STATE OF CALIFORNIA

CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY

STATE WATER RESOURCES CONTROL BOARD

) Public Hearings to Determine) Whether to Adopt Cease and Desist) Orders against:) Mark and Valla Dunkel, Middle River) in San Joaquin County;) Yong Pak and Sun Young (Pak/Young),) Duck Slough in San Joaquin County;)) Rudy Mussi, Toni Mussi and Lory C.) Mussi Investment LP (Mussi et al.),) Middle River in San Joaquin County)

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COASTAL HEARING ROOM

SACRAMENTO, CALIFORNIA

VOLUME II

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1	P R O C E E D I N G S
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3	CO-HEARING OFFICER BAGGETT: Good morning.
4	We're here today to continue the May 5th Yong Pak and
5	Sun Young CDO hearing and to conduct the Rudy Mussi,
6	Toni Mussi, and Lory C. Mussi Investment LP CDO hearing.
7	I'm Art Baggett, Member of the State Board.
8	And acting as my Co-Hearing Officer today is Chair
9	Charlie Hoppin.
10	Also present are staff counsel Dana Heinrich
11	and engineer Ernie Mona.
12	Before we get started, you know the evacuation
13	drill, down the stairs, out across to the park. I
14	think looks like everybody was here before, so we
15	won't have to go through that.
16	This hearing is webcast. It's audio and video
17	both. We have a court reporter preparing us a
18	transcript, and as always anyone who wants a copy can
19	make separate arrangements.
20	So let's begin.
21	This is the time and the place for the
22	continuation of the May 5th hearing to receive evidence
23	relevant to determine whether to adopt with or without
24	revision a Draft CDO issued against Yong Pak and Sun
25	Young.

During the May 5th hearing, we completed the
Prosecution Team's case-in-chief, began the
case-in-chief for Pak/Young, and we concluded the direct
testimony and cross-examination of the witnesses Pankey,
Lajoie and Moore.
The parties agreed without objection the
testimony and cross-examination of these three witnesses

8 will be used in both this proceeding and the Mussi 9 hearing which follows to be conducted after this 10 hearing.

Are there any other procedural issues before we begin from any of the parties?

MR. O'LAUGHLIN: Yes, one. Tim O'Laughlin
representing Modesto Irrigation District.

15 Is Dunkel going to be -- are we going to 16 address the Dunkel motion separately at a later date and 17 time, or are we going to address that today, or are we 18 going to schedule that?

19 CO-HEARING OFFICER BAGGETT: Since I just
20 received it 30 minutes ago, I would prefer to at least
21 read it and contemplate it for a few minutes.

22 So we'll send something out in writing. I 23 don't think there is any great urgency to make that 24 decision before -- unless, Mr. Herrick -- to make the 25 decision before today. I see you're nodding no.

MR. HERRICK: No. 1 CO-HEARING OFFICER BAGGETT: So we will get 2 something out in writing in the near future. 3 With that, Mr. Herrick, you're up for direct. 4 (Discussion off the record) 5 --000--6 DANTE JOHN NOMELLINI 7 Called by RUDY MUSSI, TONI MUSSI AND LORY C. MUSSI 8 9 INVESTMENT LP; YONG PAK AND SUN YOUNG DIRECT EXAMINATION BY MR. HERRICK 10 ------11 12 MR. HERRICK: Thank you, Hearing Officers, John Herrick for Pak and Young. Mr. Nomellini's testimony 13 will be for both the Pak and Young and the Mussi 14 15 proceeding. Most of the testimony hereinafter will be that 16 17 way, although I understand that opposing parties would 18 like to treat Mr. Neudeck separately because there are 19 differences, and so we'll probably have two 20 presentations and two sets of cross on that. 21 The next witness we'll bring then is Dante John Nomellini. 22 23 And Mr. Nomellini, if you'll just identify 24 yourself for the record and give your business address. 25 MR. NOMELLINI: Dante John Nomellini, 235 East

1 Weber Avenue, Stockton, California 95 --

2 MR. O'LAUGHLIN: Mr. Baggett -- oops, sorry.
3 MR. NOMELLINI: -- 202.

4 MR. O'LAUGHLIN: Go ahead, finish. Sorry.

5 Yeah, I want to make objections before -- after 6 he states his name and puts it into the record for the 7 admissibility of the testimony.

8 CO-HEARING OFFICER BAGGETT: Do you want to 9 continue, Mr. Nomellini? Sorry for the interruption. 10 MR. NOMELLINI: I stated my name and address. 11 CO-HEARING OFFICER BAGGETT: Object away. 12 MR. O'LAUGHLIN: In the testimony proffered by 13 Mr. Nomellini in regards to these two matters, there are 14 legal conclusions and opinions that are offered where

15 under the Evidence Code none would be required.

16 Also, there are numerous citations to other 17 documents.

And then the other thing is while there is a general description -- while there is a general description related to Roberts Island, there is nothing specific to either of the parcels in the testimony.

22 So therefore, all the testimony should be 23 stricken because it's irrelevant because it only states 24 a general statement about what's happening on Roberts 25 Island and is not specific to either Pak, Young slash or

1 Mr. Mussi.

2 CO-HEARING OFFICER BAGGETT: Mr. Herrick? 3 MR. HERRICK: Mr. Nomellini's testimony is certainly capable of having conclusions, both legal and 4 nonlegal. We've had testimony already where witnesses 5 6 have made legal conclusions about riparian status. 7 With regard to the specifics in his testimony, Mr. Nomellini is providing evidence, conclusions, and 8 9 information regarding his conclusion and that of the parties which will be that the lands subject to this 10 11 hearing are riparian for reasons other than a current 12 physical surface connection. And whether or not his background is too broad 13 for anybody's liking, I believe it's perfectly 14 15 appropriate for him to explain the underlying reasons why he has reached these conclusions. 16 CO-HEARING OFFICER BAGGETT: Overrule the 17 18 objection, and the objection is noted for the record. So continue. 19 20 MR. HERRICK: Mr. Nomellini, your -- excuse me. 21 Exhibit No. 10 in both these proceedings is a statement 22 of qualifications; is that correct? 23 MR. NOMELLINI: If that's the exhibit number. 24 I thought I had 9. 25 MR. HERRICK: And that's a true and correct

1 copy of your qualifications?

2 MR. NOMELLINI: Okay. Yes, that is true and 3 correct.

4 MR. HERRICK: And do you have a copy before you 5 of Exhibit 9 and attachments?

6 MR. NOMELLINI: My testimony? Yes.

7 MR. HERRICK: And that is a true and correct 8 copy of your testimony for these proceedings?

9 MR. NOMELLINI: Yes, it is.

MR. HERRICK: Would you please summarize your testimony for the Board, please.

MR. NOMELLINI: First of all, I am Dante John Nomellini, as I stated, and I graduated as a civil engineer. I am a practicing lawyer.

15 I've farmed in this area. My family has farmed 16 in this area. And I serve as the secretary and counsel 17 to a number of the reclamation districts surrounding 18 this area -- Lower Roberts, District 17 on the east side 19 of the San Joaquin, Victoria Island.

20 And I am familiar with these particular 21 properties, and I have directed my testimony

22 specifically to those.

23 One of the things that I think is important to 24 state is that the basic investigation associated with 25 these parcels has focused on flowing streams, rivers,

1 sloughs, and that the Delta itself is not only an area
2 of flowing streams and sloughs but is also like a lake
3 or a pool.

And I realize that may be a little bit different than what is the typical situation. It is clear in the law that you can be riparian to a lake, you can be riparian to a pond, and you can be riparian to a pool.

9 I realize that's probably going to be 10 controversial, but I think it's important that the Board 11 understand from our view that this investigation, which 12 is not an adjudication of the water rights, should look 13 for a prima facie case as to the legitimacy of the diversions, and then it should be left to those of us 14 15 who fight the water rights battles to have the 16 adjudication on the stream system if that's where we're 17 headed.

The Delta lands that we're dealing with here are all swamp and overflow lands that were patented by the State of California, granted to the State by the federal government under the Arkansas Act of 1850. I think the actual name was the Swamp Land Act of 1850. That provided that the states could take title

24 and convey the land with the obligation that they would 25 in good faith proceed to reclaim it.

1 These were swamp and overflow lands. These 2 lands were slightly above the mean high tide. Not 3 greatly. There's no mountains out there. They look 4 like mountains now because the organic soils have 5 oxidized, and there's quite a bit of difference in the 6 terrain. But when it started, pretty flat.

7 The Arkansas Act -- and there's a case I cited 8 in my testimony where the Supreme Count found that the 9 State has a good faith obligation to carry out the 10 reclamation, and that was to put this land into 11 productive use.

Productive use, I would submit, involves irrigation. Because once you put the levees around it and drain it, then in order to produce crops you have to control the water, and of course crop production depends greatly on application and control of water.

17So I find it that the State -- improper for the18State to take a role in trying to create a

19 disqualification of riparian water use in the Delta 20 without going after waste or unreasonable use because I 21 think the policy is that the State has to support the 22 continued cultivation and productive use of the Delta.

And that would go to an estoppel question with regard to the cease and desist process. Not to the adjudication of the water rights, but to the role of the

1 State Board.

And I understand what you're trying to do. You're trying to get a handle on these things. And we are going to continue to try and get our people to file and let you know who they are, where they divert, and give you that information.

7 Now, the second point I want to make is that the use of these various channels -- I mean, it's quite 8 obvious that the Delta was full of sloughs and channels. 9 10 I think the evidence ought to be crystal clear 11 after this hearing for sure and based on the mapping that we've seen. You can look at current aerials and 12 13 see traces of lighter-colored soil which are mineral soils which reflect historic channels in the past. 14

And I have in here -- if we can put one of the slides up.

17 STAFF MEMBER LINDSAY: This is from your Power 18 Point?

MR. NOMELLINI: The first one, yeah. We don't have to advertise my name again, but the next one, the second one.

This is from my Exhibit 9B, and it's a history of San Joaquin County written in 1879, and it was republished. And I think it sheds some light on the situation that we have out there from the viewpoint in

1 1879. And what I'd like to just call to your attention, 2 it says:

3 The numerous creeks or sloughs running from the main rivers into the interior, 4 though necessitating expected treatment 5 6 to dam them effectually at or near their 7 outlets --8 They're talking about the levees, when the 9 levees cross these sloughs. -- are admittedly beneficial features of 10 11 the land, constituting as they do main 12 arteries for drainage, irrigation, and navigation. 13 14 So when the pioneers first went out there to 15 reclaim, they used these sloughs to get to the properties. And there weren't any roads. You know, 16 there weren't any highways or anything like that. 17 18 So they served the opportunity of access as 19 well as drainage and irrigation. And this is written in 20 1879. And it says: 21 Ingeniously contrived tidal gates as an 22 adjunct to the dams regulate and control 23 the egress or ingress of water from or to 24 the lands according as draining or 25 irrigation is temporarily desired.

1 My experience -- and I was involved -- I 2 actually bought an interest in a small piece of property 3 that was reclaimed in the late '50s right to the west of 4 these properties that we're talking about, right on the 5 edge of Honker Lake. And my experience confirms that. 6 We had a tide gate, which I'm going to show you

7 pictures of over -- and we call it either Trapper or 8 Whiskey Slough.

9 And when the flap gate was working on the 10 inside, we'd be able to maintain a higher water level. 11 So when we wanted to irrigate the land, which we did 12 through a floodgate, which I pushed the pipe through the 13 levee to irrigate this small piece of ground.

And then when we wanted better drainage, we worked the flap gate on the outside. In other words, the water would go out as the tide drops and it would close.

And I found that this fits in 1879. They're talking about same kind of thing I experienced in the '50s and '60s.

21 Now, in addition -- let's go to the second 22 slide, or the next slide.

The settlement geography of the Delta -- and we've provided -- I think we've got it all over the records of the State Board -- a complete copy of that

1 document. I remember Mr. O'Laughlin putting it in in 2 the Phelps case as well, so we've got it. But here's an 3 extract from it, and that's the Exhibit 3J. 4 It talks about the history of irrigation in the 5 And they say there wasn't much done prior to the Delta. 6 1870s. It was probably pretty wet out there. 7 Then: Subirrigation prior to plowing and 8 9 planting dates from the same decade. Ιt was originally used for beans and 10 11 potatoes or to encourage growth of a 12 volunteer hay crop. Since then, subirrigation has been used on all 13 14 growing crops. 15 Irrigation water was delivered to the 16 backswamp through tidal gates and 17 drainage ditches in the 1870s. Filled 18 mains backed water into field ditches of 19 2 to 4 feet in depth. From these the 20 water spread along the 6-inch to 2-foot 21 deep laterals, spud ditches, which were 22 spaced at intervals of 65 to 85 feet. 23 Seepage occurred in the peat soils. 24 Water levels were controlled with dams 25 across ditches.

I irrigated like that when I worked on the farm which was a family farm. I did it on Venice Island. We turned the irrigation pumps -- I mean the drainage pumps off and brought the water level up. We dammed the ditches.

Now, there were only two major owners on the islands, so it wasn't a problem of coordination. If you have different crops, of course, some crops like to be dry at certain times than others.

10 So those fluctuate depending upon the crops. 11 The more owners you have, the greater the opportunity 12 for conflict, and therefore the practice is today more 13 varied than it was historically because we have more 14 separate land ownership.

15 (Reading:)

Water delivery systems independent of 16 17 drainage ditches were in use by the 18 latter 1870s. These systems were 19 maintained by the farmer, only the 20 drainage system being the responsibility 21 of the reclamation district. 22 Waterwheels, windmills and low-head pumps 23 were used on the higher alluvial banks 24 where furrow and check irrigation were 25 the rule.

Now, what happened in the Delta is, of course -- and I don't think this is in any form debated -- is that along the major sloughs there were depositions of the heavier sediments, the clays and sands and things like that.

6 So there were natural banks along the main 7 rivers and, of course, along these major sloughs. And 8 they show up as lighter soil and a lighter color on most 9 of these maps.

10 The organics were these tule swamps. They 11 called them the backswamps.

When they went out there to reclaim them, they started on this higher ground because it was less susceptible to being flooded, which makes sense, and they used different devices to get water on top of that ground.

Pumps were used starting in the 1870s, steam-driven pumps. Waterwheels, of course, and some of the traditional-type, windmills, things of that type were used.

In the organic soils, which is still the practice today where we have organics of significant depth, the subirrigation was the method.

24 Partially because you can't keep the organics 25 level, so you can't run water down the furrow; plus

1 they're more permeable. You can move the soil -- I mean
2 the water horizontally.

3 My experience was we were about 40 feet apart 4 on the spud ditches instead of the 65 to 85 that they 5 talk about in here.

6 But that is the method that's still used today 7 in a lot of the particular area.

8 On the particular parcels we're talking about 9 today, the Pak and Young and the Mussi parcels, those 10 are not being subirrigated like the organic soils.

11 They were probably subirrigated in the early 12 days. And there's quite a bit of substantiation that 13 when you run water down an unlined ditch, it seeps out 14 and subs into the adjoining properties and soils.

15 And there's some evidence of litigation over 16 that involving the conduits that serve these particular 17 properties.

18 So anyway, let's go to the next one.

This is the floodgate that I worked with. It's still out there. And if Board Members are at all inclined to go out in the field, it might not be a bad idea for us to take a field trip, at least offer one to you, to do it with counsel from the other side and whoever their contingent might be, to actually go see these things, because they're still in place.

This is the flap gate on the inside of the one
 I was talking about.

This is located at the railroad tracks where --I guess we'd call it the end of Whiskey Slough. We argued about where the beginning of the sloughs are, historically.

But anyway, this gate is still there. It's a wooden box. And on the other side of this, if we can go to the next slide, the gate is now gone.

10 When I farmed out there, there was a gate on 11 both sides. It was just like the other one. You could 12 crank it up with a little hand winch and then hold it 13 out where you can let it work.

14 All right. Let's go to the next slide.

15 And these aren't the greatest pictures to 16 depict what's going on, but this is what we call 17 Trapper's Slough at Middle River which is near the same 18 area but downstream.

And a screw gate has been put on the end of the pipe. Used to be a floodgate, just a flapper gate, but now they use the screw gate. So when they want to fill Trapper Slough, they go out there during the high tides, open this gate, bring the water in, and then they close the gate.

25 But they also have a flap on the inside, which

1 is the next slide -- and that sign is somebody's attempt 2 to say no fishing. It didn't turn out too well.

But there is a flap gate on the end of that that keeps water coming out. So the screw gate on the water side can be operated to control the water. It's probably there primarily to make sure during flood times we can control the water in Trapper Slough; and in flood times or when they're not using it for irrigation, they close it.

10 All right. The various sloughs that we're 11 talking about that go to -- and other people have 12 testified as to the maps that show the historic sloughs 13 that run to this area of Pak and Young and the Mussi 14 property, and they have been called by at least the 15 people on our side Duck Slough.

16 There is historical -- and I cite it in here --17 information about putting a Samson dredge -- if we can 18 go to the next slide -- and one of the first jobs of 19 this dredge was to excavate into the Duck Slough from 20 Burns Cutoff.

Now, Duck Slough, in our estimation, extended all the way from Burns Cutoff to Middle River. So this is the downstream side.

And the significant part of this is that this machine, according to the settlement geography of the

1 Delta and the history, needed a 30-foot by 7-foot water 2 area to float it.

Now, we don't know how far along Duck Slough it went, but the probability is that it excavated a channel and constructed a levee on both sides.

6 There is what we call High Ridge Levee. When 7 you leave Burns Cutoff and head, I'd say, uphill towards 8 these parcels, it intersects what is commonly referred 9 to as the High Ridge Levee.

And therefore we know that there was a slough. We have lots of maps that show it. The other experts have put that forth, to indicate where that slough is.

Now, I went over, and you can come as well, and look at the Middle River which is the upper level. The land falls to the north and a little bit to the west, so the intake to Duck Slough on Middle River is at a higher elevation than where the old Duck Slough intersected Burns Cutoff. The fall is down.

19 So if you go up to the upper end, there's a 20 pumping plant there that the testimony will show was put 21 in in about 1925.

But if you look at that site, you can see the pilings and what appears to be the headworks of a floodgate.

25 Now, we haven't excavated the site, and maybe

1 the floodgate isn't there anymore, but there is evidence 2 of other features at that location that would have put 3 water into what we've been calling a slough, Duck 4 Slough, that intersected Middle River.

5 There are also areas that are subsequent to my 6 testimony that if you came out we have located other 7 floodgates in that immediate vicinity that we can show 8 you that could have also fed that Duck Slough complex.

9 Because it isn't just one meander of 10 light-colored -- I call it heavy soil. It's heavier 11 than peat. But there isn't just one meander there that 12 might be helpful to look at.

13 Let's go to the next slide.

We don't have a map like this for Middle Roberts where these two parcels are, but this is the one for Lower Roberts. This is the reclamation district I've represented since 1979.

We have this 1927 map, and there are 30 floodgates located on this. And I merely present this to show what was the typical method in this particular area.

And since the '30s, 1930s, and more recently since the 1980s, those of us involved in flood protection, we've been trying to get all these floodgates out of the levee because we worry about them

1 during flood times because you've got an intake, an
2 archaic one, buried in the levee right down at the low
3 water surface.

So we are trying to get farmers to put in Siphons or pumps where the conduit goes through the levee above the hundred-year floodplain.

So we've been expending that. They're
obviously not all out because if you go out in the field
there are a lot of them still there.

10 The one over near Whiskey Slough and Trapper 11 Slough is not in a critical section of the levee. That 12 piece under the railroad can stay there forever because 13 we've got levees on both sides.

But these are almost entirely in critical parts of the levee, and we've been trying to get these out. And a lot of them are out, and there are still a few left.

And some we don't know where they're located for sure, and we're trying to use electrical conductivity and those kinds of testing to locate them so we can take them out.

But there is no question that the practice was to use these sloughs, put the floodgates in them and use them to help irrigate the properties.

25 And right at first when the organics were still

1 up at mean high tide, subirrigation was really

2 important. But what these guys did when they reclaimed 3 these tule marshes, they burned them. They lit a match 4 to it and burned it, and the organic soils burned as 5 well.

6 So part of the loss of the peat soils in the 7 Delta, we can call it oxidation, but it's because it 8 oxidized because they lit a match to it.

9 And then later on when they grew potatoes, in 10 order to get a nice clean potato with no blemish in it, 11 they burned the top 12 inches of the soil so they could 12 grow a clean potato.

And I was involved -- my father was the farmer, but I was the kid out there with him, where we had a subtenant who grew the potatoes. And I worked in the summer taking the hog feed off the end of the belt which is now those small potatoes that people like as peewees.

But they burned that ground intentionally. So the top 12 inches became ash. And after the potato crop, when that ash was exposed to the wind, it blew away.

And what I'm telling you is that the organic soils dropped rapidly when they started burning them. So we had fall away from the natural levees down into the backswamps, and irrigation was easy to do because of

1 the change in elevation.

Now, what's going to happen? We argue that the act of reclamation, putting levees, putting drains in, which was done pursuant to agreement with the State -in fact, landowners had to do it. The State was obligated, the federal government, to get the reclamation done.

8 That building those levees, constructing those 9 drains, isolating these channels, is not an act of 10 severance. It should not be.

And when we look at the cases, we think the underlying case law focuses on the intent of the parties. In other words, when somebody conveys a parcel that's no longer attached to the river, it's presuming -- the argument from the other side is it's presumed unless you say riparian it's detached, and you've got to prove the intent the other way.

18 Well, for the Delta swamp and overflow lands 19 that are reclaimed because of the Arkansas Act grant to 20 the State, we think the presumption ought to be the 21 other way.

But even if the presumption is not the other way, the intent is clear that they were trying to keep these lands productive.

25 So unless there is some kind of document that

1 says I'm keeping the riparian right and I'm severing 2 it -- which I don't know whether you could do as a 3 matter of policy because of the commitment of the State 4 to the federal government -- that would be the only way 5 I would suggest that there's a proper argument of 6 severance.

Now, what happens if the levees go away or our
farmers stop draining and maintaining these levees?

9 If we go to the next slide -- let's skip this 10 one. Let's go to the next one.

11 The Delta will become a water body, and in the 12 shallower parts it will become a tule swamp. That's 13 what's going to happen if we can't do it.

Now, there's a little bit of a play in between. We knock one guy out with 40 acres, the rest of the guys stay in business. You know, it isn't going to happen that way.

But that one piece of land that goes fallow is going to turn into some type of vegetative area that is going to consume water.

These pictures show what happens when Upper Jones Tract flooded. Even though the river is there all the time, the fact we had more land flooded, we started to see new seepage areas coming up in the adjoining lands.

So there will be a rewatering of the Delta if 1 2 we do not keep the lands reclaimed and drained. And in order to keep them reclaimed and drained, we've got to 3 have viable agriculture, and viable agriculture needs 4 5 irrigation. So the intent -- the policy, we think -- should 6 7 be of the State to keep those going. 8 All right. There are a number of studies that I've attached to my testimony that were done by the 9 State that show what happens with the 10 11 evapotranspiration. 12 If we can go to the -- let's go to the next -the next one after this one. Go one more. 13 14 Now, these show -- this is from the Delta 15 Lowlands Service Area Investigation DL9. There were investigations done by the Department of Water Resources 16 17 and the Bureau of Reclamation of water rights in the 18 Delta. While it's true it's not a definitive 19 20 adjudication of water rights by any means, but they 21 analyzed it, and they categorized water use in the 22 lowlands. 23 All of these lands that we're dealing with 24 today, all of the Woods Irrigation lands, are in the

25 Delta lowlands in those studies. And they used the

1 criteria of all lands below 5 feet above mean sea level 2 they treated as lowlands, and they made an assumption in 3 their studies that these lands were riparian.

That doesn't bind you, I realize that. It's not an adjudication. I'm just giving you the information, pointing you to the studies. And they analyzed what happens out there.

8 And if you look at this exhibit, you will see 9 that tule and swamp uses 5.82 acre feet per acre of 10 freshwater. In other words, that's the

11 evapotranspiration rate.

12 If you go to corn or milo, you have 2.51 acre 13 feet per acre. So as we turn this land into nonfarmable 14 land, or we let the reclamation and drainage go away, we 15 are going to consume more water than what we have with 16 the farmers farming.

Now, that study has been corroborated. Even the State Board has got some recent stuff that was done in connection with water transfers between the Delta wetlands projects and Metropolitan Water District of Southern California.

Anyway, if we go to the next slide, this is the result of studies done by the Department of Water Resources in 1995.

25 And it shows riparian vegetation at 55.4

inches. Of course this is inches per acre rather than
 acre feet per acre. But you can compare that to like
 field corn up here at 30.8 inches. Same thing.

4 Clear evidence that when we let this land go, 5 because of the proximity of the water table -- even if 6 we had the levees and drains working, it's still high 7 water table -- we're going to vegetate.

8 Unless we can force the farmer to go out there 9 keep it all disced, clean and free of weeds, we're going 10 to use more water than if we farm.

11 So we think there's good reason to be careful 12 in what we do as a matter of policy for this Board to 13 interject itself, unless there is a wasteful use of 14 water, to interject itself into what is basically a 15 water rights fight between export contractors and in 16 this case Modesto Irrigation District, an upstream water 17 user, and the Delta.

All right. I think that summarizes the high points of my testimony, Mr. Chairman, and I thank you for the opportunity.

21CO-HEARING OFFICER BAGGETT: Thank you. Do you22want to do cross? Prosecution have any cross?

23 MR. ROSE: The Prosecution Team does not have 24 any cross.

25 CO-HEARING OFFICER BAGGETT: Mr. O'Laughlin,

1 you're up. 2 --000--3 CROSS-EXAMINATION BY MR. O'LAUGHLIN FOR MODESTO TRREGATION DISTRICT 4 -----5 6 MR. O'LAUGHLIN: Good morning, Mr. Nomellini, 7 My name is Tim O'Laughlin. I represent the Modesto Sr. 8 Irrigation District. I never thought I'd get this day. 9 This is wonderful. MR. NOMELLINI: Pleasure to see you, Tim. 10 11 We actually are friends. 12 MR. O'LAUGHLIN: I want to start kind of at the 13 end of your testimony, maybe, then there are some points 14 that you raised. 15 You mentioned briefly in your testimony that under the Arkansas Act that you believe that the 16 17 presumption should be the other way. Can you cite me to 18 a case that supports your belief or position? 19 MR. NOMELLINI: Not yet. 20 MR. O'LAUGHLIN: Not yet, in that you can't -you're looking for a case, or you're hoping to make new 21 22 law? 23 MR. NOMELLINI: We're hoping to make new law. 24 And I haven't exhausted a search to see whether there is 25 such a case dealing with it.

The Arkansas Act, of course, applied
 nationwide. I have not done that review to see whether
 there's a comparable case.

4 MR. O'LAUGHLIN: And would you say -- I'm 5 confused as to your testimony that you're being 6 proffered for today.

7 Are you being proffered as an expert witness in 8 regards to water rights? Or are you being proffered as 9 a percipient witness of what is occurring on Roberts 10 Island?

11 MR. NOMELLINI: I kind of think both.

MR. O'LAUGHLIN: Okay. So then you're aware that, as well, that your belief in regards to severance of swamp and overflow land runs counter to California case law, correct?

16 MR. NOMELLINI: No. I'm not sure that's the 17 case. I --

18 MR. O'LAUGHLIN: Okay. I'm sorry.

MR. NOMELLINI: Anyway, go ahead. I'm not sure that's the case. That's my answer.

21 MR. O'LAUGHLIN: And in that regard, did you 22 read the prior decision that was done by this Board in 23 the matter of State Water Resources Control Board, 24 order -- Water Right Order 2004-004 in the matter of the 25 civil liability complaints for Phelps, Ratto, Conn, and

1 Silva. It states in there at page 11: 2 The California Supreme Court reasoned 3 that an owner of swamp and overflow land 4 would not have a riparian right if either there was no watercourse -- i.e., no 5 6 channel to which a riparian right could attach -- or the land was on the bottom 7 of or not adjacent to the stream. 8 9 So your testimony, you would disagree with that 10 statement, correct? 11 MR. NOMELLINI: You've got to speak up. I've got one hearing aid that works, and the other one --12 13 could you repeat that? 14 MR. O'LAUGHLIN: Yes, I'd be happy to. 15 MR. HERRICK: If you could provide him with a 16 copy to read, that may help. 17 MR. O'LAUGHLIN: No. 18 MR. NOMELLINI: That's all right. 19 MR. O'LAUGHLIN: Yeah, you can hear me. And if 20 you --21 MR. NOMELLINI: I haven't reviewed that case 22 recently, but I'm generally aware of it. 23 If you're suggesting that that's a 24 determination that the swamp and overflow lands that we're talking about here are not capable of being 25
1 riparian to the Delta pool, then I disagree with that 2 interpretation.

That case, you know, focused on the Term 91, and I don't think that's determinative of what this issue would be today. And we're going to argue about that obviously, but.

MR. O'LAUGHLIN: So if I understand your 7 testimony correctly then, your view of the determination 8 9 that was done in the Phelps, Conn, Ratto and Silva 10 matters regarding the riparian status of those 11 properties in the determination of the law in that case 12 is not applicable to this case due to the nature of that 13 being a Term 91 case and this being the nature of a 14 cease and desist order case?

