1	SUPERIOR COURT OF THE STATE OF CALIFORNIA				
2	FOR THE COUNTY OF SAN BERNARDINO				
3	000				
4	CHINO BASIN MUNICIPAL WATER DISTRICT, )				
5	Plaintiff,				
6	vs. ) Case No. RCVRS51010				
7	CITY OF CHINO, et al.,				
8	Defendants. )				
9					
10	REPORTER'S TRANSCRIPT OF ORAL PROCEEDINGS				
11	BEFORE HON. STANFORD E. REICHERT, JUDGE				
12	DEPARTMENT C-1 CHINO, CALIFORNIA				
13	Friday, October 8, 2010				
14					
15	APPEARANCES:				
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26	(Appearances continued on following page.)				
27					
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1	(Appearances Continued:)				
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1		<u>E X H I B I T S</u>	
2	EXHIBITS	FOR I.D.	IN EVIDENCE
3	A - DVD of Power		
4	Point Presentation	(Attached to Orig	ginal Transcript)
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1 CHINO, CALIFORNIA; FRIDAY, OCTOBER 8, 2010 A.M. SESSION 2 3 DEPARTMENT C-1 HON. STANFORD E. REICHERT, JUDGE 4 (Appearances as heretofore noted on title page.) 5 -000-6 THE COURT: We're on the record in the Watermaster 7 We are here with respect to a couple of items this morning. Maybe I should address the shorter one first which 8 9 is the -- on the overlying Non-Agricultural Pool's motion 10 regarding their pooling plan amendments. 11 Good morning. 12 MR. HUBSCH: Morning, your Honor. Thank you for 13 taking that first. 14 THE COURT: Thank you. 15 MR. HUBSCH: This is Allen Hubsch. I'm the counsel for the Non-Agricultural Pool. 16 17 THE COURT: And Mr. Fife. 18 MR. FIFE: Yes, your Honor. Michael Fife for the 19 Watermaster. 20 THE COURT: Okay. Thanks. 21 There was a non-opposition by the Appropriative Pool 22 but had a point suggesting that the amendment requires a 23 judgment amendment consistent with Paragraphs 46 and 15. 24 is embarrassing but I could not find Paragraphs 46 and 15 in 25 the judgment. Is someone here -- is Mr. Schatz here perhaps? 26 MR. SCHATZ: Yes. 27 THE COURT: Good morning, Mr. Schatz. 28 MR. SCHATZ: Good morning.

THE COURT: To what were you referring in your paperwork that you filed with the court?

MR. SCHATZ: The original judgment filed in 1978.

THE COURT: Well, I looked at the judgment in my looseleaf here that Mr. Fife gave me.

MR. FIFE: Yes.

THE COURT: And I couldn't find Paragraphs 46 and 15. Was I looking in the wrong place? Oh, wait a minute. I think I was looking in the wrong place. Hang on. I was for some reason -- 46 is the initial pooling plan which states, the initial pooling plans which are hereby adopted are set forth in Exhibits F, G, H, respectively, and unless and until modified by amendment of the judgment pursuant to the court's continuing jurisdiction, each such plan shall control operation of the subject pool. And Paragraph 15 is the continuing jurisdiction paragraph for the court.

So the problem, I confess, I have with this is there's no judgment, no one place where the court can go and actually find the judgment and all the amendments to the judgment to figure out exactly what the judgment is, which I find odd for a case of this size that -- in one respect, but perhaps not so odd with respect to the fact that the case -- the judgment in this case was entered in 1978, and so many years have passed and there have been so many amendments and no one has really kept track of them.

So let me come back to Mr. Schatz then and ask if you have any additional argument with respect to this amendment. The Watermaster did not have a problem with it,

and I'm -- it looked to me like it was an internal matter for the Non-Agricultural Overlying Pool to handle and not -- did not require judgment amendment from the information that I have available to me at this time.

So any additional argument, Mr. Schatz?

MR. SCHATZ: Yes, your Honor. The provisions referred to have to do with the pooling plan. And the provisions as cited in the Non-Ag Pool brief note that the pooling plan, it can't be inconsistent with respect to the rules and regulations. And the gist of it is if the volume vote, it's a material change because it changes the pooling plan in terms of how the volume vote works. And for that reason, because it's clear based on those provisions in the judgment, it's really a judgment amendment, not just a --

THE COURT: A rules and regulation --

MR. SCHATZ: Yes.

THE COURT: -- modification.

MR. SCHATZ: That's right.

THE COURT: Okay.

MR. SCHATZ: Correct.

THE COURT: Mr. Hubsch, let me come back to you on this. That point does make some sense to me since it looks like it was not a technical change but a substantive change with respect to how the votes are taken.

MR. HUBSCH: Well, your Honor, that's the reason we made the motion.

THE COURT: Okay.

MR. HUBSCH: We have the ability to change our own

rules and regulations without a judgment amendment.

THE COURT: Right.

MR. HUBSCH: But we were making a -- adding a sentence to our pooling plan and so you could view that sentence as being supplemental. We weren't actually changing anything in the plan; we were just adding a sentence. And we are allowed to make changes not inconsistent, but we didn't want to have to debate whether there was or wasn't, so we decided to actually make the motion, come into the court --

THE COURT: Okay.

MR. HUBSCH: -- and seek approval and give an opportunity for others to comment. We don't think there is any substantive disagreement over what this is, and so I would ask Your Honor to approve it. If the issue is that there isn't an amended and restated judgment, maybe now's the time to get one and include this so that we'll all have a consolidated judgment that we can work on. I don't know how many times the judgment has been amended. It may not have been amended that frequently for there to be much of a need for it. Michael probably --

MR. FIFE: Yeah. If I could comment, your Honor. THE COURT: Yes, please.

MR. FIFE: You have identified an issue that should be resolved. It would be appropriate to produce a restated judgment that incorporates all of the previous amendments. I think that would make everybody's lives much easier to have all of the amendments in one place, and we can do that and submit it to the court for approval. I think it would -- we

would need to go through a process to have the court adopt that and give everybody an opportunity to review it, make sure it's correct, all of that type of stuff. That would be a good thing and we would be happy to do that.

I would like to echo Mr. Schatz's comments that Watermaster also views this as a judgment amendment.

THE COURT: Okay.

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MR. FIFE: It is an amendment to the pooling plan.

Paragraph 46 does say that any changes to the pooling plans require a judgment amendment, and so Watermaster's papers did concur with the change recommended by the Non-Agricultural Pool in the context of a judgment amendment. I believe Mr. Hubsch is correct, there's no -- there's nobody disagreeing with any aspect of this process.

then. Your request is granted to make the change with respect to your pooling arrangement. However, it's conditioned on an amendment to the judgment. We will need to have an amended judgment incorporating that change rather than just make -- And, supplemental to that, I'm going to direct Watermaster to prepare a new -- not a new judgment but a complete judgment so that we have in one place available to the court and the parties the judgment with all the amendments added, including yours, which I'm approving, and so we finally have a complete document for the court to work with. Because I just found it -- how can I describe it -- not judicially effective to orchestrate a case when no one knows exactly what the judgment says anymore because it's been modified so many times over the

last 30 years. Did you need this done soon?

MR. HUBSCH: What I'm wondering -- I'm not sure that it's going to make a difference but it is an issue that we are -- our pool wanted to resolve for its own internal administration, so I guess I prefer that the order be effective now -- that the approval be effective now so, say, at our next meeting we know which rule --

THE COURT: Okay. The approval is effective forthwith.

MR. HUBSCH: Okay. Thank you.

THE COURT: So you can go forward and know exactly what your internal policies are. But the internal policy has to be reflected in the judgment, so I'm going to direct Watermaster at this time to prepare a fully integrated complete judgment reflecting the current status of the judgment with whatever amendments there are in effect at this time, literally as of October 8, 2010. Okay. So -- and I'm going to set a review hearing for that, and I plan to do it in about 90 days.

Will that be enough time, Mr. Fife?

MR. FIFE: That will. And something we are going to discuss later is that we are going to be requesting a further hearing for some other substantive issues any way in the January timeframe so that would work well.

THE COURT: Want to go ahead and set a date now and we'll calendar that the status conference with respect to the amended motion and then add to it as this hearing progresses.

MR. FIFE: We might wait because the other

substantive issue is going to depend on some documentation 1 and --2 3 THE COURT: Okay. Want to clue me in? MR. FIFE: I don't know I can commit for the other 4 5 parties to a date for that. 6 THE COURT: Want to tell me what the issue is at 7 this point, or do we need to reserve until I get some background information? 8 9 MR. FIFE: It might be easier once you have some 10 background information from Mr. Malone's presentation. 11 THE COURT: Okay. We'll address this probably in 12 January then or in this timeframe, but I want to clarify again that the order is effective forthwith. 13 14 MR. HUBSCH: Okay. Thank you, your Honor. 15 THE COURT: You're welcome. 16 MR. HUBSCH: That's great. 17 THE COURT: All right. That puts one issue to rest. 18 And I think that the next issue is with respect to the 19 Recharge Master Plan update which the court has read. 20 understand there's a power point presentation to supplement 21 the court's reading and understanding and ruling on this 22 issue; if that's correct. 23 MR. FIFE: Yes, your Honor. THE COURT: Okay. 24 25 MR. HUBSCH: Your Honor, if -- with your permission, 26 I think I will leave. So, for the record, I'll leave the 27 presentation. Some other people may leave as well. 28 THE COURT: You don't want any input on the court's

ruling with respect to the Recharge Master Plan update?

MR. HUBSCH: No. We trust Mr. Fife will do what's necessary and convince you of whatever needs to be convinced.

THE COURT: Okay. Thank you.

I feel like I'm a school teacher to a certain extent. Anyone else -- class excused unless you want to stay, but we are going to proceed on the issue then of the Recharge Master Plan update.

I understand there's a presentation for the court. Let me make a suggestion with respect to how to proceed with the record, and let me do this off the record because we are just going to have a discussion for a moment and we can put whatever we decide on the record. So let's go off the record for a minute.

(Off the record.)

THE COURT: Let me go back on the record then and state this on the record, and that's what we're going to do.

And let me ask a couple of other questions then. Are we going to do the power point presentation now? Is now the right time to do it?

MR. FIFE: Yes.

THE COURT: Okay.

MR. FIFE: While Mr. Malone is coming to the stand, I'll give you a brief introduction to what we are going to do and how we see the structure of it, but, yes.

THE COURT: Okay. At the conclusion of the -- how long is the power point presentation about?

MR. FIFE: Approximately an hour. Approximately an

hour.

THE COURT: Okay. That will run us up to about the noon hour. I'm clear all afternoon so however long it takes to resolve whatever issues we've got, we'll come back at 1:30 and resolve them. Or did you want a future hearing date set?

MR. FIFE: I think -- I don't know that we are going to have any issues. The approval of the Recharge Master Plan is unopposed.

THE COURT: Right.

MR. FIFE: And we have submitted a proposed order, and so the purpose of the presentation is to give the court background information.

THE COURT: Okay.

MR. FIFE: Allow you an opportunity to ask any questions you might have.

THE COURT: I actually had quite a few questions -- MR. FIFE: Okay.

THE COURT: -- having read all this stuff. And so I think we may have to come back in the afternoon then unless everyone -- this is where I'm looking out. Ordinarily we complete these hearings in the morning. If lawyers are tied up in the afternoon, I'll be more than happy to have you come back on a subsequent Friday to finish out this hearing. I'm looking out to see if there's -- if not, I just assume get it done today. Today's always best. My favorite line of judicial administration, we need to get today's work done today. So let me look out. Is there a problem with anybody coming back at 1:30 to resolve some of the court's questions

and finish out the hearing? Hearing no objection, seeing no hands, let's go back on the record then. We will proceed with the power point presentation. And I'll indicate for the record that Watermaster will provide us with a disk in a power point format and we will attach that as an exhibit to the transcript.

MR. FIFE: Okay.

then. Off the record the court had a discussion with counsel with respect to the procedure of this particular hearing, some of the logistical problems with respect to the presentation of the power point. The court after consultation with counsel is going to order that a disk of the power point presentation with a disk with a copy of the power point presentation be attached to this transcript and preserved with the transcript as Exhibit "A" to the transcript. And I gather there's no objection by any of the parties present with respect to that order of the court. No hands, no objections. Okay. That will be the order.

If you don't mind I think I'll come back to counsel table so I can have a better view of the power point presentation.

MR. FIFE: Do you want this side of the table?

THE COURT: I'm fine right there. Stay where you are.

MR. FIFE: Okay.

THE COURT: And let's call -- Mr. Fife, you have a witness to proceed; is that correct?

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MR. FIFE: Yes. Watermaster will call Mr. Andy
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     Malone.
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               THE COURT:
                          Okay, Mr. Malone, come on up, please.
               MR. FIFE: He is with Wildermuth Environmental which
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     is Watermaster's consulting hydrologist.
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               THE COURT: Yes.
                                 They were the entity along with --
     it looked like they were the main entity that prepared the
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     Recharge Master Plan update.
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               MR. FIFE:
                          That's correct.
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               THE COURT: Okay. Thank you. All right. We're
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     going to have testimony then?
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               MR. FIFE: Yes.
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               THE COURT: So let's face my clerk and please raise
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     your right hand.
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               THE CLERK:
                          You do solemnly state that the evidence
     you will give in this matter will be the truth, the whole
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     truth, and nothing but the truth, so help you God.
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               MR. MALONE: I do.
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               THE COURT: Thank you.
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               THE CLERK: You may be seated.
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               THE COURT: All right. Please state and spell your
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     name for the record.
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               MR. MALONE: Andrew Malone.
               THE COURT: Okay.
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               MR. MALONE: A-n-d-r-e-w.
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               THE COURT: All right.
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               MR. MALONE: Last name Malone, M-a-l-o-n-e.
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               THE COURT:
                           Thank you. Give me just a moment.
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MR. MALONE: Yes, sir.

THE COURT: I'll come down to counsel table.

MR. MALONE: Okay.

THE COURT: That's not going to create a problem for you, is it, Deputy?

THE BAILIFF: No.

MR. FIFE: Now I should move because the way Andy is angled.

THE COURT: You're fine. Stay where you are.

MR. FIFE: Okay. So, your Honor, before Andy starts, just for the record and to clarify a little bit, what we are going to be doing, Mr. Malone is going to present a power point presentation. It is intended solely for the court's education and to give you background on the issues and concepts at work in the Recharge Master Plan. He is not going to be directed by questioning. He'll simply be set loose and he'll begin giving the presentation.

THE COURT: Okay.

MR. FIFE: Please feel free to interrupt him at any time, ask whatever questions you might have. We didn't plan this out ahead of time. There's no objection that we know of to the Recharge Master Plan but that doesn't mean that other parties might not have questions of their own. And so I think it would be up to the court's pleasure whether you would want to give an opportunity to other parties to ask questions as we go, or whether you'd prefer that they save their questions till the end in more traditional form of cross-examination. I think we would be open to either -- either way of doing it.

THE COURT: Thank you. Since this is in the nature really of an educational exercise rather than -- and since there's no formal objection to the Recharge Master Plan update, it's the court's preference that everyone, including the court, be able to ask questions as they arise rather than save them till the end. So if there's a question I'll leave it up to our witness to look for hands in the audience. I'm sitting at counsel table and my back's to the audience and I can't recognize the members. So -- I'm terribly sorry. I forgot --

MR. MALONE: You can call me Andy.

THE COURT: I prefer a little formality. Your last name again?

MR. MALONE: Mr. Malone.

THE COURT: Mr. Malone. Thank you, Mr. Malone. you see a hand, please go ahead and answer that question as it arises.

MR. MALONE: Okay.

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THE COURT: For myself or anyone else in the room. Thank you very much. Go ahead, please.

MR. FIFE: Thank you.

Mr. Malone, please proceed.

MR. MALONE: Good morning, your Honor. It is my pleasure to be here. Like Michael said, this presentation was put together as background information. It's not necessarily directed exactly at the Recharge Master Plan, but a lot of the concepts will apply and help you better understand the Recharge Master Plan as well as other issues that may come

before you. So, again, I repeat what Mike said. I invite you to interrupt me at any point in time along the way here and ask a question.

THE COURT: Thank you.

MR. MALONE: The first slide up here is the Chino Basin in the yellow color. It stretches from Fontana to -- from the east all the way across to Rancho Cucamonga, city of Ontario to Montclair and Pomona and Upland in the north. If we move further to the south, it's the city of Chino. And the very southern part of the basin is what we call the agricultural area which is converting over to urban land uses now, and we will show you some graphics of that. But we typically refer to this southern part of the basin as the agricultural area.

THE COURT: Indicating just above the Prado Dam?

MR. MALONE: Prado Dam is right down here and this whole area is Prado flood control basin.

