CHINO BASIN WATERMASTER

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In Re)) OPTIMUM BASIN MANAGEMENT PROGRAM) Special Referee Workshop,) Interim Plan for Management of) Subsidence.)

REPORTER'S TRANSCRIPT OF ORAL PROCEEDINGS

DATE AND TIME:	THURSDAY, AUGUST 29, 2002 11:00 A.M. TO 3:10 P.M.
PLACE:	CHINO BASIN WATERMASTER 8632 ARCHIBALD AVENUE SUITE 109 RANCHO CUCAMONGA, CA 91730
REPORTED BY:	WINIFRED S. KRALL, C.S.R. #5123
OUR JOB NO.:	WK-24742

1 SPECIAL REFEREE WORKSHOP 2 August 29, 2002 3 ATTENDEES 4 NAME/ TITLE AFFILIATION 5 SPECIAL GUESTS Anne Schneider, Special Referee Ellison & Schneider 6 Joe Scalmanini, Technical Expert Ludhorf & Scalmanini Judy Schurr, Assistant to Attorney 7 Special Referee 8 WATERMASTER BOARD MEMBERS Terry Catlin, Municipal Water Inland Empire Utilties 9 District Representative Agency Geoffrey Vanden Heuvel, Ag Pool Dairy Steve Arbelbide, Non-Ag Pool 10 California Steel Industries, Inc. 11 WATERMASTER ADVISORY COMMITTEES 12 Overlying (Agricultural) Pool 13 Robert DeBerard, Crops Overlying (Non-Agricultural) Pool 14 Steve Arbelbide, California Steel Industries 15 Appropriative Pool Dave Crosley City of Chino 16 City of Chino Hills Mike Maestas Bill Thompson City of Norco 17 Mohamed El-Amamy City of Ontario Henry Pepper and Raul Garibay City of Pomona 18 Robert DeLoach and Rita Kurth Cucamonga County Water 19 District Gerald J. Black Fontana Union Water 20 James T. Bryson Fontana Water Company Carole McGreevy Jurupa Community 21 Services Dist. Bill Stafford Marygold Water Company Mark Kinsey 2.2 Monte Vista Water Dist. J. Arnold Rodriguez San Antonio River Water 23 Company Charles Moorrees San Antonio Water Co. 24 R. Pete Hall State of California, CIM

ATTENDEES (continued) 2 NAME/ TITLE AFFILIATION 3 STAFF - CHINO BASIN WATERMASTER John Rossi, Chief Executive Officer 4 Traci Stewart, Chief of Watermaster Services 5 Mary Staula, Administrative Assistant Sheri Rojo, Accountant/Office Manager 6 COUNSEL TO CHINO BASIN WATERMASTER 7 Scott Slater, General Legal Counsel Michael Fife, General Legal Counsel 8 WATERMASTER CONSULTANT STAFF, WILDERMUTH ENVIRONMENTAL 9 Mark Wildermuth, President/Principal Engineer Andy Malone Francis Riley 10 11 INTERESTED PARTIES, CITY OF CHINO Patrick Glover, Director of Public Works 12 Jim Hill, Assistant Director of Public Works Yoshi Moriwaki, GeoPentach Consultant 13 INTERESTED PARTIES, CITY OF CHINO HILLS Doug LaBelle, City Manager 14 Ron Craig, RBF Engineering Tom Harder, Geoscience Consultants, Inc. 15 Dennis Williams, Geoscience Consultants, Inc. 16 OTHER INTERESTED PARTIES Diane Sanchez, Department of Water Resources 17 Josephine Johnson, Monte Vista Water Company Craig Stewart, Geometrix Consultants, State of California 18 Dave Milbrandt, Daily Bulletin 19 ATTORNEYS 20 James D. Ciampa City of Pomona James E. Erickson City of Chino 21 Burton J. Gindler Fontana Water Company City of Chino Hills Mark Hensley 2.2 Boyd Hill Monte Vista Water District Tom McPeters Fontana Water Company District/ 23 San Antonio Water Company John Schatz Jurupa Community Services District 24

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RANCHO CUCAMONGA, CALIFORNIA 1 THURSDAY, AUGUST 29, 2002, 11:00 A.M. 2 3 --000--4 MR. SLATER: Good morning. My name is Scott Slater. I'm the General Counsel for the Chino Basin 5 Watermaster. We are now a little beyond the appointed б 7 time for having our workshop today with the Referee. 8 Referee with us is Anne Schneider, Special Assistant 9 Joe Scalmanini, and Judy Schurr who is working in connection with the Referee. 10 11 Again, the subject matter of the workshop today 12 is Watermaster proposed the interim plan that's been filed with the Court. And we're waiting on some 13 printouts that are to be distributed which are reflective 14 of the slide presentation that Watermaster is going to 15 make in a moment. 16 But for the purposes of the record, it would be 17 useful if everybody were to identify themselves for the 18 19 court reporter and to which entity they are aligned. Again, I'll start. Scott Slater, General 20 Counsel to the Chino Basin Watermaster. 21 22 MR. FIFE: Michael Fife, General Counsel for the 23 Chino Basin Watermaster. MR. ROSSI: John Rossi, Chief Executive Officer 24 25 of the Chino Basin Watermaster.

MS. STEWART: Traci Stewart, Chief of 1 Watermaster Services for the Chino Basin Watermaster. 2 MR. MALONE: Andy Malone with Wildermuth 3 4 Environmental. MS. STAULA: Mary Staula with Chino Basin 5 б Watermaster. 7 MR. BOYD HILL: Boyd Hill, Counsel for Monte 8 Vista Water District. 9 MR. SLATER: Pardon me, Madam Court Reporter, would it be better if they spelled their names for you? 10 11 THE REPORTER: I think I might have a list of the names. I'll call if I need it. 12 MR. HALL: Pete Hall, CIM, State of California. 13 14 MR. STEWART: Craig Stewart, Geometrix Consultants, on behalf of the State. 15 16 MR. ARBELBIDE: Steve Arbelbide, Chino Basin Watermaster, board member. 17 18 MR. DeBERARD: DeBerard, Ag Pool. MR. CRAIG: Ron Craig, RBF Consulting, 19 representing the City of Chino Hills. 20 MR. MOORREES: Charles Moorrees, San Antonio 21 22 Water Company. M-o-o-r-r-e-e-s. 23 MS. SANCHEZ: Diane Sanchez, California Department of Water Resources. 24 25 MR. GARIBAY: Raul Garibay, City of Pomona.

MR. STAFFORD: Bill Stafford, Marygold Mutual 1 2 Water Company. MR. RODRIGUEZ: Arnold Rodriguez, Santa Ana 3 River Water Company. 4 MS. KURTH: Rita Kurth, Cucamonga County Water 5 District. 6 MS. McGREEVY: Carole McGreevy, Jurupa 7 8 Community Services District. 9 MR. SCHATZ: John Schatz, special counsel to Jurupa Community Services District. 10 11 MR. KINSEY: Mark Kinsey, Monte Vista Water 12 District. MR. CATLIN: Terry Catlin, Chino Basin 13 14 Watermaster, board member. MR. RILEY: Francis Riley, Wildermuth 15 16 Environmental. MR. ERICKSON: Jim Erickson, Attorney for the 17 City of Chino. 18 MR. CROSLEY: David Crosley, City of Chino. 19 MR. MORIWAKI: Yoshi Moriwaki, GeoPentach, City 20 21 of Chino. 22 MR. GLOVER: Pat Glover with the City of Chino. MR. MAESTAS: Mike Maestas with the City of 23 24 Chino Hills. 25 MR. EL-AMAMY: Mohamed El-Amamy with the City of