15 MR. NOMELLINI: Well, both.

16 The facts that were before the court in that 17 case, of course, determine what the legal determinations 18 are.

19 So the findings of fact which are based on the 20 evidence presented to the State Board, and that was the 21 hearing record, that evidence is limited as to what was 22 in the record. And so the decisions are based on that 23 evidence.

If you're suggesting that the law is that land in a submerged condition in a waterway cannot be

riparian, then I disagree. That's not the law. 1 2 MR. O'LAUGHLIN: Would you be in agreement that a rancho, a grant of a rancho is much like the grant of 3 4 a swamp and overflow or a CP? 5 MR. NOMELLINI: You mean a Mexican rancho 6 grant? 7 MR. O'LAUGHLIN: Yes. 8 MR. NOMELLINI: No. I think swamp and overflow has this obligation that the State assumed when it took 9 10 title from the federal government that creates a 11 different policy. 12 MR. O'LAUGHLIN: Okay. In your report on number 3, it says -- you talk about --13 14 MR. NOMELLINI: What page? I apologize. I 15 didn't get the page number. Does it matter? 16 MR. O'LAUGHLIN: No. I'm just going to read it 17 to you very shortly. 18 The Delta lowlands report including the 19 projects -- the subject parcels as enjoying riparian 20 water rights: Do you assert that as an estoppel 21 argument --22 MR. NOMELLINI: No. 23 MR. O'LAUGHLIN: -- or are you asserting that 24 as a basis for a water right? 25 MR. NOMELLINI: No. Neither.

I'm just showing -- putting that into evidence 1 2 that one group of people who looked at the situation -and they're not necessarily, you know, on the Delta 3 4 side; they were competing water users -- evaluated it 5 and decided that they would treat it as riparian. 6 That is not an estoppel on the part of the 7 State. It's not in a binding adjudication. 8 The estoppel area, I believe, is in the area with the swamp and overflow grant and the obligation of 9 the State to keep these lands reclaimed. 10 MR. O'LAUGHLIN: Are you familiar with the 11 12 Court of Appeals case Phelps, et al., vs. State Water Resources Control Board? 13 14 MR. NOMELLINI: I'm generally familiar. Ι 15 mean, I have a recollection of what happened --16 MR. O'LAUGHLIN: Okay. In footnote --17 MR. NOMELLINI: -- a number of years ago. 18 MR. O'LAUGHLIN: Footnote 16 references the 19 Delta lowlands, and riparian rights are found -- are 20 found in a 1950 study prepared by the United States 21 Bureau of Reclamation and used by the Board in projects 22 to estimate water availability: 23 The Board noted in Water Right Order 24 2004-4 that agencies other than the Board 25 made the assumptions in the report, and

1 they did not make the assumptions for the 2 purpose of determining actual water 3 rights but instead for estimating water 4 use. MR. NOMELLINI: What's that? 5 6 MR. O'LAUGHLIN: But instead for estimating 7 water use. 8 The Board concluded the reports do not 9 provide evidentiary support for an 10 estoppel argument, and we agree with that 11 assessment. 12 MR. NOMELLINI: I agree. 13 MR. O'LAUGHLIN: Would you concur with that? 14 MR. NOMELLINI: Yes. 15 MR. O'LAUGHLIN: Thank you. Is there any support in California law for 16 your -- or a case that you can point me to for your 17 18 assertion that if land is under irrigation, even though 19 it may not have a water right, that you shouldn't take 20 the water right away because it may revert to tules and 21 therefore use more water? 22 Can you cite me to a case or --23 MR. NOMELLINI: Your hypothetical is it doesn't 24 have a water right? 25 MR. O'LAUGHLIN: Yeah. My assumption is that

1 the parcel doesn't have a water right, and no water is 2 going to -- the State Board makes a determination that they have no right, and then the land reverts to tule. 3 4 Just because it reverts to tule, what cases cite --MR. NOMELLINI: I don't think. 5 6 MR. O'LAUGHLIN: -- that would confer a right? 7 MR. NOMELLINI: If you don't have a water right, I don't think just because it turns into tules 8 9 you get one. MR. O'LAUGHLIN: Okay. So then what --10 11 MR. NOMELLINI: Let me explain though. 12 MR. O'LAUGHLIN: -- what's the tule testimony, then? 13 14 MR. NOMELLINI: The tule testimony indicates 15 that there is no physical severance of the land from the 16 waterway by reason of the reclamation and drainage and 17 modifications pursuant to reclaiming the land in the 18 Swamp and Overflow Act. In other words, you're going to use more water 19 20 than --21 MR. O'LAUGHLIN: But using more water --22 MR. NOMELLINI: -- the other way. 23 It goes to intent. Why would somebody take the 24 water right away from land in the Delta when you're 25 going to consume more water?

And I think intent is behind the issue as to how you interpret the deeds and how you deal with legal severance with regard to riparian rights.

MR. O'LAUGHLIN: Have you reviewed any historical documents to determine what the intent of either Mr. Whitney was or Mr. Stewart or Mr. Woods was in regards to the development of Roberts Island?

8 MR. NOMELLINI: Well, yeah. There's a lot of 9 history. These guys spent a lot of money out there 10 putting the levees up, trying to drain them and trying 11 to grow crops.

MR. O'LAUGHLIN: But is there anything in your review of the historical documents that lead you to believe that there was, in their discussion, maybe they were land speculators?

16 MR. NOMELLINI: They were land speculators. 17 But money was driving this thing. In order to get the 18 crops, you had to control the water.

And in order to -- if you try to grow something, which I know you do -- or at least your wife does around your house -- you don't have much of a garden if you don't irrigate.

And the same thing for farmers. I mean, there's some dry farming, a little bit of this and that. But if you want production, you've got to irrigate.

1 MR. O'LAUGHLIN: Would you say -- in regards to 2 your testimony, would you say that prior to 1937 that 3 most of Roberts Island was under irrigation, or do you 4 think it was dry land farmed.

5 MR. NOMELLINI: I think there was -- when you 6 say dry land farming, you mean like pasture or something 7 like that, not direct surface irrigation?

8 MR. O'LAUGHLIN: Yeah. Winter wheat crops,9 that kind of stuff.

MR. NOMELLINI: Yeah. I think -- you know, there's parcels that were subirrigated. I think even those pasture areas, the farmer, the dairyman, whoever he was, he wanted to get some moisture up there to get some feed.

Now, he probably didn't put water over the top of it in some cases. He probably just controlled what the water was in the drainage ditch. So yes, if you're saying nontop-irrigated, I'd say yes. There might even be some today.

20 MR. O'LAUGHLIN: Okay. Specifically --

21 MR. NOMELLINI: I haven't gone out and looked 22 at every parcel.

23 MR. O'LAUGHLIN: Okay. I've gone through your 24 testimony in preparation for today. Do you have any 25 specific testimony to the Pak parcel? I'm just going to

1 call it Pak.

2 MR. NOMELLINI: Yes. 3 MR. O'LAUGHLIN: Okay. What is the specific --4 in your --In here? 5 MR. NOMELLINI: 6 MR. O'LAUGHLIN: Yes. 7 MR. NOMELLINI: I think it's riparian. 8 MR. O'LAUGHLIN: Okay. And what is the basis for your determination that it's riparian? 9 MR. NOMELLINI: Well, there's two. 10 11 One, I think it's swamp and overflow lands, and 12 it was only separated because of the reclamation from the main channels, and it would continue to have its 13 right unless there was something specific in a document 14 15 where somebody tried to go ahead and sever it and transfer it, which I'm not sure you can do as a matter 16 of policy. 17 18 The second thing is its location is along the 19 line of where I believe there was Duck Slough. And I 20 think that Duck Slough was either there or connections to it, ditches or canals, connecting those parcels to 21 22 it. 23 So even under the rigorous theory of flowing 24 streams that it retains its riparian connection. MR. O'LAUGHLIN: Okay. Do you have a 25

1 definition for what a slough is?

2 MR. NOMELLINI: I've seen it. I don't know if 3 I can remember it. But I mean I'd say it's a water body 4 that has some defined sides and some depth.

5 MR. O'LAUGHLIN: Okay. Do you know what the 6 carrying capacity of Duck Slough was prior to 1914?

7 MR. NOMELLINI: No. Except in the end where 8 they put that barge that was 30 feet by 7 feet to float 9 it, that was big. But I don't know how far that thing 10 went at that size.

Now, those 1937 aerials show the remnants of Duck Slough coming along what we call the High Ridge Levee -- or you guys like to call it the High Ridge Levee, I see it on maps as High Ridge Levee -- comes all the way down along there.

And that looks to me like it might be something on the order of 30 or 40 feet across the top. How deep, I can't tell you. And what the carrying capacity is, I don't know. But that's a pretty large channel.

20 MR. O'LAUGHLIN: Okay. And were you present on 21 Monday when Mr. Woods testified?

22 MR. NOMELLINI: Mr. Woods?

23 MR. O'LAUGHLIN: The aerial photography guy.
24 What's his name?

25 MR. HERRICK: Mr. Moore?

1 MR. NOMELLINI: Oh, Don Moore? 2 MR. O'LAUGHLIN: Moore. Mr. Moore. Sorry. 3 Mr. Moore. 4 MR. NOMELLINI: Yes, I was. 5 MR. O'LAUGHLIN: Sorry. 6 Mr. Moore opined that in looking at the 1937 7 aerial photos that it appeared to him that the remnants 8 of Duck Slough were east of the High Ridge Levee. Would 9 you agree with that? MR. NOMELLINI: The '37 photo shows that canal 10 11 I'm talking about on the east side of Inland Drive, yes. 12 MR. O'LAUGHLIN: So Inland --MR. NOMELLINI: I'm assuming Inland Drive is 13 what High Ridge Levee was back then. 14 15 MR. O'LAUGHLIN: Okay. All right. 16 Now, you put in the photo of the excavator, of 17 this Samson excavator. Do you know how long the Samson 18 excavator was out in Duck Slough, working? MR. NOMELLINI: No idea. 19 20 MR. O'LAUGHLIN: Now, you opined that the 21 excavator put levees up on both sides of Duck Slough; is that correct? 22 23 MR. NOMELLINI: Yes. That's what I would have 24 done with the excavator had I was there. 25 MR. O'LAUGHLIN: Okay.

1 MR. NOMELLINI: And let me give you a reason. 2 Because there are people on both sides that don't want 3 to be flooded.

So you put that excavator in there, and you just put a bank on one side and create an open body exposing the other side, it wouldn't work. They'd shoot each other.

8 MR. O'LAUGHLIN: Okay. Do you know... 9 After the excavation was done, have you seen 10 any document, whether a map or otherwise, denoting a 11 levee on the north side of Duck Slough or on the 12 westerly side of Duck Slough?

13 I've got the High Ridge Levee running down, 14 I've got Duck Slough remnants on the east side of the 15 High Ridge Levee. Is there -- can you point to a map or 16 a document showing a remnant of what would be the 17 northerly or northwest levee if this excavator dumped 18 remains on each side?

MR. NOMELLINI: Well, today there is only kind of a single embankment, you know. And there is a little bit of parallel with the railroad track that goes through like up like near Burns Cutoff. So the railroad is an embankment as well.

24 So other than that -- and then when you come 25 down from Burns Cutoff with Duck Slough and you

intersect -- I'll call it High Ridge Levee or the Honker 1 2 Lake Levee -- you end up with two levees. You know, 3 there's two there. Now, other than that, I don't -- I haven't seen 4 5 a map that shows that. 6 MR. O'LAUGHLIN: Okay. 7 MR. NOMELLINI: But --MR. O'LAUGHLIN: All right. Did you have --8 9 MR. NOMELLINI: It's possible. You know. 10 We're talking about what happened way back there. 11 MR. O'LAUGHLIN: Right. Have you run across 12 any topographic maps of early Roberts Island prior to 1914, 1920? 13 14 MR. NOMELLINI: Yeah, there's that one I call 15 the 1911 map. It was published in 1913, but the surveys 16 were done in 1911. Yeah. 17 MR. O'LAUGHLIN: With actual elevations on the 18 map? 19 MR. NOMELLINI: There are elevations. There's 20 some lines on there, yeah. 21 MR. O'LAUGHLIN: Okay. When -- are you of the 22 opinion --23 MR. NOMELLINI: Let me go back. 24 I don't know if those are actual elevations. 25 Somebody put lines on the topographic map, somebody from

1 USGS that was sent out there in the field, and put some 2 lines and put some elevations on there.

3 MR. O'LAUGHLIN: Okay.

4 MR. NOMELLINI: Accurate? I don't know.

5 MR. O'LAUGHLIN: Are you of an opinion that at 6 some point in time Duck Slough where it enters into 7 Burns Cutoff was severed from Burns Cutoff by a levee?

8 MR. NOMELLINI: Oh, yeah. It's not -- it's not 9 connected now.

10 MR. O'LAUGHLIN: Okay. Do you know when that 11 severance from Burns Cutoff to Duck Slough occurred?

MR. NOMELLINI: I don't know, but there are floodgates there.

MR. O'LAUGHLIN: Okay. Now, I'm curious about these floodgates. Are you of the opinion, if I understood your testimony correctly, that the floodgates at Burns Cutoff operated in both directions?

18 MR. NOMELLINI: I think there they would have,19 yeah.

20 MR. O'LAUGHLIN: Okay. So basically when the 21 drainage water got high enough in Duck Slough and you 22 wanted to excavate it, once the river dropped down you 23 would open a valve, the water would go back into the 24 river --

25 CO-HEARING OFFICER HOPPIN: It wasn't anything

1 you said.

2 MR. O'LAUGHLIN: PG&E didn't like your vote 3 yesterday.

MR. NOMELLINI: I haven't seen a drawing or anything like that. But because of its location, if there was excessive water in Middle Roberts Island, rather than flap gate it for drainage out in the Middle River, it would have been logical to move it out in the Burns Cutoff.

10 MR. O'LAUGHLIN: Okay.

MR. NOMELLINI: So therefore I conclude it would have been used for that purpose.

MR. O'LAUGHLIN: Now, given the general fall of land that you described earlier, are you of an opinion that irrigation water was being taken from Burns Cutoff and down Duck Slough in a southwesterly direction?

MR. NOMELLINI: Yeah. I think it was going both ways in Duck Slough. But yes, some of the water would be moved back that way, and of course it depends on the depth of the channel. But a good part of that area is irrigated today, you know, from the Burns Cutoff side.

23 MR. O'LAUGHLIN: Well, help me with this. I'm 24 perplexed with the hydraulics.

25 MR. NOMELLINI: Water doesn't run uphill. We

1 know that. I'm not going to tell you that. 2 MR. O'LAUGHLIN: I would have believed it. 3 MR. NOMELLINI: Okay. MR. O'LAUGHLIN: So let's talk about how water 4 moves on Duck Slough. You said the water moves both 5 6 ways. I understand that drain water can move out on Duck Slough at certain times of the year --7 8 MR. NOMELLINI: Correct. 9 MR. O'LAUGHLIN: -- when it's higher. 10 And then when irrigation water wants to come 11 in, you can move irrigation water in. 12 MR. NOMELLINI: Correct. MR. O'LAUGHLIN: Okay. But let's focus on the 13 irrigation side of the aisle. 14 15 MR. NOMELLINI: I'm sorry. You said irrigation side of the aisle? 16 17 MR. O'LAUGHLIN: Yeah. I'm just going to talk 18 about irrigation now. 19 MR. NOMELLINI: Okay. 20 MR. O'LAUGHLIN: My understanding is Duck Slough, according to your opinion, runs all the way from 21 22 Burns Cutoff to Middle River, correct? 23 MR. NOMELLINI: Correct. MR. O'LAUGHLIN: Okay. And that irrigation 24 water was supplied through Duck Slough, correct? 25

MR. NOMELLINI: To some of the area, yes. 1 MR. O'LAUGHLIN: Okay. 2 3 MR. NOMELLINI: From Burns Cutoff, yeah. MR. O'LAUGHLIN: Well, was it supplied from 4 Middle River? 5 MR. NOMELLINI: Yeah, I believe it was also 6 7 from Middle River which is the high side. 8 MR. O'LAUGHLIN: Okay. Well, here's my question, though: Given hydraulics, how far did water 9 from Burns Cutoff go to irrigate as opposed to how far 10 11 did water from Middle River go to irrigate? 12 MR. NOMELLINI: All right. The tide, the mean 13 tide, is probably around 3 1/2 to 4 feet. So if you wanted to go and put water on land by gravity without 14 15 any pumps or anything like that, you'd have to put it on 16 the land. If you want to put it on top, you'd have to put 17 18 it on land that's less than the elevation of the water. So it would be on those lands that were less than 3 1/219 to 4 feet above sea level. 20 21 If you wanted to subirrigate --22 MR. O'LAUGHLIN: No. 23 MR. NOMELLINI: -- you could irrigate lands 24 that were high as long as the water table you wanted to maintain was somewhere near what you could get out of 2.5

1 the channel.

2 You're not going to get greater height without pumping, and therefore that would limit how far it goes. 3 Now, we don't know the depth of the channel. 4 If the channel was deep enough, you could run it farther 5 6 towards Middle River from Burns Cutoff up gradient on the land. 7 8 MR. O'LAUGHLIN: But in regards -- I want to 9 focus on this canal, though. Or I'm sorry, slough. Slough. If the hydraulic -- you said earlier that the 10 11 hydraulic gradient was from Middle River to Burns 12 Cutoff. MR. NOMELLINI: The land falls from Middle 13 14 River to Burns Cutoff. MR. O'LAUGHLIN: Okay. 15 MR. NOMELLINI: The hydraulic gradient during 16 -- when there's river flow of some significance, the 17 18 river level is higher on the Middle River side than it 19 would be at Burns Cutoff. Let's say during the spring 20 flow. 21 If we have -- not since Modesto Irrigation District has been operating, but if we have water 22 23 flowing in the channels, you gain elevation from the 24 upstream side. It's not just tidal. We have stream flow on top of the tide water. 25

1 MR. O'LAUGHLIN: I understand that. But that 2 would also occur at Burns Cutoff, wouldn't it, if flow 3 was coming down? That would also occur at Burns Cutoff, 4 wouldn't it?

5 MR. NOMELLINI: Yeah, but it's higher on Middle 6 River.

7 MR. O'LAUGHLIN: How is it higher on Middle 8 River?

9 MR. NOMELLINI: Just the hydraulics of the 10 situation. The channel capacity on the San Joaquin 11 side, when you're dropping elevation from let's say 12 Mossdale, results in a lower flood elevation at Burns 13 Cutoff than in Middle River where the intake would be 14 for Duck Slough.

MR. O'LAUGHLIN: This is the point I'm driving at. If the hydraulics are higher on Middle River and the land is higher on Middle River and the slope of the land goes from the southwest to the northeast, how is it that hydraulically water from Burns Cutoff goes to Middle River?

21 MR. NOMELLINI: I explained that, and that's if 22 the channel depth was adequate.

MR. O'LAUGHLIN: If the channel depth.
MR. NOMELLINI: Yeah. I mean -MR. O'LAUGHLIN: Let me ask you another

1 question on that.

2 MR. NOMELLINI: Go ahead.

3 MR. O'LAUGHLIN: Even if the channel depth was 4 adequate -- let's say you had 10 feet of channel at 5 Burns Cutoff. If Burns Cutoff's elevation was still 6 higher than Middle River, water wouldn't flow all the 7 way to Middle River, correct?

8 MR. NOMELLINI: Burns Cutoff isn't higher than
9 Middle River.

10 MR. O'LAUGHLIN: It isn't? It's lower?

MR. NOMELLINI: Yeah. Burns Cutoff is lowerthan Middle River. I think you just misspoke.

MR. O'LAUGHLIN: Well, if Burns Cutoff is
lower -- Burns Cutoff is lower than Middle River?
MR. NOMELLINI: Right.

16 MR. O'LAUGHLIN: So let's say if it's lower, 17 then how do you push water from Burns Cutoff uphill to 18 Middle River?

MR. NOMELLINI: Okay. You don't push the water up. It would flow in there through -- there are floodgates along Burns Cutoff. We know that. The history is there. That map I gave you shows a floodgate right on the north side of that levee, whether you call it Duck Slough or whatever.

25 MR. O'LAUGHLIN: Okay.

MR. NOMELLINI: So floodgates work. Floodgates
 will irrigate some of that land.

As far as you want to go would depend on the depth of the channel. There is no question in my mind that you could get water from Burns Cutoff in the channel of Duck Slough to the Pak and Young and the Mussi property. No question in my mind.

8 MR. O'LAUGHLIN: Okay.

9 MR. NOMELLINI: Now the other side, I think 10 it's easier to get the water from the Middle River side. 11 You can bring it in at a higher elevation.

MR. O'LAUGHLIN: Okay. But without actually knowing the hydraulic gradient of the channel, you can't -- you may believe that, you may assume that, but you don't know for sure. Is that correct?

MR. NOMELLINI: Look, these guys were farmers.
They had pumps in those days. They would have
irrigated. So they got water from someplace.

MR. O'LAUGHLIN: But you as an engineer could not testify that without knowing the hydraulic gradient you would not know which way the water would run in Duck Slough; is that correct?

23 MR. NOMELLINI: I know which way it would run. 24 The question that I don't have the absolute 25 answer to is the depth of the channel that was there at

1 the time.

2 MR. O'LAUGHLIN: Well, how do you know which 3 way water runs if you don't know the elevation and/or 4 gradient of the channel?

5 MR. NOMELLINI: I can tell from the -- well, 6 which way the water would run?

7 MR. O'LAUGHLIN: Yeah. You as an engineer. 8 MR. NOMELLINI: If nobody pumped out of it and 9 there was no evaporation, there wouldn't be any water 10 movement once you filled the -- the tide would fill it. 11 When the tide would go out, it would go out the other 12 way a little bit. So there's movement back and forth 13 with the tide.

MR. O'LAUGHLIN: Okay. But for irrigation purposes for delivering water all the way from Burns Cutoff to Middle River, other than the tide pushing it, what other gradient is there?

18 You don't know.

19 MR. NOMELLINI: Gradient-wise?

20 MR. O'LAUGHLIN: Yeah. You don't know.

21 MR. NOMELLINI: None. It would be pumping that 22 would have to --

23 MR. O'LAUGHLIN: Okay.

24 MR. NOMELLINI: -- enter into the play.

25 MR. O'LAUGHLIN: Pumping. Prior to 1925, were

1 there any pumps located on Duck Slough?

2 MR. NOMELLINI: I would assume there were pumps 3 all over heck.

4 MR. O'LAUGHLIN: No, wait. I'm asking you a 5 specific question. That's an assumption.

6 MR. NOMELLINI: Do I know? Did I see a pump 7 there in 1925? No.

8 MR. O'LAUGHLIN: No. Are you aware of any
9 evidence --

10 MR. NOMELLINI: I am aware --

MR. O'LAUGHLIN: Wait. Let me finish. I know we're getting in a conversational tone.

13Are you aware of any evidence, document, or14photo depicting pumps on Duck Slough prior to 1925?

MR. NOMELLINI: I have included the quote from the 1879 history of San Joaquin County that speaks generally about the practice and that I had up on the Board. But it talks about the use of waterwheels and pumps. Okay, that's in the settlement geography of the Delta. It talks about -- yeah:

21 Water delivery systems independent of 22 drainage ditches were in use by the 23 latter 1870s. These systems were 24 maintained by the farmer, only the 25 drainage system being the responsibility

of the reclamation district. 1 2 Waterwheels, windmills and low-head pumps 3 were used on the higher alluvial banks where furrow and check irrigation were 4 the rule. 5 That is one piece of evidence. The second 6 piece of evidence is from the 1879 document. 7 8 MR. O'LAUGHLIN: Right. And --9 MR. NOMELLINI: And that -- well, let me 10 finish. You asked if there were any documents. I'm 11 giving them to you. 12 MR. O'LAUGHLIN: Okay. 13 MR. NOMELLINI: It says: 14 Ingeniously contrived tidal gates as an 15 adjunct to the dams regulate and control 16 the egress or ingress of water from or to the lands according as draining or 17 18 irrigation is temporarily desired. 19 Okay. That didn't talk about pumps. Anyway, that one article. 20 21 MR. O'LAUGHLIN: Okay. Does that article 22 mention Duck Slough? 23 MR. NOMELLINI: I didn't see Duck Slough in it, 24 but it references some other -- you know, if you go to that publication it's got a citation for it. 25

1 MR. O'LAUGHLIN: Did you review the citation to 2 see if there was any collaborating evidence that in fact pumps were being used on Duck Slough to move irrigation 3 4 water onto either the Pak property or the Mussi property? 5 6 MR. NOMELLINI: I did not look -- well, I 7 probably looked at something like that years ago, but I 8 don't remember looking for Duck Slough in it, no. 9 MR. O'LAUGHLIN: Are you of the opinion that in the area of Middle River adjacent to Duck Slough that 10 11 the water was always fresh and that there was no 12 seawater intrusion? 13 MR. NOMELLINT: No. 14 MR. O'LAUGHLIN: In fact, I'm reading these 15 minutes from the special board meeting of the board of directors, January 25th, 1940, of Woods Irrigation 16 17 Company. Do you represent in some capacity Woods 18 Irrigation Company? 19 MR. NOMELLINI: No. 20 MR. O'LAUGHLIN: Have you worked for them 21 before? 22 MR. NOMELLINI: No. Not that I recall. 23 MR. O'LAUGHLIN: It's very interesting. These 24 minutes are from 1940, and they say in here: 25 If and when the water in Middle River at

1 the point of the diversion of water 2 therefrom... 3 Do you know where Woods Irrigation Company's diversions were back in 1940 on Middle River? 4 5 MR. NOMELLINI: I'm pretty confident where they 6 were. 7 MR. O'LAUGHLIN: Okay. Where were they? 8 MR. NOMELLINI: Because there's tide gates. 9 There's two tide gates, evidence of two tide gates. One is very clear. It's a tunnel. Right there on Middle 10 11 River near where Howard Road intersects Middle River. 12 What is it. It's a little bit east of that intersection. 13 14 MR. O'LAUGHLIN: Okay. 15 CO-HEARING OFFICER BAGGETT: Mr. O'Laughlin, is this document in the record, or are you using it in a 16 17 hypothetical or... 18 MR. O'LAUGHLIN: No, I'm just reading from it. CO-HEARING OFFICER BAGGETT: Is it in the 19 20 record? 21 MR. O'LAUGHLIN: Not yet. 22 CO-HEARING OFFICER BAGGETT: Okay. So you do 23 intend to introduce it? Thank you. 24 MR. O'LAUGHLIN: On rebuttal. We'll have somebody enter it on rebuttal. 25

1 MR. HERRICK: Mr. Chairman, it's typical when 2 you're asking somebody a question about a document you 3 let them read it, not just pretend to quote it.

MR. O'LAUGHLIN: No. That's not the rule.
I'm asking him a question from a document, and
I'm just -- and if I want to use the document later, I
can enter it; if I don't want to enter it, I don't have
to.

9 I can ask him about the truth and veracity of 10 the statement therein, but there is no necessity for me 11 to actually enter the document into the record.

MR. NOMELLINI: Well, it would be helpful. I trust you, but it would be helpful to know whether you're reading it correctly.

MR. HERRICK: If the party being questioned requests a copy to look at so that we can see if he's actually quoting it correctly, and giving the witness the opportunity, I think that's only polite.

MR. O'LAUGHLIN: There you go. Read rule number 13.

MR. NOMELLINI: You want me to read it aloud?
MR. O'LAUGHLIN: No, just to yourself.
MR. NOMELLINI: Okay.

24 CO-HEARING OFFICER BAGGETT: Mr. O'Laughlin,25 how much longer do you anticipate? 28 minutes?

1 MR. O'LAUGHLIN: Probably not, but we can take 2 a break if you like. If you want to take a break, now would be a good time for a break if you like, a short 3 five-minute break. 4 CO-HEARING OFFICER BAGGETT: Yeah. Let's take 5 6 ten minutes. Recess. 7 (Recess) CO-HEARING OFFICER BAGGETT: Let's go back on 8 the record. Mr. O'Laughlin, continue. 9 10 MR. O'LAUGHLIN: I got sidetracked for a 11 minute. Let me go back to a couple follow-up questions 12 so I don't forget. 13 Have you read Mr. Neudeck's testimony in this 14 case? 15 MR. NOMELLINI: I did at one time. 16 MR. O'LAUGHLIN: Okay. It appears to me that 17 Mr. Neudeck opined that this Samson dredger that we were 18 looking at entered Duck Slough and went from Burns 19 Cutoff all the way to Middle River. 20 Would you agree with that assertion? 21 MR. NOMELLINI: I don't know how far it went. 22 Looking at some of the history, I got the impression 23 that it may have gone up to the High Ridge Levee. 24 I didn't get any impression it went all the way to Middle River, but I really don't know how far it 25

1 went. Didn't look like a great dredger to me.

2 MR. O'LAUGHLIN: Earlier you had stated that 3 you had looked at maps depicting Duck Slough. Are those 4 maps in either -- are those in your testimony or are 5 these in Mr. Neudeck's testimony?

6 MR. NOMELLINI: I think they're the same ones 7 that Neudeck's got.

8 MR. O'LAUGHLIN: Now, do you have any maps 9 depicting a slough -- I don't know if you want call it 10 the headwaters or the end of Duck Slough where it enters 11 Middle River. Do you have any map depicting a slough in 12 that area?

MR. NOMELLINI: There is a map that shows a finger coming up there.