THE COURT: All right. Thank you. That is indicated on the slide, I see.

MR. MALONE: Yes.

THE COURT: Thank you.

MR. MALONE: There's a number of surface water streams that run through the basin and across it. They exit the San Gabriel mountains to the north. And -- and so these streams all run down and ultimately merge in with the Santa Ana River which is the major tributary across the entire Santa Ana River watershed. Santa Ana River runs on the southern portion of the basin here and ultimately to Prado basin and

ultimately through the dam and down to Orange County where 1 2 Orange County Water District uses all of this water, and the Santa Ana River recharges it into their ground water basin. 3 That's a pretty important concept to understand, is that the 4 Santa Ana River, it provides beneficial uses for ultimately 5 6 drinking water purposes. 7 THE COURT: Well, that's the whole part of the -- I can't think of the concept now -- hydrology --8 9 MR. MALONE: Hydraulic control. 10 THE COURT: There we go. 11 MR. MALONE: Yeah, good. 12 THE COURT: Thank you. 13 So are almost all of the streams that flow into the 14 Santa Ana River now cemented? 15 MR. MALONE: They are. 16 THE COURT: Okay. 17 MR. MALONE: And I've got some graphics to show you, 18 the progression of that too. 19 THE COURT: Thank you. 20 MR. MALONE: That's also a very important concept to 21 understand. It's surrounded by other ground water basins and it's separated from those by faults -- geologic faults that 22 act as ground water barriers. They are not perfect barriers. 23 There is some leakage of ground water that occurs in the 24 25 subsurface from these upgrading ground water basins into the Chino Basin. And that can be very important. 26 27 important source of recharge to the Chino Basin. It's not a whole lot of water but it does occur. And particularly in the 28

Rialto/Colton basin here there's some ground water contamination, and a hotly debated concept is whether or not that ground water contamination is leaking across -
THE COURT: Is that from the old air force area?

What's the nature of the contamination?

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MR. MALONE: It's perchlorate.

THE COURT: Okay. And another question I had -- go ahead. You might get to this as you progress. Go ahead. Oh, no. You didn't -- go back to the previous slide then for a moment.

Another question I had is the judgment is defined by really legal descriptions -- legal descriptions but --

MR. MALONE: Yes.

THE COURT: -- but the physical surroundings for the basin don't conform to the legal description of the geography over which the judgment applies. So how do you deal with ground water recharge and runoff and all the other hydrologic issues for the natural boundaries that aren't included in the judgment boundaries?

MR. MALONE: Okay.

THE COURT: Do you understand my question?

MR. MALONE: Yes. I think I can answer that question from a physical standpoint. I think I would leave it up to Michael Fife to -- to speak more about the -- how we operate Watermaster and the effects of that.

I don't have the legal boundary on here. It does approximate the hydrologic boundary which I'm showing here.

THE COURT: It was close.

MR. MALONE: Close.

THE COURT: But when I saw the diagram, I can't remember the figure, but there were areas that were not included that have hydrologic consequences.

MR. MALONE: Yes.

THE COURT: But aren't subject to the court's jurisdiction.

MR. MALONE: Yes.

THE COURT: And so I was wondering how you deal -maybe Mr. Fife can answer this question -- how you deal with
those problems where you have inflow into the basin but not
subject to the court's -- not that I can control the tides but
are not part of the jurisdictional area that the court's
concerned with in the Chino Basin by virtue of the judgment
itself?

MR. FIFE: I think -- I'm not the witness. I don't want to give testimony but --

THE COURT: You can fill me in, please.

MR. FIFE: Okay. The judgment primary controls pumping. So the parties who are parties to the judgment are for the most part pumpers from the basin, and the basic structure of the judgment is to say who can pump what. Then there's the other layer of the physical solution which gets to recharge and water flowing in and such.

THE COURT: Okay.

MR. FIFE: There's inflow coming into the basin, as Mr. Malone is going to describe to you, from all directions, so from the other ground water basins, from the surface flows.

And Watermaster doesn't per se control that. We keep track of it. We try to enhance it. But it's not as if we have jurisdiction over the upper watersheds where the water's coming from. So it's more we -- water comes in, we in the big sense take what we can get, and then the judgment controls the pumping of that ground water. THE COURT: Okay. That helps. Thank you. Okay. MR. MALONE: Yeah. 

THE COURT: Go ahead, please.

MR. MALONE: Yeah. I would just add that when we do the technical work and we're running ground water flow models, we are using the hydrologic definition of the basin.

THE COURT: Okay. Thank you. Thank you. Go ahead, please.

MR. MALONE: I bring up this slide here. This is showing you an example of what the aquifer looks like. And I don't know how familiar you are with hydrogeology, but I just wanted to show this to you so you get a sense of what it is. A lot of people think that an aquifer is an underground lake. It's really not in southern California. It's sands and gravels and clays that are interbedded and saturated with water.

THE COURT: You mean in layers?

MR. MALONE: In layers.

THE COURT: Okay.

MR. MALONE: Yes. So what I'm showing you here is when we drill wells, the sediments are coming out -- out of the well hole and we take samples of those. And here we're

1 stuffing it in a little jewel box so that we can see it all together. 2 3 THE COURT: Does it come up like mud? MR. MALONE: Yes, it comes up usually in a fluid and 4 5 the sediments are in that fluid. And we sample the sediments 6 out of the fluid. When you're drilling a well you have to 7 have a very muddy fluid to keep the hole open. It's very 8 dense. 9 THE COURT: Okay. 10 MR. MALONE: So the sediments drop out of that fluid 11 and we take samples of them as they're coming up. 12 THE COURT: As it -- without getting into too much detail, but as it comes up does it pour? I mean, is it fluid 13 14 enough that it pours? 15 MR. MALONE: Yes. THE COURT: All right. Thank you. 16 17 MR. MALONE: But it's very viscus. 18 THE COURT: Okay. Thank you. 19 MR. MALONE: And so at different levels we take samples. And so what you are seeing here is the interbedded 20 21 nature of the aquifer as we are drilling down through it. 22 THE COURT: Okay. 23 MR. MALONE: The sands and gravels obviously they're -- they're very porous. There's a lot of pore space and those 24

-- they're very porous. There's a lot of pore space and those pore spaces are interconnected so the water can flow through it. Like you pour a glass of water in a sand box and it soaks in, same concept here, just a depth within the aquifer system.

THE COURT: What is the minimum and maximum depth of

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the aquifer?

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MR. MALONE: The deepest wells we have approach 1400, 1500 feet now.

THE COURT: Okay.

MR. MALONE: So that's what we consider the total depth of the aquifer system.

THE COURT: Okay.

MR. MALONE: It pinches out to zero on the edges of the aquifer, so it varies somewhere between zero and 1500 feet.

THE COURT: Got it. Thanks.

MR. MALONE: You also have these clays that are saturated with water too but they're not very permeable. The water doesn't flow very easily through them, but they still have water and water can exit those clays. So when a well turns on, the water typically flows through the sands and gravels to the wells. But sensing the lower pressure now because that water is being drafted from the -- from this -- from the gravels, the clays begin to drain out into the sands and gravels and provide their water to the well. When they do that, they can compress and you can have land subsidence. So when we have a lot of clays, you can get land subsidence in the ground surface if you extract too much water. So that becomes important later on in our discussion here when we talk about land subsidence and Chino Basin.

Any questions?

THE COURT: No, I'm good. Thanks. Go ahead, please.

MR. MALONE: Some stats here about the Chino Basin. 1 2 About 220 square miles total. Contains about six million acre-feet, six million acre-feet of water which is a huge 3 4 reservoir of water. There are 24 appropriators. 5 THE COURT: I did see a figure that said it contained 600 million acre-feet of water but -- but only used 6 7 about 500 million and there is a million excess. Did I pick that up correctly from somewhere? 8 9 MR. MALONE: I'm not sure to what you are referring 10 to there but --11 THE COURT: Let me go back through my notes. 12 MR. MALONE: Yes. The six million acre-feet don't all get extracted. There is a certain operational range of 13 extraction and recharge that occurs. 14 15 THE COURT: Somewhere I saw a figure that there was -- there was, I'll call it for lack of a better description, 16

THE COURT: Somewhere I saw a figure that there was -- there was, I'll call it for lack of a better description, excess capacity of about a million acre-feet that could be recharged back into it.

MR. MALONE: Okay. I see what you're saying.

THE COURT: Okay.

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MR. MALONE: Yeah. That the aquifer isn't full, there's a unsaturated zone at the top. And then the rest of it is saturated down to the bottom of the aquifer.

THE COURT: Okay.

MR. MALONE: So the interface there between them, we call that the water table. Anything above there could potentially be filled up with water. That won't likely happen but -- but it can. You have storage capacity that isn't

completely saturated. 1 2 THE COURT: Okay. 3 MR. MALONE: So the sediments are more or less dry in this saturated zone. The pore spaces are empty. 4 THE COURT: So when you talk about six million 5 6 acre-feet, that means --7 MR. MALONE: The saturated zone. 8 THE COURT: That means that's all water; that's not 9 water plus dirt. That's all water? 10 MR. MALONE: It's all water, yeah. 11 THE COURT: Okay. Thanks. 12 MR. MALONE: That's adding up all the water in the 13 pore space, six million acre-feet. 14 THE COURT: Okay. Thanks. 15 MR. MALONE: So we have 24 appropriators that pump 16 water, and those are the cities and the water districts. 17 Appropriators can pump water and they can transport it around 18 the basin. 19 THE COURT: Okay. 20 MR. MALONE: We have overlyers that can't do that. They are required to pump water. When they pump water they're 21 22 required to use it on their property. Those overlyers are typically agricultural but we do have commercial and 23 24 industrial overlyers too. 25 THE COURT: Okay. 26 MR. MALONE: We separate those into the three pools. 27 The Appropriative Pool are the appropriators. And then we 28 have the Overlying Non-Ag which are the commercial and

industrial. And then we have the Agricultural Pool.

THE COURT: Okay.

MR. MALONE: Those are the pumpers. Current pumping, this varies year to year, around a hundred and eighty thousand acre-feet per year. The Safe Yield, according to the judgment, is a hundred and forty thousand acre-feet per year. Watermaster is required to replenish any overproduction that occurs beyond the Safe Yield.

THE COURT: Let me ask you about the Safe Yield, the figure a hundred and forty thousand, that was established by the judgment in 1978, as I recall.

MR. MALONE: Yes.

THE COURT: And it was -- I can't remember the name of the engineer that came up with that figure.

MR. MALONE: Bud Carol.

THE COURT: Thank you. Mr. Carol.

I hate to criticize Mr. Carol at this late date, but it seemed like he was making some assumptions -- he was making a lot of assumptions that -- that resulted in as Georg H. W. Bush referred to the Laffer term is voodoo cal- --

MR. MALONE: Economics.

THE COURT: Voodoo economics. Well, these looked like voodoo calculations to the court to a certain extent. He made a number of assumptions, plugged them into an equation that he invented, and came up with a hundred and forty thousand acre-feet as a safe yield.

Can you comment on the scientific basis for his calculations even at this late date? I'm certainly not going

to go back and change the judgment, but it looked like -- it's like so many statistics where you formulate your assumptions, and then as we used to say in math turn the crank and you get the result.

MR. MALONE: Yeah.

THE COURT: How -- how does Safe Yield as a concept, how is that developed over the course of the 30 years that we've had the judgment, 30 plus years? And does it look like that is, in fact, Safe Yield? I mean, there'll be enough water, capacity, storage and recharge for the future. I've seen your figures and your Recharge Master Plan update that say it will.

MR. MALONE: Mm-hmm.

THE COURT: And everything will look fine till 2030. But it looked like a figure to me that was somewhat invented. Can you comment on that?

MR. MALONE: Yeah. I would say that he is using all the available data. And back in his time it was much less data to work with than we have today. And we are actually getting ready for the process of re-determining Safe Yield based on the last ten years' worth of data which is extensive data. There's been a lot of monitoring that's gone on. The method that he's using, it's pretty well accepted within the hydrologic community.

THE COURT: Okay.

MR. MALONE: And we are using a very similar method to re-determine Safe Yield. We also have modeling tools though that help us out too. I would say that he's not that

1 far off. 2 THE COURT: Okay. 3 MR. MALONE: He was not that far off in the 70's. THE COURT: Okay. 4 5 MR. MALONE: When you look at the water level data, 6 there hasn't -- prior to the one hundred and forty thousand Safe Yield determination, we saw water levels -- and I'll show 7 8 you some graphics that, you know, monotonic trend downward in 9 the water levels, so we were obviously producing too much 10 water prior to the judgment. 11 THE COURT: Monotonic, meaning a straight line? 12 MR. MALONE: Straight line. You'll see it. 13 THE COURT: Okay. 14MR. MALONE: And since the judgment we have had 15 water levels rebound and -- and stay fairly steady, and so 16 that is evidence that the hundred and forty thousand is at 17 least a reasonable number. 18 THE COURT: Okay. All right. Thank you. Go ahead, 19 please. MR. MALONE: I'm going to bring you through some 20 21

land use slides here. Going back to 1933, some of the things that I want you to note, the green here is irrigated and non-irrigated agricultural. The yellow is citrus. The brown -- the dark brown is the urban land uses. You're going to see those obviously expand at the expense of the citrus and the agricultural. These pink areas here are vineyards and they will have their day more towards the central part of the century. And these orange areas right here are very

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important. Those are the dairies.

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THE COURT: Okay. Just --

MR. MALONE: You see 1933 --

THE COURT: Just about the Jurupa mountains?

MR. MALONE: The Jurupa mountains, that orange area.

THE COURT: Okay. Thank you.

MR. MALONE: That you will -- you'll see the dairies' significant impact as we march through time. So this is 1933. In 1957 you can see the dairies beginning to show up down here in the southern end of the basin.

THE COURT: Does this slide have a number? Oh, I see "Land Use 1957." I just want to identify it.

MR, MALONE: Land use 1957.

THE COURT: Go ahead.

MR. MALONE: The vineyards are starting to show up here in the central part of the basin. And urbanization here is starting to take over. For land use in 1963 on the western part of the basin, you can see more urbanization and in the Fontana area more urbanization. The dairies are starting to pick up here in the southern part of the basin, and this is really where the vineyards -- when the vineyards reached their peek in the Ontario and Rancho Cucamonga area. By 1975 you can see the vineyards disappearing in the Rancho Cucamonga and Ontario area. The vineyards and the irrigated agriculture really well-established in the southern part of the basin and urbanization continuing to expand. 1984 the same patterns.

THE COURT: Wow.

MR. MALONE: And in 1990 and 1993 you can see

urbanization really well-established across the northern part of the basin. And then you can see that this is the reason why we call the southern part of the basin the agricultural area, primarily dairies and irrigated agriculture.

The next slide I'm going to bring up here is a slide of water quality at wells. You see red dots and orange dots and yellow dots, a lot of them here in the southern part of the basin. What we're showing here is nitrate nitrogen concentrations in wells that are above the maximum -- the EPA's maximum contaminant level. So you could not pump this water -- especially in the southern portion of the basin, you could not pump this water and serve it as drinking water without treatment or blending with some cleaner source of water.

THE COURT: Is this because of the total dissolved solids requirement, or is -- was there some other problem?

MR. MALONE: Nitrate nitrogen is part of total dissolved solids which sometimes we call salt or salinity. So salinity shows the same exact pattern here. It is high salinity, high nitrate water here especially in the southern end of the basin.

THE COURT: And each dot is a well?

MR. MALONE: Each dot is a well.

THE COURT: Okay.

MR. MALONE: Yes. So wells are our eyes into the aquifer.

THE COURT: Okay.

MR. MALONE: They -- we measure water levels in the

That tells us something about the -- the orientation wells. of this ground water table we were talking about earlier. take samples out of the wells and send it to a laboratory and get some chemistry analysis of the water. And then the geologic information we obtain from the wells when they're drilled, we use all that data. There's been a premium in this basin placed on the monitoring. We have a relational database that we spend a lot of effort to maintain and continue to collect data and add it into the database. And that database is used in our analysis of what's going on in the basin, to see what sort of trends are occurring, to help us with our computer simulation models, to construct them and calibrate them so we have some confidence in the models. The data is very, very important, and especially since the OBMP was implemented this data -- the data collection has really increased and is serving a very good purpose.

THE COURT: Maybe you can answer this question, maybe Mr. Fife can. What -- it's a little unclear to the court, to me, what the relationship is to the OBMP to the judgment. Do they run -- is it kind of like the Peace agreements that run kind of on a parallel track with the judgment? Or was it part of -- implemented as initially part of the judgment in '78?

MR. FIFE: It's the -- the structure of the judgment, there are different ways of adjudicating a ground water basin, and this judgment falls under a category of what's called replenishment judgments.

THE COURT: Okay.

