that. Thank you. CO-HEARING OFFICER PETTIT: Thank you all. --000--(Thereupon the WATER RESOURCES CONTROL BOARD hearing was continued at 4:58 p.m.)

1 CERTIFICATE OF REPORTER

I, LINDA KAY RIGEL, a Certified Shorthand Reporter of the State of California, do hereby certify: That I am a disinterested person herein; that the foregoing WATER RESOURCES CONTROL BOARD hearing was reported in shorthand by me, Linda Kay Rigel, a Certified Shorthand Reporter of the State of California, and thereafter transcribed into typewriting. I further certify that I am not of counsel or attorney for any of the parties to said meeting nor in any way interested in the outcome of said meeting. IN WITNESS WHEREOF, I have hereunto set my hand this June 19, 2010. LINDA KAY RIGEL, CSR Certified Shorthand Reporter License No. 13196