15 MR. O'LAUGHLIN: What map is that?

16 MR. NOMELLINI: Oh.

MR. O'LAUGHLIN: Do you have an exhibit number? MR. NOMELLINI: I don't know. Maybe you can call me back when one of these other guys puts it up. But there is a navigational map type of thing

21 that had a channel coming up in that area. You know,
22 could have been right where the Duck Slough is now. It
23 could have been farther to the west.

You know, that pocket area has -- I don't know
if you're familiar with it, but all those things kind of

1 go together near Mr. Kingston School.

2 MR. ROSE: Can I ask briefly if that's Exhibit 3Q or R, 1921 map of California Delta? Is that 3 4 what you're talking about, for my own reference? 5 MR. NOMELLINI: Maybe you can show me the map. 6 MR. HERRICK: I believe it's the Weathers, 7 Captain Weathers map from 1922 attached to Mr. Neudeck's testimony. Yes. 8 9 MR. O'LAUGHLIN: Can we throw that up on the 10 screen? 11 (Discussion off the record) 12 MR. HERRICK: That's it. Pan down. Find where 13 Middle River turns and zoom in. Right where it says Drexler Tract almost -- a little below the cursor. A 14 15 little farther below. 16 MR. NOMELLINI: Yeah, right. That looks like 17 the map that I'm recalling, yes. 18 MR. O'LAUGHLIN: Can you enlarge that area of 19 the map, please? 20 MR. HERRICK: Bring it back down a little bit. No, the other way. Now pan it to the right or move it 21 22 to the right. Right there, the centerish. Right by the 23 words "the pocket is" is what Mr. Nomellini is talking 24 about. Middle River and then the pocket in between 25 there at a diagonal.

MR. O'LAUGHLIN: If you have a pointer, 1 2 Mr. Nomellini, it might be helpful if you would denote where on that map you see a finger coming into Middle 3 4 River at or near where you believe Duck Slough either started or ended. 5 6 MR. NOMELLINI: You see where the word "the" is near the word "pocket" and just to the left of the T on 7 8 "the". That's what I've seen on a map that I recall. 9 MR. O'LAUGHLIN: Okay. Are you aware of any 10 other map depicting a slough in that area other than 11 this map? 12 MR. NOMELLINI: Well, the topographic map from 13 that 1911 one I think shows -- yeah. Yes. 14 MR. O'LAUGHLIN: Okay. 15 MR. NOMELLINI: Not like that, but I mean, I think I've seen other indications. 16 17 MR. O'LAUGHLIN: Okay. What other map would that be? 18 MR. NOMELLINI: I think that 1911, which was 19 20 published in 1913, topographic map shows indications of 21 soil conditions there that would reflect a slough, 22 possible slough. 23 MR. O'LAUGHLIN: In your testimony you don't opine as to -- anywhere in here as to when Pak/Young 24 25 started diverting water on their property, do you?

MR. NOMELLINI: No, I don't think so. But I --1 2 MR. O'LAUGHLIN: Okay. Do you have any evidence of when Pak and Young commenced to apply 3 irrigation water to their property? 4 5 MR. NOMELLINI: I think they started in the 6 1870s. It wouldn't be them, but it would be their 7 predecessors. 8 MR. O'LAUGHLIN: Okay. And what specific piece 9 of evidence should we look at to support the fact that 10 Pak and Young's predecessors were applying water to this 11 property prior to 1900? MR. NOMELLINI: Well, I got the biography of 12 the Woods in here. 13 14 MR. O'LAUGHLIN: Right. 15 MR. NOMELLINI: And they started getting property in the late 1800s. And it talks about the 16 flood of 1893 --17 18 MR. O'LAUGHLIN: Okay. MR. NOMELLINI: -- wiping them out. 19 20 And that a year or two later, I think it was 1896, they were able to produce the crops and pay off 21 the debt. 22 23 So there's evidence of the farming there, and 24 it would be logical to me that they would be out there growing crops. And if they're growing crops, they're 25

1 going to be irrigating to some extent. So I would say
2 1870s.

3 Also that deed from Glasgow or Fisher to Glasgow where they contracted back to Fisher to 4 cultivate and get ready for seeding 25,000 of 30,000 5 6 acres. To me, that's clear indication of what they 7 should have been doing, and they were doing it. 8 MR. O'LAUGHLIN: Okay. A guestion in regards 9 to that. You said to some extent. Do you know the scope of the extent? And I'm going to be specific here. 10 11 Do you know the season to which the water was put to 12 beneficial use, the time of year? 13 MR. NOMELLINI: Depends on the crop and when the crop needs it. 14 15 MR. O'LAUGHLIN: Okay. And do you know what crops were being grown specifically on the Pak property 16 and the time of year? 17 18 MR. NOMELLINI: Not specifically. But the

19 Woods brothers, if you look at their documents, they20 were in the grain and alfalfa for sure.

21 So alfalfa, you'd want to water during the late 22 spring and summer months. It depends on the, you know, 23 the hydrology of the year. If you get late rains, you 24 wouldn't add more water.

25 In grain crops, depending on when they planted

them, would probably be irrigated maybe May, even in
 April in a dryer year.

3 So you can tell from the crops when they were doing it, but I'm pretty confident they were doing it. 4 MR. O'LAUGHLIN: Okay. Would it be safe to say 5 6 that if grain crops were being grown on the property that the irrigation for the grain crop would probably 7 end prior to June 1st of any given year? 8 9 MR. NOMELLINI: Yeah. I think if it was a wheat crop -- I mean, my familiarity with crop 10 irrigation is like what we're doing today. And 11 generally the water is pulled off of the wheat. 12 You 13 might go into early June on some. Depends on when you planted it. 14 15 MR. O'LAUGHLIN: Okay. In this matter, is Pak/Young asserting a pre-1914 right? 16 17 MR. NOMELLINI: I think so. 18 MR. O'LAUGHLIN: Okay. So in regards -- if Pak 19 and Young's property is planted in a wheat crop and they 20 only plant wheat -- this is a hypothetical -- and the 21 irrigation never goes past June of any year, would their 22 season of use then run from March through June 1? 23 MR. NOMELLINI: You know, I heard your -- what went on yesterday -- was it yesterday or day before? 24

25 MR. O'LAUGHLIN: Monday.

1 MR. NOMELLINI: Yeah, Monday. 2 MR. O'LAUGHLIN: Sure. 3 CO-HEARING OFFICER BAGGETT: Excuse me. None of us, at least --4 MR. NOMELLINI: It's not relevant. 5 6 CO-HEARING OFFICER BAGGETT: The Hearing Officers didn't. 7 8 MR. NOMELLINI: I'll strike that. You can strike it, and I'll withdraw it, how about that? 9 10 I don't think the season of use is part of that 11 pre-1914 appropriative limitation. MR. O'LAUGHLIN: Okay. So in your mind a 12 pre-1914 right is not limited by the season of use, 13 14 correct? MR. NOMELLINI: Correct. 15 (Interruption for technical difficulties) 16 MR. O'LAUGHLIN: Mr. Nomellini, would your 17 answer in regards to Pak -- is Mr. Mussi asserting a 18 pre-1914 right in this matter? 19 20 MR. NOMELLINI: I believe so. 21 MR. O'LAUGHLIN: Okay. And would your 22 statement be the same for Mr. Mussi, that there is no 23 season of use applicable to a pre-1914 right? 24 MR. NOMELLINI: Generally. 25 MR. O'LAUGHLIN: Okay. Well, I know generally.

1 But specifically as to --

2 MR. NOMELLINI: Yeah, I haven't exhaustively 3 researched it, but it seems to me that that would be an 4 artificial limitation.

5 We'd look at the use that's consistent with 6 what -- you know, if you change crops, if you had a 7 season of use and it was -- you started in 1910 with 8 wheat and you went to another crop in 1912 or whatever, 9 I think there's more flexibility in that.

10 MR. O'LAUGHLIN: Okay. Can you tell me a date? 11 Did either -- did Mr. -- sorry. Did Pak's predecessor 12 file pursuant to the Civil Code for a pre-1914 right? 13 MR. NOMELLINI: I don't know of any filings by

14 these parties.

MR. O'LAUGHLIN: Okay. No Civil Code filing. Now, do you know the date upon which they first started to appropriate water?

18 MR. NOMELLINI: Like I said, I believe it's in 19 the 1870s, somebody started applying water to those 20 properties.

21 MR. O'LAUGHLIN: Do you have a specific date?22 MR. NOMELLINI: No.

23 MR. O'LAUGHLIN: Okay. Do you know when -- or 24 let's work with Pak first.

25 What is the rate of diversion upon which Pak

1 has fully put water to beneficial use?

2 MR. NOMELLINI: The exact amount, I don't know. But I'd look at what the cropping would have been and 3 4 the acreage and use just like those evapotranspiration 5 charts that I have. I think they're representative of 6 what would have occurred back at that time as well. 7 MR. O'LAUGHLIN: Okay. Is that answer the same for Mr. Mussi as well? 8 9 MR. NOMELLINI: Yes. MR. O'LAUGHLIN: Do you know if there is a 10 11 claim by either Pak or Mussi in regards to the 12 development of their pre-1914 right relating back to 1870, the relationship back doctrine? 13 14 MR. NOMELLINI: I don't --15 MR. O'LAUGHLIN: Let me --MR. NOMELLINI: I don't understand. 16 17 I mean -- you mean -- because there's no filing 18 that I know of. Is that what you're asking me? 19 MR. O'LAUGHLIN: No. I'm going to rephrase it. 20 It will probably be easier. 21 At what point in time did Mussi or Pak perfect 22 their pre-1914 appropriation? MR. NOMELLINI: I think it was in the 1870s. 23 24 And it wasn't them, of course, it was the predecessors. 25 MR. O'LAUGHLIN: Their predecessors, yes, I
1 understood that.

2 Now, where, and from your opinion, in 1870 was Pak -- where was Pak appropriating water from? 3 4 MR. NOMELLINI: I think Duck Slough. MR. O'LAUGHLIN: And Mr. Mussi? 5 6 MR. NOMELLINI: Same thing. And of course Duck 7 Slough is connected to the San Joaquin River and what we 8 call Middle River. 9 MR. O'LAUGHLIN: Okay. MR. NOMELLINI: Sometimes they refer to it as 10 11 Middle San Joaquin. 12 MR. O'LAUGHLIN: Do you know how many other people were on Duck Slough taking water in 1870? 13 14 MR. NOMELLINI: I think everybody along there. 15 That was one of those natural levee areas. MR. O'LAUGHLIN: Okay. What was -- do you know 16 17 what the, in your understanding, what the total amount 18 of the diversions would equal during a summer prior to 19 1915 on Duck Slough? 20 MR. NOMELLINI: The way I would approach it would be to take, you know, a reasonable 21 22 evapotranspiration rate and the acreage and apply it. 23 MR. O'LAUGHLIN: Okay. Then is your statement 24 then that you're assuming that prior to 1915 that there was always water in Duck Slough subject to 25

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1 appropriation?
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2 MR. NOMELLINI: Prior to 1915? 3 MR. O'LAUGHLIN: Yes. MR. NOMELLINI: I don't know what the quality 4 5 was. 6 MR. O'LAUGHLIN: But just in Duck Slough, was 7 there always water subject to --8 MR. NOMELLINI: If it was really salty, I don't think somebody would apply it to their land. 9 MR. O'LAUGHLIN: Okay. But do you know the 10 11 quantity of water that would be available in Duck Slough 12 in any given month during the year? 13 MR. NOMELLINI: Exactly, no. 14 MR. O'LAUGHLIN: Okay. Do you know -- I think 15 I asked this, and just beg my indulgence. I'm almost done, but I just want to make sure so I don't have to go 16 17 back and read my notes. 18 Do you know what the carrying capacity of Duck 19 Slough was prior to 1914 adjacent to the Pak or Mussi 20 properties? 21 MR. NOMELLINI: No, but the people at the time 22 would have -- they were building things like that. They 23 were building facilities. They had machinery. And I 24 would think that they would have built facilities capable of delivering the water they wanted to utilize. 25

MR. O'LAUGHLIN: Do you know -- have you seen a 1 2 document that depicts a building of a canal along the east side of High Ridge Levee that's proposed in 1927 3 4 for a canal? Have you seen that document? 5 MR. NOMELLINI: Maybe I'm missing something. 1925? A document? 6 MR. O'LAUGHLIN: Yes. 7 MR. NOMELLINI: Was that that document you 8 9 handed us the other day? MR. O'LAUGHLIN: Yeah. 10 11 MR. NOMELLINI: Well, yeah, I've seen a document then. 12 MR. O'LAUGHLIN: Okay. If Pak and Mussi -- I'm 13 14 almost done. 15 In your testimony you state that the inference that a parcel in the Delta no longer abutting a major 16 channel is severed from the water in the channel is an 17 artificial construct with no real benefit. 18 19 Is that your opinion? 20 MR. NOMELLINI: That's my opinion, and that's what I see as a percipient witness of the way water 21 moves in the Delta. 22 MR. O'LAUGHLIN: Is that a legal statement or a 23 24 political statement or a policy statement? 25 MR. NOMELLINI: It's a factual statement. It's

1 a legal statement. And I don't know; if you want to put 2 a political term on it, I guess you could, too. 3 MR. O'LAUGHLIN: Almost done. 4 Previously I showed you the Board minutes from 5 the Woods Irrigation Company and rule number 13. Ιt 6 says: 7 At the point of diversion therefrom by the company, has a -- Middle River has a 8 9 salinity content which the board of directors of this company deem 10 11 detrimental to its lands or crop, said 12 company may, by resolution of the board of directors, cease all irrigation. 13 14 Are you aware of Woods ever having that rule? 15 MR. NOMELLINI: I've seen the rule before. MR. O'LAUGHLIN: Okay. So here's my question. 16 17 Would this also be applicable to salinity reaching Duck 18 Slough in Middle River as well if it would be applicable 19 to the Woods Irrigation Company facility; do you think? 20 MR. NOMELLINI: I don't think Duck Slough was 21 part of the Woods Irrigation system. 22 MR. O'LAUGHLIN: Yeah, but what I'm asking is 23 that my understanding is Woods Irrigation Company's 24 facilities is just slightly downstream from Duck Slough. Correct -- or upstream. Sorry, it's upstream. I always 25

1 get confused. Slightly upstream from Duck Slough, 2 correct?

3 MR. NOMELLINI: Yeah.

MR. O'LAUGHLIN: So if water was flowing in from the San Joaquin River, Woods Irrigation Company's water quality would generally be better than the water quality at Duck Slough which is more toward the west and more seaward, correct?

9 MR. NOMELLINI: I don't know that's true. 10 There's drainage facilities, you know, in the 11 area and stuff like that. But I mean generally from 12 seawater intrusion, I think the farther inland you'd be, 13 you'd get the salt later.

14 MR. O'LAUGHLIN: Right. Okay.

15 So if Woods has this rule, would you have any 16 idea of when salinity would be at -- would salinity 17 generally show up -- seawater intrusion show up at Duck 18 Slough before it got to Woods Irrigation Company?

MR. NOMELLINI: Yeah, I would expect ocean salinity, pre Project, would arrive and move from the ccean inland.

22 Salinity now, of course, with alterations in 23 the system, it could be much saltier coming down the San 24 Joaquin.

25 But this is a rule, not necessarily the event.

MR. O'LAUGHLIN: And I'm assuming that the --1 2 one last question -- that the photos that you show in your photo 1 and photo 3 you deemed to be representative 3 of water facilities that would have been on Roberts 4 Island; is that correct? 5 6 MR. NOMELLINI: These are a couple of them. 7 There's a variety. You know, I have some pictures that I put in on the Woods thing that show the more specific 8 9 ones. There's differences. Some of them are brick. 10 11 These happen to be -- the one in particular here was made out of wood. 12 13 So there's different materials, little different designs. They're not all uniform. 14 15 MR. O'LAUGHLIN: Okay. Now, do you have an understanding of which one of these was installed at 16 17 Burns Cutoff on Duck Slough? 18 MR. NOMELLINI: Which I depicted? Those photos 19 don't show what's at Burns Cutoff. The one that's 20 immediately to the north that I know was removed was a brick facility, so it would not have matched these 21 22 two --23 MR. O'LAUGHLIN: Okay. 24 MR. NOMELLINI: -- that I showed you. 25 MR. O'LAUGHLIN: Now, where Duck Slough entered

into Middle River, which one of these photos would be 1 2 representative of what was installed at Middle River 3 where Duck Slough entered? 4 MR. NOMELLINI: There's some other ones along there that are made out of brick. 5 6 MR. O'LAUGHLIN: Okay. But at Duck Slough. 7 I'm talking about Duck Slough. 8 MR. NOMELLINI: I'm talking about Duck Slough 9 at Middle River. 10 MR. O'LAUGHLIN: Okay. 11 MR. NOMELLINI: There are others in that 12 immediate vicinity made out of brick, so I would think 13 the chances are the one at Duck Slough was brick. 14 MR. O'LAUGHLIN: Thank you for your time. I 15 have no further questions. 16 CO-HEARING OFFICER BAGGETT: Thank you. Two 17 other parties. Have they got some cross? --000--18 CROSS-EXAMINATION BY MS. KINCAID 19 20 FOR SAN LUIS & DELTA-MENDOTA WATER AUTHORITY 21 -----22 EXAMINATION 23 MS. KINCAID: Valerie Kincaid for San Luis & 24 Delta-Mendota Water Authority. 25 Good morning, Mr. Nomellini. I just have a few

1 follow-up questions.

2 In your written testimony which has been 3 marked, I believe, Exhibit 9, on page 4 you discuss your experience in Venice Island; is that correct? 4 MR. NOMELLINI: That's correct. 5 6 MS. KINCAID: And do you have any direct 7 experience with irrigation systems on Roberts Island? 8 MR. NOMELLINI: Yes. 9 MS. KINCAID: Yes? MR. NOMELLINI: Yes. 10 11 MS. KINCAID: But that's not the experience 12 depicted on page 4; is that correct? MR. NOMELLINI: Well, I tried to describe in 13 14 my -- let's see. 15 MS. KINCAID: It starts with the top of page 4, 16 in the late '50s. 17 MR. NOMELLINI: I'm looking at it now. 18 Well, the top of the page, no. The description 19 of the dam at Black Slough is on Roberts Island. And 20 then of course the photo right there at the -- where 21 Whiskey Slough crosses the railroad track. 22 MS. KINCAID: Right. MR. NOMELLINI: I consider that Roberts Island. 23 24 MS. KINCAID: You consider that Roberts Island? MR. NOMELLINI: Yes. It's right -- you know, 25

it's the line between the levee on Jones Tract and the
 Lower Roberts Island.

3 MS. KINCAID: Okay. And your testimony explains what your experience is in the 1950s? 4 MR. NOMELLINI: Correct. 5 MS. KINCAID: And --6 MR. NOMELLINI: 1950s and '60s. 7 8 MS. KINCAID: And I don't mean any disrespect with this next question, I just want to make sure the 9 record is clear that you don't have any hands-on 10 experience with irrigation systems before 1914? 11 Is that 12 correct? MR. NOMELLINI: That's true. 13 14 MS. KINCAID: Okay. Turning to the photos, you 15 just explained that photo 1 you think is in Roberts 16 Island, Lower Roberts Island, right between Middle Island -- Union Island and Roberts; is that correct? 17 18 MR. NOMELLINI: Yeah, the location is right 19 where Honker Lake, Lower Roberts, Reclamation District 20 684 and Lower Jones Tract levees come together. 21 MS. KINCAID: Okay. And are any of the photos 22 you entered in Exhibit 9 actual photos of irrigation 23 facilities that would deliver water to the Mussi or Pak 24 parcels? 25 MR. NOMELLINI: Photo 9? Oh, Exhibit 9?

MS. KINCAID: Yes. You entered --1 2 MR. NOMELLINI: Oh, my testimony. No, they are 3 not. MS. KINCAID: No. Okay. And what are the 4 dates, generally, of these photos? 5 6 MR. NOMELLINI: They're within the last three 7 months, two months. 8 MS. KINCAID: So it's fair to say none of these photos depict pre-1914 conditions? 9 MR. NOMELLINI: That's right. Well, if you 10

11 look at this floodgate underneath this railroad, this 12 railroad went in there in 1898. So photo number 1 and 13 photo number 2, they could be what was there in 1898. 14 MS. KINCAID: They could be, but the pictures

MS. KINCAID: They could be, but the pictures are not --

16MR. NOMELLINI: No, I didn't take --17MS. KINCAID: -- taken in 1914.

18 THE WITNESS: -- the picture. I took the 19 picture a few months ago.

20 MS. KINCAID: Great. Okay. And we discussed 21 earlier the highlighted portion of your testimony which 22 is 9B. You read portions which were highlighted from 23 the packet you provided today?

24 MR. NOMELLINI: Yes.

25 MS. KINCAID: And can you identify the

1 highlighted portions, can you identify which island 2 those portions are talking about?

3 MR. NOMELLINI: Well, I think the -- 9B? MS. KINCAID: Yes. 4 MR. NOMELLINI: Was a very generic one. 5 But 6 the focus of reclamation and farming at the earlier 7 stages, as I understand it, started on the Roberts Island area, at least in this area, and so it would have 8 9 been some of the first to be recognized. So I think it 10 is very relevant to what we're concerned about today. 11 MS. KINCAID: Okay. All right. To make sure 12 the record's clear, I'm talking about it looks like page 13 43 of what is labeled History of San Joaquin County California. It's Mussi 9B. 14 15 And if you -- Mr. Lindsay, I don't know if you can pan out at all to get the total picture. 16 17 STAFF MEMBER LINDSAY: Sure. MS. KINCAID: Thank you. 18 19 It looks like the highlighted portion is from a 20 section above Union island, and you'll seen in the 21 middle section there it says Roberts Island. 22 MR. NOMELLINI: I think if we go back -- we'd 23 have to look at the prior page. I think this section 24 was the generic section. Yes.

25 MS. KINCAID: You think that's the general

1 section, not specific to Roberts Island?

2 MR. NOMELLINI: Yeah, if we looked at page 42 3 we'd know exactly. I think -- that's my recollection. 4 It was the generic one.

5 MS. KINCAID: Okay. And just one last 6 follow-up question for the record.

7 The picture of the Samson-type dredge, that 8 picture, do you know the water body that is actually 9 depicted in that photo?

MR. NOMELLINI: No, but I think it's correctly reported on either the diagram or the article that that is not in Duck Slough. That picture is not in Duck Slough, but the article talks about that same machine working in Duck Slough.

MS. KINCAID: Sure. But just to be clear, this for picture is not --

MR. NOMELLINI: That picture is not of DuckSlough, as far as I know.

19 MS. KINCAID: Thanks, Mr. Nomellini.

20 CO-HEARING OFFICER BAGGETT: San Joaquin?

21 ---000--

22 CROSS-EXAMINATION BY MS. GILLICK

23 FOR COUNTY OF SAN JOAQUIN and SAN JOAQUIN COUNTY FLOOD

24 CONTROL & WATER CONSERVATION DISTRICT

25 ---00---

1 MS. GILLICK: Hi. DeeAnne Gillick on behalf of 2 County of San Joaquin and San Joaquin County Flood 3 Control & Water Conservation District. 4 Does a riparian water right have to be used in 5 order for it to be valid in an existing water right? 6 MR. NOMELLINI: No. 7 MS. GILLICK: Is it possible that -- when you have a riparian water right, that's because the property 8 9 is along a watercourse; is that correct? MR. NOMELLINI: That's where it's derived, 10 11 yeah. 12 MS. GILLICK: That's one of the principles, 13 that this property needs to be along a watercourse? 14 MR. NOMELLINI: I'd say a water body. 15 MS. GILLICK: Is it also necessary that the point of actual diversion is at the point that the 16 property touches or is along the water body? 17 18 MR. NOMELLINI: That's not my understanding. 19 MS. GILLICK: Is it possible for the point of 20 diversion of a riparian water right to be at a different 21 location than where the property touches the water? 22 MR. NOMELLINI: Yeah. I think the rule is as 23 long as there's no significant injury to other users 24 that the point of diversion could be relocated. MS. GILLICK: Okay. Or it could either be 25

1 relocated, or initially it could be at a point not on 2 the actual property touching the watercourse that the 3 person owns?

4 MR. NOMELLINI: I think we start with the 5 larger parcels and what was contacted by the larger 6 parcel as setting the bounds. But I'm not absolutely 7 sure you couldn't move it.

8 MS. GILLICK: Okay. Is it your understanding 9 that the parcels at issue, both the Mussi parcel as well 10 as the Pak/Young parcel, were originally a part of a 11 larger parcel that was riparian?

MR. NOMELLINI: Clearly, yes.

MS. GILLICK: Okay. That was clearly riparian? MR. NOMELLINI: They're part of that Whitney patent from the State of California that included a much larger area that touched the San Joaquin, Middle River, and I'll say Whiskey Slough, Trapper Slough.

18 MS. GILLICK: So could the diversion points 19 that served this property, was it necessary for those 20 diversion points to be from Duck Slough?

21 MR. NOMELLINI: No.

12

MS. GILLICK: Was it possible then for those actual diversion points that served this property to be located on other channels within the Delta?

25 MR. NOMELLINI: I believe so, yeah, within the

1 scope of that Whitney patent.

2	MS. GILLICK: In your opinion, does it make a
3	difference in the Delta if a diversion point is on, for
4	instance, Middle River or Duck Slough?
5	MR. NOMELLINI: The Delta, you know, acts
6	primarily as a pool in this portion. I see no
7	difference with regard to these particular parcels.
8	MS. GILLICK: And you mentioned the Delta is a
9	pool. Can you explain to me what you mean by the Delta
10	is a pool, why it makes any difference?
11	MR. NOMELLINI: Well, the Delta is defined in
12	the Water Code as a pretty broad area. It goes all the
13	way from Vernalis in the south to West Sacramento in the
14	north.
15	So I kind of think the Delta pool area is
16	not is probably easily described by that 5 foot above
17	sea level that the water supervisors and others were
18	using in their reports. It would be a little different.
19	Let's say you went to Vernalis on the San
20	Joaquin. I think the considerations might be different.
21	MS. GILLICK: For a riparian water right, does
22	the season of use of any prior uses matter?
23	MR. NOMELLINI: No.
24	MS. GILLICK: Is it possible for a riparian
25	water right to change the crops that are planted on that

1 property or to change the season of use of diversions on 2 that property?

3 MR. NOMELLINI: Yes, sure. 4 MS. GILLICK: In your experience or your knowledge, is it necessary to have a pre-1914 water 5 6 right for there to be a filing pursuant to the Civil Code? 7 8 MR. NOMELLINI: My understanding is you file -pre-1914, you filed under the Civil Code in order to 9 10 establish a date of preference, and it was a notice of 11 intent. So if you did use the water subsequent to filing that notice, it would relate back to that date of 12 13 the filing. 14 MS. GILLICK: So is it the actual use of the 15 water that --16 MR. NOMELLINI: That creates the right. 17 MS. GILLICK: -- that would create the right, 18 not necessarily the Civil Code filing? 19 MR. NOMELLINI: Correct. That's my 20 understanding. 21 MS. GILLICK: That's all I have. Thank you. 22 CO-HEARING OFFICER BAGGETT: Thank you. Any 23 questions from -- I think that's all the parties. And I 24 know that Charlie has one. Want to start with Ernie? 25

1 WATER RESOURCE CONTROL ENGINEER MONA:

2 Mr. Nomellini, this is Ernie Mona. I believe 3 you testified that the pumping from the Middle River 4 into Duck Slough didn't begin until 1925; is that 5 correct?

6 MR. NOMELLINI: Oh, no. No. I think pumping 7 probably started in the 1870s. In 1925 there was an 8 installation of that Woods Robinson Vasquez system, 9 which is a different system than the Duck Slough system that I was talking about, about when I thought 10 11 irrigation started and when I thought they used pumps. 12 WATER RESOURCE CONTROL ENGINEER MONA: Is that 13 the current system that is presently delivering water to the Pak/Mussi properties? 14 15 MR. NOMELLINI: No. The present system --16 excuse me, go ahead. Did I misunderstand? 17 MR. HERRICK: He asked you if Woods Robinson --

18 MR. NOMELLINI: Oh, yeah.

MR. HERRICK: -- was one presently delivering.
MR. NOMELLINI: Excuse me for not hearing
correctly.

The Woods Robinson Vasquez is the system that I think went in in 1925 that presently serves those parcels, yes.

25 WATER RESOURCE CONTROL ENGINEER MONA: Is there

1 currently a natural channel that delivers that water 2 from which water can be delivered to the Pak/Young/Mussi 3 properties?

4 MR. NOMELLINI: There is a concrete-lined ditch 5 out there today that delivers the water from the pumping 6 plant at Middle River to those two parcels.

7 WATER RESOURCE CONTROL ENGINEER MONA: And 8 that's -- the concrete-lined ditch is the ditch that was 9 developed by the Woods Robinson Vasquez as part of the 10 Woods Robinson Vasquez water system, correct?

MR. NOMELLINI: That's my understanding, yeah.
 WATER RESOURCE CONTROL ENGINEER MONA: Okay.
 Thank you.

14 CO-HEARING OFFICER HOPPIN: Mr. Nomellini, I15 have a brief question for you.

We talked a lot in your -- and Mr. O'Laughlin, I will say, talked a great deal about severance on a riparian parcel based on the filing or reclamation of an old slough or natural corridor.

Both today and during our previous hearing on this issue, you talked a bit about your concept of the Delta pool, if you will.