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MR. FIFE: So no limitations are placed on anybody's pumping even though everybody has specifically defined water rights. Everybody can pump. Everybody has equal access to the ground water basin, so everyone can pump as much as they want so long as they -- they pay a certain amount of money for their overproduction.

THE COURT: Okay.

MR. FIFE: Some of that money goes to purchase water to bring in to recharge the basin, and some of that money goes to fund what is called in the judgment the physical solution.

THE COURT: Okay.

MR. FIFE: So the judgment, rather than imposing a legal solution on the overpumping, and that would be in the form of an injunction that tells everyone turn off your wells, it imposes a physical solution which says we will take -- we will take physical management steps in order to improve the operation of the basin so everybody can keep pumping.

THE COURT: Okay.

MR. FIFE: That physical solution is the Optimum Basin Management Program.

THE COURT: Okay.

MR. FIFE: So, yes, the OBMP is a direct outgrowth from the judgment. So long as Watermaster is implementing the OBMP, that is, implementing the physical solution, everyone can continue to pump according to the -- the replenishment concept in the judgment.

If, for example, the parties decided they just didn't want to do the OBMP and didn't want to pay for it and

we just stopped, we would have to go to a legal solution and simply confine all pumping to the safe yields.

THE COURT: Okay. So I read the judgment but it's been a few months ago. Now I can't remember. Is the OBMP specified in the judgment, or is it -- is it left as, I'll say, an adjunct to the judgment?

MR. FIFE: The judgment -- and I'm looking right now to see if I can very quickly put my finger on -- section -- Section 6 of the judgment is titled the "Physical Solution."

THE COURT: Okay.

MR. FIFE: And if you look at the language there, the -- I'm going to try to quote it. I'll probably get it wrong. But the language in Section 6 says that Watermaster will develop a program to optimize the management of the basin.

THE COURT: Okay.

MR. FIFE: It uses each of those words, the phrase optimum basin management program. Capitalized acronym OBMP does not occur but that was clearly the intention of Section 6 of the judgment.

THE COURT: Got it. Okay. Thank you.

Okay. Mr. Malone.

MR. MALONE: And I believe in 1998 the court ordered Watermaster to develop the OBMP and implement; am I correct?

MR. FIFE: That's correct. Between 1978 and 1998 there were issues about whether the OBMP was being developed quickly enough, whether there was enough enthusiasm for it.

And in 1998 there was a process where the court put its foot

down and said you're going to do this now or else.

THE COURT: Okay. That was Judge Gunn?

MR. FIFE: That was Judge Gunn, yes. And that was also the time Watermaster, Inland Empire Utilities Agency, which was at that time known as Chino Basin Municipal Water District. In 1978 and 1998 they were the Watermaster. And in 1998, the nine-member board was created and the Watermaster as we know it now was created in order to move forward with the OBMP.

THE COURT: Another question I forgot. When you're describing this payment for overproduction, is that money that's paid into Watermaster? I mean, is your committee, your staff physically handle the money that -- these payments that come in?

MR. FIFE: Yes. There is assessment package process. And, in fact, this month the actual assessment package is making its way through the pools, the advisory committee and board in order to be approved. That is this set of calculations which shows everybody next year's budget, how that translates into acre-foot production, how the budget gets divided up amongst all the producers and becomes an assessment levied upon production which everybody -- Watermaster then sends out invoices, people write checks. It comes into Watermaster, is held in its bank account.

THE COURT: Okay. Go ahead, please, Mr. Malone.

MR. MALONE: So you might ask -- I showed you all of the land use slides -- but you might ask why has ground water quality degraded to this degree over this time period. And

I'm going to use this illustration to try to describe the process that's occurred not only in the Chino Basin but in a lot of similar ground water basins. Is that what happens is we have -- this is that unsaturated zone and this is the saturated zone, part of the aguifer very simplistically illustrated. We have wells that pump water out of the saturated zone and that water gets applied to the land surface for irrigation. The plants use up maybe 75 percent of that water. There's also salt in that water. The plants don't use up much of the salt, just a little bit of it. So that 75 percent of the water gets used up. We call that consumptive use. The 25 percent, that makes its way past the root zone and ultimately returns to the aquifer. Because all the salt was left behind, the salt concentration in those return flows is four times the concentration than when that water was first applied to the ground surface.

THE COURT: Okay.

MR. MALONE: So you get these concentrated returns that come back and recharge the aquifer system. You also have subsurface inflow to the aquifer and a subsurface outflow from other ground water from and to other ground water basins. If those turns are really high, then you have a lot of flushing of the aquifer system. And this process of degradation of water quality of the aquifer is slowed down or completely arrested. Unfortunately, in the Chino Basin in a lot of these ground water basins where we have faults that restrict these inflow and outflow turns, we don't have much of that compared to what's happening from the ground surface and the recharging

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     from the ground surface. So this process of concentrated
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     return flows and then pumping back up and reapplying to the
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     ground surface, it's a positive feedback loop. It's
     occurring, like I said, in many, many ground water basins.
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     And so are we -- my boss Mark Wildermuth likes to term this,
     the basin is programmed to degrade just because of the way we
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     operate it, because we pump and apply water to the ground
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     surface. They're programmed to degrade. It's a very
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     important concept to grasp. We also model this process.
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     is a model projection, total dissolved solids. So this is
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     salinity on this access. And we're looking at a
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     one-hundred-year projection of water quality in the Chino
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     Basin, in the northern part of the Chino Basin in this
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     example. And in 2000, the TDS concentration, we start it here
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     in the model at about 320 million grams per liter.
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               THE COURT: Is that an average throughout the
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     county?
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               MR. MALONE: It's an average within the Chino Basin.
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               THE COURT: Okay.
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               MR. MALONE: Yes.
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               THE COURT: All right. In other words, you take the
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     average from all those wells and come up with that figure?
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               MR. MALONE: Yes, exactly.
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               THE COURT: All throughout the basin.
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               MR. MALONE: All throughout the basin. In this
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     example the northern part of the basin.
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               THE COURT: Oh, this is just from the northern part?
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               MR. MALONE: Yes, in this example.
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1 THE COURT: I see it. Okay. Thanks. 2 MR. MALONE: In this example. So what you're seeing 3 here is the degradation occurring over time. Again, we call this programmed to degrade, and it's mainly driven by this 4 5 process of pumping, irrigation and concentrated returns, and 6 then the cycle continues. 7 THE COURT: Okay. Well, the northern part ended up 8 being mostly -- what year was this? Okay. This is a 9 projection. But over the last ten years or so on your slides, 10 you showed, I think I understood, a tremendous amount of 11 urbanization in the north part of the county. 12 MR. MALONE: Yes. 13 THE COURT: Doesn't that just send all the water 14 running down the culverts? 15 MR. MALONE: No. There's a lot of outdoor irrigation of landscape, fields --16 17 THE COURT: Just the lawns and so forth? 18 MR. MALONE: Lawns and so forth. 19 THE COURT: Okay. 20 MR. MALONE: That this process occurs not only in agricultural areas but in urban areas where we irrigate. 21 Landscapes as well. Same process is occurring. 22 23 THE COURT: Okay. 24 MR. MALONE: So what this line here, though, is 25 indicating is that we're having some success at arresting this 26 That it's going asymptotic, not completely

asymptotic, but that line is trending asymptotic.

THE COURT: Meaning downward?

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7 MR. MALONE: No. It means it's slowing down. 2 THE COURT: Okay. Okay. 3 MR. MALONE: It's slowing down. It's not continuing 4 in this direction and the reason why is because we are 5 implementing the Optimum Basin Management Program. 6 THE COURT: Okav. 7 MR. MALONE: We are bringing in high quality 8 imported water and we're capturing more storm water and we are 9 bringing it into the basin. And we also have desalters that 10 are pumping the contaminated ground water out, and we are exporting the salt out of the basin. 11 12 THE COURT: Is that -- is -- that means you're 13 actually extracting the salt from the water? 14 MR. MALONE: Yes. 15 THE COURT: And so is this -- is this a salable 16 item --17 MR. MALONE: It is. 18 THE COURT: -- of which you extract? 19 MR. FIFE: Yes. And when we started today, we 20 talked about another hearing that we're going to need to have that's going to pertain to the desalters. And the desalters 21 22 are a whole other subject which we would have to spend a half 23 day just on the desalters and we will in January. 24 THE COURT: Okay. MR. FIFE: And so, yeah. 25 26 THE COURT: Okay. Thanks. Go ahead, please. 27 MR. MALONE: The brine that's left over from the 28 desalters, we don't sell that. That we export down to Orange

County and it's ultimately discharged to the ocean. But the product water, the clean water is a salable product and it's being reused.

THE COURT: Okay.

MR. MALONE: In the Chino Basin.

THE COURT: So what you're getting at -- I mean, the word "salt" is a generic term, not talking about sodium chloride. We're talking about some other contaminants in the water left over from the desalters?

MR. MALONE: Yes. Yes.

THE COURT: Okay. All right.

MR. MALONE: And so when we say we're exporting salt, it's actually a salty brine that goes into a pipeline and then is exported out of the basin.

THE COURT: Okay. Thanks.

MR. MALONE: If we use recycled water, which of course we have plans to do, now recycled water understand what happens there is that's indoor use of the water. That then goes to the waste water treatment plant. Before it goes down our drains though, we're typically adding salt to that water. It goes to the waste water treatment plan. The waste water treatment plan adds salts to the water typically in their treatment process. So recycled water is typically higher in TDS concentration than other water that we might use like imported state project water. And so when we use recycled water, we actually accelerate the degradation of ground water quality in the basin because this recycled water then is applied to the ground surface for irrigation or it's directly

recharged in recharge basins and it returns to the aquifer system too. So in this example here we were demonstrating to the Regional Water Quality Control Board. Sometimes we just call them the Regional Board.

THE COURT: Okay.

MR. MALONE: And they are the water quality regulators in the watershed. And we were demonstrating to them, look, we're going to be -- we have these plans to do all this recycled water re-use, which is a very important part of our water supply plans. We're going to have some impact on the water quality of the ground water basin, but it's not going to be too bad. And we're demonstrating that with this model.

THE COURT: Let me -- since you brought up the Regional Water Quality Control Board, what is the relationship with all these regulatory agencies, the state water project, the Regional Water Quality Control Board, the CEQA, and the judgment? Because you have all of these entities controlling water -- water rights, water pumping, recycling, discharging.

MR. MALONE: Yes.

THE COURT: Recharging. And then we have a judgment that's supposed to be regulating the pumpers, essentially, as I understand it. How do you reconcile all these? This may be more of a legal question than a technical question, but how do you reconcile all of these various inputs to come to a conclusion on how you can comply with both the judgment and all of these regulatory agencies that have an interest in water rights in the state of California? Or is that what you

do for a living and it's too difficult to explain in one simple sentence or even ten simple sentences?

MR. FIFE: You took the words out of my mouth. It's a very complex answer. It's a very complex structure. As you identify, there are a lot of regulatory agencies. There's the Regional Water Quality Control Board which regulates water quality issues. There's the State Water Resources Control Board which regulates diversions of surface flows only. There's the Department of Health.

MR. MALONE: Department of Public Health.

MR. FIFE: Department of Public Health which has a say over the product water that comes out of the wells.

There's Department of Fish and Game.

THE COURT: The San Bernardino Regional Tertiary
Water Reclamation Authority. I mean, I made a list of these
things.

MR. FIFE: As you see, there are pages of them, yes. And sometimes we get into very interesting issues, and I'll highlight one just to give you a flavor of it. But, again, this is just one example amongst many issues. In order for Watermaster to conduct its storm water recharge programs, we have to divert water from the channels, that those diversions are under the jurisdiction of the State Water Resources Control Board. And so Watermaster was put into a position of needing to go to the state board and get a permit which is considered a property right. Our judgment puts limitations on Watermaster's ability to hold property. The way we reconciled all of it was that Watermaster now comes to the court and asks

for permission any time it's going to do something like that. We ask for an explicit finding from the court that doing that consistent with the judgment. When we actually did the process of going to the state board, the first thing they asked us was how can you do this legally, and we pulled out our court order that said we could. So it's -- you know, that's just one example where we have to sort of muddle through all of these issues. And over time you'll -- you'll see the logic of why we end up with things like the Peace agreements and everything else as we try to sort these issues out as they arise.

THE COURT: There was a question -- in fact, I just see a citation that was issued, and essentially I'll call it a consent judgment that I cannot remember -- I would have to go through my notes in more detail -- but it looked like there was a citation, and there was one of the public agencies that said you are not complying with one of the regulations. Then you complied, and there was, I think, an attorney fee fine imposed, as I recall.

So is this part of the navigating routine to try to comply with so many different interests in -- both legal and business interests in the water rights in the Chino Basin?

MR. FIFE: Yes.

THE COURT: Okay.

MR. FIFE: Yes.

THE COURT: All right. My favorite -- actually, let's go off the record for a moment.

(Off the record).

THE COURT: Let's go back on the record.

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MR. MALONE: And I would make an additional comment that there's a program element in the OBMP that specifically calls out cooperation with regulatory agencies. There's an old paradigm and it's still being used throughout much of the state where you fight your regulator. There's a different tap that's being taken here in this watershed and particularly in this basin where we cooperate with the -- with the regulators. It requires a lot of extra work and a lot of extra money to do so but the benefits are real. And this cooperation comes in the form of a lot of meetings and a lot of discussions and a lot of education happening. And what ultimately results is that the regulators in this watershed are willing to modify their regulations to accommodate certain water resources activities to occur, but at the same time still achieve their objectives of protecting water quality, for instance.

THE COURT: So it becomes a matter of building consensus to fix the problem ahead of time rather than to have them cite you and try to fix it after you've built the desalters that doesn't comply or whatever other problems you may have.

MR. MALONE: Yeah.

THE COURT: Okay.

MR. MALONE: Absolutely.

And what the regulators will oftentimes ask for is we want monitoring programs. We want you to do these forward projection models to tell us what's going to happen. And that gives them some confidence in helping these agencies implement

their water resources plans.

THE COURT: All right. Thank you. Okay.

MR. MALONE: Another very key concept that's going on here in the Chino Basin, I've zoomed into the southern portion of the basin in this slide and --

THE COURT: Does this have a slide number? I don't see a label on this one.

MR. MALONE: There are slide numbers but I can't see them when we're in presentation mode. If you want me --

THE COURT: No, no. I'll just identify it. It says "Poor Quality Ground Water" in the center of the slide, to identify it for the record.

MR. MALONE: It's the southern portion of Chino Basin that we're looking at and all the small dots are agricultural wells. You can see there's a lot of them. They typically don't pump a lot of water but because there's a lot of them there's a lot of pumping that historically goes on in the southern part of the basin. We also know that the ground water quality is poor here. And these green lines here that have numbers on them, those are called ground water elevation contours. So we're showing the slope of the water table and ground water flows perpendicular to these -- these contours.

THE COURT: Okay. Do the numbers have a meaning?

MR. MALONE: They do; they're elevation.

THE COURT: Okay. Thanks.

MR. MALONE: Yes.

THE COURT: So, like, is that 600 feet then?

MR. MALONE: 600 feet above means sea level.

THE COURT: Got it. Thanks.

MR. MALONE: And so the ground water is flowing generally from the north to the south in this graphic here.

And it's also becoming very shallow in the southern part of the basin here, so shallow in some cases that the water table is intersecting the ground surface and ground water is becoming surface water and flowing into the Santa Ana River.

THE COURT: It actually percolates up to the --

MR. MALONE: Percolates up instead of down.

THE COURT: Okay.

MR. MALONE: Yes. And it's being pushed -- that water is being pushed by the water to the north. So water is recharging in the north and pushing this water to the south, and the ground water table gets so shallow in the southern portion of the basin that this poor quality ground water is rising. We call it rising ground water and it's becoming surface water.

THE COURT: Actually runoff?

MR. MALONE: Yes. And it commingles with all the other runoff or waste water discharges or whatever other water is in the Santa Ana River and its tributaries. So this is of obviously great concern to the Regional Water Quality Control Board because they don't want to see this poor quality ground water impairing the beneficial uses of the Santa Ana River. And, again, the main beneficial use of the Santa Ana River below Prado Dam is ground water recharge in the Orange County basin which then gets pumped back out and used for drinking water. So the Regional Board is concerned, Orange County

Water District is very concerned that this process doesn't --doesn't impair the beneficial uses of the Santa Ana River.

THE COURT: Does the Orange County Water District butt right up against the Chino Basin then? I mean --

MR. MALONE: They are down here in Orange County.

THE COURT: Okay. All right.

MR. MALONE: Further to the south- --

THE COURT: Got it.

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MR. MALONE: -- west.

THE COURT: Okay.