1 Ontario.

MR. McPETERS: Tom McPeters. I've been 2 designated a person of interest. I'm here on behalf of 3 4 Fontana Union Water Company and San Antonio Water 5 Company. 6 MR. BLACK: Gerald Black, Fontana Union Water 7 Company. 8 MR. GINDLER: Burton Gindler representing 9 San Gabriel Valley Water Company and the Fontana Water 10 Company division. 11 MR. BRYSON: Jim Bryson with Fontana Water 12 Company. MR. LaBELLE: Doug LaBelle, City of Chino Hills. 13 14 MR. HARDER: Tom Harder with Geoscience representing Chino Hills. 15 16 MR. WILLIAMS: Dennis Williams, Geoscience, representing City of Chino Hills. 17 18 MR. HENSLEY: Mark Hensley, City Attorney, Chino Hills. 19 MR. SLATER: I think that there were a couple 20 elements of housekeeping for the workshop today that we 21 22 hoped might be acceptable to the Referee. Watermaster 23 has a presentation to make to the Referee and the parties with regard to the proposed interim plan that has been 24 25 filed. It would consist primarily of an introduction by

me followed by a technical summary by Mark and Andy and 1 2 then our offering technical representatives as well as Watermaster staff open for questions that the Referee 3 4 might have. And following that, we would open it up to 5 any member of the producers group who wanted to make a supplementary or additional presentation to the Referee. б 7 We would hope that, again, it would be 8 understood that this is a workshop; it's not a hearing. 9 We're not swearing in witnesses, and we're not looking for cross-examination of people who are providing 10 11 information today. And we would hope that that was the 12 acceptable way to proceed, and I think that is. THE REFEREE: I think that is. I want to 13 14 emphasize that this is a workshop, and it is pursuant to Judge Gunn's order of June 19th of this year. And the 15 purpose is limited. The purpose is to give the 16 Watermaster an opportunity to present to the Court 17 through the Special Referee the details of the interim 18 19 plan. It is not a fact-finding hearing of any kind concerning the cause or causes of subsidence. That is 20 not an issue to be addressed today at all. 21 2.2 But it is expected that there -- that a factual

23 basis will be provided to explain how the interim plan 24 will accomplish its goals. And one of those goals is to 25 minimize subsidence and fissuring while new information

is collected in order to assess the causes and to develop 1 2 an effective long-term management plan which is stated in the implementation plan and numerous other places. So 3 4 it's very important, in order to conclude today, that everyone adhere to that limited scope of the workshop. 5 Just as a matter of reference, I am to file with 6 the Court by September 18th my report and comments on the 7 8 interim plan. And then any comments or objections to the 9 report I file have to be filed with the Court by September 30th. And then any responses or objections to 10 11 those responses or objections have to be filed by 12 October 10 leading up to a hearing on the interim plan. And my report is scheduled for October 17th at 13 14 1:00 o'clock in Judge Gunn's court. Now, at that hearing there are still pleadings 15 that are outstanding, and at the hearing the Court will 16 also determine whether it needs to set a briefing 17 schedule for the City of Chino's motion under 18 19 Paragraph 15 of the judgment. And then any motion by the Watermaster that it may want to make instructing it to 20 proceed in accordance with the interim plan has to be 21 22 filed and served by September 30th. 23 So those are details that are all in the judge's last order, but that's the schedule that we're looking at 24

25 right now.

MR. BOYD HILL: Will your report include any 1 2 fact-finding? THE REFEREE: Let me just go back to this again. 3 4 The purpose of the workshop, and therefore the scope of my report, is to advise the Court on the interim plan. 5 And there may be a need to understand the factual basis б 7 that led to the plan in order to understand it. But that 8 would be the extent of it, literally to explain what it 9 means. 10 MR. BOYD HILL: Thank you. 11 THE REPORTER: May I ask if people are speaking 12 out here that they identify themselves. I have names, but I couldn't get them all memorized. 13 14 MR. BOYD HILL: Mr. Hill. THE REPORTER: Thank you. 15 THE REFEREE: Did everyone hear that request? I 16 think I also can barely hear people who have identified 17 themselves. So if when you talk, you would be louder 18 19 and --MR. ERICKSON: Would you restate what was being 20 said, please. We didn't hear it. 21 2.2 THE REFEREE: I'm sorry? 23 MR. ERICKSON: Would you restate what was being said. We can't hear back here at all. 24 25 THE REFEREE: The request is reiterated that we

all speak more loudly and, when you speak, identify for
 the reporter who you are.

And with that, Scott, I turn it over to you to go ahead. We will hold our questions until each of you has finished, unless there's something initial that you're going to talk about.

7 MR. SCOTT: We would hope that anybody who has 8 additional questions would direct them to the Referee, 9 who can deal with your question in an orderly fashion. 10 THE REFEREE: It's a bit territorial, but this 11 is the workshop that we set up so we can get the 12 information we need. If some of you have questions, if you would just address them to me and we can discuss 13 whether it's within the scope of what we're hoping to do 14 here to pursue those questions, that would be the way I'd 15 like to handle that. But that's down the line, so first 16 we will hear from Scott and Mark and Andy and have our 17 questions and then get to yours. 18

19 I also understood that at some point Chino and 20 Chino Hills have indicated that they have information 21 that they want to provide related to the interim plan. 22 Is that still true?

- 23 MR. HENSLEY: Yes.
- 24 MR. GLOVER: Yes.

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25 MR. SLATER: Chino Hills is saying yes and Chino
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1 is as well.

2 THE REFEREE: Can somebody give me some idea of 3 the time that you would require to make a presentation? 4 Each of you.

5 MR. HENSLEY: No. I can tell you it's difficult 6 to know at the moment. I've not seen this presentation. 7 We really didn't know what to expect today as far as how 8 the format would work. We have a study that's been 9 prepared by Dr. Williams that we have a lot of background 10 to. We can just simply give it to the Watermaster, the 11 Special Referee, and anybody else that wants a copy.

12 THE REFEREE: So when you get to this point, the 13 key issue is related to the interim plan. So if what we 14 want to ask or talk about relates to the interim plan, 15 that's fine. How about Chino?

16 MR. GLOVER: Because we were at the workshop 17 that we had previous to this, a dry run, a lot of the 18 information that we had brought forth is contained in the 19 presentation, so ours will be very brief, maybe five 20 minutes.

21 THE REFEREE: Great.

22 MR. SLATER: We apologize on the delay in the 23 printing. It will be with us shortly. I just wanted to 24 again remind everybody that this is the interim plan that 25 we're here to discuss today. It's not the long-term

plan. The long-term plan was envisioned to come out or
 be a byproduct of the interim plan which we are now
 initiating.

4 First slide, please. The subject areas for the 5 Special Referee's workshop were suggested by the Special Referee, and our presentation today is designed to parse б 7 on and respond to each one of these elements of the 8 outline. It will include a problem description and 9 problem area and interim plan components, the interim plan constraints, and the interim plan implementation 10 11 status. I'm going to begin with an introduction and to 12 do that, in order to provide some context for why the plan, where the plan is going, and how do we evaluate its 13 adequacy. 14

To begin with, we didn't just decide about 15 having to do an interim plan yesterday. This actually 16 comes from the OBMP. This is OBMP Program Element 4, 17 which provides the genesis for why we're doing this plan. 18 19 Again, the origin of the genesis of the plan was the Peace Agreement. And the Peace Agreement had various 20 covenants and obligations among all of the producers to 21 22 the judgment, and then those were embraced by 23 Watermaster, and Watermaster agreed to carry those covenants forward to the best of its ability. 24 25 And with regard to the interim plan,

specifically the interim plan and not the long-term plan, there were specific goals. And one of those goals was to minimize subsidence and fissuring -- when? -- in the short term. No, we didn't put a number of years as to what "short term" meant, but it's definitely less than a ten- or a twenty-year program.

Secondly, a goal was to collect information necessary to understand the extent and causes of -what? -- subsidence and fissuring. Not just subsidence but subsidence and fissuring. Why? Because fissuring, we think, has caused some stresses on buildings and caused other management-related problems within Management Zone 1 generally.

And then what was the final goal was to come up with a long-term management plan. Without defining what all of its elements were going to be, the idea was that we were going to have an effective long-term management plan come out of the interim plan.

So in order to provide a bridge to that
long-term plan and as a measure of implementing the
interim plan or judging its adequacy, there were certain
prescribed components that were to be in the interim
plan. And one of those elements included voluntary -- I
stress the word voluntary -- a voluntary modification of
groundwater production. That was to be a component. So

when judging the adequacy of our interim plan, one test would be, Is there such a modification possible or presented?