23 MR. NOMELLINI: Correct.

CO-HEARING OFFICER HOPPIN: Under manyconditions, riparian parcels have been severed through

the sale of lands. And I'm not talking about the Delta;
I'm talking about anywhere. If somebody severs a parcel
and creates a new parcel number, the portion that isn't
contiguous with the watercourse, generally speaking, is
severed from a riparian right.

But am I hearing you say that under your Delta pool theory that no parcel would be severed under that circumstance because the riparian contact is an underlying --

10 MR. NOMELLINI: Yes, that's correct.

I think it can't be physically severed because of the interconnection of the water that's beneath the land and the surface waters, and it would continue to use the water anyway, and that the construct of severance is based on intent.

You know, the intent is that when somebody sells the land that's not near the river, the argument is that therefore there's some benefit to that party. You know, you can get rid of a competitor on the river system. So it makes some sense in upper river areas. In the Delta, to me, it does not.

It's just like there's no avulsive act that's separating -- you know, if you had an avulsive act, a stream moved, you can go back as a riparian and hook it up and in a reasonable period of time you maintain your

1 riparian right.

2	The construct of the levees and the reclamation
3	is pursuant to the state and federal plan. It was a
4	condition that came along with the patent. So that, to
5	me, cannot serve as a basis for the severance.
6	Once the property is leveed off or whatever, it
7	remains the contact, I would say there should be
8	there might be a possibility of somebody explicitly
9	saying, hey, I'm withholding it.
10	But I think that would run against the policy
11	that should go with swamp and overflow lands.
12	CO-HEARING OFFICER HOPPIN: Thank you,
13	Mr. Nomellini.
14	CO-HEARING OFFICER BAGGETT: Since I guess
15	we've allowed this to turn into, let me see, policy,
16	legal closing arguments, and engineering and ag
17	arguments all in one witness, I will try to still
18	maintain this is not legal arguments.
19	I think in the Phelps decision we pretty
20	clearly talking about swamp and overflow. That's
21	already been litigated. I think some of those issues
22	have been resolved.
23	It seems to me, though, that I guess as an
24	engineer the question would be or hydrologist if
25	you take a stream or a slough or river and channelize

1 it, does it still maintain a stream, the characters of a
2 stream or slough or river?

3 As an engineering definition, I guess, or
4 hydrologist, do you have an opinion?

5 MR. NOMELLINI: Well, I know your focus is on 6 stream flow. And I think --

7 CO-HEARING OFFICER BAGGETT: I said slough,8 also.

9 MR. NOMELLINI: Or slough. But I think the 10 focus should be also on riparian to lake bodies, because 11 the Delta acts as a pool.

12 CO-HEARING OFFICER BAGGETT: This is a very 13 much narrower question I guess I have. I'm just trying 14 to understand what your opinion is as an engineer, not a 15 lawyer. Let's not argue about Delta pools.

But as an engineer and a hydrologist and a farmer, if you take a stream or a slough or river and channelize it, does it still maintain that character, in your opinion?

20 MR. NOMELLINI: Yeah, I think just by the mere 21 fact of leveeing a channel, I think it's clear that that 22 does not constitute a severance. The court would look 23 at the intent, you know.

24 CO-HEARING OFFICER BAGGETT: I'm trying to
 25 avoid intent. I'm just trying --

MR. NOMELLINI: Just physically?
 CO-HEARING OFFICER BAGGETT: -- to look at
 engineering. Physically.

4 MR. NOMELLINI: Physically. All right. We 5 narrow the channel. We're not going to cease the 6 riparian nature. The question then becomes the 7 connection.

8 CO-HEARING OFFICER BAGGETT: So if it becomes a 9 canal, it still maintains that original character.

10 MR. NOMELLINI: Yeah.

11 CO-HEARING OFFICER BAGGETT: Okay.

MR. NOMELLINI: To me, whether it's a natural channel or an artificial channel, if that's what you're getting at, it doesn't make any difference as long as that connectivity is established even under the traditional, you know, upstream action.

And here you can't -- you can't stop it. You can't stop it unless you encapsulate it. So as a practical matter there is no disconnect.

I don't care what we do legally or whatever, the decisions and all that. What's going to happen if these guys don't farm, they're going to evaporate more water off that land than farming, period.

24 CO-HEARING OFFICER BAGGETT: I appreciate that.25 MR. NOMELLINI: And that's the problem I'm

1 dealing with. I think the law ought to recognize -- I 2 recognize you didn't see it that way before. And that's okay; we're hopeful that you'll look at it again. 3 4 CO-HEARING OFFICER BAGGETT: That's why I'm asking you a very specific question, trying to get it --5 6 I'm trying to understand a technical difference here, not a legal difference. 7 8 Okay. Any other questions? Do you have any 9 recross? MR. HERRICK: Yes, I do. 10 11 ------12 REDIRECT EXAMINATION BY MR. HERRICK FOR RUDY MUSSI, TONI MUSSI AND LORY C. MUSSI INVESTMENT 13 14 LP; YONG PAK AND SUN YOUNG -----15 MR. HERRICK: Could we pull up -- how about 16 Exhibit, I think it's O or P, on Mr. Neudeck's 17 18 testimony, please. 19 Looking for 1941 map of Woods. I'm sorry, S. 20 MR. O'LAUGHLIN: That says 1913. 21 MR. HERRICK: Yeah, I was looking for the 1941 22 Woods map. 23 MS. GILLICK: Yeah, its P. P is Woods map. 24 MR. HERRICK: Thank you. 25 MR. ROSE: I believe 3R is what you're looking

1 for. They're labeled differently for Mussi and Pak and 2 Young, which is probably some of the confusion, But I 3 believe 3R is the 1941 map.

MR. HERRICK: Thank you. If you could rotate that to the right. Only one way to go. Did I say that wrong? Thank you.

7 Mr. Nomellini, I want to make sure the record 8 is clear based on some of the questions about flow of 9 water.

Here we have the 1941 map of Woods Irrigation District which is Exhibit R to Mr. Neudeck's testimony. And there is a waterway on the upper right-hand corner which includes Burns Cutoff off of the San Joaquin River. Do you see that?

15 MR. NOMELLINI: Yes.

16 MR. HERRICK: And then at the other corner we 17 can see -- excuse me. At the other corner, we see a 18 heavy dotted line that partially goes along a meandering 19 line. Do you see that?

20 MR. NOMELLINI: Yes.

21 MR. HERRICK: Do you recognize that portion in 22 the far left corner is touching the Mussi property at 23 issue here?

24 MR. NOMELLINI: Yeah, I recognize.

25 MR. HERRICK: And the curvy line, I'll say --

1 excuse my language -- but the sinuous line running from 2 that property in a northeasterly direction up to Burns 3 Cutoff is the line that's being described as either Duck 4 Slough or High Ridge Levee; is that correct?

5 MR. NOMELLINI: That and the remainder that 6 goes down to the south.

7 MR. HERRICK: And if we could pan down a little 8 bit so we can see the remainder in the south. There you 9 go.

10 That line, according to this map anyway, the 11 line goes down and touches Middle River; is that 12 correct?

13 MR. NOMELLINI: Correct.

MR. HERRICK: Now, when you have a floodgate on Middle River feeding a channel along that line, that floodgate can be operated in two different manners; is that correct?

18 MR. NOMELLINI: In other words, it could allow 19 tide water to come in, or you might operate it to not 20 allow tide waters to go in; is that correct?

21 MR. NOMELLINI: Sure.

22 MR. HERRICK: And when the tide goes out, you 23 could operate it to open so that water flows out of the 24 Duck Slough into Middle River rather than the other way, 25 correct?

1 MR. NOMELLINI: It could. 2 MR. HERRICK: And you could do that same thing 3 at the other end at Burns Cutoff; is that correct? MR. NOMELLINI: That's correct. 4 MR. HERRICK: So depending upon whether you 5 6 were trying to irrigate or drain and where you're located along Duck Slough would determine how the flap 7 8 gates would be operated at either of those two ends, 9 correct? 10 MR. NOMELLINI: If there were flap gates, yes, 11 or screw gates. 12 MR. HERRICK: Or screw gates, some control mechanism. 13 14 MR. NOMELLINI: Correct. 15 MR. HERRICK: So let's just assume for a second 16 that the flap gate on Duck Slough at Middle River is 17 closed. It's not operating, it's just closed, it's 18 shut. You could operate the flap gate on Burns Cutoff 19 such to allow tide waters to run in Duck Slough; is that 20 correct? 21 MR. NOMELLINI: Yeah. 22 MR. HERRICK: And the --23 MR. NOMELLINI: You could put tide water in 24 part of Duck Slough depending on the depth. 25 MR. HERRICK: Right. The distance which that

1 tide water would flow depends on the depth of the 2 channel, correct?

3 MR. NOMELLINI: Correct.
4 MR. HERRICK: And so farmers along that area,
5 in your opinion, did those very same operations to
6 either maximize irrigation water when they needed it or
7 to drain when they needed it; is that correct?

8 MR. NOMELLINI: Yeah, I think they fed that 9 Duck Slough area from both ends.

10 MR. HERRICK: And you recall Mr. Lajoie's 11 testimony, don't you, given back on May 5th?

MR. NOMELLINI: I'm not sure I recall all, but I remember him testifying.

MR. HERRICK: You remember his presentation that based on the soils that Duck Slough is a major distributary off of Middle River?

17 MR. NOMELLINI: Yeah. Even without his 18 testimony, it's just absolutely clear to me it was a 19 major channel that carried the what I call heavier soil 20 into the area from south to north.

21 MR. HERRICK: Then you recall from Mr. Lajoie's 22 testimony that there were also indications of old 23 waterways that did not have those same soils indicating 24 flow from the Burns Cutoff direction, do you not? 25 MR. NOMELLINI: Yeah. I think those too still

1 had some heavier soil in them, but yes.

2 MR. HERRICK: And I believe he labeled them 3 either distributary or tributary channels off those main 4 channels.

5 MR. NOMELLINI: The smaller channels, some of 6 them drained interior areas but connected as 7 tributaries, and lots of them were branches all over, 8 which we would expect in a swamp.

9 MR. HERRICK: So the historic geologic 10 information about water flowing in from both ends of 11 this corresponds to your description of man manipulating 12 water in the system for agriculture; is that correct? 13 MR. NOMELLINI: Yeah. You could move water 14 from both sides.

15 MR. HERRICK: And --

16 MR. NOMELLINI: And from the west. And east as 17 well.

18 MR. HERRICK: And the fall of land from Middle 19 River where Duck Slough intersects it to Burns Cutoff 20 where Duck Slough intersects it is only a few feet;

21 isn't that correct?

22 MR. NOMELLINI: No, I think it's more than 23 that.

24 MR. HERRICK: Well, how many feet would you say 25 it is, do you believe it is?

MR. NOMELLINI: I think it's in the range of 5
 feet.

3 MR. HERRICK: Okay. But that difference of elevation doesn't affect your testimony about getting 4 water back and forth in two directions, does it? 5 MR. NOMELLINI: No, it doesn't. 6 7 But if I was going to irrigate the upper end, I would irrigate it from Middle River rather than Burns 8 9 Cutoff. Now, irrigating the Pak and Young and the Mussi property, I think it's a toss-up. 10 11 Today they're irrigating it from Middle River. 12 So maybe that's the preferred way. But you certainly 13 could get the water the other way without too much 14 trouble. 15 MR. HERRICK: And remember, I'm on your side. MR. NOMELLINI: I don't know about that. 16 17 MR. HERRICK: The 1911 quad map that you 18 referred to in questions from Mr. O'Laughlin, as you stated, gives some elevation lines; is that correct? 19 20 MR. NOMELLINI: Yes. 21 MR. HERRICK: And those elevation lines around 22 the Mussi and Pak and Young property indicate that those 23 properties are somewhere around the sea level line per 24 that map? 25 MR. NOMELLINI: I think that's correct, but

1 maybe we ought to let the map speak for itself, whatever 2 the --3 MR. HERRICK: Okay. It was one of those we 4 just looked at, if you don't mind. Just go back to the list. 5 MS. GILLICK: I believe it's 3P. 6 7 MR. HERRICK: Right there. I don't know if we can see that, but if you can zoom in. There you go. 8 9 Mr. Nomellini, we're looking at the 1911, published 1913, USGS Quad map for Holt. 10 11 MR. NOMELLINI: That's the one I was talking 12 about as also showing indications of the slough, the 13 Duck Slough coming all the way down to Middle River. 14 MR. HERRICK: But as we see from this, there's 15 a -- on this map anyway, there is a faint line sort of paralleling the old Duck Slough line near the Mussi 16 property. Do you see that? 17 18 MR. NOMELLINI: Yeah, I see it. 19 MR. HERRICK: And that's the sea level line, 20 isn't it? 21 MR. NOMELLINI: I think you're right. I think 22 it says sea level right up there at the Mussi property 23 where it goes off in a northeast --24 CO-HEARING OFFICER BAGGETT: Where are you? 25 I'm confused. Where is the Mussi property?

MR. HERRICK: You see the words "the pocket" on 1 2 map? The right-hand side of the pocket at the north part of the pocket is the Mussi property, that little 3 hook. 4 5 MR. NOMELLINI: If you go up where Kingston 6 School is, where that straight line --7 MR. HERRICK: Right there. 8 MR. NOMELLINI: -- comes -- right there. ТΟ 9 the right --MR. HERRICK: Is Mussi. 10 11 MR. NOMELLINI: -- is Mussi. And right up 12 above that, north of that, is Pak and Young. 13 MR. HERRICK: Pak and Young. Little farther right. Now up. There's --14 15 MR. NOMELLINI: Right there. 16 MR. HERRICK: -- Pak and Young. 17 CO-HEARING OFFICER BAGGETT: Okay. 18 MR. HERRICK: So anyway, Mr. Nomellini, the 19 fact that we have sea level on or equal to the land 20 level there, doesn't that affect the amount of water 21 that might be in Duck Slough? 22 MR. NOMELLINI: Yeah. You could put water from Burns Cutoff to sea level without too much trouble 23 24 because the tide range gets up -- you know, the regular mean tide is 3 1/2 to 4 feet above sea level. So you 25

can move it over there without too much trouble and put
 it on top of the sea level ground.

3 MR. HERRICK: Now, Mr. Nomellini, let me just 4 walk you through this once again, which has already been covered, but I want to make sure it's absolutely clear 5 6 because there was some confusion, I believe, on cross. 7 It's your testimony that absent farming on the property natural vegetation will reestablish itself and 8 9 consume an amount of water, correct? 10 MR. NOMELLINI: Absolutely. 11 MR. HERRICK: Now, is that water it's consuming 12 rainfall water? 13 MR. NOMELLINI: In part. 14 MR. HERRICK: It could be rainfall, could it 15 not? 16 MR. NOMELLINI: Yes. 17 MR. HERRICK: But it also consumes water that 18 seeps in from the ground, is in the ground, seeping? MR. NOMELLINI: Correct. 19 20 MR. HERRICK: And is that seepage water 21 connected to the surrounding streams? 22 MR. NOMELLINI: Yes. 23 MR. HERRICK: So if somebody deeds a piece of 24 property in the middle of Roberts Island or in this area of Roberts Island such that it doesn't have a surface 25

1 connection to a river, would that land under natural 2 conditions still use water from the river?

3 MR. NOMELLINI: Yeah.

And I testified that it's going to use more water than is used by the crops in the farming based on those two exhibits that we have that were prepared by -one by DWR and the other by the Bureau of Reclamation. I think that's crystal clear.

9 MR. HERRICK: So your point in making that is 10 not just that shutting down ag on the lands would be a 11 bad policy decision because it would result in less 12 water in the Delta, but also that the use of that water 13 under natural conditions absolutely shows that the land 14 cannot be severed from the Delta pool and waterways.

MR. NOMELLINI: That's what I'm saying. You
can't physically separate it.

MR. HERRICK: There is no way to do that unlessyou made some impermeable barrier somewhere.

MR. NOMELLINI: There is not anything that I know of.

21 MR. HERRICK: And you have a similar line of 22 reasoning with regards to levees about the surface water 23 touching or abutting the property; is that correct? 24 MR. NOMELLINI: Yeah. I testified and I think

25 it's clear that putting those levees and drainage

1 systems in there do not constitute a severance.

2 MR. HERRICK: One of the questions you were asked dealt with when Duck Slough was, quote, severed, 3 closed quote, from Burns Cutoff. You don't believe it 4 5 was severed from Burns Cutoff, do you? 6 MR. NOMELLINI: I don't remember the question, 7 but no, I don't think it was severed from Burns Cutoff. 8 MR. HERRICK: So if somebody had a --9 MR. NOMELLINI: I thought the question was whether or not it was leveed off. 10 MR. HERRICK: And even if were leveed off, does 11 12 that interrupt or sever the connection between the 13 slough and the waterway? 14 MR. NOMELLINI: Well, there are floodgates 15 there, so it does not in even the traditional sense. But as a practical matter, it won't separate the water 16 that's being consumed on the land from the river. 17 18 MR. HERRICK: And the channel itself of Duck 19 Slough, even if it's leveed off from the main channel, 20 would not that channel of Duck Slough still have water 21 that seeps in from the river? 22 MR. NOMELLINI: Absolutely. 23 MR. HERRICK: So again, even if you physically 24 create a barrier to block a surface connection between Duck Slough and Burns Cutoff, they're still connected? 25

1 MR. NOMELLINI: In my opinion they are, yeah. 2 MR. HERRICK: Mr. Nomellini, you were asked 3 questions about whether or not people used Duck Slough 4 for irrigation. You reviewed a large number of 5 historical documents in preparation for your testimony; 6 is that correct?

7 MR. NOMELLINI: I looked at as many as I could 8 that we put on the 40 disks that we accumulated, but I 9 haven't looked at every one of them.

10 MR. HERRICK: In your opinion, is it reasonable 11 to conclude that the purchase and sale of these lands, 12 including the lands at issue here on these islands, was 13 for farming practices?

MR. NOMELLINI: Yeah. They were -- they wanted to make it productive. Now some of these lands were farmed. There was some industrial use in those early days. There's a brick kiln on the property that I have that's 1893. So they were using it to take and reclaim swamp and make it productive.

But basically, the bulk of this was to be cultivated, and they talked about cultivation in connection with that Arkansas Act.

23 MR. HERRICK: And given the activities back 24 then pursuant to your research, is it reasonable to 25 conclude that they were farming these lands, or is it

1 reasonable to conclude they were doing something else
2 with them when they were buying and selling?

3 MR. NOMELLINI: There's no question in my mind 4 that they were farming the lands, and I cited those 5 documents that I think give further support, the farming 6 agreement between Glasgow and Fisher.

And then if you look at the history of the Woods brothers, I mean, it's clear they farmed the land. They've got the farm equipment. If you look at that decree of distribution in the Woods case, they've got all the farm equipment and they were farming.

12 MR. HERRICK: Is there some other use you know 13 of for that land in the late 1800s and early 1900s?

MR. NOMELLINI: No. I mean, small parts of it. You know, they had like a cannery and different things like that, beet dumps. There was a little town at Holt, you know, where they had a saloon.

18 MR. HERRICK: But those were all associated 19 with the agricultural use of the land.

20 MR. NOMELLINI: Well, I think so. The Chinese 21 were persecuted in Stockton, and a lot of them moved out 22 there so they could, you know, avoid this

23 discrimination. So whether they all worked on the farm24 or not, I don't know.

25 MR. HERRICK: Mr. Nomellini, you were asked to
read Rule 13 from the minutes of the Woods Irrigation 1 2 District, do you recall that? 3 MR. NOMELLINI: I read it. 4 MR. HERRICK: And it talked about a provision 5 that would allow the company to, under certain conditions, not provide water; is that correct? 6 7 MR. NOMELLINI: Correct. 8 MR. HERRICK: Those conditions were if the quality of water was such that it was adverse to 9 agricultural use; is that correct? 10 11 MR. NOMELLINI: If the board of directors 12 determined that it was unsatisfactory quality, they 13 could stop diverting. That's what it said.

14 MR. HERRICK: And you are familiar with the 15 history of the Central Valley and State Water Projects, 16 are you not?

17 MR. NOMELLINI: A little bit, yes.

18 MR. HERRICK: And prior to the operation of 19 those projects, was there ever a time when the San 20 Joaquin River water quality was bad?

21 MR. NOMELLINI: Yes.

22 MR. HERRICK: No, the San Joaquin River water 23 coming down the river.

24 MR. O'LAUGHLIN: No?

25 MS. GILLICK: Asked and answered.

MR. O'LAUGHLIN: Object. Tim O'Laughlin. 1 2 Wait, wait. 3 MR. NOMELLINI: Yeah, all right. MR. O'LAUGHLIN: Wait, wait. 4 (Laughter) 5 6 MR. NOMELLINI: What was the question now? Ι can see I'm not hearing you right. 7 8 MR. HERRICK: I can ask for clarification. 9 MR. O'LAUGHLIN: Well, no, I know. I'll object that it's been asked and answered. 10 11 MR. NOMELLINI: Do I know if the San --12 MR. HERRICK: That's it. We're done because he 13 said the wrong thing. Let's go home. 14 MR. NOMELLINI: Do I know if the San Joaquin 15 River has bad water quality? Yes. 16 Historically, it had good water quality. MR. HERRICK: Thank you. 17 18 MR. NOMELLINI: Pre Project. 19 MR. HERRICK: Pre Project. 20 Now, historically in the Delta, were there times when drought conditions resulted in sea water 21 intrusion which worsened water quality. 22 23 MR. NOMELLINI: Yes. 24 MR. HERRICK: And was that a common occurrence or a rare occurrence? 2.5

MR. NOMELLINI: It wasn't common, in my opinion. The worst one was in 1931 in September. I mean -- but there were natural occurrences.

And the Central Valley Project, which is a federal project, was to provide salinity control to avoid those problems thereafter. And we're still looking forward to their compliance.

8 MR. HERRICK: And those water quality problems 9 under normal conditions arose later in the summer or in 10 fall; is that correct?

MR. NOMELLINI: They were in like August and September.

MR. HERRICK: Okay. And so if Woods Irrigation District minutes from 1940 talk about the possibility of not providing water due to bad water quality, that would be a contingency to address a bad drought situation; is that correct?

18 MR. NOMELLINI: That would be my expectation,19 yes.

20 MR. HERRICK: It wouldn't have anything to do 21 whether or not there's water available in the channel, 22 would it?

23 MR. NOMELLINI: No, it talks about salinity. I24 mean, it talks about quality.

25 MR. HERRICK: And in 1940 or before that, is

1 there any issue that you know of that would have 2 impacted water availability in the channels of the 3 Delta?

MR. NOMELLINI: No, because it's connected to the ocean, and basically the ocean tides would dominant the elevation. And then the rest of the year when we've got flows coming from up river, at that time we had more than we have today.

9 MR. HERRICK: Right. But generally speaking, 10 except for whatever the sea level rise may have been 11 over the last hundred years, doesn't the -- aren't the 12 water levels in the Delta determined by tides rather 13 than flow?

14 MR. NOMELLINI: Yes.

MR. HERRICK: Okay. Let me briefly follow up on that.

17 So under natural conditions, adverse water 18 quality under drought conditions would come from west to 19 east, not from east to west; is that correct?

20 MR. NOMELLINI: Yes, I think that's basically 21 true.

22 MR. HERRICK: And you were asked by Ms. Kincaid 23 about some photographs. And actually you believe --24 don't you believe that photograph 1 indicates the 25 remnants of a floodgate structure that dates before

1 1900?

2 MR. NOMELLINI: Yeah, I think probably when the railroad went in in the 1890s. I think it was like 3 1898. 4 MR. HERRICK: You're familiar with the 5 railroad. How difficult would it be to ask them to put 6 a floodgate in after they built it? 7 8 MR. NOMELLINI: They're like phantoms. You 9 can't even find them to talk to them. MR. HERRICK: That was sort of nonproductive. 10 I'm sorry. So anyway --11 12 MR. NOMELLINI: It's hard. It's hard to communicate with the railroad. 13 14 MR. HERRICK: Although the floodgates that 15 would feed Duck Slough that we've talked about have apparently been removed, you've actually identified 16 pre-1900 floodgates in the area; is that correct? 17 18 MR. NOMELLINI: Yes. MR. HERRICK: And you've identified other 19 20 floodgates along Middle River near the Duck Slough 21 intersection? 22 MR. NOMELLINI: That's correct. And I think we 23 ought to all go out there and look at them. 24 MR. HERRICK: And in your opinion, those floodgates predate 1914, don't they? 25

1 MR. NOMELLINI: In my opinion, because of the 2 construction with the brick, that they predate 1914, 3 yes. MR. HERRICK: That's all I have. 4 CO-HEARING OFFICER BAGGETT: Prosecution? 5 6 MR. ROSE: We do have some recross. ------7 8 CROSS-EXAMINATION BY MR. ROSE 9 FOR PROSECUTION TEAM -----10 11 MR. ROSE: Could you please put up -- I think it's 3R, the 1941 map. 12 13 I guess I should say good morning, Mr. Nomellini, since I wasn't up here before. 14 15 You discussed this map briefly and used it in describing flow of water from Burns Cutoff or from 16 17 Middle River along what we've been referring to as Duck 18 Slough; is that correct? 19 MR. NOMELLINI: I think it was this map and 20 other maps, yeah. 21 MR. ROSE: Right. In the redirect 22 specifically --23 MR. NOMELLINI: Okay. 24 MR. ROSE: -- you used this map to -- as a --25 MR. NOMELLINI: We'll use this map.

1 MR. ROSE: Okay. Can you show me on the legend what is -- how a canal is delineated? Or irrigation 2 3 ditch or drainage ditch, I believe, would be the terms that they used there. 4 MR. NOMELLINI: Well, I can't read it, but I 5 6 think the map has a distinction. 7 MR. ROSE: If it's helpful, I do have some copies that are cleaner, if you want to look at that. 8 9 MR. NOMELLINI: That would be better. T see the word drainage ditch, and I see irrigation ditch on 10 11 the legend, so there is a distinction. 12 CO-HEARING OFFICER HOPPIN: Is that more distinct than what we've got in front of us? 13 14 MR. ROSE: It's up to you. 15 Obviously, this is still fairly small, but I wanted first for you to confirm that you think this is 16 17 the same map, just so we're not dealing with anything 18 different here. 19 MR. NOMELLINI: It looks like the same map to 20 me, but I'm not sure I can help you on the --21 MR. ROSE: Okay. You can't --22 MR. NOMELLINI: -- legend application from what 23 we've got in front of us. 24 MR. ROSE: Okay, but it looks like the same map? We can go more into detail if we need to. I did 25

1 zoom in and print out a copy of the legend, so I'll give
2 you that if that would help you as well.

3 MR. NOMELLINI: I can read the legend. Are we 4 going to talk about drainage ditches and irrigation 5 ditches? Okay.

6 CO-HEARING OFFICER BAGGETT: The solid black 7 line is an irrigation ditch. It's pretty 8 straightforward.

9 MR. ROSE: Again, just to be clear, does this 10 look to you to have been just a blown-up version of what 11 I previously gave you and representing the same map? 12 MR. NOMELLINI: Yeah. It looks the same to me. 13 MR. ROSE: I just want to make sure that you don't think that I'm giving you something different than 14 15 what's here, than what you previously had as Exhibit 3R and I believe 3S for the other proceeding. 16 17 MR. NOMELLINI: All right. 18 MR. ROSE: So looking at this legend, obviously 19 this is black and white. It doesn't show green or red. 20 But how is an irrigation ditch delineated? 21 MR. NOMELLINI: The irrigation ditch looks like 22 a solid line.

23 MR. ROSE: And drainage ditch?
24 MR. NOMELLINI: And the drainage ditch looks
25 like it's got a white break periodically in it.

1 MR. ROSE: Okay. Now, tracing along the course 2 of what we've been discussing as Duck Slough starting at Middle River, do you see anything that is shown as 3 either a -- labeled as either an irrigation ditch or a 4 5 drainage ditch there? 6 MR. NOMELLINI: Yeah. 7 MR. ROSE: Tracing from Middle River northward? MR. NOMELLINI: Correct. I see an irrigation 8 ditch extending from the word "pumps" on Middle River on 9 10 up to the line that runs east and west by the words 11 "Kingston School." 12 MR. ROSE: Do you see anything labeled irrigation ditch heading northward from there to Burns 13 14 Cutoff? 15 MR. NOMELLINI: I do not. MR. ROSE: Do you see anything labeled drainage 16 ditch in that same location? 17 18 MR. NOMELLINI: In the same location? I see 19 off to the right. Is that what you're talking about? 20 MR. ROSE: I'm talking about what we've been 21 calling a continuation of Duck Slough from the Kingston 22 Road that you just described northward along High Ridge 23 Levee as is labeled on this map up towards Burns Cutoff. 24 Do you see anything labeled an irrigation ditch or a drainage ditch? 25

1 MR. NOMELLINI: No, I do not. 2 MR. ROSE: Okay. Can you look to the left or east of what we have just been discussing as what we had 3 previously been calling Duck Slough or along High Ridge 4 5 Levee. 6 MR. NOMELLINI: To the left is west. 7 MR. ROSE: I'm sorry. To the left or west. Do you see something there labeled slough? 8 9 MR. NOMELLINI: Yes. MR. ROSE: Is that slough delineated in the 10 11 same way as anything that you see running along the Duck Slough line that we were just discussing? 12 MR. NOMELLINI: 13 No. 14 MR. ROSE: Looking at the legend, along the 15 High Ridge Levee that we previously have been discussing in the area of Duck Slough, what do you see as labeled 16 17 on the legend along that course? 18 If you'd like, I can ask you more specifically. 19 MR. NOMELLINI: Yeah, I really didn't 20 understand. I see the words High Ridge up here near the 21 top. Is that what you want? 22 MR. ROSE: Let me ask more specifically. You 23 previously said that you saw an irrigation ditch labeled 24 from Middle River to the Kingston area along the High Ridge Levee. Heading northward from there, can you 25

1 describe what the legend says runs northward along the 2 High Ridge Levee from that Kingston School area to the 3 Burns Cutoff?