MR. MALONE: The reason why it's a concern -- and I showed you those land use slides -- that urbanization is coming in and displacing the agricultural land uses. agricultural land use gets displaced in here, the well goes away. There's no more pumping. The municipal pumpers wouldn't normally come in here and locate a well here and pump this ground water because it's so poor quality water. So we predicted that this could be a real problem. As these -- as this pumping goes away, the agricultural pumping goes away. The ground water levels that were suppressed by the pumping now will begin to rise, and we will lose water out of the That will be a loss of yield that water now is no basin. longer being pumped and being used for a beneficial use in the agricultural area. It's now just leaving the basin. that's a loss of basin yield.

In addition, it's contaminating the Santa Ana River with poor quality water. So this is the reason why the desalters were planned and are now being implemented down in

here, is to build large high capacity wells to replace the agricultural production that's going to be leaving the basin.

THE COURT: You mean, actually extract water so it doesn't flow into the Santa Ana River?

MR. MALONE: Yes.

THE COURT: Actually pull it out so it doesn't percolate up and --

MR. MALONE: Right. It maintains the yield of the basin, so now that water is being pumped up and it's going through this reverse osmosis process where it's being cleaned up. And then the water is being resold -- is being sold to the municipal agencies and is being used by the municipal agencies as a drinking water supply. And it's protecting ground wat- -- or surface water quality in the Santa Ana River, the very key component of the Optimum Basin Management Plan, to maintain yield and protect beneficial uses.

THE COURT: And then is this part of the hydrologic control also?

MR. MALONE: Absolutely.

THE COURT: Okay.

MR. MALONE: I'm going to switch gears here and talk a little bit about ground water flow and water levels.

If we go back to the turn of the century, 1905, this is before there are any wells in this basin. We have again these streams that are exiting the mountains. They're all sandy bottom streams so we're getting storm water recharge, especially in these for bay areas -- northern for bay areas of the basin. That's where most of the recharge occurs.

THE COURT: Northern what kind of areas?

MR. MALONE: We call them for bay. For bay is where the water is percolating in and recharging the basin.

THE COURT: F-o-r b-a-y, for bay?

MR. MALONE: Yes.

THE COURT: Okay.

MR. MALONE: The water flows from the north to the south. And this area right here was mapped as a artesian area where if you put a well in, the water would just flow out of the well. So it's this area where rising ground water is occurring. It was a swampy area and a lot of riparian vegetation in this area using the water.

THE COURT: Ducks and stuff? I mean, was it so swampy you'd get that kind of animal --

MR. MALONE: Yeah. I don't know too much about it, but I assume there was a lot of water fowl too at this time.

THE COURT: Okay.

MR. MALONE: And, again, this water -- this water flowing -- this water rising and flowing out and out of the basin. No pumping. So there really was no yield of the basin at this point in time. Yield was zero.

THE COURT: Okay.

MR. MALONE: There was inflow and inflow equals outflow and surface water. Okay. So we have water level records that date back to the 1930's, maybe even some to the 1920's. And what we're looking at here on this chart is water level elevation at a number of wells in the city of Chino. So this Y axis here is your water level elevation, in feet above

means sea level. And we're looking at a time period from 1935 to about the year 2000. This dark gray line, it's an indication of what the climate was doing. When you have a upward slope of that line, that means it's a wet year relative to the long-term average. When you have a downward slope, that's a dry period relative to long-term precipitation records.

So we're plotting two things on this chart, climate and we're plotting water levels at wells. This is what I was telling you about prior to the judgment. The judgment occurred right here. We had a lot of water level decline prior to the judgment, and really that was one of the main reasons why the judgment occurred was because of this very obvious overdrafting of the basin that was occurring.

THE COURT: Again, are these average figures throughout the basin?

MR. MALONE: These, you're looking at about seven or eight wells in the city of Chino but they're representative of what was going on throughout most of the basin.

THE COURT: Okay.

MR. MALONE: So what occurred, you can see here we were also in a dry period. But even when we were in a wet period, you can see some of these water levels beginning to decline. But as we entered 1945 to about 1978, it's relatively dry in the watershed. From about 1978 to 1983 we had a wet period. We also had the judgment so we limited the amount of pumping that could occur in the basin. We also had State Water Project water that became available for direct use

on the ground surface which, again, then ultimately recharges the ground water basin too. So new water is being brought into the basin. And we see water levels begin to rebound here and then stay relatively stable from about the mid 80's to today.

THE COURT: Okay. Just for the record, that's identified as "figure nine water level time history shallow wells."

Since it says shallow wells, how shallow is a shallow well? How far do you go down?

MR. MALONE: About 200 feet.

THE COURT: Okay.

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MR. MALONE: In this area here.

THE COURT: All right. Thanks.

MR. MALONE: When we look at a map of water level decline from 1933 to 2000, the previous graphic I was showing you, just water levels at a number of wells, and those are those wells right there in the city of Chino that I was showing you on the previous graphic.

THE COURT: Okay.

MR. MALONE: The yellow dots. We see here that a lot of the water level decline occurred in the Pomona Montclair area, over 150 feet of water level decline. But you can see here in the Ontario area, we had over a hundred feet of decline. In the southern part of the basin here it stayed relatively constant. There wasn't a whole lot of pumping down here in Prado Basin that caused water level decline in that area.

When you see these sorts of water level declines, they're really indicative that there's too much pumping going on in this area and not enough recharge. We call this in Watermaster speak balance of recharge and discharge. We're out of balance here. Watermaster in the Peace agreement has an obligation to balance recharge and discharge in every area and sub-area through its recharge activity.

THE COURT: And that's Peace I?

MR. MALONE: And that's Peace I, yes. So when I say the Peace agreement, that's Peace I. Peace II I'll call out at Peace II.

THE COURT: Okay. Thanks.

MR. MALONE: So this is clearly one of the areas.

You can see over here in the Jurupa area, there's another area where we have over a hundred feet of drawdown. And we'll talk about this area as well in future slides that this is an area where it appears that we are out of balance in terms of recharge and discharge.

THE COURT: Is there kind of a -- of a level of what you consider balance? I mean, plus or minus ten feet or fifty feet? Or, you know, are you looking at a range to keep things within -- obviously you can't have exact numbers in and out but --

MR. MALONE: Yeah.

THE COURT: -- is there for practical purposes a balance range that you're looking at?

MR. MALONE: Well, I think what you certainly don't want to see is continued drawdown in these areas.

THE COURT: Okay.

MR. MALONE: That it's not so much a range, and a lot of times it's dependent upon other factors like how deep are the wells. Are we going to have to drill new wells or drill these wells deeper in order to accommodate this continued drawdown? Is that what's going to happen? That would be an example of we're really out of balance and we're starting to lose production at wells.

THE COURT: Okay.

MR. MALONE: Or cause land subsidence to occur. That's another indication of being out of balance.

THE COURT: Got it. Okay. Thanks.

MR. MALONE: Also on this chart here you can see a mapped subsidence area, so this is an area where land subsidence has occurred.

THE COURT: In the green area circled by the green area.

MR. MALONE: Circled by the green area here. Land sudsidence in the Chino Basin is not confined just to this area, but in general the western portion of the Chino Basin is subjected to subsidence. We've monitored it for many years now. It does not appear to be a big issue on the eastern side of the basin, and that makes sense with our understanding of the distribution of clays in the aquifer system. We have a lot of clays on the western side of the Chino Basin. We don't have as many clay layers in the eastern side.

THE COURT: What do you think the maximum subsidence has been?

MR. MALONE: It's been measured. A maximum of about two-and-a-half feet of land subsidence in one area. THE COURT: Okay. MR. MALONE: Could be more because we weren't measuring too far back in time. THE COURT: All right. Thanks. Why don't we break here, moving on to land subsidence? Would now be a good time to break? MR. MALONE: That's fine. Any time. THE COURT: Why don't we take our lunch break at this time? So, everyone, thanks very much. We'll see you back at 1:30 and the education process will continue. MR. FIFE: Thank you, your Honor. (A recess was taken until 1:30 p.m. of the same day.) --000--

1	CHINO, CALIFORNIA; FRIDAY, OCTOBER 8, 2010
2	P.M. SESSION
3	DEPARTMENT C-1 HON. STANFORD E. REICHERT, JUDGE
4	(Appearances as heretofore noted.)
5	THE COURT: Okay. Mr. Malone, want to come back up
6	on the stand?
7	We're back on the record in the Watermaster case.
8	MR. FIFE: Your Honor, before we go back on the
9	record, a conversation we
10	(Off the record.)
11	THE COURT: So let's go back on the record then and,
12	Mr. Malone
13	MR. MALONE: Continue.
14	THE COURT: pick it up. We are on the land
15	subsidence in Chino.
16	MR. MALONE: Yes.
17	THE COURT: We went back to the water level decline
18	1933 to 2000.
19	MR. MALONE: Yeah. And just to remind you that
20	there is a linkage there between water level declines and land
21	subsidence. Very well-established fact in the hydrologic
22	THE COURT: Community.
23	MR. MALONE: community, I guess, yes.
24	THE COURT: Okay.
25	MR. MALONE: That this happens. And it's not just
26	unique to this basin.
27	THE COURT: Got it. Thanks.
28	MR. MALONE: What happened in the early 1990's is

that there was so much subsidence that it caused the ground to crack here in the city of Chino. This is Central Avenue here and we have Chino Avenue here. So the courthouse, I believe, is in this area right here. So we're not too far away from where the ground cracked.

THE COURT: Thanks.

MR. MALONE: What it looked like was this. And the type of subsidence that leads to ground fissuring is when it's differential in nature, where one part of the basin subsides and another part does not. So in subsequent studies that happened after these fissures occurred, we did make the causal link between too much production and causing too much water level drawdown, not enough recharge in this area, and the ground surface to subside differentially like this and cause the ground to crack. So this was another issue that was very important to a lot of parties here in the Chino Basin.

THE COURT: Was there a fix for this?

MR. MALONE: Yes. And the OBMP was the beginning of it.

THE COURT: Okay.

MR. MALONE: There was a specific program element in the OBMP to address this special situation to develop a management plan for pumping and recharge in this area so that this phenomenon does not occur again.

THE COURT: The fissures themselves were just--

MR. MALONE: Were just covered up. And a lot of them occurred in agricultural fields that could just be plowed over.

THE COURT: Okay.

MR. MALONE: Now, though, a lot of these agricultural fields are heavily urbanized so it's a very important -- it continues to be a very important issue to Watermaster. And like I said, we do have a management plan now. It's basically a control of pumping and water levels in this area so it doesn't happen again.

THE COURT: Thank you. Go ahead, please.

MR. MALONE: Okay. So what I'm showing you here is a water level map. And, again, we're looking at contours of water level elevation across the entire Chino Basin. We're looking at a certain time period, fall 2000 in this case. And I described to you before the way the ground water historically has flowed from the north to the south in this basin. This is 2000. You see a lot of these contours that are concentric. What this represents is a depression in the ground water table. So, again, it's indicative of too much pumping and not enough recharge in this area. You see the same thing over here in -- in the Jurupa area.

This next map here I'm showing you predicted or projected water levels from our computer simulation models that are showing you what we think water elevation is going to look like in 2030. I have to correct myself. Not water level elevation but drawdown of water levels. Due to our management practices, specifically basin re-operation, which you might be familiar with that term. That's the Peace II measures.

THE COURT: Okay.

MR. MALONE: And so --

THE COURT: Let me just ask you for a minute since you brought that up, because I am familiar with that term but I'm still a little vague on what it means. And I'm familiar with the Peace II agreements, but if you could summarize or maybe Mr. Fife could, the objectives that -- the objectives of the Peace II agreement sought to reach.

MR. FIFE: I think your question began with based on re-operation.

THE COURT: Yes.

MR. FIFE: And that's, I understand, your main focus with the question.

THE COURT: Correct.

MR. FIFE: Because the Peace Two measures covered a variety of different issues, one of which was based on re-operation.

THE COURT: And that means -- if you could define it for me a little bit.

MR. FIFE: I think probably Andy would be more appropriate to give you a very brief description of basin re-operation and hydraulic control.

MR. MALONE: Okay. So it starts with hydraulic control. That in the southern end of the basin here the white dots you see on the map in the southern end of the basin are the desalter production wells. So those are the large municipal production wells now that are pumping water. They're meant to replace the agricultural production that's exiting the basin.

THE COURT: Okay. By the way, when you pump the

1 water out of the ground then for these desalters, where does 2 the water qo? 3 MR. MALONE: So there's two treatment plans now. THE COURT: Okay. 4 5 MR. MALONE: We call them the desalter facilities. 6 THE COURT: Okay. 7 MR. MALONE: And they have treatment there where the 8 water is pushed through membranes and the pure water passes 9 through the membranes. The salty brine remains behind the 10 membranes and that salty brine then, again is, exported out of the basin, and the pure water then is used as a resource for 11 12 drinking water. 13 THE COURT: Oh, okay. That was my -- got it. Okay. 14 MR. MALONE: Yeah. 15 THE COURT: So -- and I do understand the concept of 16 hydraulic control, and my understanding is that it just means 17 none of the water gets out of the Chino Basin into the Santa 18 Ana River in a sentence. 19 MR. FIFE: Exactly. 20 MR. MALONE: From the north. None of the water from 21 the north here that's flowing south passes this desalter well 22 field to come down here into Prado Basin and potentially exit 23 the basin. 24 THE COURT: Okay. 25 MR. MALONE: That is hydraulic control. 26 THE COURT: Got it. 27 MR. MALONE: Is that these -- these wells here 28 create a hydraulic barrier between all of our activities in

the northern and central parts of the basin from the Santa Ana River and Prado Basin.

THE COURT: Where does the money come from to build the desalters? Can you answer that or can Mr. Fife?

MR. FIFE: They've been done in phases. So the first desalter was built pre 2000 and that was a joint project by a few different entities under the umbrella of the Santa Ana Watershed Project Authority.

THE COURT: Okay.

MR. FIFE: There is a whole layer of complexity that we are not going to get into today, and you don't even want to start thinking about it. This -- the Chino Basin adjudication and everything you're hearing about -- everything you're hearing about today is just Chino Basin. Chino Basin is one area within the overall Santa Ana watershed. The Santa Ana watershed has its own adjudication structure. So this is their nested adjudications, and you're hearing about one part of an overall picture. So the first desalt- -- and -- and within the context of that bigger picture, there's an entity called the Santa Ana Watershed Project Authority.

THE COURT: Okay.

MR. FIFE: So the first desalter was built by SAWPA. That's the acronym for the Santa Ana Watershed Project Authority, and they funded the first desalter. Second desalter was funded through Proposition 13 funding. That was the Water Bond in 2000. The Chino Basin received I believe it was 90 million dollars through that to build Desalter II. And we are currently in the process of negotiating the agreements

to expand the desalters into phase three. And that, again, when we come back to you in January we're going to be bringing to you the agreements that will enable the funding for the third phase.

THE COURT: Okay. Santa Ana Watershed Authority, S-A-W -- I guess it would be S-A-W --

MR. FIFE: Santa Ana Watershed Project Authority.

THE COURT: Okay. That's what the "P" stands for.

MR. FIFE: They fund and facilitate projects throughout the entire Santa Ana watershed.

THE COURT: When you say it has its own adjudication structure, does that mean the court is supervising it? Or does that mean it's a legislative body or a regulatory body?

MR. FIFE: No. The court supervises it. There's a judgment just like there's a judgment for Chino Basin. It's referred to colloquially as the '69 Judgment because it was entered in 1969.

THE COURT: And is that an Orange County judgment?

MR. FIFE: Yes, it's Orange County Superior Court.

THE COURT: Okay.

MR. FIFE: The court isn't as actively involved as you are with Chino Basin. But there is a Watermaster composed of on different entities and, again, Chino Basin is just one part of that adjudication.

THE COURT: And is that because -- is the court less involved from Orange County because of the nature of the judgment and when it was entered, or is that just the way things worked out here in San Bernardino County versus Orange

County? Was there -- let me phrase it this way: Was there a logical reason or more an accident of history in terms of how things got supervised?

MR. FIFE: I'd say accident and the other attorneys are involved in this also. I'd say accident of history. There's no reason why it wouldn't be involved except there haven't been issues that the parties have needed to take to the court. There's a Watermaster. It meets regularly and through that process all the issues that have come up have been able to be resolved.

THE COURT: Oh, Okay.

MS. WILLIS: And it's partly --

THE COURT: I'll need your name for the record.

MS. WILLIS: Jill Willis on behalf of Cucamonga Valley Water District.

THE COURT: Thank you.

MS. WILLIS: There's significantly fewer parties to that adjudication than there are to the Chino Basin because of certain agreements that were entered into as the judgment was being negotiated that dismissed all but a handful of the parties. And so it's a different type of adjudication than what we see here insofar as it's designed to provide sort of a more 25,000-foot view of watershed management as opposed to individual restrictions on pumping by individual parties.