4 Secondly, it was to incorporate the recharge 5 elements that were otherwise carried out under the OBMP. And we think it's important that we not lose sight of the б 7 fact or forget that the OBMP recharge components include 8 among other things an introduction of 6500 acre-feet of 9 wet water into Management Zone 1 for a five-year period. Third, it was designed to determine gaps in 10 11 knowledge: What did we not know that we needed to know 12 about subsidence and fissuring?

And then once we had some handle on that, we 13 needed to put in place a process which was designed to 14 fill those gaps. And knowing how we've tried to do 15 things in the Chino Basin for at least the last two years 16 is we tried to do it on a consensus basis. So what was 17 going to be the best program to get the widest 18 19 dissemination and analysis of the information necessary to develop a better plan? 20 And then finally, we had to have some mechanism 21 22 to develop a long-term plan.

So the plan ultimately transmitted to the
Court -- and Mark and Andy are going to be going through
this in greater detail -- but the plan transmitted to the

Court was designed to go about these tasks in various
 ways. It was designed to create a method for Watermaster
 to determine gaps in its knowledge base. So that is, in
 the first instance, a Watermaster responsibility, a
 Watermaster responsibility to identify what needs and
 requirements may exist.

7 Through the process of trying to get our arms 8 around a rather difficult issue, we had come to the 9 conclusion as Watermaster that we needed to have a 10 broader buy-in from technical representatives and to 11 create a place for the technical representatives from 12 each of the parties to come and to fairly express their 13 points of view.

14 I think we would be remiss if we didn't acknowledge, at least, the parallel or existing --15 although not directly a part of, necessarily, 16 Watermaster's function -- but there is litigation 17 occurring outside of Watermaster. There are concerns 18 19 generally about subsidence and claims of potential responsibility. And we wanted to find a way to create 20 the best information and the best approach for 21 22 Watermaster that would be supported by the producers. 23 Which led us to, How are we going to implement a process? And for things as simple as the extensometer 24 25 and the piezometer, we had to reach agreements with

various producers on how we were going to get access to
 locate the facilities. And those were deemed to be
 instrumental in filling data gaps.

4 So we began implementing a process, gee, as far 5 back as first part of this year which then generated the interim plan that we transmitted to the Court. And its б 7 core elements include the idea that we're going to form a 8 technical group -- indeed, we are going to execute 9 agreements and have done so for the extensometer and piezometer -- and that Watermaster is going to provide 10 11 the necessary study and analysis to be presented to this 12 technical group for bedding.

The plan that we transmitted to the Court needs 13 to have voluntary modifications in pumping, and indeed 14 this was going to require a commitment from Watermaster 15 and the producers to reach out to substitute water 16 supplies that were available. So we had to identify 17 substitute water supply sources, and we had to also make 18 19 sure that they were going to be provided at a comparable cost and quantity at the locations the people needed. We 20 couldn't very well tell people to turn down pumping if we 21 22 couldn't keep them whole, at least we didn't think that 23 was an appropriate basis to start.

And then we also wanted to have a process in our plan that would allow or accommodate future voluntary

measures that could be identified by Watermaster working 1 2 in connection with the technical group. I think one of the things that people all brought to the table over the 3 4 last several months is, we don't have all the answers now. We're not even sure that we have all the abilities 5 or all the pathways identified to get all the answers, б but we think we're on the right track. We wanted to 7 8 leave open the prospect that other voluntary measures 9 could be incorporated.

10 Next slide. Against these ideas that -- or 11 components that we wanted to include in the plan, and 12 indeed were required to, we had some constraints. And those constraints included a recognition that people in 13 14 Management Zone 1 needed water, they have existing demands, and we couldn't very well shut down a community 15 16 or shut down an existing business and ask them to support 17 the program.

Simultaneously, we had an existing
infrastructure in place that we had to deal with, an
existing supply, so we needed to know a little bit about
what the supplies were, how we could move them around and
use existing conveyance systems to do so.
And then finally, we had the constraints

24 associated with substitute water. If substitute water 25 was easily obtained and plentiful, it would be a

1 no-brainer, but that's not the case.

Next slide. So, again in a brief introductory,
summary fashion, the plan that was transmitted to the
Court includes a provision for voluntary pumping
reduction.

6 Watermaster at great -- with great effort and 7 attempt to consensus-build on the best way to achieve a 8 voluntary pumping reduction met with producers for many 9 months in trying to come up with a method to create the 10 broadest possible participation.

We transmitted -- we adopted a recommendation which included a schedule which was an attachment to the interim plan, and we recommended that Chino participate at the level of 1500 acre-feet for a period of three years from specific wells. And we made a comparable recommendation for Chino Hills for 1500 acre-feet from specific wells, all within Management Zone 1.

18 The offer to Chino and Chino Hills received the 19 following result. The City of Chino has accepted the 20 Watermaster proposal as it exists in the interim plan 21 today and proposed to take 1500 acre-feet of substitute 22 water and modify their production from the wells 23 identified by Watermaster and to do so for a period of 24 three years.

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The City of Chino Hills filed a -- what is

tantamount to a rejection and a counteroffer. They 1 2 suggested that they indeed would participate at the 1500 acre-foot level but wanted to do so for a one-year 3 4 period and chose to use other wells or have discretion from which wells that they would include, and then 5 attached an additional requirement that the City of б 7 Pomona also participate. So they have responded that 8 they're willing to take part but under different 9 conditions.

10 Then with regard to the substitute supply, we're 11 pleased to announce today that IEUA and Metropolitan have 12 contractually agreed in writing to make the water 13 available at \$233 per acre-foot which was in accordance 14 with the requirements of the plan. So we now have the 15 water to back up the commitment.

16 Then we also have a commitment from the 17 producers to begin a monitoring program for Management 18 Zone 1. We are hamstrung here a little bit. We had 19 hoped to already have our technical group meetings, which 20 would allow this monitoring program to proceed a little 21 further. That's actually a further bullet item down, but 22 I'll cover it here.

23 And in an effort to break the logjam, we have 24 proposed a stipulation which we think is going to be 25 acceptable to the parties. We have every reason to

believe it's acceptable because we've discussed it at
 various meetings.

But the desire here is when the technical group 3 4 representatives come to the technical group meetings so they can discuss the monitoring programs, they can 5 provide input, and they can help Watermaster build a б 7 better trap, we want to have an assurance that when they 8 come to these meetings that the things that they say are 9 privileged and confidential and that they don't end up in a pleading or in litigation between the parties. 10

And so we asked as a pre-condition of participating in the technical group, which is again the springboard to the monitoring program and making it as good as it can be, that they sign an acknowledgement that when they come to these meetings that the things that are going to be said are going to be privileged.

And we also want an understanding that when they 17 bring information which is otherwise privileged -- for 18 19 example, if the City of Pomona had hired a consultant who was an expert to the City of Pomona and they brought that 20 information to the meeting -- would otherwise be 21 22 privileged as work product privilege. By sharing it with 23 the technical group, they are not waiving any privilege that otherwise exists to that material. Therefore we 24 25 hope that all of the producers will have the opportunity

1 to fully participate at a technical level.

2 And then, third, we provided a catchall which 3 provides an open door for something else to be privileged that is in writing and presented but only if all of the 4 5 parties agree to the technical group process, that it is of such an importance and of such utility that they want б 7 to protect it. And we don't know precisely what that 8 might be, but we feel as if everybody agrees that it 9 ought to be privileged, that we ought to respect the wishes of the participants. 10

11 What we specifically don't want to have happen 12 is we don't want people reaching into their files bringing masses of unprivileged material to the technical 13 group meetings, and then dumping them into the process 14 with the intention of trying to create a privilege over 15 that information. And we don't believe that's anybody's 16 intention, but we want to make sure for Watermaster's 17 protection and for the protection of the parties that 18 19 this proposed stipulation is on the record and known and 20 understood.

Again, we have been informed that if this representation and stipulation was made to the Referee today and acknowledged by the other parties that we could begin our meetings of the technical group, presuming that the acknowledgements that are carried out in Exhibit A

1 are satisfactory and signed by all the parties.