MR. NOMELLINI: It looks like levee indication.
MR. ROSE: It looks like levee indication?
MR. NOMELLINI: Yes.

7 MR. ROSE: And there is also a solid line 8 there, is that correct, in addition to the hatched lines 9 that indicate levee? There's hatched lines as well a 10 solid course?

MR. NOMELLINI: A see a solid line with it.
Where does that say -- I don't see where that says
levee. The hatched line says levee.

MR. ROSE: The hatched line says levee.
MR. NOMELLINI: I think so. I guess that other
one -- oh, that's public road.

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17 MR. ROSE: That's public road.

And if it helps to figure that out, you can follow that to the south and east and see that it does attach to a specific road.

21 So are those the only two items as delineated 22 on the legend that you see heading along the High Ridge 23 Levee from Kingston Road the Burns Cutoff?

24 MR. NOMELLINI: All right. The blow-up stops.
25 MR. ROSE: On either. I mean, that's simply to

blow up the legend. But you can look at the map. 1 2 And do you see anything other than what's labeled as levee or road heading from the Kingston 3 4 School area that you had described, that east-westerly 5 road north to Burns Cutoff? Do you see anything labeled 6 differently? 7 MR. HERRICK: I don't mean to interrupt, but would you like to just ask him if he sees anything that 8

9 says slough in 1941? Is that what we're -- I don't 10 understand what we're trying to do.

MR. ROSE: I'm asking if there is only, as labeled on this map, levees and roads in that area.

13 If that question is easier, you can answer that 14 question: Do you only see levees and roads labeled in 15 that area we've just been talking about?

MR. NOMELLINI: Yeah. You know, other than the intersecting lines.

18 MR. ROSE: Right.

MR. NOMELLINI: It looks like it doesn't show any legend slough, along that levee line.

21 MR. ROSE: It doesn't show any slough, it 22 doesn't show any irrigation ditch --

23 MR. NOMELLINI: That's --

24 MR. ROSE: -- or any drainage ditch?

25 MR. NOMELLINI: That's correct.

1	MR. ROSE: So when
2	MR. NOMELLINI: Except where they get
3	intersected by these other lines.
4	MR. ROSE: That's fine.
5	So when you were discussing what water could
6	have come from Middle River or Burns Cutoff, were you
7	just using this 1941 map as a guide, or were you
8	specifying that in 1941, when this map was drawn, water
9	could have come up from Burns Cutoff or from Middle
10	River and headed along the entire course in either
11	direction?
12	MR. NOMELLINI: I didn't pick the map.
13	Somebody else did and asked me some general questions of
14	the fall of which way it could go.
15	MR. ROSE: So you weren't saying that at the
16	time this map was created, let's call it 1941, that
17	water could have come up naturally from either Burns
18	Cutoff or Middle River and gone along the entire course
19	between the two?
20	MR. NOMELLINI: Oh, I think it probably did.
21	MR. ROSE: You can't say that based on this
22	map?
23	MR. NOMELLINI: No, I can't say it based on
24	this map. But there is a 1937 aerial that shows the
25	canal still in place along this very area where this map

1 doesn't show.

2 MR. ROSE: I just wanted to be clear that you weren't using this map. 3 4 MR. NOMELLINI: I wasn't using this map, no. I 5 think this is a Woods Irrigation System map. 6 MR. ROSE: I have no further questions. (Interruption for technical difficulties) 7 CO-HEARING OFFICER BAGGETT: Let's go back on 8 9 the record. Mr. O'Laughlin. -----10 11 RECROSS-EXAMINATION BY MR. O'LAUGHLIN 12 FOR MODESTO IRRIGATION DISTRICT -----13 14 MR. O'LAUGHLIN: Thank you. 15 Mr. Nomellini, I'm going to ask you a series of questions regarding Duck Slough, and these questions are 16 twofold. 17 18 One is whether or not you would need to know a 19 number in order to determine a quantity of water moving 20 in Duck Slough; and then two, whether or not you know 21 the quantity of water. 22 Do you know the elevation of the invert of the 23 channel bottom at Duck Slough at Burns Cutoff? Yes or 24 no. 25 MR. NOMELLINI: At the time it was in place? I

1 don't know.

2 MR. O'LAUGHLIN: And do you know what the 3 elevation --

4 MR. NOMELLINI: Well, let me tell you. It was 5 below the water level because it had water in it and it 6 was a slough, so it would be below the high tide, for 7 sure.

8 MR. O'LAUGHLIN: I'm going to ask specific 9 questions. I want to know if you know specific 10 responses. Specific elevations.

11 So do you know a specific elevation of the 12 invert of the channel bottom of Duck Slough where it 13 entered Burns Cutoff?

MR. NOMELLINI: At least less than 3.5 feet above mean sea level.

MR. O'LAUGHLIN: Okay. And what was the elevation of the invert of the channel bottom of Duck Slough where it entered Middle River?

MR. NOMELLINI: I'd say again at least lessthan 3.5 feet above mean sea level.

21 MR. O'LAUGHLIN: Okay. But do you have a 22 specific number for either Burns or Middle River where 23 the channel bottoms entered the respective watercourses? 24 MR. NOMELLINI: No, I do not.

25 MR. O'LAUGHLIN: Thank you. Do you know

1 what -- at any particular time of year, would water surface elevations in Middle River be a determining 2 factor as to the amount of water that could be moved 3 4 into Duck Slough? Mr. Nomellini, is the water surface --5 6 MR. NOMELLINI: Well, the water -- the flow 7 will increase as the water surface rises and decrease as 8 it goes down. 9 MR. O'LAUGHLIN: Okay. MR. NOMELLINI: But it's connected to the 10 11 ocean. 12 MR. O'LAUGHLIN: We'll get to that in a minute. So over time, the elevation of the water 13 surface elevation in Middle River changes due to the 14 15 tides; is that correct? 16 MR. NOMELLINI: Yeah. Before the pumping. There's some pumping influence in that area from the 17 18 Projects, but --19 MR. O'LAUGHLIN: No, before that. 20 MR. NOMELLINI: -- before that time it was 21 tide. And then river flow from upstream would cause it 22 to rise, which was typically in the --23 MR. O'LAUGHLIN: Wait. We can get through this 24 a lot quicker if you just answer my specific questions. 25 MR. NOMELLINI: All right.

1 MR. O'LAUGHLIN: We'll get through it a lot 2 quicker. Okay. 3 So tidal action is a determining factor in how 4 much water would enter Middle River through Duck Slough, correct? 5 6 MR. NOMELLINI: It was one of the factors. 7 MR. O'LAUGHLIN: One of the factors, okay. And tidal action changes how many times a day? 8 9 MR. NOMELLINI: About twice a day. 10 MR. O'LAUGHLIN: Okay. And then that would 11 also change based on the seasonality of the year and the 12 station of the moon and the tides and everything else, 13 correct? 14 MR. NOMELLINI: Somewhat. 15 MR. O'LAUGHLIN: Goes up and down, correct? 16 MR. NOMELLINI: A little bit, yes. MR. O'LAUGHLIN: Okay. And then also would 17 your answer be the same to the tidal action at Burns 18 Cutoff where Duck Slough entered? 19 20 MR. NOMELLINI: Just pure tide, we're talking 21 about. Yes, it would be. 22 MR. O'LAUGHLIN: Now, if you have flow in the 23 San Joaquin River, the higher the flow, I would imagine 24 that the higher the stage elevation would be at Burns Cutoff; is that correct? 25

1 MR. NOMELLINI: Generally true, yes. 2 MR. O'LAUGHLIN: Okay. Then as it drops, it would lower the stage, and then less water would get 3 4 into Duck Slough, correct? 5 MR. NOMELLINI: Correct. 6 MR. O'LAUGHLIN: Okay. Do you know what the width of the channel was of Duck Slough where it entered 7 Burns Cutoff prior to 1915? 8 9 MR. NOMELLINI: The only thing, if they had to 10 float that dredge in there like the history says, it 11 says you needed 30 feet by 7 foot in order to float the 12 dredge. 13 MR. O'LAUGHLIN: Okay. And would that be your same answer for the width of the channel where Duck 14 15 Slough entered into Middle River? 16 MR. NOMELLINI: I don't think the dredge was there, but --17 18 MR. O'LAUGHLIN: Okay. MR. NOMELLINI: -- no, it wouldn't be exactly 19 20 the same because I don't -- I don't know that it was 21 there. 22 MR. O'LAUGHLIN: Okay. Do you know the width 23 of the channel, though, as Duck Slough entered into 24 Middle River? 25 MR. NOMELLINI: No.

MR. O'LAUGHLIN: Okay. Do you know the depth 1 of the channel when Duck Slough entered into Middle 2 3 River? MR. NOMELLINI: Only that it had to be below 4 that --5 6 MR. O'LAUGHLIN: No, depth. Depth, not 7 elevation. 8 MR. NOMELLINI: Oh, okay. No, I don't know the 9 depth. MR. O'LAUGHLIN: Okay. 10 11 MR. NOMELLINI: It had water in it, so --12 MR. O'LAUGHLIN: Okay. MR. NOMELLINI: -- it's got to be greater than 13 14 zero. 15 MR. O'LAUGHLIN: And would you know the depth of the channel of Duck Slough when it entered into Burns 16 17 Cutoff? 18 MR. NOMELLINI: No. MR. O'LAUGHLIN: Do you know what --19 20 MR. NOMELLINI: Except when that dredge was in 21 there. 22 MR. O'LAUGHLIN: Correct, okay. Do you know 23 what Manning's n is? 24 MR. NOMELLINI: What? 25 MR. O'LAUGHLIN: Manning's n?

MR. NOMELLINI: Oh, Manning's equation? 1 MR. O'LAUGHLIN: Yes. 2 3 MR. NOMELLINI: Yeah, I know a little bit about it. 4 5 MR. O'LAUGHLIN: Okay. Do you know what the 6 Manning's n of Duck Slough was at --7 MR. NOMELLINI: No. 8 MR. O'LAUGHLIN: Thank you. 9 Do you know the gradient in the bottom of the channel of Duck Slough from Middle River to Burns 10 11 Cutoff? 12 MR. NOMELLINI: No. 13 MR. O'LAUGHLIN: Would it be your opinion as an 14 engineer that the amount of water that can flow into 15 Duck Slough would also be determinant about the amount 16 of withdrawals coming out of Duck Slough? 17 MR. NOMELLINI: Yes. 18 MR. O'LAUGHLIN: Okay. And -- oh, wait, I 19 already have that answer. 20 Thank you. I have no further questions. 21 Appreciate it. 22 CO-HEARING OFFICER BAGGETT: Thank you. 23 111 /// 24 /// 25

1 --000--2 RECROSS-EXAMINATION BY MS. KINCAID FOR SAN LUIS & DELTA-MENDOTA WATER AUTHORITY 3 ------4 MS. KINCAID: Valerie Kincaid for San Luis & 5 6 Delta-Mendota Water Authority. 7 Mr. Nomellini, are you licensed to practice civil engineering in the state of California? 8 9 MR. NOMELLINI: No. 10 MS. KINCAID: No. Thank you. 11 CO-HEARING OFFICER BAGGETT: San Joaquin? Any 12 questions? 13 MS. GILLICK: No questions. 14 CO-HEARING OFFICER BAGGETT: Staff? Ernie? 15 Dana? Charlie? 16 CO-HEARING OFFICER HOPPIN: Mr. Nomellini, we have all acknowledged we've wandered around here a bit 17 18 today on different subjects all of which are 19 interesting. 20 I'm going to ask you a question on what I call Nomellini Theory II, and that is the idea that if you 21 22 don't farm this land because of consumptive use tules 23 are going to take over and they're going to use more 24 water than corn or sunflowers or --25 MR. NOMELLINI: Add willows in there.

CO-HEARING OFFICER HOPPIN: With the tules in 1 2 particular, that area is different than where I come 3 from. Would you say that a tule would scavenge water and have a depth of a root like alfalfa or sunflowers or 4 5 something like that? 6 MR. NOMELLINI: My experience with tules is 7 that they have relatively shallow roots rather than like 8 alfalfa which kind of can go around. 9 CO-HEARING OFFICER HOPPIN: That's what's confused me, because I thought maybe you had a different 10 11 kind of a reed or a tule or something there. 12 MR. NOMELLINI: No, I think the tule --CO-HEARING OFFICER HOPPIN: And I couldn't see 13 how it would really spark that phenomenon that I would 14 15 agree with if you didn't irrigate it. 16 MR. NOMELLINI: Yeah. 17 The willows, if you carry a water bottle in 18 your pocket, the willow root is liable to follow you 19 down the road. Those willows will chase water great 20 distances. 21 CO-HEARING OFFICER HOPPIN: Can I use that 22 quote some day --MR. NOMELLINI: Yes, you can. 23 24 CO-HEARING OFFICER HOPPIN: -- without plagiarizing you? 25

MR. NOMELLINI: And the tules are more shallow. They would be in the fringes. Where the water was too deep, of course, the tules wouldn't grow.

4 CO-HEARING OFFICER HOPPIN: Thank you for your 5 answer. And I can use that line?

6 MR. NOMELLINI: Yes, you can. It's not 7 copyrighted.

8 CO-HEARING OFFICER HOPPIN: I'm going to 9 scribble it in the back of my Winston Churchill quotes 10 book.

11 CO-HEARING OFFICER BAGGETT: With that, I guess 12 we'll wait for the exhibits until you're done with your 13 case-in-chief?

MR. HERRICK: My recollection was that after Lajoie we moved them into -- at Lajoie and Moore, we moved them into testimony. It doesn't matter to me if you want me to do it later or not.

18 CO-HEARING OFFICER BAGGETT: Mr. Nomellini is 19 going to be here. We might as well wait and finish, 20 because I think those parties are already gone and not 21 back.

22 MR. HERRICK: You don't want me to move them 23 into evidence yet?

24 CO-HEARING OFFICER BAGGETT: No, let's just 25 wait until we're done with the rest of your case and

1 move the rest of your -- might as well do them all at 2 once.

3 MR. HERRICK: Okay. 4 CO-HEARING OFFICER BAGGETT: Do you have more 5 witnesses? 6 MR. ROSE: The Prosecution Team, if now would 7 be the appropriate time, we'll move in those two exhibits that you just labeled that I passed out 8 9 earlier. You said you'd prefer that those be exhibits? 10 CO-HEARING OFFICER BAGGETT: I just said wait 11 until we're done with the case. 12 MR. ROSE: Sure. 13 CO-HEARING OFFICER BAGGETT: It's just easier. That's normally how we do it, but I think since 14 15 your witnesses weren't going to come back was why I recall we did it differently than normal. 16 17 MR. HERRICK: I don't recall that as the 18 reason, but that's fine. CO-HEARING OFFICER BAGGETT: That's normally 19 20 how, at least in the other hearings I do them all at the 21 close of the case-in-chief. 22 So you want to do -- you've got three more 23 witnesses, you said?

24 Mr. Herrick, how many more -- you have more 25 witnesses?

1 MR. HERRICK: Yes. We have a panel of three, 2 and then Mr. Neudeck. So my suggestion would be to take lunch, do the panel of three. They can be done fairly 3 quickly, I would say within an hour. And then I assume 4 Mr. Neudeck will take the rest of the day. 5 6 MR. O'LAUGHLIN: I would agree with that 7 assumption. 8 CO-HEARING OFFICER BAGGETT: Okay. 9 Mussi, we'll do after this, so he's not part of 10 Pak/Young's witness, right? 11 MR. O'LAUGHLIN: Yeah. My understanding was 12 Mr. Nomellini's testimony was for both. 13 CO-HEARING OFFICER BAGGETT: Right, For this one, but your next panel was --14 15 SENIOR STAFF COUNSEL HEINRICH: Mr. Herrick, did you indicate that you were going to have a Mr. Mussi 16 17 testify as part of the Pak/Young hearing? Because I 18 think he may have been listed as a witness for the Mussi 19 hearing but not for Pak/Young. Is that right? 20 MR. O'LAUGHLIN: Yeah, I would prefer to keep them separate, if we could. 21 22 MR. HERRICK: We can --23 MR. O'LAUGHLIN: I think for a hearing record, John, it's better to keep Mussi separate. I realize you 24 want them as a group. I think it will still go fast. I 25

just think the hearing record is cleaner if Mussi is not 2 of testifying as part of Pak/Young. I get Dante, but --MR. HERRICK: That's fine with me. It's just 5 that there's three of them. I thought it would go 6 easier --CO-HEARING OFFICER BAGGETT: No, we'll let them --MR. HERRICK: -- as Three individuals and not a panel. CO-HEARING OFFICER BAGGETT: Let's come back at 1:00. 12:45. (Lunch recess)

1	AFTERNOON SESSION
2	
3	CO-HEARING OFFICER BAGGETT: We are now back on
4	the record with Mr. Herrick's continued case.
5	
6	GINO CELLI
7	Called by YONG PAK AND SUN YOUNG
8	DIRECT EXAMINATION BY MR. HERRICK
9	
10	MR. HERRICK: Thank you, Mr. Chairman. John
11	Herrick again for, in this instance, Pak and Young.
12	And the witness we're going to call here is Mr.
13	Gino Celli as a representative of the landowners who
14	don't live in the area. So this is just for the Pak and
15	Young portion of these proceedings, not for the Mussi
16	part.
17	So, Mr. Celli, would you please give your name
18	and business address?
19	MR. CELLI: My name is Gino Celli. Business
20	address is 5303 Wood Duck Court, Stockton, California.
21	And I have I'm farming various properties on the
22	Delta and go ahead.
23	MR. HERRICK: And have you read Exhibit 5 which
24	is front of you right now?
25	MR. CELLI: Yes.

MR. HERRICK: And is Exhibit 5 a true and 1 2 correct copy of your testimony for this proceeding? MR. CELLI: Yes. 3 MR. HERRICK: Would you please just summarize 4 your testimony. 5 MR. CELLI: Like I said, I've farmed various 6 7 properties on the Delta. I've been farming the Pak 8 property for the last three years, and I'm here 9 representing them. MR. HERRICK: And does the property receive 10 11 water from the Woods Robinson Vasquez -- I'll say district, but I don't mean that as an official title. 12 MR. CELLI: Yes, it does. 13 14 MR. HERRICK: To your knowledge is it -- well, 15 that's fine. 16 That's all we have. We're just trying to have a representative of the landowner here to say where he 17 18 gets the water now. Thank you. CO-HEARING OFFICER BAGGETT: Thank you. Any 19 20 cross-examination by any party? 21 MR. ROSE: We don't have any, the Prosecution 22 Team. 23 CO-HEARING OFFICER BAGGETT: Mr. O'Laughlin? 24 MR. O'LAUGHLIN: Thank you. 25 111

1 --000--2 CROSS-EXAMINATION BY MR. O'LAUGHLIN FOR MODESTO TRREGATION DISTRICT 3 ------4 MR. O'LAUGHLIN: Good afternoon, Mr. Celli. My 5 6 name is Tim O'Laughlin. I represent the Modesto 7 Irrigation District. 8 Would you say it would be a fair statement that your knowledge of this property does not predate the 9 three years in which you've been working on it? 10 11 MR. CELLI: Excuse me? Can you say that again? 12 MR. O'LAUGHLIN: Yeah. Maybe I'll just go 13 backwards. When did you first arrive on the property? 14 MR. CELLI: Three years ago. 15 MR. O'LAUGHLIN: Okay. So is that -- can we say like 2007? 16 17 MR. CELLI: Yes. 18 MR. O'LAUGHLIN: Okay. And you have a lease to 19 farm this property? 20 MR. CELLI: Yes, I do. 21 MR. O'LAUGHLIN: In your lease does it tell you 22 where you are to get water from? 23 MR. CELLI: Yes. 24 MR. O'LAUGHLIN: And where does it say you are 25 to get water from?

1 MR. CELLI: Woods Robinson Vasquez. 2 MR. O'LAUGHLIN: Okay. Do you pay to get water 3 delivered from Woods Robinson Vasquez? 4 MR. CELLI: I do not myself. 5 MR. O'LAUGHLIN: Who does pay? 6 MR. CELLI: I know -- I'm not quite sure what 7 my landlords have, but I'm sure they have some kind of a 8 district deal to maintain water. 9 MR. O'LAUGHLIN: Okay. Do you derive water 10 from any other source other than the Woods Robinson 11 Vasquez system? 12 MR. CELLI: No. 13 MR. O'LAUGHLIN: Is the Woods Robinson Vasquez system a canal that is on the easterly side of High 14 15 Ridge Levee? 16 MR. CELLI: On the east side there's -- I'm fed 17 through a concrete ditch is what I'm fed through. 18 MR. O'LAUGHLIN: Okay. Is that concrete ditch 19 on the east side of the High Ridge Levee, or is it on 20 the west side of the High Ridge Levee? 21 MR. CELLI: There's one on both sides. 22 MR. O'LAUGHLIN: Do you have any knowledge 23 yourself of when the canal was built on the north side of the High Ridge Levee? 24 25 MR. CELLI: No, I do not.

1 MR. O'LAUGHLIN: Okay. Do you have any 2 knowledge of any farming practices that occurred on your 3 property prior to 2007? MR. CELLI: No, I do not. 4 MR. O'LAUGHLIN: All right. When you apply 5 6 water to your property, do you do surface irrigation or 7 subirrigation? 8 MR. CELLI: Surface. 9 MR. O'LAUGHLIN: Is your system set up on your 10 property to apply water through subirrigation? 11 MR. CELLT: No. 12 MR. O'LAUGHLIN: Do you know how long the current method of diverting water from the Woods 13 Robinson Vasquez delivery system has been in place on 14 15 your property? 16 MR. CELLI: No, I do not. 17 MR. O'LAUGHLIN: Do you know if your ability to 18 take Woods Robinson Vasquez water is limited by a diversion rate? 19 20 MR. CELLI: No. 21 MR. O'LAUGHLIN: Do you know if it's limited by 22 a diversion quantity? 23 MR. CELLI: No. MR. O'LAUGHLIN: Have you done any independent 24 investigation yourself as to the source of water rights 25

1 for this property?

2 MR. CELLI: No, I have not. Just what I've been -- what we've been going through lately is all I 3 know in these last documents and stuff that we 4 discussed. 5 6 MR. O'LAUGHLIN: Thank you, Mr. Celli. 7 I have no further questions. CO-HEARING OFFICER BAGGETT: Mr. Rubin? 8 9 ------CROSS-EXAMINATION BY MR. RUBIN 10 11 FOR SAN LUIS & DELTA-MENDOTA WATER AUTHORITY 12 --000--13 MR. RUBIN: Good afternoon, Mr. Celli. My name is John Rubin. I'm an attorney that represents San Luis 14 15 & Delta-Mendota Water Authority. I just have one or two 16 questions, I believe, for you. 17 In your written testimony, which I believe is 18 marked as Exhibit 5, you indicate that you understand 19 that the delivery of water to the property that you farm 20 is pursuant to an old water right; is that correct? 21 MR. CELLI: Yes. 22 MR. RUBIN: And is your understanding based 23 upon the lease that you executed with the owners of the 24 property? 25 MR. CELLI: Yes.

1 MR. RUBIN: And in the lease, does it indicate 2 that the property holds a particular type of water 3 right?

4 MR. CELLI: You know, I don't know. I don't 5 have the lease in front of me.

6 MR. RUBIN: Do you recall at all what the lease 7 said in terms of the water right?

8 MR. CELLI: That there -- what I -- the only 9 thing I really recall when I look at my lease is that 10 they're responsible for the water rights and water. As 11 me leasing the property, I usually don't have to worry 12 about that.

MR. RUBIN: Do you know if the lease indicates that the owner of the property holds the right or that the right is held by the Woods Robinson Vasquez district, as you've characterized it?

MR. CELLI: Like I said, I'd have to look over the lease again.

MR. RUBIN: And did you do that as you prepared your testimony?

21 MR. CELLI: I think we did look it over, if I 22 remember right.

23 MR. RUBIN: And did you prepare your testimony 24 or did somebody else prepare your testimony? 25 MR. CELLI: Me and Herrick did it together.

1 MR. RUBIN: Okay. 2 I have no further questions. 3 CO-HEARING OFFICER BAGGETT: All right. 4 Anybody else? San Joaquin? MS. GILLICK: No. 5 6 CO-HEARING OFFICER BAGGETT: Okay. That's it. 7 Do you have a question? 8 WATER RESOURCE CONTROL ENGINEER MONA: 9 Mr. Celli, what is your season of diversion per 10 year? 11 MR. CELLI: Excuse me? 12 WATER RESOURCE CONTROL ENGINEER MONA: When do you divert water for irrigation purposes during the 13 14 year? 15 MR. CELLI: Depends on the crop, what we're 16 using. 17 WATER RESOURCE CONTROL ENGINEER MONA: Do you 18 have a --19 MR. CELLI: History? A range? 20 WATER RESOURCE CONTROL ENGINEER MONA: A range? 21 MR. CELLI: Like right now, I probably won't 22 use any water until next month I'll start using the 23 water. It's all different. It's different. 24 It's all depending on what we're putting in. If we're using corn, putting corn, like the last two 25

1 years I've had, it's from April until September. 2 WATER RESOURCE CONTROL ENGINEER MONA: Is that the -- since you've been, I guess, farming the property, 3 that would be your typical irrigation season? 4 5 MR. CELLI: Yeah. For the last two years, 6 yeah. WATER RESOURCE CONTROL ENGINEER MONA: Are you 7 aware of what the typical irrigation season was before 8 you started farming the property? 9 MR. CELLI: No, I do not. 10 11 WATER RESOURCE CONTROL ENGINEER MONA: Okay. 12 Thank you. 13 CO-HEARING OFFICER BAGGETT: Thank you. Next? 14 MR. HERRICK: Thank you. John Herrick once 15 again, this time for Mussi, et al. I have here Mr. Rudy Mussi who is one of the principals, one of the owners of 16 the land. 17 --000--18 RUDY MUSSI 19 20 Called by RUDY MUSSI, TONI MUSSI AND LORY C. MUSSI 21 INVESTMENT LP 22 DIRECT EXAMINATION BY MR. HERRICK 23 --000--24 MR. HERRICK: And Mr. Mussi, would you please 25 give your name and business address.

MR. MUSSI: Yeah. Rudy Mussi, 3580 West Muller 1 2 Road, Stockton, California 95206. 3 MR. HERRICK: Mr. Mussi, you have a copy of Exhibit 8 in front of you; is that correct? 4 5 MR. MUSSI: Yes. MR. HERRICK: And is that a true and correct 6 copy of your testimony being presented here today? 7 8 MR. MUSSI: Yeah, from the looks of it. It's been a while since I've seen it, but yes, that's 9 10 correct.

MR. HERRICK: Would you please summarize your testimony.

MR. MUSSI: Just basically that my brother and myself own the property; that, you know, there's a map here that I found -- well, found, saw it hanging on the wall; and that various crops have been grown out there. MR. HERRICK: And your testimony also talks about giving testimony regarding irrigation on the

19 property before 1914; is that correct?

20 MR. MUSSI: Yes.

21 MR. HERRICK: Did you reach a conclusion that 22 that property was farmed and irrigated since at least 23 1900 and probably before that?

24 MR. MUSSI: Yes.

25 MR. HERRICK: And was the purpose of the map
1 you've attached to show crops being grown in approximately the year 1914? 2 3 MR. MUSSI: Yes. MR. HERRICK: And from those listed crops, you 4 as a farmer then concluded that surface irrigation must 5 6 have been occurring in that area? 7 MR. MUSSI: Yes. 8 MR. HERRICK: And I think that generally covers it. And again, you're here as an owner representing the 9 10 principals in this matter? 11 MR. MUSSI: Yes. 12 MR. HERRICK: Thank you. CO-HEARING OFFICER BAGGETT: Mr. O'Laughlin? 13 Does the prosecution have any questions first? 14 15 MR. ROSE: No, I don't believe we have any questions at this time. 16 --000--17 CROSS-EXAMINATION BY MR. O'LAUGHLIN 18 FOR MODESTO IRRIGATION DISTRICT 19 --000--20 21 MR. O'LAUGHLIN: Good afternoon, Mr. Mussi. My 22 name is Tim O'Laughlin, Modesto Irrigation District. 23 Are you claiming a riparian right to divert 24 water from the Middle River to farm your parcel? 25 MR. MUSSI: I'm claiming riparian, pre-14, and

1 whatever else I can claim.