THE COURT: I see. Okay. Thanks. Okay. Thank you very much.

Go ahead, please, Mr. Malone.

MR. MALONE: So we define what hydraulic control is,

is the concept of creating a hydraulic barrier between the northern and central part of the basin and the southern part of the basin. To make it easier for these wells to do that job and to fulfill that purpose, a management plan was put into place where about 400,000 acre feet of additional controlled overdraft in the central and northern parts of the basin would lower water levels in those areas so that you don't have as much of a hydraulic head from the north pushing the ground water to the south. So it assists in -- it assists that desalter well field in achieving hydraulic control.

THE COURT: And was that a plan instituted by Watermaster, by -- the passive voice always makes me ask who's doing it. Who came up with that plan? Who's --

MR. FIFE: Yeah. That's under Watermaster control and that plan is what's known as based on re-operation. So we re-operate the basin in order to better achieve hydraulic control.

THE COURT: Okay. So essentially it's to pump water to reduce the water pressure moving south towards the desalter field, so to speak?

MR. MALONE: Mm-hmm.

THE COURT: Okay. All right. Thanks.

MR. MALONE: Very good.

THE COURT: Okay. Thank you. Go ahead, please.

MR. MALONE: Okay. On this map what you're seeing is what we expect, lowering of the ground water table -- what -- what to happen when the ground water table lowers under basin re-operation. And we can see again we have some areas

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     where we're going to have more drawdown than other areas.
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     these are areas that concern us, again in the Pomona/Montclair
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     area, over here in the Jurupa area, where we have historically
     had drawdown problems. And then here in the Rancho
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     Cucamonga/Ontario area more than 50 feet of drawdown.
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     you're seeing on this map are feet of drawdown by the year
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     2030.
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               THE COURT: Okay. And it's drawdown from what level
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     then?
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               MR. MALONE: 2006 levels is where our model started.
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     As a starting point.
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               THE COURT: Okay. Thanks. So then the 2006 level
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     got instituted as, I call it a baseline, simply because that's
     when you started doing these studies? That's how you chose
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     that particular year?
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               MR. MALONE: Yeah. And that was the beginning of
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     our model projections. That's approximately the beginning of
18
     basin re-operation too.
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               THE COURT: Okay. T-o-o, too, or is there a second
20
     basin re-operation?
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               MR. MALONE: No.
                                 I was just saying the beginning of
22
     our model simulations coincides with approximately the
23
     beginning of basin re-operation.
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               THE COURT: Okay. All right. Thanks. Another
     question then.
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               Was the basin re-operation plan, did that require
     court approval? Did you come back to get Judge Gunn for that?
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MR. FIFE: Yes. And that's the 2000 -- the December

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2007 order was the order that approved the basin re-operation program and each of the eight conditions subsequent were conditions that needed to be met to make the court comfortable with having provided that approval. The final of those conditions is that Watermaster complete an update to the Recharge Master Plan.

THE COURT: Okay. Got it. Thanks. Thank you.

MR. MALONE: The last point with this is that I'll remind you that that part of the commitment in the Peace agreement is for Watermaster to balance recharge and discharge into every area and sub-area of the basin. So what I'm pointing out to you again are areas that potentially are problem areas that may need to be addressed by the Recharge Master Plan.

THE COURT: Okay.

MR. MALONE: To direct recharge to address these issues where drawdown is greater than in other areas.

THE COURT: And when you talk about areas and sub-areas, are you talking about areas where there are larger problems and then areas -- how do you define the areas and sub-areas?

MR. MALONE: That wasn't really defined in the Peace agreement, correct, as to exactly what an area or a sub-area is. What we have in Chino Basin are management zones, and I've got some graphics to show you what the management zones are. I always considered those to be -- areas and sub-areas to be parts of management zones. Now, that's just my own personal opinion. That's not a legal interpretation of areas

and sub-areas. It wasn't defined really in the --

MR. FIFE: Right, it wasn't defined. I think area and sub-area was simply meant to be the broadest possible term that there is to be balance. And it's not simply a matter of balance between management zones or anything else. It's simply balance in whatever areas or sub-areas there might be --

THE COURT: Might be a problem?

MR. FIFE: -- might be a problem, yes.

THE COURT: Oh, okay.

MR. FIFE: So --

THE COURT: Go ahead, please.

MR. MALONE: Okay. While we're talking about recharge, and you asked the question earlier about the lining of the concrete channels.

THE COURT: Yes.

MR. MALONE: I've got some graphics here to show you how that has progressed over time. In the beginning nothing was lined obviously but in the 1950's this part of San Antonio Creek was lined. During the 1960's San Antonio Creek turns into Chino Creek here and this portion was lined as well as the other orange areas on the map. In the 1970's the green stream segments were lined. In the 1980's a lot of the streams in the central part of the basin were lined as shown by the yellow. And in the 1990's the stream segments shown in purple were lined.

THE COURT: And was this part of -- just part of the ordinary urbanization of these particular areas and part of

flood control plans?

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MR. MALONE: Flood control districts did the lining, yes, and so it was all to protect the urbanization that was developing in this area, and to transport --

THE COURT: Okay.

MR. MALONE: -- the storm flow out of the basin.

THE COURT: Okay. As these -- as these channels were being lined, did Watermaster or -- have any input on this, or is this the flood control people? They come in, they line it, and we deal with the runoff problems later? I'm looking at both of you to see who wants to answer.

MR. MALONE: Today we coordinate much closer with the flood control districts to try to get as much storm water into the ground. In these days flood control took precedence and they were operating without input from Watermaster.

THE COURT: Okay. Thanks.

MR. MALONE: So what's happening here is that we're paving over the land surface. And then when it does rain, we generate a lot of runoff. And these flood control facilities are -- are transmitting the water out of the basin quickly.

THE COURT: Down to the Santa Ana River then?

MR. MALONE: Yes, ultimately down to Santa Ana River and ultimately to Orange County, yeah.

THE COURT: Okay.

MR. MALONE: So definitely a loss of yield to the basin because now the storm water isn't recharging. And the fact that it's storm water, it's usually very good quality water. So we're losing that good quality water while our

ground water basin is degrading too. So we're getting the 1 double whammy there. We're not only losing water but we're 2 3 losing good quality water. THE COURT: I need -- I should call Judge Bilash, my 5 colleague upstairs, so if we could just take a recess for a few minutes. I'll be right back. 6 7 MR. MALONE: No problem. (Pause). 8 9 THE COURT: Okay. Thanks, everybody. 10 Okay. Go ahead, please, Mr. Malone. 11 MR. MALONE: So what I've been doing up to this 12 the adjudication in 1978, and to the OBMP, and the Peace 13

point is leading you through a lot of the things that led to agreement in the year 2000, and then ultimately to the Peace II agreement. So I just have some text slides here that describe -- that describe those three things that I just talked about. That the stipulated agreement or the judgment set the Safe Yield at 140,000. It also had a controlled overdraft measure of 200,000 acre feet that would be spread out over a 40-year period which is ending here in 2017. there's a small amount of water that -- that is part of the controlled overdraft as part of the stipulated agreement.

THE COURT: I'm not quite sure what that means. That means they could pull out an additional whatever -whatever --

> MR. MALONE: 200,000.

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THE COURT: Yeah. If you divide 200,000 by 40, 5,000 acre feet a extra year?

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               MR. MALONE: A year.
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               THE COURT: Over those 40 years.
               MR. MALONE: Over -- yes, over the Safe Yield.
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               THE COURT: Okay.
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               MR. MALONE: That was one of the deal points in
 6
     the --
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               THE COURT: Okay.
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               MR. MALONE: That the parties are allowed to pump
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     what they need for their beneficial uses. And that
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     Watermaster must replenish the overproduction.
               THE COURT: And back then it was the IEUA was the
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12
     Watermaster? Did I get that --
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               MR. MALONE: IEUA.
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               THE COURT: Inland Empire Utilities -- I can't
15
     remember what it stands for.
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               MR. FIFE: Agency.
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               MR. MALONE: Agency.
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               THE COURT: Thank you.
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               MR. MALONE: They served as the Watermaster,
20
     correct.
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               MR. FIFE: Correct.
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               THE COURT: Thanks.
                                    Go ahead.
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               MR. MALONE: And the Watermaster assesses fees to
     pay for replenishment like Michael was talking about earlier.
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25
     And that the Watermaster had this authority to develop an
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     optimum basin management program.
                                        Then in 1998 the court
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     ordered the development of the OBMP. It was completed in
     1999. And the Peace agreement and the program EIR were
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completed in July 2000. And so when that happened, the court ordered it to be implemented -- the OBMP to be implemented.

And then there -- I've said this a number of times now, but there is a commitment in the Peace agreement to balance recharge and discharge in every area and sub-area. The reason I keep bringing that up is because of its relationship to the Recharge Master Plan. That's one of the purposes of the Recharge Master Plan.

THE COURT: That was one of the objectives Judge Gunn set in 2007 requiring the Recharge Master Plan to be completed?

MR. MALONE: To be updated.

THE COURT: Updated.

MR. MALONE: Yes.

THE COURT: Thank you. Okay. Thank you.

MR. MALONE: So the OBMP, I've talked about certain program elements. We call them Program Element 1 or PE1 or PE2. There were nine of them in total. And so what they are in general is a comprehensive monitoring program to -- this comprehensive monitoring program supports the rest of the program elements, the recharge program, water supply for impaired areas, the main impaired area being the southern portion of the basin. So the desalters are part of that. The subsidence issue needed to be addressed. That was program element four, bringing in supplemental water including recycled water. Cooperative programs with regulators. We talked about the Regional Board and how we're cooperating with them, including the salt management program that's being

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implemented here in Chino Basin. And then storage and --
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     storage and recovery programs as well were addressed in the
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     OBMP. So it was a really comprehensive management program.
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     The Peace II agreement, some of the main points to it is the
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     initiation of basin re-operation to achieve hydraulic control.
     And it includes this controlled overdraft of 400,000 acre
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     feet.
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               THE COURT: Meaning above the Safe Yield of
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     140,000?
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               MR. MALONE: Yes.
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               THE COURT: Okay. Per year.
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               MR. MALONE: 400,000 acre feet --
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               THE COURT: And that was over -- that was over the
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     40 years we're talking about?
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               MR. MALONE: When I said the 200,000 controlled
     overdraft, that was part of the stipulated agreement. This is
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     an additional 400,000 acre feet on top of that.
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               THE COURT: Okay. Okay. And that's over what
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     period?
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               MR. MALONE: And, Michael, do you know that off the
21
     top of your head?
               MR. FIFE: One of the -- one of the conditions
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23
     subsequent, I think it was -- somebody know -- I think it was
24
     seven or five was to submit a schedule according to which the
     400,000 would be withdrawn. And we did provide that.
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               THE COURT: Okay.
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                          It's going to go through -- I think -- I
               MR. FIFE:
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     think it will last through 2030.
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MR. MALONE: Something like that.

MR. FIFE: Approximately.

MR. MALONE: Might be a little bit earlier than that.

MR. FIFE: Right. There are different ways that it's being apportioned through time, but it will take about 20 years.

THE COURT: Okay. Part of the 2030 plan for the whole Recharge Master Plan update?

MR. FIFE: Yeah.

THE COURT: Okay. Go ahead, please.

MR. MALONE: And then another part of the Peace II agreement is to update the Recharge Master Plan, and some of the goals of the Recharge Master Plan are to assure that availability of recharge capacity, and that there's enough water that's going to be available for recharge, and then to balance recharge and discharge.

Michael, you can correct me if I'm wrong here, but the basic vehicle to achieve this 400,000 acre-foot of overdraft is to forgive replenishment associated with the desalter pumping. The desalters are not a part of the judgment. They don't have pumping rights. And so any production that occurs of the desalter according to the judgment should be replenished. But as part of basin re-operation we're forgiving that desalter replenishment so it does not have to happen, and that's how the overdraft is occurring -- the control overdraft is occurring. But one day we're going to have to replenish. Once that 400,000 acre feet

are used up and we've achieved that overdraft, then we're going to have to replenish for those -- for the desalter pumping on the out years.

THE COURT: Okay.

MR. MALONE: And so the special referee and her assistant really wanted to make sure that Watermaster had the recharge facilities and the water available to achieve that desalter replenishment in the future when it was needed.

THE COURT: Got it. What -- what role did the special referee play in the course of the case under Judge Gunn? And the question I've had is whether I should get another special referee, especially given the fact that the binder for the -- I can never keep the name straight --Recharge Master Plan update was about two inches thick and absolutely, as I mentioned, full of a lot of technical facts and details which I read, and some of which I understood but some of which I didn't. Now, it helped that there was not a dispute among the parties with respect to the Recharge Master Plan update. But I would be interested in hearing any input that you could give me at this time with respect to another special referee given the technical requirements of administering this, the Watermaster and the water Recharge Master Plan update and the rest of the technical aspects and legal aspects, to a certain extent, of this case. I know that it was Ann Schneider whom I met -- she passed away recently. I'm sorry to hear that.

MR. MALONE: Yes.

THE COURT: It left me wondering if that -- if at

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1 some point in the future if there were a dispute it would be 2 appropriate for the court to get another special master. 3 Does anyone have any opinion on that issue, or is it really for me to decide at some point in the future on my own? 4 5 MR. FIFE: To begin with your last question --6 THE COURT: Yes. 7 MR. FIFE: -- it ultimately -- in the end it's up to 8 your discretion. I think that it's a rather contentious 9 question so --10 THE COURT: Okay. 11 MR. FIFE: You would get different answers from 12 different parties. And so I'm going to give you an answer 13 that's -- I think would be the perspective of --THE COURT: Your perspective as an advocate. 14 15 MR. FIFE: Just to be safe, I would say the 16 perspective of Watermaster's legal counsel. THE COURT: Okay. 17 18 MR. FIFE: Because I can't even represent that this 19 would be the unified perspective of the Watermaster board. THE COURT: I understand that completely. 20 21 MR. FIFE: Right. In my view, one of the purposes of the special referee when she was put in place in the late 22 23 90's was to serve as an oversight role for the new Watermaster 24 that had been put in place. That was the nine-member board. 25 THE COURT: Okay. 26 MR. FIFE: There were concerns expressed by the 27 court that the Watermaster sufficiently take on this role.

And since it was -- it is a representative body, the nine

member board, it is -- Watermaster is now composed of the parties that the Watermaster oversees. And so I think the court perhaps even used the phrase in its orders, the fox guarding the hen house.

THE COURT: Okay.

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MR. FIFE: And so there were concerns about whether the Watermaster would adequately fulfill its role. And in my view, one of the purposes of the referee was to serve that oversight function. Moving through time, as the nine member board came into its role, there were at least some parties in the basin who felt that the period of oversight was done, and that the role of the special referee was a role that the Watermaster should be fulfilling. And rather than having this mediated relationship between Watermaster and the court through the special referee, it should be a direct relationship of the court to the Watermaster that the court has appointed in order to provide that role of education, assistance, guidance to the court through these technical matters. And so, for example, the sort of thing that we're doing here today we never did with Judge Gunn. We never were given the opportunity to try to educate him or to have the Watermaster serve in the function of providing guidance through whatever issues might arise. And so, again --

THE COURT: No, I understand.

MR. FIFE: -- my perspective, I think that it's a valuable thing. It's good to put Watermaster in that role of the neutral and objective assistant to the court, and that seems to be where we're going right now.

1 Now, caveat, there are other parties who may have other views, and I would suggest that if the court really was 2 3 considering the use of a referee, that -- that an opportunity 4 be given to all of the parties to express their opinions on 5 that issue. THE COURT: And that would mean not only expressing 6 7 their opinions but also proposing candidates? How did Judge Gunn select Ann Schneider? I don't know. 8 9 MR. FIFE: And I wasn't around at the time. Mr. 10 Kidman might have insight as to that. 11 MR. KIDMAN: Well, I think -- my name is Art Kidman, 12 legal counsel for or representing Monte Vista Water District. 13 Mr. Fife has presented a balanced view, I believe. 14 THE COURT: Okay. 15 MR. KIDMAN: It is most accurate that there has been a lot of contention over this issue. And I think, one, there 16 17 is controversy. 18 THE COURT: Okay. 19 MR. KIDMAN: There comes to be a question just as 20 happened most recently in front of Your Honor --21 THE COURT: Mm-hmm. MR. KIDMAN: -- relative to the Non-Ag Pool. 22 23 THE COURT: Right. 24 MR. KIDMAN: And there were things in there, papers 25 where they were questioning whether the Watermaster was sufficiently objective and neutral or whether it was doing the 26

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bidding of the Appropriative Pool.

THE COURT: I remember.