2 So it would be actually useful to us today to hear if there are any objections to this proposed 3 4 stipulation because otherwise we think we've satisfied 5 this problem. THE REFEREE: I have a few questions about this. 6 7 Are there representatives here from all of the entities 8 that would have a participant on the technical group? 9 MR. SLATER: I believe that most everybody, but I would not say it's uniform. I see Monte Vista, Chino, 10 11 Chino Hills are here. Pomona is here. 12 MS. STEWART: the State. MR. SLATER: The State's here. I guess the only 13 14 one probably not is Southern California Water Company. MR. ROSSI: And maybe Upland. 15 MR. SLATER: And Upland. But I have had contact 16 with Upland's lawyer, Pomona's lawyer who has no problem 17 with this. 18 THE REFEREE: For the record, if anyone has a 19 problem who is here, would you say so now. 20 Hearing none, I have a few questions for you, 21 2.2 Scott. 23 MR. SLATER: Sure. THE REFEREE: I guess my questions go to what 24 25 would likely be included as confidential and what would

not, just so that the record can reflect what you would anticipate now. Are any of the data that the Watermaster collects or that are collected under agreement with the Watermaster in any way going to be able to be confidential?

MR. SLATER: There is no intention to cloak 6 7 Watermaster data with privilege. Watermaster data is 8 open and available to the Court, to the extent that it is 9 an arm of the Court presently, and there is no intention 10 to shield Watermaster data under a privilege. This 11 privilege is designed to protect the parties. And to the 12 extent that the parties generate data and produce it, it would not be used against them. 13

14 THE REFEREE: So if the Watermaster produces data and takes it into the technical group for 15 16 discussion, that doesn't affect it? MR. SLATER: Absolutely not. 17 THE REFEREE: What if the Watermaster enters 18 19 agreements to do pump testing, for example? Would that 20 information be --MR. SLATER: On the face of it, this would not 21

22 provide for a pump test exclusion. So no, it would be 23 Watermaster data that would otherwise be available to the 24 Court and the parties to the judgment.

25 THE REFEREE: And then from a different angle,

1 if someone, say if a party submits information to you and 2 then that information is used in the technical group, it 3 stays public?

4 MR. SLATER: If information is transmitted to 5 Watermaster in the context of the technical group so 6 Watermaster is chairing the technical group meeting, the 7 technical group comes together, and a party produces it 8 at that meeting and it is otherwise privileged, we would 9 respect the privilege. If it is not, then no, it would 10 not be privileged.

11 THE REFEREE: It would not be if it had already 12 been submitted too?

13 MR. SLATER: That's correct.

14 THE REFEREE: Can you give an example of the 15 sort of thing that would be kept confidential or category 16 of thing that might be kept confidential in the technical 17 group?

18 MR. SLATER: Sure. Let's run through each of 19 the three items or the possibilities.

The first one is a representative from the City of Upland comes to the technical group meeting and says, Well, I've seen the data but my own opinion is that the real cause of subsidence is the -- this is a hypothetical -- that the real cause is, (a) a well that

25 we own and operate and we've been operating and we've

1 known that it's caused subsidence in our backyard for the 2 last five years and we've got data to prove it, and makes 3 such an oral disclosure. That oral disclosure is 4 protected. It is not an admission against interests and 5 cannot be released.

The second scenario is, again hypothetical, the 6 7 representative from Upland comes and says, Not only did I 8 say that but here's the written report which was prepared 9 for us by XYZ Consultants in which they've analyzed well data over the last hundred years and come to the 10 11 conclusion that, by God, it's our well in the backyard 12 that's causing this problem. And that report itself, which is otherwise work product, does not become 13 discoverable and nonprivileged simply because they 14 disclosed it. 15

And the third category is there is some 16 information or a study, perhaps, that a party -- let's 17 again pick on Upland because they're not here -- that 18 19 Watermaster wants and the technical group thinks that Upland ought to perform. Upland hasn't got the 20 information yet, it hasn't retained a consultant to do 21 22 it, and it does so at the request of Watermaster and at 23 the request of the technical group. They generate the data, and Watermaster wants them to do it, but they're 24 25 otherwise reluctant to do it because they just don't want

1 the answer. They say, Why would we want to develop that 2 information because it could hurt us? So Watermaster 3 says and the technical group says, Well, then perhaps we 4 ought to privilege the outcome.

THE REFEREE: What do you do now if you want 5 data and someone doesn't want to get it for you? б 7 MR. SLATER: Well, it depends on the powers of 8 Watermaster in the judgment and the specific data 9 request. Typically what we try to do is work 10 consensually and by agreement to get the data we need. 11 THE REFEREE: I'm still not clear on what sort 12 of things you see that you need data or information on that would only be acquired through this privileged 13 14 technical group process.

MR. SLATER: It's a bit of a stretch for us as well, but we thought we ought to equip the technical group with at least the possibility to deal with some information that should come to their attention or should they decide that they want it in the event that the integrity of the plan or the benefit of the plan is compromised by not having the information.

THE REFEREE: Bottom-line question is, Are you sure that the confidentiality aspect of the technical group won't interfere or undermine Watermaster's responsibility to collect and analyze data, whether or

1 not subsidence or anything else?

2 MR. SLATER: Are we sure? We certainly hope 3 not. I would say it's incumbent -- the benefit and the 4 prospects for implementing this plan are dependent upon 5 having participation from the producers. And we think 6 it's in everybody's best interests for us to develop a 7 good long-term plan, and we hope that people are 8 forthcoming with information.

9 We have our own independent ability to conduct 10 tests, monitor, and we plan to do that. And the 11 extensometers and the piezometers are going forward 12 without regard to future agreements. So we believe we'll 13 have an information base to carry out the interim plan 14 and develop a long-term plan.

We would -- there is the prospect that a party could elect to shield data from us that will hinder the long-term plan. I mean, that's a possibility. We hope that's not the case, and we don't think it will preclude the development of a plan.

I know that's not -- it's not the best answer that I might give, but it's an honest one. To the extent that we have powers under the judgment to secure data, we plan to pursue those to the full extent of our powers in the judgment. But there are some limits.

25 So my five-minute presentation is extended here.

1 So let me quickly sum up and say that the timing and 2 schedule for reports is something that we're very sensitive to. We're hopeful that we would have regular 3 reports, both the technical committee and to the Court. 4 We're hopeful, again, to have an actual proposed 5 program for study to the Court and approved by б 7 October 1st. And that means us getting our first 8 technical group meeting together, like, tomorrow. We 9 regret not being able to have an earlier meeting, but we 10 think with this confidentiality behind us, that Mark and 11 John and Traci can sit down with the technical group and 12 at least have a good start on that program, maybe not the complete program, but a good start on it approved by 13 14 October 1.

And then finally the interim plan status is --15 the whole purpose, again, for having the technical group 16 is to make it an adaptive iterative process. We're 17 starting today. This is Day One. Or October 1st, if you 18 19 would, would be Day One of the plan. And we don't plan to be stuck on any specific element or measure and say 20 that that's the universe of what we intend to do. If the 21 22 group in consensus lead us to do other things that are 23 for the benefit of the Basin and for benefit of the 24 long-term plan, we hope to accommodate that.

25 So I think, with that, we're ready for Mark and

1 Andy to go through the balance of our presentation.

2 MR. MALONE: We tried to follow your outline as best we could that we received. And the first part of 3 your outline was more background information, the problem 4 description and the problem area, and so we'd start with 5 the historical observations of the nature, extent, and 6 7 location of subsidence. And the type of data that we'll 8 be reviewing here are ground level surveys as 9 commissioned by the City of Chino from 1987 to the 10 present, ground fissuring documentation, and InSAR 11 mapping, which is remotely sensed data.

12 This is a figure of measured subsidence as measured by ground level surveys commissioned by the City 13 14 of Chino from 1987 to 1999. This is an older figure from the Phase I OBMP report. Basically what these contours 15 16 show are equal lines of subsidence from 1987 to 1999. And our area of interest right here, this is Central 17 Avenue, Eucalyptus, and Edison in Management Zone 1 on 18 19 the southwest portion of the Chino Basin.

The purple lines represent zones of fissuring as documented in the 1994 report by the State. And the green dots here are various wells owned by the City of Chino and Chino Hills. What's missing here are some production wells owned by the State here on CIM property down in this region here.