2 MR. O'LAUGHLIN: Okay. Pueblo rights? 3 MR. MUSSI: Hey, if they count, they're on 4 there. 5 MR. O'LAUGHLIN: I wanted to make sure. Okay. 6 Does your -- let's go through your 7 appropriative -- do you have a permit or license from the State Water Resources Control Board to appropriate 8 water from Middle River for this parcel? 9 MR. MUSSI: No, I don't. 10 11 MR. O'LAUGHLIN: Have you or your successors in 12 interest ever applied for a permit from the State Water 13 Resources Control Board to appropriate water from this -- for this property? 14 15 MR. HERRICK: I believe -- you mean the 16 predecessors? 17 MR. O'LAUGHLIN: Predecessors. Thank you. 18 Predecessors. 19 MR. MUSSI: You know, I don't know if they did. 20 MR. O'LAUGHLIN: When you bought the property, 21 did the person who sold you the property tell you what 22 water rights you had? 23 MR. MUSSI: Yes. Sunny Walter, the prior 24 owner. 25 MR. O'LAUGHLIN: And what rights did they say

1 that you had?

2 MR. MUSSI: He told me I had riparian rights, I had appropriative rights. He said I had solid water 3 4 rights. 5 MR. O'LAUGHLIN: Okay. What documentation did 6 he provide you to support that assertion? 7 MR. MUSSI: Documentation of just his knowledge and the history that he had of that area. 8 9 MR. O'LAUGHLIN: Okay. In regards to your 10 pre-1914 rights, can you tell me what the intent was 11 prior to 1914 to divert water? 12 MR. MUSSI: Farm use. 13 MR. O'LAUGHLIN: Do you know how many acres the Mussi property was contiguous -- well, let me ask it a 14 15 different way. 16 Prior to 1914, was your property riparian to Middle River? 17 18 MR. MUSSI: Yes, it was. 19 MR. O'LAUGHLIN: Okay. 20 MR. MUSSI: My understanding of it. 21 MR. O'LAUGHLIN: Okay. Well, let me ask you a 22 question since I couldn't get this out of the State 23 Board staff the other day. How is it that you're 24 claiming a pre-1914 right to divert water to a riparian 25 parcel?

MR. MUSSI: I think you can have both rights. 1 2 MR. O'LAUGHLIN: Okay. Now, prior to 1914, what -- if you were diverting or your predecessors were 3 4 diverting water onto the property under a riparian right to farm, let's say, what would be the nature of that 5 6 appropriative right? 7 MR. MUSSI: Are we talking about riparian or appropriate now? 8 9 MR. O'LAUGHLIN: No, appropriative. What would be the nature of that -- you're 10 11 claiming it's riparian. You're claiming the land's 12 riparian. I'm assuming the water in the channel is natural water that you're taking, correct? 13 14 MR. MUSSI: Yes. 15 MR. O'LAUGHLIN: Okay. So, in that time period, what is the nature of the appropriative action 16 that is being done to put water on that property? 17 18 MR. MUSSI: I'm not a legal attorney, but my 19 understanding is if you put water to use before 1914 you 20 had a pre-1914 water right. 21 Now, the terminology of it, I'm not an 22 attorney. I'm just a farmer. 23 MR. O'LAUGHLIN: So in your -- I'm trying to 24 understand because you're the person testifying about what rights you have. 25

1 So in your mind, then, the appropriative nature 2 of the water right is that it was done prior to 1914; is 3 that correct?

MR. MUSSI: The water was used pre-1914.
MR. O'LAUGHLIN: Do you know if you had any
storage facilities on your property prior to 1914 to
store water in excess of 28 days?

8 MR. MUSSI: You know, if there was, besides 9 Duck Slough that's been mentioned, I consider that a 10 water storage facility. Now -- and it was abutted to my 11 property, so I assumed that was part of my water storage 12 system.

13 MR. O'LAUGHLIN: Do you know if in regards to 14 your property if there was any upstream development to 15 bring foreign water in to the watershed to deliver water 16 to your property?

MR. MUSSI: I'm not a water expert. I have no knowledge of that.

MR. O'LAUGHLIN: Do you know if there was any upstream dams built in regards to your property to deliver water to your property prior to 1914?

22 MR. MUSSI: You know, I'm not a water expert. 23 I don't have knowledge of that. The only thing I do 24 know is that there's water in the ocean, and my 25 property's basically at sea level, so I always have

1 water.

2 MR. O'LAUGHLIN: Okay. Did you -- are you 3 aware -- if your property is contiguous to the 4 watercourse, are you -- by definition would you agree 5 that it is non -- it is a non -- by definition it's 6 riparian and therefore it is not an appropriative piece 7 of property?

8 MR. MUSSI: The legal terminology, I'm not 9 aware of. I just know that the water was being used on 10 that property pre-1914, so whatever terminology or 11 legal, I'm sorry, I'm ignorant to the terminology. 12 MR. O'LAUGHLIN: Okay. Moving on. 13 What was -- prior to 1914, what was the rate of 14 diversion from Middle -- you were taking -- has your

15 property always taken water from Middle River?

MR. MUSSI: I'm assuming, you know. Okay. I wasn't there in 1914. From my knowledge, it took water from Burns Cutoff, and it took water from Middle River through Duck Slough.

20 MR. O'LAUGHLIN: Through Duck Slough. Okay. 21 So your property, if I understand correctly, is that 22 it's adjacent to Duck Slough.

23 So going with the theory that water moved back 24 and forth between Burns and Middle River, your statement 25 would be you could take water from either source,

1 correct?

2 MR. MUSSI: Right. My experience with 3 floodgates and stuff, you could access the water from 4 both sides, control level from both sides.

5 MR. O'LAUGHLIN: Okay. Do you know what the 6 rate of diversion prior to 1914 was to the property on 7 your land?

8 MR. MUSSI: I can't tell you the rate of 9 diversion. You know, my map here shows that there's an 10 alfalfa crop, so I'm assuming that there was enough 11 water to supply that parcel with water to grow an 12 alfalfa crop.

MR. O'LAUGHLIN: Do you know if the diversion that occurred prior to 1914 has continued in effect every year since then?

MR. MUSSI: From the discussion I had with Sunny Walter, I would say yes.

18 MR. O'LAUGHLIN: Do you know what the season of 19 diversion was for your right prior to 1914? When did 20 you use it? What time of year?

21 MR. MUSSI: From this map that I can see, 22 there's an alfalfa crop there. So alfalfa, if you 23 planted it, might have been planted in -- oh, back then 24 probably November, December.

25 Depending on the year, the rainfall, they might

have diverted the water starting in April and might have
 continued on until October, November even.

3 MR. O'LAUGHLIN: Okay. In regards to the 4 alfalfa that was grown out there prior to 1914, was that 5 used as pasture as opposed to cutting and baling it and 6 using it at a later date?

7 MR. MUSSI: You know, it could have been used 8 as both. I don't know if they would have baled it. 9 They might have just picked it up. But it could have 10 had multiple uses.

MR. O'LAUGHLIN: Do you know -- do you have any idea -- where do you currently divert water from? MR. MUSSI: Currently from Middle River.

14 MR. O'LAUGHLIN: Okay. And that's through the 15 canal?

MR. MUSSI: It's through that 1925 agreement that replaced -- eventually replaced Duck Slough.

18 MR. MUSSI: Which is the Woods Robinson
19 Vasquez?

20 MR. MUSSI: Yes.

21 MR. O'LAUGHLIN: Now, does your property 22 currently have the ability to irrigate subsurface? 23 MR. MUSSI: Again, the terminology. I'm at sea 24 level. Could I irrigate it subsurface? I could put 25 spud ditches in. Instead of running the water over the

1 top, I could run it through spud ditches.

2 MR. O'LAUGHLIN: Do you do that? 3 MR. MUSSI: No. It's just -- it's a better practice for me to run the water over the surface. 4 MR. O'LAUGHLIN: So you apply water on the 5 6 surface? 7 MR. MUSSI: Yes, I do. 8 MR. O'LAUGHLIN: Other than the limitation of what crop you're growing, do you have any limitation 9 10 that you know of in regards to what amount of water you 11 can apply to your property?

MR. MUSSI: My understanding is if I'm riparian the amount is unlimited unless I'm being wasteful or unreasonable.

MR. O'LAUGHLIN: Do you know the difference between a riparian right and an appropriative right in which the appropriative right is quantified whereas a riparian is unquantified?

MR. MUSSI: You know, I've got a general understanding. I'm not a legal person, so, you know, I don't -- don't hold me to any legal terminology.

22 MR. O'LAUGHLIN: Do you have any -- did your 23 predecessors file pursuant to the Civil Code that was in 24 place prior to 1914 to appropriate water from either 25 Middle River or Burns Cutoff?

1 MR. MUSSI: My understanding is that they 2 didn't need to, but I don't know if they did. 3 MR. O'LAUGHLIN: My understanding on this piece 4 of property is that there are other owners in addition 5 to you; is that correct? MR. MUSSI: Yes, there is. 6 7 MR. O'LAUGHLIN: So I'm assuming that you have gotten the agreement of the other owners to testify for 8 9 all the owners in this matter? MR. MUSSI: You know, I have got it for the 10 11 major owners. That would be my brother, my wife, his 12 wife. 13 MR. O'LAUGHLIN: I just want to raise a quick point here. I don't want to have at a later date some 14 15 due process concern that parties to the proceeding weren't afforded the opportunity to come here in regards 16 17 to Mr. Mussi's testimony or they would have put in 18 different evidence had they been here in that. 19 So in other words, when we're done with Mr. 20 Mussi, I want to make sure that Mussi is the testimony 21 for Mussis, and we're not going to get another owner of 22 the property coming back in and claiming some additional 23 request to reopen the hearing and supply additional 24 testimony. 25 MR. MUSSI: There is some minor ownership.

There is like a 10 percent ownership. There was like
 3 percent, 3 percent, 3 percent. And I haven't heard
 from them. I don't know.

I think -- how can I word this without denigrating some of the family members? But they didn't get along, and some of them might have been in jail, and I don't know where they're at.

8 CO-HEARING OFFICER BAGGETT: This is not an 9 issue. This has been noticed. People have been served. 10 Move on, Mr. O'Laughlin, please.

11 MR. O'LAUGHLIN: Have you in the years that 12 you've been -- how many years have you been farming this 13 property?

MR. MUSSI: Farming it since 1991. We've leased some of the facilities on that property since --I mean, 1990 is when we bought it. Leased some of the facilities, I think, like in 1991.

18 MR. O'LAUGHLIN: During the time period that 19 you've been on the property, have you changed the 20 cropping patterns?

21 MR. MUSSI: No, I haven't. It was diversified 22 farming before.

23 MR. O'LAUGHLIN: Thank you.

24 CO-HEARING OFFICER BAGGETT: Mr. Rubin? 25 ///

--000--1 2 CROSS-EXAMINATION BY MR. RUBIN 3 FOR SAN LUIS & DELTA-MENDOTA WATER AUTHORITY ------4 MR. RUBIN: Good afternoon, Mr. Mussi. 5 I'm John Rubin. I'm an attorney with the San Luis & 6 7 Delta-Mendota Water Authority. I have a few questions for you. 8 9 MR. MUSSI: Sure. MR. RUBIN: Mr. Mussi, did you prepare your 10 11 written testimony, I believe Exhibit 8? 12 MR. MUSSI: Yes, with help from counsel. MR. RUBIN: Mr. Mussi, am I correct that the 13 purpose of your written testimony is to express your 14 15 conclusion that the parcel at issue in this proceeding was irrigated prior to 1914? 16 17 MR. MUSSI: That it was continually irrigated, 18 yes. And it might have been from 1870 when the levees 19 were put up. 20 MR. RUBIN: But it's your belief that at least since 1914 the property has been irrigated? 21 22 MR. MUSSI: Yes. 23 MR. RUBIN: But you do not know whether the 24 parcel has a pre-1914 water right, do you? 25 MR. MUSSI: I'm claiming a pre-1914 water

1 right, and I'm also claiming a riparian right.

2 MR. RUBIN: Do you know what is required to 3 hold a pre-1914 water right?

MR. MUSSI: All I know is, you know, the property has a history of using water before 1914, and it was put to a beneficial use, and if we use Nomellini's theory of this being tules or whatever, it's been beneficial since it's been farmed.

9 MR. RUBIN: And therefore your assertion that 10 you have a pre-1914 water right is based upon advice you 11 received from counsel?

MR. MUSSI: No. Based on personal knowledge of my interest in the Delta, of living out there, my dad's history of being a farm worker out there and beginning basically our legacy out there.

MR. RUBIN: If I were to -- let's assume for purposes of my question that in order to hold a pre-1914 water right you must be able to identify the quantity of water that was diverted prior to 1914. Let's assume that's the case for purposes of my question.

21 Can you tell me today the quantity of water 22 that was diverted prior to 1914 on the parcel at issue 23 in this proceeding?

24 MR. MUSSI: This map here shows 1914, and it 25 shows an alfalfa crop. So based on an alfalfa crop

being out there, you know, I'm going to say that there was enough diversion to take care of that alfalfa crop, and being that it was a multimonth application, there was enough water to satisfy the needs of that property.

5 MR. RUBIN: And you believe there was a 6 multimonth application of water in 1914 based upon the 7 photograph that's attached to your written testimony, 8 Exhibit 8?

9 MR. HERRICK: Just for the record, it's a 10 photocopy of a map. It's not a photo. I just want to 11 make sure it's clear.

12 MR. RUBIN: Excuse me.

MR. MUSSI: You know, based on my farming knowledge, either they had multiple applications of water over the surface or there had to be a subirrigation system where there was water to the alfalfa. And my history of growing alfalfa for the last 30 years leads me to believe that multiple irrigations were made.

20 MR. RUBIN: But again, your response to the 21 question that I just asked indicates that that might 22 have been either surface or subsurface irrigation?

23 MR. MUSSI: You know, I wasn't there in 1914, 24 so I can't tell you what method. If it was me, I would 25 have done surface.

1 MR. RUBIN: Okay, thank you. Appreciate that. 2 And with regard to your written testimony, you state that you do not have any personal recollection for 3 4 water use during the period at or before 1914, correct? 5 MR. MUSSI: Personal, no. 6 MR. RUBIN: And if I understand your testimony correctly, your testimony is based upon discussions that 7 you've had over the years with many local farmers; is 8 9 that correct? MR. MUSSI: Yes. And, you know, various maps 10 11 and other literature that I have read on the history of the formation of the Delta and --12 13 MR. RUBIN: Okay. What other maps aside from the photocopied map that's attached to your written 14 15 testimony did you rely upon for the purposes of your written testimony, Exhibit 8? 16 MR. MUSSI: I've got 57 years of history in the 17 18 Delta. And, you know, through the numerous years I've seen maps of Union Island, Roberts Island, showing 19 20 different sloughs. And pictures in historical books, 21 Mickey's Grove. 22 So, you know, it's just an accumulation of 23 knowledge that I've acquired. I can't specifically cite you. No, I can't refer you to something that you could 24

25 rebut me on.

1 MR. RUBIN: And none of the maps --2 MR. MUSSI: I don't mean to be sarcastic. I'm just trying to cut it short. 3 MR. RUBIN: No offence has been taken. 4 CO-HEARING OFFICER BAGGETT: It's appreciated. 5 6 I wish counsel could take some lessons. 7 MR. RUBIN: I'm sure that wasn't directed 8 towards me. 9 MR. HERRICK: It was directed to me. MR. RUBIN: Mr. Mussi, the additional maps, 10 11 some of the additional information that you were just 12 referring to, is not part of the testimony that you have 13 submitted for this proceeding? 14 MR. MUSSI: No, I didn't provide that. 15 MR. RUBIN: Now, Mr. Mussi the photocopy of the map that's attached to your written testimony, 16 17 Exhibit 8, you say was used as part of a display for a 18 1915 Panama-California Exposition; is that correct? MR. MUSSI: Well, that's what it says on there. 19 20 I'm just going by that. 21 MR. RUBIN: You don't know if it was or was not 22 used as a display for that exposition? 23 MR. MUSSI: No, I wasn't there, so I couldn't 24 tell you. 25 MR. RUBIN: Let's assume that it was -- the map

1 that's attached to your written testimony, Exhibit 8, 2 was used for the 1915 Panama-California Exposition. You don't know what purpose it was used for, do you? 3 MR. MUSSI: No, I don't. 4 MR. RUBIN: Now, Mr. Lindsay, if you wouldn't 5 6 mind placing the map on the overhead. 7 CHIEF LINDSAY: Is this the one you're looking 8 for? 9 MR. RUBIN: Yes. Thank you, Mr. Lindsay. Mr. Mussi, can you identify the area on this 10 11 map where the parcel that's the subject of this 12 proceeding is located? 13 MR. MUSSI: I can give you a general location. If you look on the bottom of the map, if you're looking 14 15 at the waterway, the Middle River. If you look at that little dimple in the 16 17 waterway. 18 MR. RUBIN: Which, if I'm understanding your 19 description correctly, it's roughly at the bottom of the 20 first image that's attached to your Exhibit 8 in the 21 middle of the image at the bottom? 22 MR. MUSSI: Right. More or less my property is 23 in this area. MR. RUBIN: The parcel that you've identified 24 or the area that you were circling is just north of what 25

you described as a dimple. It's a bend in Middle River that appears at the center of the map at the bottom. You're describing an area that's just north of that. Just west of that, there is a line that appears to separate a field that's labeled beans from a field that's labeled alfalfa?

7 MR. MUSSI: Yeah. You know, that's a general 8 idea. I've done this -- when I looked at this, this was 9 a while back. So, you know, it's a general area where 10 I'm giving you.

11 MR. RUBIN: And aside from this map, do you 12 know what crops -- do you have any independent 13 additional information that verifies that beans or 14 alfalfa were grown on the property that's the subject of 15 this proceeding in 1914 or earlier?

MR. MUSSI: Specific property or just area in general?

18 MR. RUBIN: The specific property.

MR. MUSSI: No. The specific property I -- you know, I'd have to look back through some of my paperwork or history. But right now, no, I don't recall anything. MR. RUBIN: So today you don't know how many acres of alfalfa or beans were growing prior to 1914 on the parcel that's the subject of these proceedings? MR. MUSSI: No. The only thing I can tell you

is alfalfa is a multiyear crop. It probably -- back
 then it probably lasted about six years, could have
 lasted eight years.

So, you know, you could have gone back eight years or you could have gone forward eight years. You know. And that's the extreme, is the eight years. But, I mean, six years would be an average lifespan.

8 MR. RUBIN: Now, Mr. Mussi, I would like to 9 draw your attention to the last paragraph on the first 10 page of your written testimony, Exhibit 8.

If I understand your written testimony correctly, you indicate that the map shows certain crops that were being grown on your parcel and that you have concluded, based upon the crops that are depicted on that photograph, that irrigation must have occurred; is that correct?

17 MR. MUSSI: Yes.

MR. RUBIN: Then you continue to state that other testimony submitted during this matter shows that water was available to the parcel, and based upon that other information it's your belief that the property was surface irrigated; is that correct?

23 MR. MUSSI: Yes.

24 MR. RUBIN: And what other information that was 25 submitted during this proceeding are you relying upon

1 for that conclusion?

2 MR. MUSSI: You know, I'm just drawing on the history of the Delta and the way alfalfa is grown, 3 that's all. 4 5 MR. RUBIN: Thank you. 6 I have no further questions. CO-HEARING OFFICER BAGGETT: Thank you. San 7 Joaquin? Anyone else? Ernie? 8 9 WATER RESOURCE CONTROL ENGINEER MONA: I have a 10 few. Larry, could you put up Pak/Young 3R again, 11 please. 12 Mr. Mussi, the property that is currently under 13 this current CDO, is that the property that is currently identified as being owned by John and Anna Vasquez on 14 15 this map? MR. MUSSI: You know, I can't see it from here, 16 17 but just knowing the area and the property, I would say 18 yes. WATER RESOURCE CONTROL ENGINEER MONA: Okay. 19 20 Is it your testimony that prior to 1925 that particular piece of property was being served with water directly 21 diverted out of -- I think it's identified as High Ridge 22 23 Levee aka Duck Slough? 24 MR. MUSSI: My understanding of it, yes. 25 WATER RESOURCE CONTROL ENGINEER MONA: Is that

1 piece of property now identified on this particular map, 2 is it located within what is described as the Woods 3 Robinson Vasquez irrigation agreement area, service 4 area?

5 MR. MUSSI: Yes.

6 WATER RESOURCE CONTROL ENGINEER MONA: And just 7 for my understanding, is it your testimony that since 8 1925 this piece of property has been served water 9 diverted under that system which was developed for the 10 Woods Robinson Vasquez -- correct? -- district?

11 MR. MUSSI: Well, I don't know if it's under 12 that original agreement or what they had an 13 understanding before that.

14 I'm just saying that property was served by 15 Duck Slough.

Now, if Woods Robinson Vasquez had an agreement prior to that, I don't know. You know, I'm assuming they may have or they may not have, and that's why they formalized it. That I don't know.

20 WATER RESOURCE CONTROL ENGINEER MONA: 21 Currently is the Woods Robinson Vasquez a point of 22 diversion diverting water in order to serve properties 23 within the surface area to -- based on the various 24 properties owners claims of right for diverting out of 25 the Middle River?

In other words, do they have water rights 1 2 separately, or are they serving, diverting water of 3 Middle River to serve properties claiming other rights? MR. MUSSI: That's a legal question. I'm not a 4 water attorney, so -- you know, I'm assuming Woods 5 6 Robinson Vasquez may have a water right, a pre-1914 7 water right, and the property owners may have a riparian 8 and a pre-1914 water right. But I'm not a legal 9 attorney. WATER RESOURCE CONTROL ENGINEER MONA: Okay. 10 11 Thank you. 12 CO-HEARING OFFICER BAGGETT: Any other 13 questions? 14 MR. HERRICK: Just a quick -- couple of 15 follow-ups, Mr. Mussi. 16 --000--17 REDIRECT EXAMINATION BY MR. HERRICK 18 FOR RUDY MUSSI, TONI MUSSI AND LORY C. MUSSI INVESTMENT LP 19 -----20 21 MR. HERRICK: You testified with regard to the 22 map attached to your testimony dealing with the alfalfa 23 located approximately in the area of your land? MR. MUSSI: Yes. 24 25 MR. HERRICK: And you noted that based on your

1 experience alfalfa would take multiple applications of 2 water during the year; is that correct? 3 MB. MUSSI: Yes.

4 MR. HERRICK: And we have information now that 5 allows people to calculate how much evapotranspiration 6 an alfalfa crop would consume; is that correct?

7 MR. MUSSI: Yes, we do.

8 MR. HERRICK: And from that, one could estimate 9 how much water would be needed to serve an alfalfa crop; 10 is that right?

11 MR. MUSSI: Yeah. And that's what, you know, I 12 base my conviction that there was plenty of water to 13 serve that property.

MR. HERRICK: And the map also shows to the north of the alfalfa, it says dairying. Do you see that, just to the north of where it says alfalfa?

17 MR. MUSSI: Yes, I see that.

18 MR. HERRICK: And that doesn't say diary farms.
19 It says dairying, doesn't it?

20 MR. MUSSI: Right.

21 MR. HERRICK: Would you agree that the 22 reasonable interpretation then would be the dairy cows 23 were grazing in that area?

24 MR. MUSSI: Yeah. And you would need also 25 water, you know, unless either subsurface irrigation or

1 top surface irrigation to grow feed.

2 MR. HERRICK: So noticing that indication on the map, would you then conclude that when it says 3 alfalfa it means alfalfa for cropping, not for grazing? 4 MR. MUSSI: Yes. 5 6 MR. HERRICK: You were asked a question with 7 regard to what other information you may have relied upon with regard to water use in this area and 8 9 specifically on your land. Do you recall those questions? 10 11 MR. MUSSI: Yes. 12 MR. HERRICK: And in addition to what you 13 stated as the other sources upon which you relied, aren't you a Board Member of the Central Delta Water 14 15 Agency? 16 MR. MUSSI: Yes, I am. 17 MR. HERRICK: And as a board member of that 18 agency, don't you constantly review both historical 19 water quality, water application, and farming documents? MR. MUSSI: Yes. And I was also a Woods 20 21 Irrigation director in the '80s. And through that, we 22 also basically discussed water issues and water quality. 23 MR. HERRICK: And lastly, there was a question 24 regarding your statement in your testimony that other testimony submitted in this matter showed that water was 25

available. Do you recall that question? 1 2 MR. MUSSI: No. You might just -- I'm just a 3 little nervous. I don't do this for a living. 4 MR. HERRICK: I'm sorry. I am going fast. Ιn 5 the last paragraph on the first page of your testimony. 6 MR. MUSSI: Okay. 7 MR. HERRICK: The second -- or excuse me, the fourth sentence says: 8 9 The other testimony submitted this matter show that water was available to the 10 11 property --12 Dot, dot, dot. MR. MUSSI: Yes. 13 14 MR. HERRICK: And you were asked a question 15 about that by Mr. Rubin. Do you recall that? 16 MR. MUSSI: Okay. MR. HERRICK: Now, whether or not you've read 17 18 the other testimony, isn't it your understanding that 19 the testimony of people like Mr. Neudeck is providing information to lead to the conclusion that water was 20 21 available to your property? 22 MR. MUSSI: Yes, I am. 23 MR. HERRICK: So that would be one of the 24 materials that which -- one of the materials that you were citing to in this sentence? 25

1	MR. MUSSI: Right.
2	And then, like I said, the prior owner stated
3	that there was a water history on that property, and his
4	relative. George Patterson, had a considerable history
-	in that area
6	MR HERRICK, That's all I have Thank you
5	work much
7	CONTRACTOR OFFICED DACCEMEN Decreased
ð	CO-HEARING OFFICER BAGGETT: Recross?
9	MR. O'LAUGHLIN: I have no questions.
10	CO-HEARING OFFICER BAGGETT: Mr. Rubin?
11	MR. RUBIN: I have no questions.
12	CO-HEARING OFFICER BAGGETT: Prosecution?
13	MR. ROSE: We have no questions.
14	CO-HEARING OFFICER BAGGETT: San Joaquin?
15	Okay. That's it. Thank you.
16	
17	MICHAEL ROBINSON
18	Called by RUDY MUSSI, TONI MUSSI AND LORY C. MUSSI
19	INVESTMENT LP; MARK and VALLA DUNKEL;
20	YONG PAK AND SUN YOUNG
21	DIRECT EXAMINATION BY MR. HERRICK
22	
23	MR. HERRICK: Once again, this is John Herrick,
24	this time representing both Pak and Young and Mussi.
25	I believe Mr. Michael Robinson's testimony has

1 been submitted in support of both actions, and so I have 2 called Mr. Robinson.

3 Mr. Robinson, could you please state your name 4 and business address for the record.

5 MR. ROBINSON: Thank you. My name is Michael 6 S. Robinson, business address 7000 South Inland Drive, 7 Stockton 95206.

8 MR. HERRICK: And, Mr. Robinson, you have a 9 copy of Exhibit 8 which is your testimony for both 10 proceedings here; is that correct?

11 MR. ROBINSON: That's correct.

MR. HERRICK: And is that a true and correct copy of your testimony?

14 MR. ROBINSON: Yes, it is.

MR. HERRICK: Would you briefly summarize your testimony.

17 MR. ROBINSON: Yes, I will.

I have lived at the address 7000 South Inland Drive up until 1970 when I was married and moved. So I've lived there most all my life. We still work there. That's our main headquarters and office.

22 My grandfather purchased the original parcel 23 1890, 1891, and it's been in the family ever since. 24 MR. HERRICK: Mr. Robinson, let me interrupt 25 you there. Just for clarity, the parcel you're talking 1 about your grandfather purchasing is next door to the 2 Mussi property, isn't it?

3 MR. ROBINSON: Yes, right, to the south.
4 MR. HERRICK: Go ahead.

5 MR. ROBINSON: Growing up, I worked with my 6 father all the time. He was, well, very outspoken, and 7 we had numerous conversations about numerous things 8 including the Woods Robinson Vasquez Irrigation 9 District.

My understanding from those conversations was that the name Woods was part of the Woods Irrigation District. Robinson and Vasquez joined together at some point in time to create another diversion for irrigation.

15 They were at the end of the distribution system 16 for Woods Irrigation, and periodically because the 17 control of the water supplied was not real accurate they 18 would get flooded out periodically.

And in order to have better control of the water, they decided to move their diversion point and join together with their properties and put in the installation at some point on Middle River.

I believe that would have been near the 1900s. If it was -- well, 1911 was Woods, so at some point in time they decided to move that installation.