MR. KIDMAN: So I don't know that -- and my client was one who was more supportive of Ms. Schneider than some others because we felt that it was important to have some check and balance on the pecuniary interests of the producing parties to make sure that the public interest in the management of the basin was also being --

THE REPORTER: Also being what?

THE COURT: Met.

MR. KIDMAN: -- also being taken into consideration properly through the court. And so it's -- right now that particular controversy seems to be in a period of non-controversy.

THE COURT: Remission we could call it.

MR. KIDMAN: Yeah, we could call it that. I certainly would expect that it might come up again. So I think Mr. Fife is exactly correct that ultimately it will be up to Your Honor to decide that. And I imagine that it would be quite controversial --

THE COURT: Okay.

MR. KIDMAN: -- if you were to start asking should we or shouldn't we have an independent special referee.

How was Ms. Schneider selected? I don't know.

THE COURT: Okay.

MR. KIDMAN: Best I can tell you is that Judge Gunn maybe did some literature research. There was no question in my mind -- I'm not sure how everyone else felt about it -- she was extremely well-qualified to do this particular job. But I have no idea. To me it was a surprise when it happened,

although I knew her very well even before then. I don't know that he could have really picked out anyone better. One of the problems was in those days we had some -- this controversy going over between who should be the Watermaster. We had controversy going over who should be Watermaster counsel and trying to find somebody who wasn't already heavily involved in the basin who knew something about ground water, ground water management, ground water rights. And that was -- would not have been an easy task, particularly if you had been confined to southern California.

THE COURT: All right. I appreciate the insight. I really do and the advocacy. I understand I have more of an insight into the issue than I had previously, so I appreciate your candor in filling me in. Thank you very much. Okay. Thank you.

Okay. Go ahead, please.

MR. MALONE: Okay. The next graphic I'm showing you here is a cartoon of the Chino Basin, but I encourage you to maybe make a copy of this and just have it around because we spend a great deal of time constructing this cartoon because it shows the management plan in a very simplistic format. But I think it's understandable.

THE COURT: Which management plan, the OBMP?

MR. MALONE: Yes, the OBMP.

THE COURT: Thank you.

MR. MALONE: So what you're seeing here in this graphic is the bottom of the aquifer. And this is the saturated zone and this is the unsaturated zone.

THE COURT: Indicating the blue is the saturated zone and the brown above it the unsaturated zone labeled.

MR. MALONE: Yeah.

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THE COURT: Okay.

MR. MALONE: The Santa Ana River goes along the southern edge of the basin, and you can see the slope of the ground surface going from the north to the south towards the Santa Ana River. And then these are the mountains. And storm water flows out of the mountains. And we're showing a blue oval here in the middle -- in the middle of the graphic, and that represents an engineered basin. Some of these basins that are in the Chino Basin are old quarry pits or flood control facilities that were built to store storm water temporarily before it's released into the concrete line channels. These basins are sandy bottom basins so water can percolate down to ground water. And so what we're showing here is storm water coming into these basins and being recharged. We also have a pipe here that represents imported surface water, mainly from the State Water Project, that can be imported into the basin and discharged to these recharge basins and percolated in. That's a major part of our management plan. This POTW, it stands for publically owned treatment works, and that's an acronym for a waste water treatment plant.

THE COURT: Okay.

MR. MALONE: So this is where the -- the recycled water is generated, and it's shown here as being discharged also to one of these recharge basins where we're having direct

recharge of recycled water to the ground water basin as well. So that's -- that's what this all represents are three major types of water that can be recharged artificially into the Chino Basin, is storm water, imported water and recycled water.

THE COURT: Okay. And the POTW, Publically Owned --

MR. MALONE: Treatment Works.

THE COURT: -- Treatment Works. Okay. Thank you.

MR. MALONE: Yes. What we're --

THE COURT: And these recharge basins are just open pools?

MR. MALONE: They're depressions in the ground surface. And so storm water can flow in them. We have inlet structures from the flood control channels that pass by them or through them where the water can be diverted out of these stream channels and into these basins.

THE COURT: I saw something in the materials about Vulcan Materials offering -- or using some of the quarries from Vulcan Materials as recharge basins. Has that happened? Or is that one of the proposals, or was that simply a proposal at one time?

MR. FIFE: That's an issue under discussion right now. Thinking of a quarry pit is a good way to think about what the recharge basins look like. And Vulcan Materials has a quarry pit that they're trying to decide what to do with, and so it creates an opportunity to acquire one more recharge basin.

THE COURT: Got it. Thank you.

Go ahead, please, Mr. Malone.

MR. MALONE: The -- in the blue saturated part of the aquifer system, you can see the -- the higher quality ground water here in the northern part of the basin. And then as it's flowing down to the south, we have the desalter wells and the desalter facility here graphically where the desalter is pumping this poor quality ground water and then this is where the treatment occurs. Now, what we're showing here with this U-shaped depression in the saturated zone is hydraulic control. Where this water is moving in this direction, this water is moving in this direction, the desalter is creating a hydraulic barrier in the southern part of the -- of the basin and is capturing all the water that's flowing from the north to the south.

THE COURT: It's pumping it out as fast as it's flowing in?

MR. MALONE: Yes.

THE COURT: And would you measure the flow rates by wells that you've -- monitoring wells that you've dug to figure out what the flow in is?

MR. MALONE: Yes. There's a very -- ground water flows in a very simple -- by a very simple mathematical formula. It has to do with the gradient or the slope of this surface, this ground water table surface. That's one factor. The other factor is a permeability factor of the sediments.

THE COURT: And is the permeability consistent enough that you can use a formula and get a pretty accurate description of how fast the water is flowing through it?

MR. MALONE: Yes, we generalize it. It does vary spatially and that sort of spatial variation is built into our ground water flow models. And so it's not constant everywhere but we get an idea from the wells and how water levels respond to pumping. We can get estimates of the permeability. And then that's also something that we calibrate in our ground water flow models, too, is that permeability --

THE COURT: Factor.

MR. MALONE: -- factor.

THE COURT: Okay. Thanks.

MR. MALONE: The last major important part here is the Santa Ana River where we're showing the water recharging in the Santa Ana River and then flowing towards the desalter wells and ultimately being pumped. Now, again, remember when we started out here with ground water levels much higher, ground water was discharging to the Santa Ana River and leaving the basin. What we're doing is causing the opposite to happen by pumping the desalter wells, lowering ground water levels, and getting inflow from the Santa Ana River and increasing the yield of the basin.

THE COURT: Okay. So if I understand the graphic depiction, is there, in fact, physically a depression?

MR. MALONE: Around the desalter well field?

THE COURT: Yeah. That you purposely put the desalter above so you can collect the most water -- the most lesser quality water wherever you sink the desalter? And have you been able to figure out where underground those depressions are so you can sink the well down to pick up the

1 water? 2 MR. MALONE: Well, this depression right here in the 3 ground water table --THE COURT: Yes. 4 MR. MALONE: -- is caused by the pumping of the 5 6 desalter wells. So the desalters -- the desalter pumping 7 causes the depression in the ground water table. 8 THE COURT: But it doesn't cause subsidence in the ground the desalter actually sits on? 10 MR. MALONE: It -- we've measured a very tiny bit of 11 subsidence on the order of less than an inch of subsidence 12 around some of these desalter wells. But we're purposefully 13 trying to construct these wells so that they don't cause 14 subsidence. What we've determined is that when we pump too 15 deep in the aquifer system we cause more subsidence than if we 16 pump shallow. And so these desalter wells are screened 17 primarily in the shallow zones, especially the new wells that 18 we're bringing on line are screened in the shallow zone. that's where most of the contaminated water exists is in the 19 20 shallow ground. 21 THE COURT: Let me grab something real quick. 22 (Pause.) 23 THE COURT: So this curve that you've got "Unused Storage" written just above, does that curve as you pump more 24 25 out, does that curve get more and more pronounced?

THE COURT: But no land subsidence above it or very

MR. MALONE: Yes.

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little?

MR. MALONE: Yeah, very little.

THE COURT: Okay. Why? I would think if that's going down below the desalter, the land above it would come down with it. But it doesn't work that way?

MR. MALONE: Yes, it does work that way. But it's a matter of scales that we're talking about. We can have a hundred feet of drawdown of water levels and maybe just a very tiny bit of land subsidence associated with it.

THE COURT: And why is -- that doesn't make common sense to me. It doesn't make sense. How does that happen physically?

MR. MALONE: Okay.

THE COURT: So the land fills in in this area. And the unsaturated zone, the land fills in, but it doesn't -- so it creates minimal subsidence at the surface?

MR. MALONE: Again, let's go back to our concept of the aquifer being sands and gravel, grains that are in contact with each other. And there is water in the pore spaces. When you drain the water out of the pore spaces, the sands and gravels may rearrange a little tiny bit because that pore water pressure was providing some of the support. But if you take the water out it doesn't make the sands and gravels crush and crumble underneath. They still have a lot of support and they create a skeleton.

THE COURT: Oh, okay.

MR. MALONE: The clays are a different animal altogether. When you take water out of the clays, they can squish and squeeze.

THE COURT: Okay.

MR. MALONE: Where a lot of these desalter wells are constructed right now and pumping right now, it's further to the east where we don't have as much clay. It's mostly sand and gravel. Where this third phase of desalters are coming in -- desalter wells are coming in, we have much more concern about subsidence because we know there's a lot more clay in this area.

THE COURT: Okay.

MR. MALONE: So that's why we're -- we want these wells, these new wells that are going to be constructed to be constructed in the shallow aquifer system where there's not as much clay. In the deeper aquifer system we have more clay. And so that's the complexity that's not shown on this graphic here, but that's the complexity of especially the western portion of Chino Basin.

THE COURT: Got it. Okay. And in the curve here that exists under the words "lesser quality ground water," does that change or is that just bedrock?

MR. MALONE: No, that's bedrock and that stays stationary except over geologic time.

THE COURT: Okay. Got it. Thanks.

MR. MALONE: So any other questions on this graphic before we move on?

THE COURT: I got it. Thanks.

MR. MALONE: Okay. This is a very technical graphic here and what it's demonstrating is a model prediction of what hydraulic control is going to look like.

THE COURT: In the year 2030? 1 2 MR. MALONE: In the year 2030. 3 THE COURT: Okay. 4 MR. MALONE: We think we're going to get there 5 before 2030. We think we're going to get there -- if the 6 wells are constructed -- this third phase of wells are 7 constructed by 2014, we believe we're going to get to full 8 hydraulic control by 2017. But this model projection you're 9 seeing here is several years out beyond that. 10 What you're seeing on this graphic are, again, the 11 desalter wells in white squares and in yellow squares. are the existing desalter wells, and we believe that we have 12 13 hydraulic control right now in this area here. Where we don't 14 think we have hydraulic control is over here on the west side. 15 These six blue wells are -- are the third phase of the 16 proposed desalter well field. 17 THE COURT: This is a trivial question but I can't resist asking. Why yellow and white for the existing ones? 18 19 Were they phase one and phase two? 20 MR. MALONE: Yes. This was phase one. This was 21 phase two. 22 THE COURT: Got it. Thanks. Yellow phase two and 23 the white phase one. 24 MR. MALONE: Yeah. 25 THE COURT: Thanks. Go ahead. 26 MR. MALONE: For your information, the Chino I 27 Desalter Facility is over in this area, and the Chino II

Desalter Facility is over in this area. So there are

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     pipelines that take the water from these wells to these
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     facilities.
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               THE COURT: Okay. And these are desalter wells?
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               MR. MALONE: These are desalter wells that you're
     seeing right here.
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               THE COURT: Okay. And how many wells feed one
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     desalter plant then?
               MR. MALONE: Well, you can see here that these eight
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     wells feed Desalter II, and then all of these wells feed
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     Desalter I. I believe when these wells -- these new six wells
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     come on, they're going to re-plumb these three wells to
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     Desalter II and that the remaining white wells and these blue
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     wells will go to Desalter I.
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               THE COURT: That's just a matter of running pipes?
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               MR. MALONE: Yes.
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               THE COURT: Well, not just a matter of but that's
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     physically how you do it?
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               MR. MALONE: Yes. And those we wall the raw water
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     pipeline. So it's the raw ground water being delivered to the
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     desalter facilities. Then there are product water pipelines
     that deliver the product water from these desalter facilities
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     to the agencies that are --
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               THE COURT:
                           Selling it.
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               MR. MALONE: -- selling it, yeah.
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               THE COURT: Okay.
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               MR. MALONE: You have the brine lines that are
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     taking the brine and exporting it from the basin.
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               THE COURT: Down to the Orange County and then to
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     the ocean?
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               MR. MALONE: Yes.
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               THE COURT: Got it.
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               MR. MALONE: The water is treated at an Orange
     County facility and then discharged to the ocean.
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               THE COURT: Do they charge Watermaster for that, for
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     the treating it before they send it out to the ocean?
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               MR. MALONE: It's a -- that brine line is a regional
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     facility. It covers a good portion of the whole watershed, so
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     I believe that all the dischargers do pay money. The people
     that discharge to that brine line do pay money for it to be
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     treated.
               THE COURT: Okay. All right. Thanks.
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               MR. MALONE: And to maintain the brine line.
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               THE COURT: Got it. Okay.
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               MR. MALONE: The red arrows show the projected
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     ground water flow directions. Tiny red arrows and the green
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     lines --
               THE COURT: I'm sorry. Where are the red arrows
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     again?
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               MR. MALONE: You can barely see them but --
               THE COURT: Oh, they're all over the place.
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               MR. MALONE: They're showing which way we believe
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     the ground water will flow.
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               THE COURT: Okay. So here on the lower or in the
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    mid right area it's actually flowing west?
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               MR. MALONE: Yes.
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               THE COURT: Okay.
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MR. MALONE: Yes. And what we believe is happening there is the Santa Ana River flows along the southern portion, is recharging and water is flowing towards these desalter wells. So I showed it to you in your cartoon, now I'm showing you it in a very technical graphic on how yield of the basin is being enhanced by these desalter wells.

THE COURT: Got it.

MR. MALONE: You can also see some of these red arrows showing the ground water flowing back towards these wells over here.

THE COURT: Again, just for the record, on the left-hand side.

MR. MALONE: On the left-hand side, on the western side. And this is really the definition of hydraulic control, that all the water that's flowing from the north to the south, even if it makes its way past some of these wells, it's going to come back in and be produced by these wells. So that is going to be our task is with water level data in the future, for monitoring of wells in this area, to demonstrate that northward reversal of the hydraulic gradient. When we can show that, then we can tell the Regional Board that we have hydraulic control.

THE COURT: So at some point by 2030 is the plan?

MR. MALONE: Mm-hmm.

THE COURT: I'll make this ridiculously simple. All the little red arrows should be -- none of the little red arrows should be going toward the Santa Ana River; all of them should be sweeping back towards the desalters?

MR. MALONE: Well, not necessarily down in this area but just south of this well field is where we want to see those little red arrows going back up.

THE COURT: Okay.

MR. MALONE: Because, again, it's all of our water management practices up here, we want to be isolating those

management practices up here, we want to be isolating those water management practices from any impact in the Santa Ana River.

THE COURT: I got it. Thanks.

So there shouldn't be any -- once you get past the -- the desalter line --

MR. MALONE: Mm-hmm.

THE COURT: -- all -- you're not so concerned about the arrows.

MR. MALONE: Yeah.

THE COURT: We're talking about the arrows now but meaning the water flowing represented by the arrows, you won't -- once you get past that line, it's not a problem if they're flowing into the Santa Ana River. But it is a problem if the ones north get past.

MR. MALONE: Yes.

THE COURT: Okay.

MR. MALONE: Yes. That if we have some water that's recharging from the Santa Ana River and flowing in this direction and then resurfacing down here in Prado Basin, that that's not a great concern to Watermaster or the Regional Board.

THE COURT: I see. Okay.

MR. MALONE: And hydraulic control is a -- is something that the Regional Board wants to see now, and I'm going to get to why they want to see that.

THE COURT: Okay. Okay.

MR. MALONE: I think you can probably guess by now.

THE COURT: Yes, actually.

MR. MALONE: Back to the recharge facilities -- I know I'm jumping around here a little bit -- but back to the recharge facilities. Again, we talked about these stream channels once being unlined. Now the way that we do the storm water recharge is in all of these light blue polygons on the map, these are the basins, the flood control basins and the recharge basins. They have -- a lot of them have dual purpose, flood control and recharge.

THE COURT: Okay.

MR. MALONE: And this is where the artificial recharge is occurring and, again, mostly in the northern and central portions of the basin.

THE COURT: Okay.

MR. MALONE: The orange lines that I just overlaid on this graphic, these are the main imported water pipelines that come from either the Colorado River or the State Water Project in the Sacramento Delta. The yellow dots are so-called turnouts where you can take water out of the pipeline and discharge it to a creek or one of these recharge basins.