1 As you can see by the contours, that there's a 2 main trough of subsidence that occurred during this time 3 period along Central Avenue, maximum subsidence measured 4 of about 26 inches, so a little over 2 feet over that 5 time period. These contours also terminate here at the extent of the ground level surveys but indicate the б subsidence was occurring further to the west during this 7 8 time -- or further to the north during this time period. 9 MR. ROSSI: Andy? 10 MR. MALONE: Yes. 11 MR. ROSSI: Just to let you all know, we're 12 making a few more copies. We'll have enough for everyone 13 in just a few minutes. MR. MALONE: In this figure we zoomed out to 14 look at almost the entire extent of Management Zone 1, 15 and we have left the ground level survey contours on 16 here. What we've added is the InSAR mapping data. And 17 what these colors mean, the red means maximum subsidence 18 19 of about 15 centimeters, I believe that says there, along Central Avenue and extending further north, as the 20 contours from the ground level survey suggest, and 21 2.2 extended on further north in Management Zone 1 as well 23 and even over into Management Zone 2. MR. ROSSI: 15 centimeters in inches is what? 6? 24 25 MR. MALONE: Now, this is an InSAR image from

1993 to 1998 so it doesn't coincide exactly with the 1 2 magnitude of subsidence as measured by the ground level 3 surveys over the 1987-to-present time period. But they do corroborate each other in their location and their 4 relative magnitude of subsidence so it's two independent 5 forms of evidence that corroborate each other nicely in 6 7 this figure. The dots -- the remaining dots in here show 8 production wells by various producers.

9 The outline also asked for some comment on changes in subsidence rates over time. We can look to 10 11 the ground level surveys and the InSAR mapping to 12 illustrate this phenomenon. This is that same figure we were looking at. And we have a profile along A-A' Prime 13 14 here, which is along Central Avenue, that the City of Chino has measured ground level surveys from time to time 15 from 1987 to the present, like we said earlier. 16

We're going to look at that time history in this 17 chart here, which shows subsidence beginning at zero up 18 19 here down to 3 feet on the X -- on the Y axis and then this is distance along this cross section A-A' Prime. 20 Each one of those dots represents a benchmark and 21 2.2 subsidence measured at that benchmark over time. 23 We started in 1987 datum where we have zero subsidence, and then our next measurement is June 1993. 24 You can see along this profile that we've had maximum 25

1 subsidence of a little bit over a foot at the

2 intersection of Eucalyptus and Central and at Schaefer3 and Central from 1987 to 1993.

Then from 1993 to 1995 we had another almost foot of -- approximate foot of subsidence at these same locations. And then from 1995 to 1999, we see that the rate of subsidence at these benchmarks is slowing considerably and that continues -- that trend continues on into 2000 and 2001.

10 So what this is showing us here is the ground 11 level surveys are showing that most of the subsidence 12 since 1987 occurred prior to 1995 and has since slowed 13 down to the present.

14 The InSAR data mimics this, only we have data 15 over different time periods. This is an InSAR image of 16 the western part of Chino Basin that represents the time 17 period from October 1993 to December 1995. Again the red 18 zone in here represents subsidence of about

19 15 centimeters.

20 When we look at time periods following 1995 --21 this is January of '96 to October 1997 -- we still see 22 subsidence in this general area, but it's somewhere on 23 the order of more than zero but less than 5 centimeters. 24 MR. WILDERMUTH: 2 inches. 25 MR. MALONE: This is another InSAR image from

September 1996 to January 1999. Again, subsidence in the
 same general area but somewhere between zero and
 5 centimeters over this time period.

4 So again the InSAR -- I guess the point to take 5 away from this is as far as rates of subsidence, the 6 InSAR and the ground level surveys are corroborating each 7 other in this area.

The outline also called for some comment on 8 9 future rates of subsidence expectations. What we can say 10 on that point is that the recent data, as we just 11 discussed, indicates a slowing of subsidence rates over 12 time to the present. We have experiments under way, specifically the extensometer and the piezometer, that 13 14 are going to more closely monitor subsidence rates and the forcing functions that drive subsidence. And that, 15 specifically we're talking about pore pressure 16 distributions within the aquifer and changes in pore 17 pressure distributions over time. 18 19 Stop me when you have questions. THE REFEREE: We were holding our questions till 20 21 you're through. 22 MR. MALONE: Okay. The outline also calls for

23 some summary description of the hydrogeology within
24 Management Zone 1, and specifically what we're going to
25 be talking about here is hydrogeology of the southern

1 portion of Management Zone 1 where subsidence has been
2 most acute.

The aquifer system in general, we have an abundance of saturated fine-grained sediments especially relative to other areas of the Basin such as further north towards the mountain front and further east in Management Zone 3 -- 2 and 3.

8 We have evidence in Management Zone 1 of a 9 multiple aquifer system consisting of both confined and 10 unconfined aquifers, and we'll review some of that data. 11 And we also are in an area here of former flowing 12 artesian conditions so under virgin conditions when wells 13 were drilled here, water flowed without pumping, the 14 pressures were so high.

Since those virgin conditions, groundwater level time histories show us that we've had lowering of piezometric levels in comparison to those early years.
We'll review some of those time histories.

Again, in terms of the saturated fine-grained sediments, we see generally in this area that the upper hundred feet of sediments is fine-grained in nature, mostly consisting of silts and sands.

At a depth of 250 feet we encounter a thick
fine-grained unit, which could be classified as a major
aquitard. It's generally 150 to 250 feet thick. In

places it's almost entirely fine-grained consisting of 1 2 silts and clays, but in other places not too far distant it becomes more interbedded with coarse-grained sands and 3 4 gravels. And we have a figure to illustrate that. 5 And then again former -- we're in an area of former flowing artesian conditions. The point there is б 7 that the fine-grained sediments in this area are acting 8 as confining layers and that under virgin conditions the 9 sedimentary column was nearly 100 percent saturated 10 before pumping began. 11 MR. SCALMANINI: Andy, the upper 100 feet starts 12 at the ground surface? MR. MALONE: At the ground surface. We're 13 talking depth, yes. 14 This is a map that illustrates -- first of all, 15 this orange area, the general area, of measured 16 subsidence from the ground level surveys conducted by the 17 City of Chino. This polygon here was 1905 -- comes from 18 a 1905 map of the former artesian area. So this is where 19 we had flowing wells in 1905. 20 You've seen this figure here before, but we've 21 22 just added a cross-section in here to help support our 23 next figure, which we're going to look at the sediments at depth and specifically the thick aquitard unit at 24 25 depth.

1 These are three deep wells that have a lot of 2 lithologic and geophysical data that allowed us to construct this cross-section. Basically you can see this 3 interval that's shaded is our delineation of the thick 4 aquitard unit that begins at about 250 feet, to a 5 250-foot depth, and is about 200 feet thick. And you can 6 7 see over in these wells here that the E-logs are showing 8 us that it's fairly consistent all the way through 9 fine-grained sediments, but as we move further to the north, we get some interbedding of some coarser-grained 10 11 units within this general aquitard.

12 When we speak of the shallow aquifer systems, 13 we're generally speaking of this area above this aquitard 14 unit, and when we speak of the deep aquifer systems, 15 we're speaking of the aquifers within and below this 16 aquitard unit.

17 So when we move to our discussion of groundwater 18 level time histories, in the shallow zone from the '40s 19 to 1978, we had substantial lowering of water levels in 20 the shallow zone. We have since recovered somewhat, and 21 we'll show you a time history of that. Recently from 22 about 1988 to present, we've had a substantial increase 23 in production from deeper aquifer zones.

This is the same artesian map that we had, but I'm showing you the locations of the wells shallow --

wells that are perforated in the shallow aquifer system,
 their locations for this time history here, which also
 comes from the Phase I OBMP report.

4 What we have here is water level elevation on the Y axis and time on the X axis from 1935 to about 5 1998. The thick gray line here represents the cumulative б 7 departure from mean precipitation curve, the thick gray 8 line. A negative slope means a relative wet period, a 9 positive slope means -- did I say that right? I'm sorry. Negative slope, relative dry period; positive slope, 10 11 relative wet period. Thanks for catching that. 12 MR. SCALMANINI: You're welcome. MR. MALONE: Our ground surface elevation is 13 approximately 690 for all these wells. So you can see 14 back in the '30s that water levels were near surface. 15

16 Since about the mid '40s we entered this dry period here 17 and more wells and production come into the Basin, and 18 groundwater levels drop pretty dramatically here to about 19 1978. And we're looking at, let's say, over a hundred 20 foot, maybe 150-foot drop in groundwater levels in the 21 shallow aquifer zone.