1 Originally the diversion supplied water through 2 a dirt ditch down the top of what is called High Ridge Levee. That had seepage problems, and I believe 1925 is 3 the agreement where they created the concrete ditch for 4 better control of seepage out of that ditch. 5 6 The early map, the previously mentioned 1914-15 map, shows that area in alfalfa which is consistent with 7 8 the understanding that it was irrigated. 9 When the property was purchased, it was purchased for farming, so from 1890 irrigation out of 10 11 Duck Slough and subsequently with the system that they 12 created. That's about it. 13 14 CO-HEARING OFFICER BAGGETT: Prosecution? 15 MR. ROSE: We have some brief cross. 16 -----17 CROSS-EXAMINATION BY MR. ROSE 18 FOR PROSECUTION TEAM -----19 20 MR. ROSE: Good afternoon, Mr. Robinson. David Rose, the Prosecution Team. Just a few brief questions. 21 22 Your testimony which is labeled Exhibit 8, I 23 believe, on the second page, paragraph G, you states: 24 I'm informed by counsel that the last map indicating Duck Slough is dated 1911, 25

1 that a 1913 map shows canals along the 2 Duck Slough route connecting to another 3 slough near Kingston School. 4 Is that -- do you have your testimony in front That's your statement? 5 of you? 6 MR. ROBINSON: Yes. 7 MR. ROSE: (Reading:) This information confirms my statements. 8 9 Now, have you seen the 1913 map that you're 10 discussing, or is that simply something you were 11 informed by counsel? 12 MR. ROBINSON: Informed by counsel. MR. ROSE: So you don't know what the 1913 map 13 14 shows? 15 MR. ROBINSON: No, I do not. MR. ROSE: You don't know when the information 16 17 that the 1913 map shows was actually compiled or created 18 or -- I guess compiled is the best word? 19 MR. ROBINSON: No, I do not. 20 MR. ROSE: So the fact that there's a 1913 map 21 that could very easily show the same data as 1911, you 22 relied on that to confirm there has always been a Duck 23 Slough and that that Duck Slough then became the 24 irrigation canals that you were told? MR. ROBINSON: Duck Slough did not become a 25

1 canal. The irrigation canals was to replace Duck Slough 2 which at some point was filled in. 3 MR. ROSE: Then maybe I'm not quite following 4 your testimony. What is it that you -- what is it that these 5 6 maps as identified by counsel confirm to you? 7 MR. ROBINSON: That in 1911 Duck Slough was there, and at a subsequent date there were canals that 8 9 had replaced Duck Slough. MR. ROSE: So your understanding is that the 10 11 1913 maps shows --12 MR. ROBINSON: Shows canals. 13 MR. ROSE: Shows canals that replaced Duck 14 Slough? 15 MR. ROBINSON: I would assume that. 16 MR. ROSE: Okay. But again, as I asked you before, you don't know whether the 1913 map shows 17 18 information that was compiled in 1913 or whether it was 19 in fact the same information from the 1911 map, do you? MR. ROBINSON: No, I don't. I could ask 20 counsel. Do you have that map? If you'd like to put up 21 22 the 1913 map, we can probably look at it. 23 MR. ROSE: I'm just asking as to how you came 24 to this data. I don't think that the map shows anything different than what you're saying, which is that you 25

1 don't know.

MR. ROBINSON: Well, I was informed the 1913 2 map did not show Duck Slough, but it showed canals. 3 MR. ROSE: You were informed of that. Okay. 4 But you weren't informed as to when the data on the 1913 5 6 map was compiled? 7 MR. ROBINSON: No. 8 MR. ROSE: Okay. Now I'll briefly point you to paragraph D of your testimony. This is going to be a 9 fairly obvious question. Of course no offense is 10 11 intended by this: But you don't have any personal 12 knowledge of when delivery to various lands within the 13 water company as you described in paragraph D, when that began, do you? 14 15 MR. ROBINSON: I wasn't there. No, I don't. MR. ROSE: I suspected. Again, no offense 16 17 intended by that. 18 You don't know -- same question in regards to 19 paragraph -- I quess those are all under paragraph 6, 20 but paragraph 6A: 21 Both the parcel and Vasquez parcel had 22 been farmed at or immediately after 23 purchase in 1890. 24 You don't have any personal knowledge of that, do you? 25

MR. ROBINSON: No. 1 2 MR. ROSE: And same question for paragraph B: 3 Each parcel has been irrigated as part of the farming practices on the land. 4 5 You don't have any personal knowledge of that? 6 MR. ROBINSON: It was purchased in 1890 and I assume in 1900 it was still farmed. 7 8 MR. ROSE: But your personal knowledge does not 9 extend to --10 MR. ROBINSON: No. 11 MR. ROSE: Okay. Thank you very much. 12 CO-HEARING OFFICER BAGGETT: Mr. O'Laughlin. --000--13 14 CROSS-EXAMINATION BY MR. O'LAUGHLIN FOR MODESTO IRRIGATION DISTRICT 15 16 -----17 MR. O'LAUGHLIN: Good afternoon, Mr. Robinson. 18 My name is Tim O'Laughlin. I represent the Modesto 19 Irrigation District. 20 Prior to 1914, was Woods Robinson Vasquez an irrigation district? 21 22 MR. ROBINSON: I could not confirm that. They 23 were operating together. MR. O'LAUGHLIN: Okay. Do you know whether or 24 not they were an irrigation district formed under the 25

1 Water Code?

2 MR. ROBINSON: No, I do not know that. 3 MR. O'LAUGHLIN: Okay. Same question: Do you 4 know if Woods Robinson Vasquez was a water district formed under the Water Code? 5 6 MR. ROBINSON: No, I do not know that. 7 MR. O'LAUGHLIN: Okay. 8 MR. ROBINSON: 1925, they put their agreement 9 in writing. MR. O'LAUGHLIN: Okay. So is Woods Robinson 10 11 Vasquez a mutual water company? 12 MR. ROBINSON: No. 13 MR. O'LAUGHLIN: Okay. Is Woods Robinson Vasquez a corporation? 14 MR. ROBINSON: No, I do not believe it is. 15 16 MR. O'LAUGHLIN: All right. Would it be safe 17 to say that maybe Woods Robinson Vasquez is a 18 partnership? 19 MR. ROBINSON: They were working together. 20 MR. O'LAUGHLIN: Okay. Now, one of my 21 questions that I've always wondered about, and it comes 22 up in this case as well other cases that we'll deal 23 with: When Woods Robinson Vasquez prior to 1914 was 24 delivering water to parcels, was it delivering its water rights or was it delivering the water rights of the 25

1 individual landowners?

2 MR. ROBINSON: I believe it was the individual 3 landowners.

MR. O'LAUGHLIN: Okay. Do you know if Woods Robinson Vasquez is, to your knowledge, asserting -- or let me -- sorry, strike that.

7 Do you know if Woods Robinson Vasquez has an 8 independent pre-1914 water right?

9 MR. HERRICK: I would just object to the 10 question. Mr. Robinson is not here representing his 11 partners, if they are indeed partners, but Woods 12 Robinson, and I don't know if he wants to take a legal 13 position on what rights somebody who is not involved in 14 this proceeding may have.

MR. O'LAUGHLIN: Wait. He came here to testify, and he's testifying about the type of water being delivered to these parcels. So one of the questions to ask is: Is it their water right, or is it his water right?

And if they're going to assert an independent right, I want to -- I just want to know about it. Because then if it's -- because this is the same thing we --

24CO-HEARING OFFICER BAGGETT: Okay.25MR. O'LAUGHLIN: Well, because here's the

1 problem.

2 CO-HEARING OFFICER BAGGETT: You can answer
3 within your knowledge.
4 MR. O'LAUGHLIN: Yeah, within your knowledge.
5 That's all I'm asking.

6 CO-HEARING OFFICER BAGGETT: We know you're not 7 an attorney.

8 MR. ROBINSON: That they delivered their own 9 water under their own rights.

10 MR. O'LAUGHLIN: Yes, pre-1914.

11 MR. ROBINSON: Riparian rights.

MR. O'LAUGHLIN: Woods Robinson Vasquez' rights are riparian rights?

MR. ROBINSON: Well, the individual property
owners' riparian rights.

16 MR. O'LAUGHLIN: Okay. Has Woods Robinson 17 Vasquez ever applied, prior to 1914, for a Civil Code 18 appropriation under the Civil Code?

19 MR. ROBINSON: Not to my knowledge.

20 MR. O'LAUGHLIN: Okay. I get confused about 21 this now. The Woods Robinson Vasquez system runs on 22 what I will call the northwesterly side of the High 23 Ridge Levee; is that correct?

24 MR. ROBINSON: Easterly side. Easterly side of25 the High Ridge Levee.
1 MR. O'LAUGHLIN: On the east side of the High 2 Ridge Levee, or is it on the west side and north of it? When I look at the map, it appears to start on Middle 3 River, runs along the westerly side and then --4 5 CO-HEARING OFFICER BAGGETT: Let's --6 MR. O'LAUGHLIN: -- as High Ridge Levee goes 7 north --8 MR. ROBINSON: It does not extend down. The 9 property that was served does not go down to Middle 10 River. 11 MR. O'LAUGHLIN: Okay. 12 MR. ROBINSON: If you want to put the map back 13 up again, it will show it. 14 MR. O'LAUGHLIN: No, we're fine. I understand 15 what you're saying. 16 MR. ROBINSON: It runs east of the High Ridge Levee to the north. 17 18 MR. O'LAUGHLIN: So if I'm standing on the High 19 Ridge Levee, the Woods Robinson Vasquez is on the east 20 side of the High Ridge Levee as opposed to being on the 21 west side of the High Ridge Levee? That makes no sense 22 to me. MR. ROBINSON: Both sides in the north. 23 24 CO-HEARING OFFICER BAGGETT: You've got a map. 25 MR. HERRICK: If I may, just to make sure it's

1 clear without interrupting your questioning, but we keep 2 referring to east and west.

The High Ridge Levee curves. I think the answer you're looking for, if that's correct, is the Woods Robinson Vasquez lands are on both sides of what is now Inland Drive which closely approximates what used to be High Ridge Levee and Duck Slough.

8 But that's for him to say.

9 CO-HEARING OFFICER BAGGETT: Do you have a map? 10 I would assume, Mr. O'Laughlin, you've got a map that 11 would show this?

12 MR. ROBINSON: Woods Irrigation --

13 CO-HEARING OFFICER BAGGETT: We need to really 14 proceed with this. Can we just pull a map up?

15 MR. ROBINSON: -- shows it.

16 CO-HEARING OFFICER BAGGETT: Wait. Let me ask 17 the question. Do we really need to go through --

18 MR. O'LAUGHLIN: I thought this was a simple 19 question. I didn't even think I needed a map on this 20 one. I'll move on.

21 CO-HEARING OFFICER BAGGETT: Okay. Move on.22 Thank you.

23 MR. ROBINSON: Somebody has to put it up and it
24 will show it.

25 MR. O'LAUGHLIN: You talked about a canal being

1 in place, a concrete canal being put into place. Do you 2 know when that concrete canal was put into place? 3 MR. ROBINSON: I believe 1925. MR. O'LAUGHLIN: Okay. And where did that 4 canal -- where was the source of water for the concrete 5 6 canal? MR. ROBINSON: Middle River. 7 8 MR. O'LAUGHLIN: How far inland did the concrete canal extend in 1925? 9 MR. ROBINSON: Probably a mile and a half, two 10 11 miles. 12 MR. O'LAUGHLIN: Does the Woods Robinson Vasquez system take water from Burns Cutoff? 13 14 MR. ROBINSON: No. 15 MR. O'LAUGHLIN: Do you know when the original -- it sounded to me that the concrete canal 16 replaced a dirt-lined canal; is that correct? 17 18 MR. ROBINSON: That's correct. 19 MR. O'LAUGHLIN: Do you know when the 20 dirt-lined canal was put into place? 21 MR. ROBINSON: I don't know specifically, but 22 if Woods was receiving water from Woods Irrigation, that 23 would be 1911 or so, so it would be after that. MR. O'LAUGHLIN: Are some of the lands in the 24 25 Woods Robinson Vasquez area which received water part of

1 the highlands that were denoted in the Woods Irrigation 2 Company agreements, if you know?

3 MR. ROBINSON: They were all -- in the 1941 4 map, they were all shown Woods Robinson Vasquez. 5 MR. O'LAUGHLIN: No, no, no. 6 What I'm asking is if the lands within Woods 7 Robinson Vasquez that are currently being served with 8 water were at one time part of the highland properties 9 denoted in the Woods Irrigation Company 1911 agreements. MR. ROBINSON: I'm not aware of what properties 10 11 were designated. 12 MR. O'LAUGHLIN: All right. Do you know prior 13 to 1914 how much water Woods Robinson Vasquez was diverting through the dirt-lined canal? 14 15 MR. ROBINSON: No, but if the cropping was as 16 designated in the map, the 1914-15 map, the alfalfa, 17 that would be adequate to supply alfalfa. 18 MR. O'LAUGHLIN: Okay. Do you know the season of use that was for that diversion from Middle River? 19 20 MR. ROBINSON: If it was for alfalfa it may be 21 April through September, October. 22 MR. O'LAUGHLIN: Have you run across this --23 does Woods Robinson Vasquez -- let's say prior to 1940,

25 MR. ROBINSON: They talked to their neighbors

how did people order water in Woods Robinson Vasquez?

24

1 and see who was using water, and if no one was using it 2 they'd go down and turn on the pumps. 3 MR. O'LAUGHLIN: Do you know when pumps were 4 installed on Woods Robinson Vasquez's canal? 5 MR. ROBINSON: Well, there were obviously 6 electric pumps in 1925. Prior to that, I assume there 7 was some other means of pumping to put it into the 8 dirt-lined ditch. 9 MR. O'LAUGHLIN: Do you have any evidence of what pumps were out there prior to 1925? 10 11 MR. ROBINSON: No, I do not. 12 MR. O'LAUGHLIN: I have no further questions. 13 Thank you. 14 CO-HEARING OFFICER BAGGETT: Mr. Rubin? --000--15 CROSS-EXAMINATION BY MR. RUBIN 16 for SAN LUIS & DELTA-MENDOTA WATER AUTHORITY 17 -----18 19 MR. RUBIN: Good afternoon, Mr. Robinson. My 20 name is John Rubin. I'm an attorney for San Luis & 21 Delta-Mendota Water Authority. I have a couple of 22 questions for you. 23 Following up on some questions regarding the Robinson Vasquez canal that existed post 1925, you 24 25 indicated that there was an electric pump on the canal

1 to pump water from Middle River through to the Robinson 2 Vasquez system?

MR. ROBINSON: Now there are two pumps, yes.
MR. RUBIN: In 1925, there was one pump?
MR. ROBINSON: I don't know the number of pumps
at that time.

MR. RUBIN: Therefore I assume you don't know
8 the capacity of the pumps that existed at that time?
9 MR. ROBINSON: No, I do not.

10 MR. RUBIN: Okay. Do you know if the water 11 that was pumped into the Robinson Vasquez system was 12 used during more than one season of planting? Was there 13 one season of planting on the lands that were served by

14 the canal?

MR. ROBINSON: There's a season of planting.
MR. RUBIN: Do you know what the season was?
MR. ROBINSON: Well, depending on the crop, it
would be either planted in November-December or planted
in the spring, harvest in the fall. Typical farming.
MR. RUBIN: So it's possible that there's

21 either a fall season or a summer season; is that how you
22 would characterize it?

23 MR. ROBINSON: Harvest would be in the fall for
24 most crops.

25 MR. RUBIN: Are you familiar with the agreement

1 that's attached to your written testimony, Exhibit 5? 2 MR. ROBINSON: Yeah, I haven't read it in quite a while, but I'm aware that it exists, yes. 3 4 MR. RUBIN: And the agreement that I'm referring to is labeled as Exhibit 5A. Do you know how 5 6 many acres were covered in the agreement of Exhibit 5A? 7 MR. ROBINSON: Not off the top of my head, no. MR. RUBIN: Mr. Robinson, you indicated that 8 you worked with your father in the family farming and 9 related businesses for 42 years? 10 11 MR. ROBINSON: Yes. 12 MR. RUBIN: What's the period of time? What 13 year did you start working with your father? 14 MR. ROBINSON: About 1960. 15 MR. RUBIN: So you worked with your father roughly from 1960 to 2002? 16 17 MR. ROBINSON: Yes. 18 MR. RUBIN: And what years did your father 19 farm. 20 MR. ROBINSON: 1960s through the '90s, up into the '90s, but he was always giving us advice. 21 22 MR. RUBIN: Mr. Robinson --MR. ROBINSON: Well, when he started farming 23 24 there? 25 MR. RUBIN: I'm sorry, your father, yes.

1 MR. ROBINSON: Oh, when he started farming 2 there?

3 MR. RUBIN: Yes.

4 MR. ROBINSON: I believe he started actually 5 farming himself taking over from his father after World 6 War I, which would be, I don't know, 1918-19 when he 7 started farming it.

8 MR. RUBIN: Now, Mr. Robinson, you also spoke 9 about an earthen-lined canal that existed where the 10 current concrete-lined canal exists to serve the 11 Robinson Vasquez area?

MR. ROBINSON: In the proximity of it. The arthen canal was on top of the High Ridge -- high line -- High Ridge Levee.

MR. RUBIN: Now, do you know if there was a pump that fed that earthen canal?

MR. ROBINSON: I don't know that there was one, but in order to get water into it I would assume there was a pump.

20 MR. RUBIN: Is it possible that the canal was 21 fed by gravity during high tides?

MR. ROBINSON: If it was on top of that levee,I believe not, unlikely.

24 MR. RUBIN: Do you know if it was on top or if 25 it went through?

MR. ROBINSON: My recollection was he stated it
 was on top of the levee.

3 MR. RUBIN: And "he" is your father?

4 MR. ROBINSON: My father.

5 MR. RUBIN: Do you recall specifically whether 6 your father said that the diversion facility for the 7 earthen canal was on top of the levee?

8 MR. ROBINSON: The ditch was on top of the 9 levee. The diversion would have been in the river.

MR. RUBIN: And do you know if the diversion
went through the levee or went over the levee?

MR. ROBINSON: I have no recollection of him saying either way.

MR. RUBIN: And if it went through the levee, it's possible that the canal could have been fed through gravity, or by gravity?

MR. ROBINSON: Hydraulically, I would say no.
If the ditch was on top of the levee, the water level in
the river would not be high enough to supply it.

20 MR. RUBIN: Now, it's your conclusion, 21 Mr. Robinson, that the parcel at issue in this 22 proceeding has been farmed since at least 1890?

23 MR. ROBINSON: I believe that was the date that 24 both parcels were acquired by the separate families and 25 they would have been farmed then, yes.

MR. RUBIN: Do you know how many acres within 1 2 the subject parcel was farmed in 1890? 3 MR. ROBINSON: For Mussi, I would say all of 4 it. 5 MR. RUBIN: What would you base your statement 6 on? 7 MR. ROBINSON: They bought the property to 8 farm. 9 MR. RUBIN: Is it possible that some of the land was left idle? 10 11 MR. ROBINSON: I would not think so. Other --12 MR. RUBIN: Is it possible -- sorry. 13 MR. ROBINSON: Other than what, at that time, what area was taken up by Duck Slough. 14 15 MR. RUBIN: Is it possible that some of the land was dry land farmed? 16 17 MR. ROBINSON: I guess it would be possible. 18 But if you have the opportunity to irrigate, you don't 19 dry land farm. 20 MR. RUBIN: Is it possible that you irrigate through subsurface irrigation? 21 22 MR. ROBINSON: It was possible. 23 MR. RUBIN: Now, you indicate part of your 24 conclusion that the subject property was irrigated was irrigation may have been needed to control salt buildup; 25

1 is that correct?

2 MR. ROBINSON: It was -- irrigation is a remedy 3 for salt buildup.

4 MR. RUBIN: Is it your belief that there was 5 salt buildup prior to 1914 that required irrigation in 6 order to address the salt buildup?

7 MR. ROBINSON: Any time there is irrigation 8 there is a potential for salt buildup. Salt buildup is 9 both a problem and a solution.

MR. RUBIN: But again, is it your testimony today that lands that are the subject of this proceeding needed to be surface irrigated to address salt buildup? MR. ROBINSON: No. I wouldn't say, no. MR. RUBIN: I have no further questions.

15 CO-HEARING OFFICER BAGGETT: San Joaquin? Any 16 recross? Okay. Thank you. Any questions, Ernie? 17 Dana? Thank you.

18 We've got one more witness, Mr. Herrick.

19 MR. HERRICK: Yes.

20 CO-HEARING OFFICER BAGGETT: Let's take a short 21 break then. Let's take ten minutes, and then you can be 22 ready to go.

23 (Recess)

24 CO-HEARING OFFICER BAGGETT: Back on the25 record. Mr. Herrick.

1 MR. HERRICK: Thank you, Mr. Chairman. John 2 Herrick again. Before we get to this, the court 3 reporter asked me to clarify something from the last 4 cross-examination.

And that is regardless of comments either by the witness or any of the attorneys asking questions, Mr. Robinson's testimony was Exhibit 8 in both proceedings and Mr. Rudy's testimony was exhibit -well, I uncleared that up.

10 (Laughter)

MR. ROSE: I don't know if this helps. I have Michael Robinson's testimony as Pak and Young 8 and Mussi 5. Is that my own mistake in labeling?

14 MR. HERRICK: That is correct.

MR. ROSE: Then the 8A and 5A are the analogous following exhibit.

MR. HERRICK: Their testimonies are asspecified on the witness list.

CO-HEARING OFFICER BAGGETT: Very good. Thank
 you. And everyone has got that.

21 MR. HERRICK: Maybe we should go home now. 22 Okay. Next we will call Mr. Chris Neudeck in 23 Pak and Young matter, and he will give the direct 24 testimony on that.

25 As we start here I would like to clarify that

there are incorrect references or citations to exhibits 1 2 which I believe staff is generally aware of, and as we go through it, I will then hopefully clarify that part 3 4 of the record so everybody knows what map or what document we're referring to or what changes or what was 5 6 mistakenly presented is clarified. ------7 CHRISTOPHER H. NEUDECK 8 9 Called by YONG PAK AND SUN YOUNG DIRECT EXAMINATION BY MR. HERRICK 10 11 ------12 MR. HERRICK: So with that, Mr. Neudeck, would 13 you please give your name and business address. MR. NEUDECK: Yes. Christopher H. Neudeck, 711 14 15 North Pershing Avenue, Stockton, California 95201. MR. HERRICK: And Mr. Neudeck, presented as 16 17 your evidence here is both your testimony, Exhibit 3, 18 and then I believe -- I'm sorry, I didn't bring -- your 19 professional qualifications are exhibit --20 Thank you for your consideration. I apologize. 21 And 4 for his statement of qualifications. 22 Mr. Neudeck, are you aware of Exhibit 4 in this 23 proceeding? 24 MR. NEUDECK: Yes, I am. 25 MR. HERRICK: And is it a true and accurate

1 representation of your resume or statement of

2 qualifications?

3 MR. NEUDECK: Yes, it is. MR. HERRICK: And you have before you a copy of 4 Exhibit 3; is that correct? 5 6 MR. NEUDECK: That's correct. With attachments? 7 MR. HERRICK: MR. NEUDECK: Yes. 8 9 MR. HERRICK: And Exhibit 3 is, excepting as we 10 shall correct along the way, a true and correct copy of 11 your testimony for this proceeding? 12 MR. NEUDECK: That is correct. 13 MR. HERRICK: Mr. Neudeck, would you please summarize your testimony. And I don't say briefly 14 because there are a number of exhibits that we wish to 15 go through, and so please do. 16 MR. NEUDECK: Yes. Thank you. Just briefly, 17 18 as a matter of background, I'm a registered civil engineer in the state of California. I've been working 19 20 in the Sacramento-San Joaquin Delta for nearly 30 years 21 and practice in the area of flood control, drainage and 22 irrigation. 23 My firm, Kjeldsen Sinnock & Neudeck, 24 Incorporated, are very familiar with the Roberts Island

25 area. We serve as district engineers for both Upper

Roberts and Middle Robert as well as the adjoining
 reclamation districts, Union Island 1, 2, RD 17 and the
 like.

My testimony today is going to involve basically two areas: One is the mapping of title and other documents, and the other is some summary of irrigation and drainage practices.

8 I worked with the chain of title that was 9 prepared for the Pak and Young case, prepared by Thurl 10 Pankey from Central Valley Land Service Company.

I do have one correction to my testimony. On the very first exhibit, 3A, there's a typo in my direct testimony. The parcel number is listed in my testimony as 131-170-03. That actually is referring to the Mussi parcel. The Pak/Young parcel is correctly stated as 131-180-07.

17 Now what I'd like to do is just briefly walk18 through my exhibits and mapping on the chain of title.

19 The first Exhibit 3A -- and Mr. Lindsay, I 20 guess we can just bring these up as we go along --21 identifies the current configuration of the Pak and 22 Young parcel.

And this is not something to dwell on, but this is the piece we're speaking of, the piece generally northwest of what has been deemed in many of the prior

1 testimony as Duck Slough. As 7. You can see 7 reflects
2 the 07 on the APN.

3 Okay. Walking through, 3B. 3B is the first transfer from the State to J.P. 4 Whitney. This is a very large -- and if you turn to the 5 6 last -- actually, Mr. Lindsay, all of these references are going to be to the last document in these exhibits 7 -- last page, excuse me. I apologize. I know we have a 8 9 lot of information here. But that's where I'm going to be referring to. So we can leave the full page. 10 11 Here you can see this is the first transfer, State to J.P. Whitney. This was done in November of 12 13 1876. And this is the State patent. 14 The second exhibit which is 3C is on

January 22nd of 1877. This is where Whitney transfers it to Fisher. Again, you can see it's a rather large parcel. All of this is northwest of the slough known as Duck Slough, Highland Levee, and touching both Burns Cutoff and Middle River.

The next Exhibit 3D, June 20th, 1877, transfer from Fisher to Glasgow Company. Again, a major transfer incorporating a majority of the area northwest of the Duck Slough area still connected to Burns Cutoff and Middle River.

25 Turning to 3E, in 1896, this is November 6th of

1 1896. This is Glasgow to John S. Woods.

An important note to make in this deed, and I reference this in both this testimony and my Mussi testimony, is that language in the deed states as follows: Together with all and singular the

6 Together with all and singular the 7 tenements, hereditaments and 8 appurtenances thereunto belonging or in 9 anywise appertaining and the reversions 10 -- reversion and reversions, remainder 11 and remainders, rents, issues and profits 12 thereof.

13 And my understanding of hereditaments is the 14 preservation of water right to this parcel.

As you can see at this state -- and I will show on the map -- this is now no longer connected to either of the two main water bodies, Burns Cutoff to the north or to Middle River to the south, whereas it is still connected to Duck Slough.

20 The next Exhibit 3F. Again, it would be the 21 last page.

22 MR. HERRICK: Mr. Chairman, the mapping for 3F 23 is incorrect. I have a copy of the same deed with the 24 correct mapping.

25 And the problem is it simply includes too much

1 land to the west which is not part of this or not 2 connected to that. I will pass that out.

We would prefer to substitute this as 3F. If there are objections to that or not, and if they're upheld, Mr. Neudeck can just describe from the map what the true shape of the parcel was and not this incorrect one. So I'll pass that out right now.

8 Mr. Neudeck.

9 MR. NEUDECK: Briefly, the difference in this 10 map is it is a smaller parcel. This is a grant deed 11 from E.W.S. Woods to his wife, Alice Woods and others. 12 And you can see that the cross-hatched area is not as 13 substantial as the exhibit we had up on the screen.

14 Okay. The last exhibit in my chain is 3G. I15 do not have a map exhibit.

16 This is -- the date of this transfer was 17 December 10, 1928. And this was a deed from Alice Woods 18 to Lloyd Woods which was E.W.S. and Alice Woods' son. 19 And it's in this general area here.

The current Pak parcel that we showed at the beginning was eventually subdivided sometime after 1928 which is this date I just mentioned in 3G. And I did not attempt to map that, and I'll give reasons as to why I did not attempt to map that.

25 Now I'm going to move into an area, some

1

historical background with some assessor maps.

The first map I'd like to refer to is actually --well, there's a series of maps, but I'll turn to 3I which is --

5 MR. HERRICK: Let me clarify that. The next in 6 order, 3H, is a series of maps, and now Mr. Neudeck is 7 going to refer to one of those which is his own exhibit. 8 MR. NEUDECK: That's correct.

9 The reason I didn't go through all of them, the 10 maps date from 1876 through 1910 -- 1919, excuse me, and 11 I'm just referencing one map.

12 This map has been shown in earlier testimony, 13 and the purpose of this map is to reference -- this is 14 real tough on this view here, but you can see the blue 15 line which has been referenced as the general location 16 of Duck Slough extending from Burns Cutoff down to 17 Middle River.

18 MR. O'LAUGHLIN: Excuse me. Which map are we 19 looking at right now?

20 MR. NEUDECK: This is 3I. This is 1876.

21 MR. O'LAUGHLIN: Thank you.

22 MR. NEUDECK: Now I'm going to give you a 23 little bit of history as to what they call the High 24 Ridge Levee along that area and how the High Ridge Levee 25 was created.

You have heard through prior testimony from Mr.
 Nomellini this morning and others with regard to how
 levees in Delta region were created.

The High Ridge Levee in this particular area
was along a slough, a natural slough, originally
creating the natural slough overbank.

7 When the flow would get up and outside the 8 banks of the slough, it would create small levees. 9 Ultimately, that slough that I'll reference to you 10 shortly here was dredged and levees were created to a 11 greater extent.

12 The next citation in my testimony relates to 13 that very dredging in 1875. This is the Samson dredge. 14 We made reference to the Samson dredge.

Again, in Mr. Nomellini's testimony we showed the picture of the Samson dredge even though it was not on Duck Slough, but we have a direct reference of the Samson dredge being on Duck Slough in 1875 creating a channel something on order of 30 feet wide by 7 feet wide.

21 This is the Duck Slough channel that I've been 22 referring to so far.

All right. Exhibit 3J. Okay. Yeah, thankyou.

25 3J is the overall settlement geography of the

Sacramento-San Joaquin Delta by John Thompson in 1957. 1 2 And in that, there's a quote directly quoting the Samson steam shovel first job which was on Duck 3 4 Slough. That just brings to light the fact that the 5 Samson dredge was on Duck Slough during that time frame. 6 Okay. Now I'm going to walk through a couple of additional maps to give some history as to the Duck 7 8 Slough connection between Burns Cutoff and Middle River.

9 3L is my next exhibit, and this is an 10 assessor's map. This is a little better alignment of 11 Duck Slough.