THE COURT: Okay. I'm still not quite sure -- you mean you can take -- I'm still not quite sure what a turnout

is. 1 2 MR. MALONE: It's a valve. 3 THE COURT: Oh, okay. 4 MR. MALONE: Basically a very large valve that you 5 can open up and access the water that's in the pipe. And it 6 will bubble out or come out, and it comes out into a channel 7 or into a recharge basin. THE COURT: Okay. So this is water that's 8 9 acceptable for -- this is good enough quality water for 10 recharge purposes? 11 MR. MALONE: Yes. 12 THE COURT: Okay. MR. MALONE: It would need to be treated, basically 13 14 filtered before it could be directly --15 THE COURT: Consumed. 16 MR. MALONE: -- consumed, yes. But for recharge it 17 doesn't need to be filtered. It can just be discharged into one of these basins and recharged directly to the aquifer. 18 19 THE COURT: And so where is it coming from again? 20 MR. MALONE: The State Water Project water comes 21 from the Sacramento Delta. 22 THE COURT: Okay. 23 MR. MALONE: So the central valley. And it comes 24 down the California Aqueduct. Colorado River water comes from 25 the Colorado River through the desert and into southern California. 26 27 THE COURT: Okay. So that's the source for these 28 turnouts?

1 MR. MALONE: Yes. 2 THE COURT: That's the source of water for these 3 turnouts. 4 MR. MALONE: Yes. THE COURT: Okay. And when do you turn the turnouts 5 6 on and when do you turn them off? 7 MR. MALONE: When you order the water. THE COURT: 8 Okay. 9 MR. MALONE: Watermaster again is required to 10 replenish for overproduction, so that would be one reason to 11 order the water. And --12 THE COURT: And this is metered so you're paying --13 MR. MALONE: Yes. THE COURT: -- you're paying either -- are you 14 paying the Regional Board for this water --15 16 MR. MALONE: No. 17 THE COURT: -- or are you paying --18 MR. MALONE: Metropolitan Water District. THE COURT: Okay. 19 20 MR. FIFE: Metropolitan Water District who are 21 actually -- I mean, there's a whole structure around doing 22 this but IEUA is the Met member agency. So IEUA buys it from 23 Metropolitan Water District, sells it to Watermaster. 24 THE COURT: Okay. All right. Thanks. Okay. 25 MR. MALONE: The red lines that I just overlaid on 26 the map are either existing or planned recycled water 27 The red polygons are some of the major recycled water treatment plants, the POTW's. And so the water is 28

generated here at these plants and then piped to different areas where it can be recharged as well, or sold to customers for direct -- indirect -- for direct use where they use it for irrigation, for instance.

THE COURT: But non-potable water.

MR. MALONE: Yes, it's non-potable water. But it's -- in these recharge basins it's blended with storm water or imported water per requirements of the Department of Public Health. So this is another place where we're coordinating and cooperating with a regulator to come up with appropriate regulations to use this recycled water to replenish our aguifer.

THE COURT: Okay.

MR. MALONE: Yeah. This is a photograph of one of the recharge facilities. We call this the Eli basin and I'll go back to the map itself. These basins right here in the central part of the -- of the Chino Basin (pointing).

THE COURT: Okay.

MR. MALONE: And here again storm water and recycled water get released to these basins and it percolates in. So this is a pretty good example of seeing where recharge is occurring artificially.

THE COURT: Is this a basin here on the right?

MR. MALONE: Yes, it is. And it's not filled but the basin on the left is filled at this point.

THE COURT: What time of year was this picture taken? Is this a summer picture, or a fall, winter picture?

MR. MALONE: I'm not sure.

THE COURT: Okay. Is there ever a time when both 1 2 basins are full; do you know? 3 MR. MALONE: Chris? We have a representative from 4 IEUA who does a lot of the recharge operations. 5 THE COURT: And your name for the record, please? MR. BERCH: Chris Berch. 6 7 THE COURT: B-e-r-c-h? MR. BERCH: (No audible response.) THE COURT: Okay. Thanks. Mr. Berch. 1.0 MR. BERCH: Yes. During different times of the year 11 depending on water availability all the sites could be totally 12 full, especially during storm seasons where you have high 13 flows coming down quickly. It's the least expensive water for 14 the region. 15 THE COURT: Okay. Thank you very much. 16 MR. MALONE: What you're seeing here are what we 17 call lysimeters. 18 THE COURT: These are the red boxes? 19 MR. MALONE: These red boxes. And what we have is 20 conduit that comes down here underneath the basin, and at 21 maybe five-foot intervals we have little devices that collect 22 the water as it's being recharged at these -- out of these 23 basins and percolating down. And we'll collect the water and we'll analyze its chemistry and the chemical transformations 24 that are occurring in the soil as the water's percolating 25

These results are used in -- are used to help us

determine the blending requirements and -- the blending

28 requirements of the Department of Public Health.

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down.

1 THE COURT: So these are sensors that can give you 2 an analysis of the water, I'll call it, in realtime? 3 MR. MALONE: Not realtime. But we collect the water sample and then send it to the lab and we get the chemistry 4 5 results back. 6 THE COURT: Okay. 7 MR. MALONE: We use those results in coordination 8 with the -- with the Department of Public Health. 9 THE COURT: They're actually -- are these water --10 are they -- they actually collect the water in some way and 11 you pull them out? 12 MR. MALONE: Mm-hmm. Yeah. THE COURT: Okay. 1.3 14 MR. MALONE: There's a vacuum applied to the line 15 here that sucks the water in. Even though the sediments 16 aren't totally saturated with water, we can collect a water 17 sample. 18 THE COURT: Okay. At what levels -- there are various levels under the --19 20 MR. MALONE: Various depths underneath the basin. 21 So we can see the chemical transformation in the water as it 22 percolates. It's called soil aquifer treatment where the --23 just the process of percolating the water is treating the 24 water and improving it. 25 THE COURT: Okay. 26 MR. MALONE: Its quality. 27 THE COURT: Got it. 28 MR. MALONE: So I bring this up just to show you

1 that there is a tremendous amount of monitoring that goes on 2 here and a tremendous amount of cooperation with the 3 regulatory agencies so we can get this recycled water in the ground and put it to beneficial use. 4 5 THE COURT: How often do you collect the water 6 samples? 7 MR. MALONE: I'm going to ask Chris to answer that question again. 8 9 THE COURT: From the Eli Basin, for example, how 10 often --11 MR. BERCH: Well, we're actively recharging. 12 sampled about once a week. Like Andy indicated, there's a 13 vacuum that's pulled onto it, and you have to come in the next 14 day --15 THE REPORTER: I'm sorry. I'm sorry. You have to 16 come in the next day and what? 17 THE COURT: "and collect the sample from the day 18 before." 19 MR. MALONE: This next slide shows a number of 20 photographs of the flood control channels that you can see are 21 concrete-lined. And this is during a stormy event here. THE COURT: On the left. 22 23 MR. MALONE: On the left. And then on the right are 24 two examples of these -- of other recharge basins that are filled with water. And in these cases this is storm water. 25 26 You can see the snow on the mountains. These are wintertime 27 pictures.

THE COURT: Okay.

MR. MALONE: So just to give you a flavor of what 1 this really looks like. 2 3 THE COURT: What is the -- I don't know if this is a 4 logical question or not -- what is the total acre feet 5 capacity of all of the basins in the -- that are subject to б the Chino Valley Watermaster? 7 MR. MALONE: Mm-hmm. 8 THE COURT: Do you have an estimate? 9 MR. MALONE: I believe the estimate is slightly over 10 80,000 acre feet per year capacity. 11 THE COURT: Okay. Thank you. 12 MR. MALONE: If anyone -- is that about right, 13 Chris? 14 MR. BERCH: (Nodding.) 15 THE COURT: Thank you, Mr. Berch. Okay. Thanks. MR. MALONE: Okay. Moving on, what I'm showing you 16 17 here are the management zones of Chino Basin. So during the 18 development of the OBMP we segmented the basin up into 19 different management zones. And the criteria that we used to 20 do this segmentation was based on how water flows through the 21 So this we call management zone one. The water that 22 is recharged in the northern part of the management zone one 23 flows to the south generally towards Prado Basin. thing with management zone two, water that is recharged in the 24 north flows to the south. This is management zone three, four 25 26 and five, and, again, it's -- they're based on the hydrology. 27 So you have areas of recharge and areas of what we call

discharge and connected by a flow system. So you can -- it's

a management unit. If you have management plans that include recharge or pumping, that you can implement that management plan within this management zone.

THE COURT: Okay. I'll just indicate for the record, they're numbered starting on the left number one and essentially moving clockwise two, three, four and five. And, again, further to identify it for the record, zone number one has a two-nine-three and a four point nine in that zone.

What do those numbers represent?

MR. MALONE: Okay. So what I'm transitioning over into now is water quality regulations by the Regional Board.

THE COURT: Okay.

MR. MALONE: During the time the OBMP was being developed, the Regional Board was also developing an update to its basin plan. And what the Regional Board did was it took Watermaster's work on the management zones and -- and adopted those as their own as well in their basin plan. And what these are are the water quality objectives that the -- that the Regional Board adopted for the basin plan. So these are based on historical water quality data within these management zones here. And you can see that a lot of these -- the red values here represent the TDS objective. And the green values represent the nitrate nitrogen water quality objectives.

THE COURT: Okay. And I understand -- so is it for two ninety-three, is that parts per million?

MR. MALONE: Milligrams per liter or parts per million. Those are the same.

THE COURT: Okay. And four point nine is the same

1 then? 2 MR. MALONE: Yes. 3 THE COURT: Okay. Thanks. MR. MALONE: Now, the problem here is that IEUA is 4 5 recycled water. The TDS concentration of it is somewhere 6 between 450 and 500, somewhere in that range. So the Regional 7 Board could not permit the recharge of that recycled water because it's higher in concentration than its water quality 8 9 objectives. 10 THE COURT: Got it. 11 MR. MALONE: So all of the plans in the OBMP for 12 recharge of recycled water were put into jeopardy because of 13 these pretty stringent and restrictive water quality 14 objectives that the Regional Board was getting ready to adopt. 15 THE COURT: Okay. Why is it so much higher in the 16 objectives in --17 MR. MALONE: Four. 18 THE COURT: -- zone four and five? Yes. 19 MR. MALONE: Because these objectives here were 20 based on historical water quality data from the 1950's to the 21 1970's. And the water quality during that time period was 22 still pretty poor in these southern management zones of Chino 23 Basin. 24 THE COURT: Okay. 25 MR. MALONE: But not very poor at all in the 26 northern parts. 27 THE COURT: Okay. 28 MR. MALONE: Okay.

THE COURT: Got it.

MR. MALONE: So this is where the cooperation with the Regional Board really came in, is the Regional Board didn't want to adopt these really restrictive water quality objectives that were going to jeopardize the plans to use recycled water. They recognized that recycled water re-use was a very important part of the management plans for the future for a lot of these agencies. So they came up with a --they didn't come up with a concept. This was built into the California Water Code and we call it maximum benefit. And what the Regional Board did with -- in cooperation with the Chino Basin parties was they took management zone one, two and three, and they combined them into one management zone, and we call that the Chino North Management Zone.

THE COURT: And that's effective now?

MR. MALONE: It is.

THE COURT: Okay.

MR. MALONE: This is what we're regulated to now.

They elevated the water quality objectives to four twenty and five point zero. And what that did was it created assimilative capacity in these basins, and that's a definition I can define for you if you'd like.

THE COURT: Yes. What was it again?

MR. MALONE: Assimilative capacity.

THE COURT: Okay. What does that mean?

MR. MALONE: What that means is that the current quality in this management zone is better than that objective. If you go back to that predictive model where I said it was

three twenty milligrams per liter in the beginning in 2000, that was the current quality in this Chino North Management Zone in the year 2000. So the current quality is better than the objective, and then that allows the Regional Board to permit discharges to this management zone that are higher than that four twenty objective.

THE COURT: Okay.

MR. MALONE: Okay.

THE COURT: Okay.

MR. MALONE: A little bit complex there. But what they did by elevating this from the two fifty to the four twenty, it allowed for the recharge of recycled water at concentrations at about five hundred milligrams per liter.

THE COURT: Okay.

MR. MALONE: It allowed for it.

THE COURT: Was that a practical solution to the problem of allowing treated water to come back as recharged water?

MR. MALONE: So it's, again, the recycled water very important -- recycled water re-use is a very important part of our management plans here because we know that imported water is getting scarce, less reliable, and so recycled water is a very reliable source of water. It just happens to be at a higher concentration. What the Regional Board wanted, though, in exchange for the ability to use recycled water here is some assurances that beneficial uses in the basin and downstream from the basin would continue to be protected. That's why they had us do these modeling runs. What's going to happen

1 long term if we allow you to recharge recycled water? What's 2 going to happen to the concentration in the basin over time? 3 Are you still going to be protecting drinking water beneficial uses? 4 5 THE COURT: Okay. 6 MR. MALONE: And we were able to demonstrate through 7 our modeling that, yes, we will. 8 THE COURT: Is drinking water the main beneficial 9 use? 10 MR. MALONE: Yes. 11 THE COURT: Okay. 12 MR. MALONE: There are other beneficial uses like 13 agricultural supply and industrial supply. 14 THE COURT: Okay. 15 MR. MALONE: But that's the main beneficial use of 16 the ground water. 17 THE COURT: Got it. 18 MR. MALONE: Probably the most sensitive beneficial 19 I'll put it that way. 20 THE COURT: Okay. Thanks. Got it. 21 MR. MALONE: What they also asked in return was a lot of these of -- were commitments to implement the OBMP, the 22 23 monitoring, hydraulic control, bringing in good quality storm water and imported water. Trying to do your best to manage 24 25 the TDS concentration of the recycled water. They asked for 26 all these commitments that the Chino Basin folks were already 27 going to do. It was already part of the OBMP. But the 28 Regional Board was saying we want those commitments. We want

1 you to do these -- to do these, and we want you to commit to 2 them, and we want to write it into our basin plan. So now 3 there's this regulatory hammer that's hanging over you that 4 says that you will do it or we will fine you. 5 THE COURT: Okay. 6 MR. MALONE: So -- and fine you or we'll go back to 7 these objectives and you'll have to mitigate for all the salt that you put over these objectives. 8 9 THE COURT: Oh, man. Okay. 10 MR. MALONE: So they have a real regulatory hammer now that they can use to make sure that the Chino Basin 11 12 implements the OBMP. THE COURT: Okay. And are the fines -- and when did 13 14 this go into effect with respect to the --15 MR. MALONE: Maximum benefit? 16 THE COURT: -- maximum benefit, combining the three 17 zones into one? When did that take effect? 18 MR. MALONE: When the basin plan was updated in 19 2004. 20 THE COURT: Okay. Okay. And did that require --21 did you have to go back to Judge Gunn for that as part of that -- that plan? 22 That I don't know. 23 MR. MALONE: 24 MR. FIFE: No. For this we did not seek court 25 approval. 26 THE COURT: Okay. Is that because it was part of --27 part of the administration of the OBMP already, and you did

not require a court approval to I'll call reintegrate these

particular zones or integrate these particular zones for 1 2 management purposes probably? 3 MR. FIFE: Yeah. 4 THE COURT: Okay. 5 The commitments that were being made by MR. FIFE: Watermaster were already commitments that we were committed to 6 7 under the OBMP, so there was no change in Watermaster's 8 operations by doing this. 9 THE COURT: Okay. 10 MR. FIFE: We were still progressing the way we had 11 always progressed. 12 THE COURT: Got it. Okay. Thanks. Go ahead. 13 And for OBMP purposes these management MR. MALONE: zones still exist. This Chino North is a construct of the 14 15 Regional Board and the maximum benefit, and so it's in their 16 basin plan here. But when we meet as Watermaster, we still 17 use management zone one, management zone two and three. 18 THE COURT: Yeah. That was in your paperwork. 19 management zones were still quite significantly addressed --20 MR. MALONE: Yes. 21 THE COURT: -- in the paperwork for the recharge 22 update master plan. 23 MR. MALONE: Yeah. 24 THE COURT: So I understand better that you have an overlay because of the requirements of a particular 25 26 administrative agency to which you need to report to keep your

obligations current, and to meet your obligations with respect

to discharge into the Santa Ana River. If I summarized that

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1 correctly. 2 MR. MALONE: Yeah. 3 MR. FIFE: Exactly. THE COURT: All right. 4 5 MR. MALONE: So --6 MR. FIFE: It gets easier. 7 THE COURT: One of those -- off the record. (Off the record.) 8 9 THE COURT: Okay. Go ahead. 10 MR. MALONE: Well, one of the most important 11 commitments that the Regional Board had was hydraulic control. 12 And, again, they're all about protecting beneficial uses of 13 the Santa Ana River in this case in particular. And so the -they require Watermaster to continue to do a lot of monitoring 14 15 down here and to report annually on the state of hydraulic control. And so all of those reports are what's telling us 16 17 that we have hydraulic control in this area. We don't have it 18 in this area and so that is the reason why phase three of the desalter well field is going in in this particular area over 19 20 here on the west. 21 THE COURT: Okay. And I'll just indicate for the 22 record, hydraulic control basically on the east side of the 23 Prado Basin management zone, not achieved yet on the west side 24 essentially. 25 MR. MALONE: Yes. 26 THE COURT: We keep talking in general areas. 27 MR. MALONE: Yes. 28 THE COURT: The general area the Prado Basin

1 management zone. 2 MR. MALONE: Mm-hmm. 3 THE COURT: Okay. Thanks. MR. MALONE: And this is the last slide I have for 4 you today. But these are some of the major maximum benefit 5 б commitments, we call them, the ongoing monitoring analysis, 7 the expansion of the desalters, this phase three, this expansion of the artificial recharge facilities to bring in 8 9 low TDS storm water and imported water, and the blending of 10 the recycled water, and to improve the quality of the waste 11 water. And then the last one, which is the major one, which 12 is hydraulic control to control the beneficial uses of the 13 Santa Ana River. THE COURT: All right. Thank you very much, Mr. 14 15 Malone. 16 MR. MALONE: You're welcome. 17 THE COURT: Let me see if I had any other questions 18 that occur to me right at this moment. 19 Tell me about Senate Bill 7 which was enacted in 20 There's a note that it included aggressive water 21 conservation requirements which slowed the increase and demand 22 for development of other recharge capacity. And the 23 legislature also delayed the required 2010 update to the urban 24 water suppliers urban water management plan -- another 25 acronym, UWMP -- for one year until June of 2011.