Since 1978 we enter a relatively wet period.
This also coincides with the commencement of the
judgment, and we have a recovery of water levels here but
not back to original conditions. We're still about

100 feet lower than original conditions in this part of
 the Chino Basin for the shallow zone.

Now, in reference to the deep zone, the next time history chart we're going to look at is for these two wells down here. And one of these wells is perforated in the shallow aquifer system and another well is perforated in the deep aquifer system. So we're going to see a comparison between the two.

9 Again, water level elevation in feet above mean 10 sea level -- this is 1982 to about the year 2000 on this 11 axis. This time history is for the shallow well. It's 12 perforated from 166 to 317 feet below ground surface. 13 This water level time history is for the deep well, was 14 perforated from 440 to 1180 below ground surface.

I think you can see here in the shallow zone you have some seasonal fluctuation in water levels in this well, but in the deeper zone you have a much more pronounced seasonal fluctuation in water levels due to production.

20 So the main point here is that we have evidence 21 here for two very different responses to pumping which 22 leads us to believe that we are in a multiple aquifer 23 system. We have distinct aquifers in the shallow zone 24 and distinct aquifers in the deeper zone.

25 This is also corroborated by water quality data.

1 These deeper wells are generally lower in concentration 2 in TDS and nitrogen than the shallower wells. The 3 converse is true for arsenic. In the deeper wells you 4 have higher concentrations of arsenic as compared to the 5 shallower wells. So the water quality and the hydraulic 6 response to pumping indicate multiple aquifer units in 7 this area.

8 I think that ends our summary discussion of the 9 hydrogeology and the history of subsidence in Management 10 Zone 1. If you had questions on this part, we're going 11 to go into the monitoring program now. But if you had 12 questions on that, we could take that now.

13 THE REFEREE: We'd rather you finish the 14 presentation, and we'll come back.

MR. MALONE: Okay. The monitoring program for 15 Management Zone 1 consists mainly of three different 16 elements. One is the extensometer and piezometer that 17 we're installing in the south of Chino in Ayala Park. 18 19 We're going to use this facility to establish relationships between the pore pressures in the aquifer 20 and the aquifer system deformation, the mechanical 21 22 response in the aquifer system. So we want to establish 23 the relationships between those two.

24 The ground level surveys that we have planned 25 will monitor the vertical and horizontal ground surface

deformation at specific benchmarks located along specific
 profiles in Chino Basin. We've got some figures to show
 you that illustrate that.

4 Then the InSAR mapping is remote sensing using 5 space satellites to map ground surface deformation over 6 the entire basin. We want to move into a quarterly time 7 step on acquisition of that data, and we'll discuss that 8 in more detail later.

9 MR. SCALMANINI: Andy?

10 MR. MALONE: Yes.

11 MR. SCALMANINI: I'll save the other question. 12 Where it says monitoring program, that's just like a global monitoring program. That is not unique to an 13 14 interim plan or a long-term plan or anything else. It's just a monitoring program. Is that fair to say? 15 16 MR. MALONE: Yeah. I would say --MR. SCALMANINI: This wasn't crafted uniquely 17 for the interim plan, and it's not crafted uniquely to 18 19 exclude it. It covers both bases of the ongoing investigation. 20 MR. MALONE: Right, yeah. Parts of this, the 21 22 extensometer -- did you want to --23 MR. WILDERMUTH: We elaborate a little bit 24 later.

25 MR. SCALMANINI: Okay. Good. Sorry.

1 MR. MALONE: Our objectives here, briefly, for 2 the piezometer and extensometer specifically -- we're going to concentrate on this now for a while -- is to 3 derive essential data in order to describe and 4 5 characterize the aquifer system, which will then help us in our development of the long-term management plan. The б 7 analysis of this data that we obtain from the piezometer 8 and extensometer will be used to predict future rates and 9 extents of subsidence caused by future management activities. 10

11 Another objective is to monitor the performance 12 of the long-term management plan with this data. The data will allow us to distinguish between elastic and 13 14 inelastic aquifer system compaction resulting from current production regimes. It will also permit us to 15 identify residual compaction from long-term past historic 16 drawdowns. And we'll also use the data to validate and 17 improve the long-term management plan. We'll get on 18 19 those points in more detail later.

In terms of location, this is an air photo. This comes from an earlier presentation as well. We were talking about potential extensometer locations, but we've zeroed in and now we are beginning construction at this site right here. This, again, is Central Avenue, and we've overlaid the ground level survey contours onto the

air photo and the distribution of historic ground
 fissuring, and this is going to be the location of the
 piezometer and the extensometer. We've also located some
 of the wells that you've seen on earlier figures here.
 And then the CIM wells are located down here.

As far as schedule goes, the multi-piezometer is 6 currently under construction. Our expected completion 7 8 date is the end of September so in about one month. We 9 will then enter into three months of intense monitoring where -- this is the stage where we're really going to 10 11 ask for the assistance of the surrounding producers, 12 specifically Chino Hills, Chino, and CIM but not -specifically but not excluding others in Management 13 14 Zone 1. We're going to ask for their help in especially monitoring the production. 15

During this three-month period, data that we collect and the monitoring that we do will assist in the design of the extensometer. The specifications will be written during this three-month period for the extensometer and will go to bid.

For the dual extensometer, this we're going to push back to February. I should have changed this before this presentation. But the construction will begin probably in February as opposed to -- we have written January here. And the completion we're expecting in

April of 2003, at which point in time we go into another round of more intense aquifer system characterization testing. The testing that we do during this three-month period will help us design the testing program that will be initiated after the extensometer is installed.

6 This is a photograph of the piezometer drill 7 site. This was taken last week. This is at Ayala Park, 8 and we have fenced off the area here to separate it from 9 the rest of the park. And here is the reverse 10 circulation mud rotary drill rig that we've got a better 11 image of here.

12 This is CIM property right here so this is the southern end of Ayala Park, and we're working on the 13 first and the deepest piezometer right here. This is the 14 second piezometer that will be shallower. We anticipate 15 putting in five completions within each hole at different 16 depths throughout the aquifer system. So we're going to 17 have a good idea about pore pressure distribution 18 19 vertically throughout the aquifer system at this 20 location.

I might add that these piezometers are not only going to be completed in the aquifer units, the coarse-grained units, but we're also attempting to complete them within the fine-grained units that are normally responsible for a high percentage of the

1 inelastic, nonrecoverable aquifer system compaction.

2 So our monitoring plan for the first three 3 months of the piezometer, we will continuously record 4 pore pressures in the multi-depth piezometers, again in 5 the aquifer and in the aquitard units.

And then in the surrounding production wells we 6 7 want to monitor production and water levels. And 8 specifically for production we're most concerned with the 9 pumping periods, when the well turns on, when the well turns off, and at what rate is the well pumping. The way 10 11 we can do that is to insert continuously recording water 12 level transducers into the production wells, and that will give us a continuous record of when the well's off 13 or its static water level. And then when the well turns 14 on, we will have a pumping water level, and we'll have a 15 good idea as to how long that well was turned on, when it 16 turned off. We're going to need the help of the 17 producers to tell us at what rates were these wells 18 19 pumping during those periods.

There's also a number of other wells surrounding the area that aren't pumping. They're either dedicated monitoring wells such as on CIM property. They have a lot of dedicated monitoring wells, and there's other abandoned wells in the area that we hope to use as observation points for our testing program.

This is one concept of the testing program for 1 2 the first three months that we're throwing around right 3 now. Generally what this figure shows is our piezometer site and then in red our wells that we would put water 4 level transducers in for the first month. The blue would 5 be for the second month, and the green would be for the б 7 third month. So we would be tracking production at all 8 wells but specifically zeroing in and focusing on these 9 wells on a by-month basis.