You can now see the configuration of Duck Slough is more likened to what we see in the current configuration which is a greater degree of mapping accuracy.

You can also see on this map, if you were to zoom into it, two dashed lines along either side of the slough referencing levees. This will be consistent with the Samson dredge time frame.

This is 1881-1882, post the period where the Samson dredge was in the area so -- Mr. Lindsay, you may need to go just a little bit further. It's very faint, but you can see two dashes on either side of slough that runs the length of the slough.

25 All right. The next exhibit is 3M.

1 This is an 1883 map. It was a map created by 2 Tucker and Smith, civil engineers, and they were mapping 3 the lands owned by Fisher.

Here again, if you pan down, pan down a little
bit further -- or I'm sorry, pan up. I have to get the
direction here correct. Keep going up.

You can see what's referenced as Cross Levee
here. This again is the alignment of Duck Slough and a
levee.

Now, interestingly, this is in 1883, they do not show a levee on either side. They only show a levee on what would be considered the east side.

13 My belief is they were only looking at the area 14 within this region of the map, so they're only mapping 15 the features that they traversed.

As you saw in the prior assessor's map, we saw these dashed lines on either side of Duck Slough demonstrating that there was likely levees of some sort on both sides of the river -- both sides of the slough, excuse me. I apologize for that confusion. Here they've only shown the levee on the east side.

Okay. Moving to 3N, this is an 1886 map produced by the California State Engineering Department, topographic and irrigation map.

25 Here again -- and it's a little difficult to

see -- right here you can see the Duck Slough alignment,
 again between Burns Cutoff, Middle River, abutting up
 against the Pak/Young property.

Bear with me. We've got a couple more ofthese. 30, 1894 map.

6 This is known as the Stockton-Bellota drainage 7 Map. This again shows Duck Slough continuing. Here the 8 word "Duck Slough" is right on the alignment, continuing 9 from Burns Cutoff all the way down to Middle River.

3P, this is the 1911 Quad, USGS Quad. It's actually a 1913 map with 1911 data. And here if you pan up, I'll get this correct -- oops, got to pan to your right.

14 CHIEF LINDSAY: I can't go right. Still lost. 15 MR. NEUDECK: You are. That's it. This is 16 Duck Slough here. And if you were able to zoom in and 17 have a little more clarity, you could actually see the 18 blue line within Duck Slough up against the Pak parcel, 19 Pak/Young parcel.

20 So this is the Duck Slough alignment, 21 continuing on down here on down to Middle River in this 22 area right here. And you can actually see blue on up 23 here to the Kingston School site.

I've got some confusion on my exhibits here.Again I'm going to defer to counsel here to correct.

1 MR. HERRICK: In the testimony the next exhibit 2 listed is Q, and that's identified as the 1911 Woods 3 Irrigation Company agreement with E.W.S. Woods to 4 furnish water.

5 In the testimony, unfortunately, Q is labeled 6 as the California Delta map by Captains Weathers and 7 Petzinger.

8 So I will pass out the 1911 agreement which has 9 been presented in other areas, but this is the actual Q 10 and we'll correct the numbers of the others as we go.

11 CO-HEARING OFFICER BAGGETT: So this is the new 12 Q. What is the old Q?

MR. HERRICK: We'll get there in a minute, but the testimony just numbered them in order so that it incorrectly showed the map of California Delta, of the Sacramento and San Joaquin Rivers as Q.

17 That will then become R. We'll just go through18 and renumber. I apologize for mistake; it is mine.

MR. NEUDECK: Okay. This is the 1911 Woods Irrigation agreement to furnish water. This agreement serves the Pak/Young parcel.

And the importance of this is to demonstrate the ability to get water to the Pak/Young by virtue of the Woods Irrigation District.

25 Okay. Moving on.

1 The next fact I'd like to raise is this 2 provision for the 1911 agreement was further amplified 3 by another agreement with the Woods Robinson Vasquez 4 district which was done in 1925.

5 This we've talked to earlier. Mike Robinson 6 referred to it in his testimony. This was another point 7 of diversion, final point of diversion serving this area 8 of the Pak/Young parcel.

9 Now I'd like to go into again some additional 10 maps, and then I'll wrap up on kind of the general 11 history of drainage and irrigation within the Delta.

12 Now I'm confused as to what my next exhibit is. 13 MR. HERRICK: The next exhibit would be R as in 14 the written testimony. It's just the attachment has a Q 15 on it, and it should be R.

16 So the map is identified as the map of 17 California Delta of the Sacramento and San Joaquin 18 Rivers. That should be R.

19 It's just that the map attached has a Q on it 20 instead. We'll just make that R. We'll do that 21 henceforth.

22 MR. NEUDECK: Okay. The importance of this map 23 here, we've seen this map earlier. Mr. Nomellini 24 testified in his testimony.

25 What I'm tying this to is the slough that's

1 right in the area that I'm highlighting in my -- with my 2 highlighter on the screen.

This is an area just west of the point that Duck Slough tied in. This is a natural slough from the Weathers -- this Weathers map which we're -- it's a large slough identified by people that are navigating these channels in this vicinity. So they obviously saw this as a navigational channel enough to map it. So it was an open channel in 1921.

10 MR. HERRICK: Mr. Neudeck, you've indicated 11 where you're showing the cursor on the map. You might 12 want to describe -- there is some language there so you 13 can focus that for anybody reading the record later.

MR. NEUDECK: There's some language? You mean as far as what the --

16 MR. HERRICK: The slough you're identifying is 17 next to the words "the pocket" just off of Middle River. 18 MR. NEUDECK: That's correct. I apologize.

19 Yes, the T for "the" is right at the end of the 20 slough. The pocket actually runs in kind of a 21 southeasterly direction.

The channel actually runs almost in a north-south direction off of Middle River, the T at the top of that natural slough off of Middle River.

MR. HERRICK: Thank you.

25

1 MR. NEUDECK: My next exhibit --

2 MR. HERRICK: Still S.

3 MR. NEUDECK: S.

4 MR. HERRICK: Just for clarification, in the 5 written testimony, it refers to the 1941 map of the 6 lands served by Woods Irrigation Company, and it's 7 Exhibit S. It is indeed S.

8 Unfortunately, the map has an R on it, so the 9 map that says R is now the map that says 3S.

10 MR. NEUDECK: The importance of this map is to 11 highlight the slough again, the one I just mentioned in 12 the prior exhibit.

Here's this large slough that runs off of Middle River. This is west of the Duck Slough intersection. It runs up to a point of what is known as the Kingston School area.

17 And this is referenced to another natural 18 slough leading off the Middle River in a northerly 19 direction.

20 The date of this map is 1941. This is a map of 21 the lands served by Woods Irrigation Company.

22 MR. HERRICK: The next Exhibit 3T. 23 3T is correct, and it's identified as the 24 Denny's pocket map of San Joaquin County dated 1913. 25 That map attached to Mr. Neudeck's testimony has a 3S on it which should be 3T as identified in the written
 testimony. Thank you.

3 MR. NEUDECK: I hope you're all following4 along. I think I'll get confused here.

5 Okay. The importance of this map is to 6 demonstrate within the area that we're referring to, 7 this being Burns Cutoff. You can see all of these lines 8 including Duck Slough.

9 And if you look at the key in the lower10 left-hand corner, they're showing these areas as canals.

11 This is a 1913 map showing irrigation canals 12 throughout the Woods Irrigation Company area, areas east 13 of the Duck Slough area, as well as Duck Slough being 14 called out as canals.

15 My final exhibit is 3U.

16 MR. HERRICK: And again, Mr. Neudeck's 17 testimony correctly identifies a 1976 Department of 18 Water Resources Aerial Geology Sacramento-San Joaquin 19 Delta map as Exhibit 3U.

20 That map on his testimony has 3T on it; it 21 should be 3U.

22 MR. NEUDECK: Okay. The importance of this is 23 to demonstrate in 1976 we can see -- let me get my focus 24 here.

25 MR. HERRICK: Zoom in a little bit.

MR. NEUDECK: Well, you want to go down to your
 right, up to your -- yeah.

There you can see the alignment of Duck Slough on downwards in this direction towards Middle River, as well again this major slough that we referred to earlier in the 1913 map and the 1941 map.

7 This is a major feature for being in 1976. And 8 this is a map prepared by the Department of Water 9 Resources just to demonstrate that the nature of these 10 sloughs in this area were predominant, and the features 11 were mapped as late as 1976 for this region.

12 At this point, it's my belief the evidence for 13 Pak/Young parcel is relatively overwhelming as far as the connection to waterways, both from the standpoint of 14 15 initially -- well, from the 1911 Woods agreement, from the standpoint of the numerous sloughs that I showed not 16 17 only dating back pre-1911, as far as up to and close to 18 1976, both 1931 -- excuse me, 1913, I apologize -- 1913 19 Denny's pocket map, the 1941 Woods map, and then again 20 finally with this 1976 map.

Now I'd like to just drop into a quick history of the Sacramento-San Joaquin Delta to give you some perspective on where I believe some of these channels were developed and how they were developed.

25 Initially -- and I started on this earlier in

1 my testimony, and I'll wrap it up.

2 MR. HERRICK: Let me interrupt you there. We didn't cover your Exhibit 3V which is referenced as a 3 combination map made by you putting together various 4 bits of information from the prior maps. It is 3V. 5 6 The map attached to his testimony says 3U on 7 it, but that should be 3V. 8 MR. NEUDECK: That's correct. Okay. Just briefly back to the history of the 9 Sacramento-San Joaquin Delta. As has been testified 10 11 earlier, through Mr. Nomellini's testimony in 12 particular, this area of swamp and overflow lands was 13 reclaimed starting in the early 1850s, formally for the most part was wrapped up in the early 1900s. 14 15 Most of the levees we know nowadays were probably in their formal position by the late 1910, 1909 16 period. 17 18 Initially these channels were all natural 19 channels. They had these overbank areas where they 20 created deposits of the heavier materials adjoining the 21 immediate waterways. 22 These were originally termed as what they call 23 shoestring levees. It was those areas that the original 24 settlers of this area and the farmers started to construct their levees. 2.5

1 On some of the major channels, those levees 2 were set back to provide additional capacity. On some 3 of the minor sloughs, the levees were built right on top 4 of those sloughs, channels, dendritic channels 5 throughout this entire area.

As Mr. Lajoie testified to earlier, this area was dotted with an extraordinary amount of these what we call dendritic or channels running throughout this pregion.

10 Upon full reclamation, many of those channels 11 were cut off from the main channel. And at that time in 12 order to continue the irrigation and drainage practices, 13 they installed gates, floodgates and drainage gates.

And these gates were installed in such a manner that they could be operated in both directions. You could either trap high tides to irrigate from or you could open and flow out from a drainage perspective.

18 The ground was relatively level. Tides were 19 used to push water in both directions.

In this particular case, we are on a riverine system on Middle River. As we extend to the upper side on Burns Cutoff we're more in what we call the tidal, Delta tidal pool, which we don't have the riverine system.

25

We don't really see a reaction to a high flow

there. Once you go down towards Burns Cutoff or the
 Stockton area, you just get a rise and lowering of the
 tide. You do not see an actual gradient in the river.

4 Ultimately these areas that were floodgates, as 5 we've testified to, were turned into pumps.

6 It's been my practice throughout the 30 years 7 I've been working in the Delta to remove these. These 8 are not practically the best infrastructure to have in 9 the middle of the levee when you're trying to protect 10 the area behind it for flood protection.

11 We've had many occasions where they have been 12 buried in place and ultimately after high water events 13 start to leak.

14 Upon further investigation, we learn that we 15 have this large cavity running through the levee that we 16 ultimately remove because in many cases they have 17 already been replaced by pumps.

As I've indicated, this is not a matter of speculation. My practice in the Delta has come across this practice of removing floodgates and old structures like this on numerous islands, and I'm aware of ones that still exist, some that actually still serve a purpose.

24 But some of the historical ones that come into 25 a dilapidated case or that were partially covered,

1 reverting to a pump, we've had to take out because of 2 flood response issues.

3 My final section of testimony relates to my 4 Term 91 February 2003 testimony, and this relates to the 5 testimony on the Delta pool.

I want to cite directly from that a quote relating to the hydraulic conductivity. I stated in my testimony:

9 It's important to understand the local water supply. The entire Delta is one 10 11 big pool of water, some in the channel 12 and some in the soils. There is no net difference in the amount of water in the 13 14 Delta channels when local diverters take 15 from neighboring channels, pump from 16 shallow groundwater, farm crops which 17 drop from shallow groundwater. Taking 18 water from one place is virtually the same as another. This is especially true 19 20 during the summer and fall months when 21 the three tidal barriers downstream of 22 our site here actually hold water back up 23 in Middle River and Grant Line Canal 24 allowing that higher water surface in the 25 region that we're speaking of.

Another reference in that 2003 testimony was a 1 2 July 2001 seepage monitoring study done by the Department of Water Resources. And within that document 3 4 there is a direct quote saying: There is a direct connection between the 5 6 shallow groundwater --7 And this study was done on Upper Roberts, so just to the south of where we are referring to the 8 9 Pak/Young parcel, still within Roberts Island, between Middle River and the San Joaquin -- main stem of the San 10 11 Joaquin. 12 Finishing the quote: There is a direct connection between the 13 14 shallow groundwater and the neighboring 15 channels. When the river goes up, the 16 groundwater goes up. 17 And that was a quote directly out of the July 2001 DWR study. 18 With that, I conclude my direct testimony. 19 20 I believe the records I put forth today 21 demonstrate a connectivity to either surface water 22 connection or, in this case, Woods Irrigation Company or 23 the Woods Robinson Vasquez agreement. 24 Thank you. 25 MR. HERRICK: Thank you. Mr. Chairman, I note

once again a mistake here, and I'd like to correct it. 1 2 Mr. Neudeck, on your Exhibit 3V which is that combination map showing different waterways put on a 3 4 current aerial photograph. Do you see that? MR. NEUDECK: 5 Correct. 6 MR. HERRICK: The area hatched appears to be --7 MR. O'LAUGHLIN: The Tanaka property. MR. HERRICK: The Tanaka property which is not 8 the subject of this hearing. 9 MR. NEUDECK: 10 Right. 11 MR. HERRICK: And which is just south of the 12 Mussi hearing which this is not for, which is just south 13 of the Pak/Young parcel which is clearly indicated on other exhibits. Anyway, I apologize for that. 14 15 So with that, what is the Chairman's pleasure? Would you like me to take his direct for Mussi and 16 follow on before we break? 17 CO-HEARING OFFICER BAGGETT: Yeah. 18 19 MR. HERRICK: Thank you. Give me one minute 20 please. 21 CO-HEARING OFFICER BAGGETT: Mr. Rubin? 22 MR. RUBIN: I just wanted to make sure it's 23 clear. I was not here the morning. I understand that 24 you would prefer that we raise any objections we may have at the time the exhibits are moved into evidence? 25

1 CO-HEARING OFFICER BAGGETT: Correct.

2 MR. RUBIN: Okay.

MR. HERRICK: Counsel pointed out to me with regard to Mr. Neudeck's testimony we just presented for Pak/Young we didn't reference the attached Term 91 testimony which was labeled V and is now W, as we did the ones before that, we just gave it the subsequent letter.

 10
 CHRISTOPHER H. NEUDECK

 11
 Called by RUDY MUSSI, TONI MUSSI AND

 12
 LORY C. MUSSI INVESTMENT LP

 13
 DIRECT EXAMINATION BY MR. HERRICK

 14
 --000-

MR. HERRICK: Anyway so now Mr. Neudeck, I don't believe he needs to introduce himself again. He will now present the slightly similar and slightly different direct testimony for the Mussi matter so we may try to keep those as separate as we can. MR. NEUDECK: Thank you. I won't go through any of my background and will jump right in.

22 My testimony involves the same two main areas 23 related to mapping and title of documents and the 24 summary of irrigation and drainage practices.

25 Again, we began with the chain of title through
the Central Valley Land Service Company, Thurl Pankey's
 work, on the Mussi property.

And starting with Exhibit A, this will bring forward the current configuration of the Mussi parcel. We've had some reference to this in testimony by Mr. Mussi earlier.

7 This is the piece abutting Duck Slough, Inland 8 Drive, and it's known as parcel 131-170-03 which is the 9 circle 3 here. Thank you.

10 Okay. We'll walk through these. Mr. Lindsay, 11 if we can just, again, capture the last page of these 12 exhibits, I'd appreciate it. The deed themselves we 13 won't walk through.

14 The first is the State patent dating15 November 24th, 1876.

Here you can see this is a very large parcel covering both sides of Duck Slough nearly out to the San Joaquin touching both Burns Cutoff as well as Middle River.

20 San Joaquin is to the right of this picture, 21 Burns Cutoff is to the north. Middle River is to the 22 south. The San Joaquin River actually flows on up past 23 and around the other side of Burns Cutoff.

24 The next Exhibit 3C is where J.P. Whitney25 grants deeds to M.C. Fisher. This is January 17, 1877.

Again, a very large transfer. In this
 particular case, it's all areas east of Duck Slough,
 still incorporating the Mussi parcel.

Once again, still connecting to Burns Cutoff to the north, Middle River to the south and to some degree nearing the San Joaquin on the east.

7 Exhibit 3D is a transfer from Fisher to Stewart
8 dated March 15, 1877. This again is another large
9 transfer. Similar area, again touching Burns Cutoff,
10 Middle River and Duck Slough on the west.

11 Okay. 3E. 3E is a date where Stewart 12 transfers his property to Vasquez. Vasquez -- the date 13 of this transfer was April 28, 1891.

You can see the parcel here abutting Duck Slough but apart from both Burns Cutoff and Middle River.

The important feature here, again, the same note I cited in the last hearing on Pak and Young, the deed language related to tenements and hereditaments was part of this deed, believing that the hereditaments is preserving the water right as part of this language at the time this deed occurred.

23 MR. HERRICK: Mr. Neudeck, would you explain 24 the altered shape of this mapped parcel with relation to 25 the section lines and the true line of the High Ridge

1 Levee, Duck Slough.

2 MR. NEUDECK: I'm not sure if I'm -- could you 3 repeat the question? I apologize. I'm not sure what 4 you're referring to.

5 MR. HERRICK: (Indicating)

6 MR. NEUDECK: Yeah, this is not exactly the --7 again, this is a representation back in 1891 of Duck 8 Slough. This parcel configuration, as it lays out 9 today, is slightly different given the fact that Duck 10 Slough was not a perfect surveyed alignment at this 11 point.

All right. 3G which has not been mapped is the final subdivision of the property. This was the Milton Welser deed to the Mussi property.

And this at that point created two parcels, and I did not map that.

Now what I'm going to do is briefly walk through the historical references that I walked through in the Pak and Young, and we'll go through those relatively guickly.

For reference sake, as a witness, I'm a little lost here. Do you want me to walk through these as I stepped through them in the case for Pak and Young, because many of these are similar?

25 MR. HERRICK: I would just mention the exhibit

1 numbers but not go into the detail you did before.

2 MR. NEUDECK: Okay, so we won't pull the maps 3 up themselves.

4 MR. O'LAUGHLIN: I think for the record we 5 should -- since we have separate records on these, we 6 should go through some detail. Not as much as before, 7 but some on this.

8 MR. HERRICK: The witness should list each 9 exhibit and briefly identify it, you know, with the 10 summary in mind.

11 MR. NEUDECK: Okay. I'll do my best here to 12 keep everyone attentive to my testimony which I know is 13 absolutely riveting.

But the next subject is the assessor's parcel map in 1876. Mr. Lindsay, I don't believe we need to pull it up. It's the blue-lined map.

This is where we make reference to the blue line and extended both from Burns Cutoff down to Middle River. This is an 1876 assessor's map which I contend the Mussi parcel abuts to.

The next, Exhibit 3K, is reference to the Samson dredge from the 1957 Delta geography. This is where we speak to how the Samson dredge dredged a portion of Duck Slough starting from Burns Cutoff heading in a southwesterly direction.

Exhibit 3L is the 1881-82 assessor's map. The 1 2 importance of this was to demonstrate that it was post 3 the reference to the Samson steam shovel in that the 4 assessor's map actually shows levees on either side and 5 again shows the general configuration of Duck Slough. 6 3N -- excuse me, M as in Michael -- is the Tucker and Smith map of 1883. The importance of this 7 8 was to demonstrate again the alignment of Duck Slough as 9 of 1883. The term Cross Levee now, instead of High Ridge 10 11 Levee or the term Duck Slough. The important feature 12 here is to show levee and slough. One thing I didn't reference in -- I did not 13 reference in my earlier testimony, and maybe it would be 14 15 warranted to pull this exhibit up. I wanted to show that there is a Cross Levee, a similar Cross Levee to 16 the southeast of this property, if we can bring that up. 17 18 CHIEF LINDSAY: I'm sorry, 3M? 19 MR. NEUDECK: M as in Michael, correct. If we 20 could blow up -- right there. 21 If you note the Cross Levee that's referenced 22 here versus --23 MR. HERRICK: Right here. 24 MR. NEUDECK: I apologize. Thank you. 25 This is an area that would be southeast of the

1 area that we've been referring to as Duck Slough. So it 2 would be upstream on Middle River. There is a term that 3 runs across the middle of the map between Middle River 4 and the mainstem of the San Joaquin that says "Cross 5 Levee".

6 Similar dashing, the reference to the levee 7 along Duck Slough, also is referenced along here but it 8 doesn't have the straight line. There is no water 9 against that.

10 That's the separation between Middle Roberts 11 and Upper Roberts. There is a cross levee there.

In many cases, these levees were constructed for purposes of preventing flooding from one district to the next. It most likely wouldn't prevent flooding of the downstream districts, that being Middle and Lower Roberts, if Upper Roberts were to fail, but it would likely protect Upper Roberts, say, if Middle Roberts were to fail.

19 The reason I say that is these cross levees 20 were not the same height as the adjoining riverine 21 levees. So it was a dividing line as well as a flood 22 control line.

But I wanted to show you in reference to the dashed line that there was another dashed line on the map showing a levee.

The next exhibit is 3N. This is the California
 State Engineer topo and irrigation map. This was
 referencing the Duck Slough.

30 is an 1894 Stockton-Bellota drainage Map.
Here again, this is a reference to Duck Slough. It
actually says Duck Slough on the map, and it shows the
alignment extending from Burns Cutoff to Middle River.

8 My exhibits are all correct on this one, 9 correct?

10 MR. HERRICK: Hope so.

MR. NEUDECK: Okay. I apologize for the confusion.

But 3P is the 1911 Quadrangle -- 1911 data, 14 1913 map, demonstrating again the alignment of Duck 15 Slough. As indicated in the Pak/Young testimony, 16 there's water in that blue line.

3Q is a 1921 map. This is the Weathers and Petzinger marine captains that were mapping the major slough that runs in a northerly direction just west of the point that Duck Slough ties into the Middle River and the area known as the pocket.

3R is the 1941 map of land served by Woods Irrigation Company, again showing the major slough to the west, the one I just referred to with Weathers and Petzinger along with Duck Slough alignment and other

1 irrigation features.

2 3S is the 1913 Denny's pocket map that shows 3 canals throughout Middle Roberts and along the alignment 4 of Duck Slough.

5 And then finally 3T is the 1976 DWR Aerial and 6 Geology Map. It shows water down particularly on the 7 major slough to the west of the slough tie-in.

3U is the same map we referred to that's a9 compilation and kind of historical use of connectivity.

Again, this was more referencing the Tanaka parcel, which is not a matter in this hearing, but it does reference a lot of the history that was put together in this mapping effort.

14 CO-HEARING OFFICER BAGGETT: Maybe you have 15 confused me then. It wasn't the same numbering we just 16 corrected? It should have been the same letter. So U 17 on that one was the map of the Delta.

18 MR. HERRICK: I believe it's correct in this.
19 This is -- the map U is the --

20 CO-HEARING OFFICER BAGGETT: That's V, right?21 It was V before. Is it U now?

22 MR. HERRICK: In the prior --

23 MR. NEUDECK: Pak/Young it was V.

24 CO-HEARING OFFICER BAGGETT: Pak/Young it was25 V; but in this one, it's U.

MR. HERRICK: Yeah, the lettering is correct - CO-HEARING OFFICER BAGGETT: For - MR. HERRICK: -- on these exhibits in Mussi - CO-HEARING OFFICER BAGGETT: Got it, okay.
 MR. HERRICK: -- with the testimony numbering.

CO-HEARING OFFICER BAGGETT: I just relabeled
them all.

I appreciate that. The fault is all mine. I apologize.

9 MR. NEUDECK: Give me a moment to catch up 10 where I'm at here. Okay.

6

11 Now I was going to briefly touch upon the 12 history of the irrigation and drainage practices within 13 the Delta. I just recently spoke about that in the 14 Pak/Young matter relating to the original swamp and 15 overflow lands.

16 As the dendritic channels that extend 17 throughout the Delta were bordered by what is known as 18 shoestring levees -- those are the levees that were 19 created by overflow of those sloughs and the deposits of 20 the heavy materials -- those dendritic channels were 21 eventually leveed off to make the full reclamation of 22 the Delta region starting in the mid 1800s, wrapping up 23 in the early 1900s.

24 During that period as those channels were cut 25 off from the main sloughs and rivers, there were

structures put in such as floodgates to continue the
 connectivity for purposes of irrigation and drainage.

3 Ultimately some of those areas have been 4 changed in a sense that the gravity feed systems aren't 5 as efficient, and the floodgate structures served as a 6 danger to the flood protection of the reclamation 7 district, and pumps were placed in there instead of the 8 gate structures.

9 I think I made reference as well in the Pak and 10 Young, the purposes of these gate structures that were 11 occurring in the early transition between the natural 12 Delta and the reclaimed Delta served both as openings to 13 allow tidal flow into the farmland as well as opening on 14 the opposing end to drain water off the irrigated 15 farmland.

16 They also could serve a purpose to back water 17 up. There could be flap gates to allow water in, and 18 then closed down not to allow water back out.

19 I refer to the fact that this is not an issue 20 of speculation. My firm has been involved in the Delta 21 since the mid '50s, I myself since the early '80s.

And I have had a number of instances where we've had the opportunity to remove these old floodgates, namely for purposes of flood protection. In many cases, they have been filled over historically, and

1 pump structures have been put in place.

And we have learned through a flood fight experience that the levee was leaking, and it was because of that.

5 There is still instances where these floodgates 6 are still in play and are serving the irrigation 7 capabilities today. That definitely exists in the Woods 8 system, and there's a remnant of that in the Woods 9 Robinson Vasquez system as well.

10 Okay. To wrap up my testimony related to the 11 Mussi testimony, is to touch base a little bit on the 12 Delta pool concept. I made reference to my Term 91 13 testimony, which is Exhibit -- V.

14 I apologize, I don't have that with me.

15 So my Term 91 testimony, which is Exhibit V, 16 which I reference the Delta pool, as well as I reference 17 the July 2001 seepage monitoring study by DWR.

18 The Delta pool reference has been discussed in 19 prior testimony by Mr. Nomellini with regards to the 20 entire Delta being one large pool. Water in the 21 channel, similar water in the river -- I mean similar 22 water in the farm area.

These levees, particularly in this area that we're speaking of, are extraordinarily sandy. The DWR 25 2001 seepage monitoring study was able to evaluate that

and actually report there was a direct connection. As
 the river goes up, so goes the groundwater.

They're essentially the same water body. There might be some lag time as the river climbs that the groundwater may lag in its rise. But ultimately, if left to no disturbance, they would equal the same elevation.

8 In other words, if there wasn't drainage on 9 that land, the river water and the groundwater behind 10 the levees would equal in nature.

11 That concludes my testimony.

12 MR. HERRICK: Let me ask two questions here to 13 sum it up, and then we're done, I believe.

Mr. Neudeck, your conclusions, especially on page 5, are that the Mussi property was abutting a waterway called Duck Slough through at least 1911; and then you've connected it through canals to a neighboring slough well past that, actually through 1941; is that correct?

20 MR. NEUDECK: That is correct. 1913 as well in 21 the Denny's pocket map, yes.

22 MR. HERRICK: And based on those maps, you have 23 concluded there was no time, especially up to the 24 installation of the current Woods Robinson Vasquez 25 diversion, there was no time that the Mussi property was

1 not abutting a waterway; is that correct? 2 MR. NEUDECK: Yes, that's my finding. 3 MR. HERRICK: And the distinction with the Pak 4 and Young property, the other hearing, is that their 5 property became benefitted by agreement to provide water in 1911? 6 7 1911, that's correct. MR. NEUDECK: 8 MR. HERRICK: I believe that's all. 9 CO-HEARING OFFICER BAGGETT: Very good. Unless the prosecution has less than 35 minutes 10 11 of cross, we will continue till later. 12 MR. ROSE: I'm honestly not sure and wouldn't 13 want to delay you in any way. So if you'd rather, I'll 14 begin next time. 15 CO-HEARING OFFICER BAGGETT: I think it's 16 probably cleaner if we just begin all the cross at once. 17 MR. ROSE: I agree with that. 18 (Discussion off the record) CO-HEARING OFFICER BAGGETT: With that, thank 19 20 you very much and we'll see you sooner than later, I'm 21 sure. * * * 22 23 (Thereupon the WATER RESOURCES CONTROL BOARD hearing adjourned at 3:25 p.m.) 24 25

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 22, 2010. LINDA KAY RIGEL, CSR Certified Shorthand Reporter License No. 13196