MR. MALONE: Well, I'll say this much, that part of

with respect to this senate bill?

What -- can you comment on that? What's going on

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the Recharge Master Plan -- a big part of the Recharge Master Plan is predicting what amount of ground water production is going to occur in the future in Chino Basin because that affects how much replenishment obligation you might have in the future. The Senate Bill 7 requires water conservation to occur 20 percent by 2020 on a per capita basis.

THE COURT: Oh, yeah. Okay.

MR. MALONE: And so that is -- that is going to have an effect on the projections of how much ground water production is going to be needed in the Chino Basin. So it's a complicating factor. Watermaster and IEUA have been both generating estimates of ground water production. And I know there is some -- there's some controversy there, there's some disagreement there. But it's things that people are talking about right now and trying to come to some consensus about.

THE COURT: Okay. Thanks.

MR. MALONE: The Urban Water Management Plans also relate to that projecting out into the future how much ground water production you're going to need as part of your water supply plans.

THE COURT: Who's responsible for coming up with the Urban Water Management Plan? Is that -- is that Watermaster? Is that some other entity? Is that its own entity?

MR. MALONE: It's not Watermaster. It's the water supply agencies and IEUA as a wholesale water supply agency too. So I believe you come up with your own urban water management plan as well. It's the water supply agencies.

MR. FIFE: If I could add onto that. It's each of

the individual appropriators creates its own urban water management plan. And then IEUA, as we just said, has its own urban water management plan. The significance, why we mentioned it in our motion for approval of the Recharge Master Plan is that when the schedule for completion of the urban water management plan was originally devised, the intention was that prior to having to file it with the court, the -- the appropriators and IEUA would have been required to complete their urban water management plans according to the statute. And so the schedule was built partially around that. Senate Bill 7 gave all of them a one-year extension, and that -- and they all were excited about that. But what that did was it created a disconnect then between the Recharge Master Plan schedule with the court --

THE COURT: Okay.

MR. FIFE: -- and their preparation of their urban water management plans. So when it came time for us to file the Recharge Master Plan with you, they still haven't done their urban water management plans.

THE COURT: Okay.

MR. FIFE: And so we don't have that one essential piece of information.

THE COURT: Okay. To whom are the urban water management plans submitted?

MS. WILLIS: Department of Water Resources.

THE COURT: Oh, okay.

MS. WILLIS: They're --

THE REPORTER: I'm sorry, ma'am. I didn't hear what

you said.

THE COURT: "They're a product of state law and required under the Water Code."

THE REPORTER: Thank you.

MR. FIFE: They're planning documents so they describe the urban water management of each of the agencies, so how they are going to manage their water resources.

THE COURT: Okay. What -- let me rephrase this. Who administers the Chino Desalter Authority?

MR. FIFE: This isn't a joke, the Chino Desalter Authority.

THE COURT: Okay.

MR. FIFE: The Chino Desalter Authority is a joint powers agency that was formed amongst the parties who buy the product water from the Chino desalters. So as Mr. Malone described, the low quality water is filtered, some as brine goes down to Orange County. The rest is sold. Those entities are city of Chino, city of Chino Hills, city of Ontario, Jurupa Community Services District, city of Norco, and most recently the Western Municipal Water District. They have formed a joint powers authority which is called the Chino Desalter Authority, and that entity owns and operates the desalters.

THE COURT: Okay. And when you say owns and operates, I mean -- that means they act -- they have incorporated in some way, shape or form to actually own property and produce a product water in this situation?

MR. FIFE: Correct.

1 THE COURT: Okay. 2 Which is then sold. They have contracts MR. FIFE: 3 with the entities that buy the water. Those entities pay CDA for the water and --4 5 THE COURT: Okay. б MR. FIFE: Yeah. 7 THE COURT: Okay. All right. You have just about 8 answered all my questions. 9 Off the record. 10 (Off the record.) 11 THE COURT: All right. That answers all the 12 questions that I have. 13 Anything further from Mr. Malone, Mr. Fife? 14 MR. FIFE: No, your Honor. THE COURT: Anyone else in the audience any other 15 16 questions for Mr. Malone while he's on the stand? 17 (Off the record). 18 THE COURT: All right. Thank you, Mr. Malone. 19 MR. MALONE: Okay. You're welcome. 20 THE COURT: Okay. Mr. Fife, anything further? MR. FIFE: No, your Honor. 21 22 THE COURT: Okay. I believe -- anyone else, 23 anything further, anyone still present? Okay. No. 24 All right. The motion today is for the court to approve the Recharge Master Plan update, and there was an 25 order submitted with respect to that motion. And the court is 26 27 prepared to sign the order but with one question, and that is 28 on page four, "the committee described in item 3 of section

7.1 of the updated Recharge Master Plan to develop the monitoring, reporting, and accounting practices that will be required to estimate local project storm water recharge and new yield." And the paperwork -- the proposal was that this committee be formed immediately and that it consist of itself, the land use control entities, the county flood control districts, the CBWCD, the Chino Basin Water --

MR. FIFE: Conservation District.

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THE COURT: Thank you -- Water Conservation

District, the IEUA and others unspecified to develop this -this project. The question that I had was to identify -well, first, the question I had is is it necessary for the
court to identify specifically the members of this committee
so that there are no open ends or subjects of dispute as to
who's going to be on this committee and when?

And so let me turn to Mr. Fife, ask if you can respond to that question.

MR. FIFE: I would recommend that you not specifically identify the composition of the committee. One, because it will be a new committee and so we will be forging new ground. And there may be decisions made about some people who we recommended be on the committee in papers who perhaps don't need to be on the committee, and there may be entities that we didn't identify that should be members of the committee. And so as we move forward working with it, it would be helpful to have flexibility.

THE COURT: Okay. Let me not address that question and answer just for a moment and come back to a larger

question which I forgot to ask earlier. What is the relationship between -- well, I understand the Appropriators are the various pools because they were identified in the judgment. I understand the Watermaster board that was appointed by the court.

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How does the advisory committee function with respect to the Watermaster board? The advisory committees. There's more than one. How does that function with respect to the Watermaster board and the pools? I've not been able to understand that relationship.

MR. FIFE: There is only one advisory committee. And it's a little bit easier to think of it in terms of the original structure of the judgment when it was one entity, that is IEUA who acted as Watermaster. And so what you had were the three pool committees where the different types of producers would get together and debate things and make recommendations. And then those recommendations from the three separate committees would filter up to one committee, and that was the advisory committee made up of representatives from all those three committees. So you have the three committees, then everyone gets together at one table and makes a decision about all those individual recommendations that were made and comes up with a single recommendation for management basin, which is then given to the Watermaster, at that time the single agency IEUA. So you had all the producers going through a process to distill out a single recommendation that could be made to IEUA about how the basin would be managed.

THE COURT: Okay.

MR. FIFE: It's a little bit slightly redundant now. I don't want to use that word. It's a little bit different now because you have a nine-member board which is also made up -- is also a representative body made up of the parties to the judgment so that you have now two entities that are both representative entities, the one making recommendations to the other about how the basin will be managed.

THE COURT: Okay. So the board's making recommendations to the advisory committee, and the advisory committee is making recommendations to the board?

MR. FIFE: No. The advisory committee makes recommendations to the board who then acts on those recommendations.

THE COURT: Okay. So you have recommendations coming up through the pool committees and through the advisory committee to the board.

MR. FIFE: They feed into one another. So the pools feed into the advisory committee who then makes recommendations to the board.

THE COURT: So does the advisory committee act as a mediator or mediating level between the actual pool committees and the board?

MR. FIFE: Yeah, at a certain level because if you didn't have the advisory committee, then you'd have three separate sets of recommendations coming from the pools and --coming from the pools. And by combining them all at the advisory committee level, then what goes to the Watermaster

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board is one recommendation from the advisory committee.
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     it organizes itself.
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               THE COURT: Okay. And the other question I had is
     with respect to the board itself, I know that -- well, it
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 5
     looks to me like the court appoints the members of the board;
     is that correct?
 6
 7
                          The court ultimately has control over the
               MR. FIFE:
 8
     whole thing. The court in its 1998 order specified who -- it
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     identified the seats, so it identified that there would be a
     seat for --
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11
               THE COURT:
                           I remember this part --
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               MR. FIFE: Right.
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               THE COURT: -- from the work I did on the recent
14
     motion.
15
               MR. FIFE:
                          Correct.
               THE COURT: I remember there were seats identified.
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17
               MR. FIFE: Yeah.
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               THE COURT: You can skip forward past that part.
19
               MR. FIFE: So who fills those seats is decided by
20
     the individual parties.
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               THE COURT: Individual pools, you mean?
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               MR. FIFE: Well, it can be. So there are nine
             One of them is -- or two of them are Agricultural Pool
23
     seats.
             The Agricultural Pool identifies who will sit in those
24
     seats.
25
     seats.
26
               THE COURT:
                           Okay.
                          Three of the seats are appropriators, and
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               MR. FIFE:
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     there is a rotation schedule for which appropriators get to
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fill those seats in which years. 1 THE COURT: Oh, I see. 2 3 MR. FIFE: And in those years the particular 4 appropriator that is assigned to fill a particular seat gets 5 to decide who its representative is. THE COURT: Okay. All right. I understand better. 6 7 So there's -- the court's not involved in actually selecting 8 the people who fill these particular seats? 9 MR. FIFE: Correct. 10 THE COURT: Okay. Okay. MR. FIFE: Now, of course, the caveat to that is 11 12 that the court at all times maintains complete control over Watermaster and the entire process. So if at some point in 13 14 your discretion you decided that you wanted to -- to exert that kind of control, you could issue an order doing that. 15 16 THE COURT: Actually appointing certain individuals to the board, you mean? 17 MR. FIFE: If -- if that's what you decided to do. 18 At the current time the court's order does not do that, but it 19 20 would be in your discretion to do that if you decided to. You retain complete control over the entire process at all times. 21 22 THE COURT: Okay. I got that. All right. Thanks. 23 Okay. Anything further, Mr. Fife? 24 MR. FIFE: We could go on all day. 25 THE COURT: I think we could but I think everyone --I really appreciate the time and effort everyone has spent, 26 27 and helping the court understand the process, and understand

the technical aspects of the process, and giving the court

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some background and insight into the process which has been ongoing for so many years.

Master Plan update. There has been no opposition. And I'm also prepared to allow the committee to be formed without specifying the members, and allow the flexibility that Mr. Fife has requested. So let me turn to those -- there has been no, as I mentioned previously, no written opposition to the plan filed. And I'll turn to the attorneys here present to inquire if there's any further objection. If not, the court's prepared to sign the order. Anything else? Hearing no objections, the court's prepared to sign the order that was proposed by Mr. Fife and approve the Recharge Master Plan update. So give me just a moment. You have given me a proposed order. I'll go ahead and sign this at this time.

Anything further that we need to do today?

MR. FIFE: No, your Honor.

THE COURT: Anything further from those present?

MR. KIDMAN: What about your date?

MR. FIFE: Right. A new date for the next --

THE COURT: For the next hearing. So let's look at the calendar.

MR. FIFE: I think late January. We -- again, I'll give you a preview of what that hearing will be about.

THE COURT: Okay. Thank you.

MR. FIFE: One will be submitting the updated judgment as you've requested.

THE COURT: Okay. Thanks.

MR. FIFE: The substantive issue will be -- you've heard about the desalters today and that the third phase of the desalters, those blue wells, still needs to go forward. There has been a long process of negotiation that's been going on in order to complete the agreements between the members of the CEA that will allow that expansion to go on. And so we will be submitting that agreement to you in order to approve Watermaster's part in accepting the responsibilities that it

For example, you heard about subsidence today.

THE COURT: Yes.

is accepting as that project moves forward.

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MR. FIFE: And how so far the desalter wells have not caused a subsidence concern because they are on that western edge where it is sandy and gravelly. But the expansion project will be on the eastern side, so there are concerns that the desalter will cause subsidence. Watermaster is making commitments to the CEA parties that it will address those alternatives. Things of that nature. And so we'll be asking you to approve Watermaster making those commitments, and direct Watermaster to follow through with those commitments.

THE COURT: Okay.

MR. FIFE: I think it'll probably be helpful to have another session like this specifically focused on the desalters to give you background on that.

THE COURT: I would appreciate that. Thank you.

MR. FIFE: So I think right now we would be looking for a date in late January. But if there's a hiccup in terms

of the negotiations, we may need to reschedule. But --

THE COURT: I have no problem, as you've noticed on my own motion, with rescheduling things largely due to the fact that the paperwork has been extensive and I've tried to review it all myself. So let's set a date. If you need to change it, you can always come to the court and I'll be happy to work with the parties in terms of arranging a new date if things don't work out, given that almost everything take longer than anyone expects. So how about -- how about the 21st of January just to pick a date --

MR. FIFE: Sure.

THE COURT: -- towards the end. We could make it the 28th. We could make it any Friday in January. Do the parties have a preference, Mr. Fife? Anyone?

MR. FIFE: Why don't we go for the 21st?

THE COURT: Okay. Let's set it then -- we'll set a further hearing then -- this will be in the nature of a status conference. I'll identify it for the record as a status conference at this time.

MR. FIFE: Okay.

THE COURT: Whatever motions or requests will be considered under that topic for January the 21st at 10:30 a.m. in this department. And we'll request from Watermaster to give notice of that hearing as usual.

And is there anything else we need to do today, Mr. Fife?

MR. FIFE: No, your Honor.

THE COURT: Anything else anyone needs to do today

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to address the court? All right. Hearing nothing, the court
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     will be in recess and again express its thanks to everyone
 2
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     with respect to their assistance and patience and attention in
 4
     this process.
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               MR. KIDMAN: Thank you.
 6
               MR. FIFE: Thank you.
 7
               (Proceedings in the above-entitle matter
 8
               were continued to Friday, January 21, 2011,
 9
               at 10:30 a.m.)
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1	SUPERIOR COURT OF THE STATE OF CALIFORNIA
2	FOR THE COUNTY OF SAN BERNARDINO
3	000
4	CHINO BASIN MUNICIPAL WATER DISTRICT, )
5	Plaintiff, )
6	vs. ) Case No. RCVRS51010
7	CITY OF CHINO et al., ) REPORTER'S ) CERTIFICATE
8	Defendants. )
9	<i></i>
10	I, VICTORIA E. VILLEGAS, CSR, Official Reporter of
11	the above-entitled court, do hereby certify:
12	That I am a Certified Shorthand Reporter of the
13	State of California, duly licensed to practice; that I did
14	report in Stenotype oral proceedings had upon hearing of the
15	aforementioned cause at the time and place hereinbefore set
16	forth; that the foregoing pages numbered 1 through 116,
17	inclusive, constitute to the best of my knowledge and belief a
18	full, true, and correct computer-aided transcription from my
19	said shorthand notes so taken for the date of Friday, October
20	8, 2010.
21	Dated at Chino, California, this 2nd day of
22	November, 2010.
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25	alana ANA
26	Sictorial Tillogh CSR
27	Official Reporter, CSR No. 9843