Another idea is to just let's attack it all at 10 11 once for the entire three months. But we're right now 12 discussing that internally as to the best approach. And again, cooperation of the surrounding 13 producers. As you can see, we're dealing with Chino 14 Hills wells, Chino wells, and CIM wells. So we're 15 depending on the cooperation of the surrounding producers 16 to pull this monitoring program off. 17

As far as the data obtained and the uses of the 18 19 data, from both the piezometer drilling and the monitoring program for the first three months we're going 20 to obtain detailed stratigraphic descriptions -- a 21 22 detailed stratigraphic description of the aquifer system 23 sediments. We also are going to get depth-specific water quality and temperature from the piezometer. And then 24 we're going to determine how drawdowns at the surrounding 25

pumping wells propagate radially and vertically within
 the aquifer system to our piezometer site.

The way we're going to use this data is to refine our existing conceptual model of the aquifer system. That in turn will help us design the extensometer completion depths and then also help us design the future aquifer system tests that we're going to perform once the extensometer is in place.

9 Another piece of data that was kind of reviewed already but the piece of data that we'll get from the 10 11 piezometers are the current distribution of pore 12 pressures within both the aquifers and the aquitards. When an aquifer is adjacent to an aquitard, we'll be able 13 14 to determine the current nonequilibrium between the pore pressures in the aquifers and the aquitards. And this 15 16 may reveal potential management goals for the water levels in the aquifers. 17

18 So to elaborate on this point here, when a water 19 level in an aquifer is lower than the water levels or the 20 pore pressures in an aquitard, the aquitard is going to 21 drain in order to equilibrate with the lower piezometric 22 level in the aquifers.

23 This draining of the aquitard leads to some
24 compaction within the aquitard. So ideally we want the
25 water levels in the aquifers to be equal to the water

levels in the aquitard. That could be a potential
 management goal. It could be derived from the piezometer
 reading.

4 Once the extensometer goes in -- it's a dual 5 extensometer. What an extensometer does is it continuously records changes in the thickness of the б aquifer system. And for our dual facility here, we're 7 8 going to have two extensometers, one that's going to be 9 completed within -- one that's going to be completed deep, and that will be anchored below the deepest pumping 10 11 wells, and one that's going to be anchored shallow at the 12 base of the shallow aquifer system. We're going to determine that through our monitoring that we do for 13 these first three months at the piezometer. 14

This is a schematic of what the extensometer 15 will look like. Basically we have the ground surface 16 here, and we have the dual extensometer system here. An 17 extensometer is basically a steel pipe that rests on a 18 19 concrete pad at the bottom of a cased hole. And as the 20 aquifer system expands and contracts, you'll see the top of the pipe appear to move up and down out of the ground. 21 2.2 We have a stable instrument datum at the ground 23 surface that we measure that movement of the pipe relative to the stable data. And we have continuous 24 recording devices that measure the pipe moving up and 25

down out of the ground. But what's actually happening is
 the ground is moving up and down. The pipe is stable.
 So we're measuring the compaction that's occurring within
 the aquifer system.

With the dual extensometer, we have one deep 5 that measures compaction over the total thickness of the б 7 sedimentary section. The shallow extensometer measures 8 compaction within only the shallow aquifer system. The 9 difference between the two is the aquifer system compaction and expansion that's occurring within the deep 10 11 aquifer system. So that's the general setup of our 12 facility.

As far as the data obtained and the uses of the data, we will be obtaining piezometric data from our extensometer -- or from our piezometer and also the surrounding wells that we have water level data coming from. And then at the -- and that's really the stress that the aquifer is feeling, the piezometric levels, the pore pressures.

Then at our extensometer we're measuring compression and expansion, or the mechanical response to the piezometric level changes, and that's the strain that the aquifer system is feeling. So with these two -- or the strain that it's undergoing.

25 With these two sets of data, we can determine

elastic versus inelastic compaction within the aquifer system. We can determine residual compaction that may be occurring from prior drawdowns in the aquifer system. We will be able to derive aquifer system parameters that we can input into models. And all of this analysis of the data will be used to predict future rates and extents of subsidence caused by management activities.

8 These are some graphs of data that was obtained 9 from similar facilities, extensometer and piezometer 10 facilities, in other locations. And we have Francis 11 Riley here who's familiar with this data. I think that I 12 will attempt an explanation at some of this. And, 13 Francis, be sure to chime in and elaborate where I'm 14 lacking.

15 In these two graphs here, we have water level 16 elevation -- or actually this is in depth -- water level 17 depth, a time history at a well. Then we have an 18 extensometer located near that well that's measuring 19 compaction. So compaction is increasing within the 20 aquifer system in this axis. This is from 1966 to 1969 21 so this is our time period.

As you can see, here we're having water level decline and at the same time we are having aquifer system compaction. And they mimic each other almost perfectly. Whenever there's a little decline in water level, the

1 pore pressures are decreasing within the aquifer system 2 and the aquifer system matrix is compacting in on itself. When the water levels increase, the pore 3 4 pressures in the aquifer systems increase, and the aquifer system matrix expands. And this is a perfectly 5 elastic response to pore pressure changes in the aquifer б 7 system. So that's what this is showing here is that 8 cause and effect relationship, the pore pressure change 9 and the mechanical response in the aquifer system to 10 those pore pressure changes. 11 This is that same data that's graphed together 12 with depth to water on this axis and compaction in feet on this axis. And you can see the perfectly elastic --13 14 not perfectly, but the somewhat elastic response here, as water level -- as depth to water increases, compaction 15 increases. And as depth to water decreases, 16 compaction -- expansion occurs. This goes back and forth 17 in this direction. 18 19 The slope of this line, Francis, I'd like you to elaborate a little bit on. It's an aquitard system 20 parameter that we hope to also derive with our 21 2.2 experiments. 23 MR. RILEY: Okay. What that slope is actually showing is the gross storage coefficient for the 24

thickness that is penetrated and monitored by that

25

instrument. In this particular case I think it turns out
 to be 3 times 10 to the minus 3. Is that what --

3 MR. MALONE: Yes.

4 MR. RILEY: In any event, that basically means 5 that for every foot of water level decline, we are seeing 6 3,000ths of a foot of aquifer system compaction, and this 7 basically is the water that is being yielded by the 8 wells. At least it's the so-called skeletal component of 9 that storage capacity.

10 There is an additional component that is derived 11 simply from the fact that the water expands as it is 12 reduced in pressure and brought to the surface. But the dominant component in this case is due to the expansion 13 14 and contraction of the aquifer system as a whole. Because this is largely elastic, the 15 contribution of the fine-grained sediments does not 16 entirely dominate it as it would in the case of an 17 inelastic process, but it probably constitutes something 18 19 well in excess of 50 percent, maybe on the order of 75 percent of the total change that we are seeing here. 20 MR. MALONE: This is similar data from a more 21 22 recent site in Albuquerque, New Mexico, where we have 23 applied stress and water level, depth to water, on this axis and compaction on this axis. So the green is 24 compaction, and the water level is in blue. And this is 25

a controlled pumping test where water level is declining here, initially rapidly and then leveling off, and compaction occurs rapidly within the aquifer system and then continues but levels off. At the end of the pump test, water levels recover almost to their original level, and compaction recovers substantially but not totally.

8 So what we're seeing here is in part an elastic 9 response in the aquifer system but partly an inelastic 10 response where we're having some nonrecoverable 11 compaction occur within the aquifer system over the 12 course of this, say, 50-day pump test at this facility. So again, the water level is being recorded at the 13 14 piezometer, the compaction being recorded at the extensometer. 15 16 Then the well goes into its normal daily

operational period where it's turning off and on, 17 compaction and expansion are doing the same thing, and so 18 19 we see this time history over time is really distinguishing between inelastic and elastic compaction. 20 We have a similar graph down here as to our 21 22 previous slide that's showing these two data sets grafted 23 against each other. So it's really the cause and effect relationships that are being charted here. 24

25 MR. RILEY: Andy, I can't see the numbers from

here, and I don't remember exactly what they are. But you might want to call off just the scale of the processes there which illustrates the sensitivity of the extensometer.

MR. MALONE: We're talking here of 200ths of a 5 foot is the magnitude of this scale here on the Y axis б 7 for compaction. So what Francis is pointing out here is 8 the sensitivity of these extensometers is extremely 9 precise. Did you have anything else, Francis? 10 MR. RILEY: No. I think you've covered it. 11 MR. MALONE: Francis, we might have a question 12 on this chart here. But what we're showing here are 13 various piezometer water levels, three in fact, at a site where we also have an extensometer. This is the water 14 level data, and this is the depth to water, from 134 to 15 156, on this axis. And this is compaction as measured at 16 the extensometer from zero to .4 feet as measured at the 17 extensometer. And this is the extensometer data here 18 19 that's showing compaction booming along here as water levels increase and decrease over time. 1990 is our 20 scale down here to 1997. 21

The point here, I believe -- and, Francis, you can elaborate -- is that although we have seasonal water level variations, the overall water levels aren't declining significantly. But we still have compaction

that's occurring continuously along this -- as measured
 by the extensometer within the aquifer system.

And the interpretation of this, I believe -- and Francis, you can chime in here -- is that this compaction that's occurring is in response to historic drawdowns that occurred prior to 1990, and what we're seeing here is residual compaction within the aquitard responding to lower water levels in the aquifer unit.

9 MR. RILEY: One minor addition to that, Andy, would be the fact that this extensometer is monitoring 10 11 one very thick aquitard and several thinner ones. The 12 very thick one is the one which was probably responsible for that long-term trend of residual compaction because 13 the pore pressures changes are migrating into the middle 14 of it so slowly, whereas the thinner ones probably 15 account for most of the little wiggle that you see on 16 that long-term trend. They are responding in 17 considerable part elastically to the seasonal 18 19 fluctuations in pore pressure. 20 MR. MALONE: I think, Pat, that was the answer. MR. GLOVER: That's what I wanted to hear. 21 22 MR. MALONE: I think that this gives you, Anne

and Joe, some flavor of the types of data that we expect to see -- we may or may not see but that we expect to see from the extensometer and piezometer site.

1 Some of the parameters that we're going to 2 derive -- aquitard parameters that we're going to derive are elastic compressibility, inelastic compressibility to 3 4 specific storage of the aquitard units, the threshold 5 pore pressure at which we break over into inelastic compression of the aquifer system, and the vertical б hydraulic conductivity. And these parameters will help 7 8 us predict the rates and extents of subsidence caused by 9 past and future management activities. 10 As far as InSAR mapping goes, we were 11 considering this quarterly time step of InSAR data 12 acquisition. This is an InSAR image from November 1999 to April 2000. It's the raw data. This is 71, 13 14 Highway 71, and Highway 60 and Highway 10. This is showing the subsidence that's going on in the Chino area. 15 16 Historically we've had trouble getting resolution in the InSAR data in the southern part of 17 Chino Basin. When we moved to time steps in the InSAR 18 19 data that are shorter, they're not years apart but 20 they're months apart, we get better resolution down in this area here. That's one reason for going to a shorter 21 22 time step in our acquisition of the InSAR data. And 23 again, as you can see, we're measuring subsidence over broad regions of the Chino Basin. 24 25 The ground surface surveys -- I put a "I" here

because there is a "II" that follows this -- in "I" we 1 2 want to establish vertical control survey lines of 3 closely spaced benchmarks. We're going to use the 4 extensometer as the datum for these ground level surveys. It will be anchored deep within the sedimentary column. 5 Hopefully no aquifer system compaction is moving that б 7 datum, that top of that pipe, it's stable. And so we 8 will use it as that datum for all of our ground surface 9 surveys. We can use the data to calibrate the InSAR data, and we can use the data to facilitate tie-in with 10 11 other local survey networks that exist out there.

12 And this is a schematic from the ISOB which 13 shows the approximate locations of these proposed ground 14 survey lines.

And lastly for "II", we want to establish a 15 horizontal and vertical control survey line of closely 16 spaced monuments through the extensometer and the fissure 17 zone, most importantly. Again, we use the deep 18 19 extensometer as the datum, and with these horizontal control survey lines, we'll be able to monitor the 20 horizontal and the vertical deformation in response to 21 22 various pumping regimes over time.

23 MR. SLATER: I think this concludes our formal 24 presentation. I have two observations. We've been going 25 at it for about an hour and roughly 30 minutes, and the

1 court reporter has not had a break yet. And also to 2 identify that food has been brought in. Would it be possible for us to take a quick 3 4 break, and maybe people could eat, and we can take up 5 with your questions. THE REFEREE: Sounds good. 6 7 MR. SLATER: So about fifteen minutes, then? 8 (Recess in proceedings) 9 MR. SLATER: We thought we'd use the rest of our time together to allow the Referee and her assistants to 10 11 ask further questions that they may have. 12 THE REFEREE: Are we asking questions of Andy and Mark? 13 MR. SLATER: You have carte blanche with regard 14 to Andy, Mark, or staff or anything you want. 15 THE REFEREE: We will ask and whoever wants to 16 answer. I have some questions about the technical group. 17 Has it been formed yet? 18 19 MR. SLATER: The technical group has been formed. The representatives have been nominated. We 20 have not been able to have a meeting because we got 21 22 together and it was an acknowledged precondition of the 23 first meeting that they execute an acknowledgement of confidentiality regarding the content of the meeting. So 24 we sent the group away to execute their acknowledgements. 25

1 And then intervening there was a concern about 2 what was meant by confidentiality, and it was felt that we ought not to proceed further until we resolved it so 3 4 the technical group --MR. ROSSI: We had a formation meeting. 5 MR. SLATER: Formation meeting, but no content. 6 7 THE REFEREE: Because I understood from Andy, I 8 guess, that October 1 you hope to have a monitoring 9 program, a monitoring program to the Court. And so that would be something that the Watermaster would prepare and 10 11 take to the technical group for an advisory review. Is 12 that --MR. SLATER: Correct. The program, again, is 13 Watermaster's. The purpose of the technical group is to 14 provide peer review. 15 16 THE REFEREE: But the Watermaster is going to prepare the plan, the monitoring plan? 17 18 MR. SLATER: That is correct. 19 MR. HENSLEY: My understanding from the 20 technical group or our representative, they asked questions about the monitoring plan and what was going to 21 22 occur several weeks ago, and we've gotten no -- received 23 no information in response to that. MR. SLATER: I believe that we will unveil 24 25 our monitor- -- we'll talk to Mark and ask him what his

1 schedule is, but we would hope to have that before the 2 technical group at the first offer. 3 MR. WILDERMUTH: The specific request that was 4 made by Chino Hills to make a presentation --(inaudible) --5 THE REPORTER: I can't hear. 6 MR. WILDERMUTH: -- and that meeting was 7 8 canceled. 9 MR. GINDLER: The reporter says she can't hear. THE REPORTER: I'm sorry. I didn't hear what 10 11 you said. 12 MR. WILDERMUTH: Sure. The specific request by 13 Chino Hills for a progress report or some explanation of what Watermaster was up to was supposed to be presented 14 at a technical committee meeting that would happen last 15 month. I can't remember the exact date, but that meeting 16 was canceled. 17 MR. MALONE: That was this month, on the 21st. 18 MR. WILDERMUTH: 21st of August. 19 MR. ROSSI: 21st, two weeks ago. 20 THE REFEREE: One of the things that I wasn't 21 22 very clear about in the interim plan was the role of the 23 technical group, especially compared to the role of the Watermaster in preparing the monitoring plan. So I guess 24 the clarification, then, is that the Watermaster prepares 25

the monitoring plan and then the technical group has an
 advisory role. Is that correct?

3 MR. ROSSI: Yes. We hope to incorporate, to the 4 extent we can, suggestions that come out of it. I guess maybe I could comment, too, I think there's two pieces to 5 that October 1st completion deadline. And that is the б 7 Watermaster's technical consultant move quickly, as you 8 saw most of the outline today, on the monitoring plan. 9 That goes to that group, get the comments we can get 10 built in, and work individually with each of the two 11 agencies that we talked about on the pump testing, get 12 their comments. And then of course we have to wait for their responses in terms of cooperation or other needs 13 14 they might have. We hope to accomplish all that by October 1st. 15

16 THE REFEREE: Now, the pump testing was just 17 briefly discussed by Andy. Can you describe where you 18 are in discussing the pump testing agreements with the 19 pumpers that we need to have agreements with and whether 20 that will be part of this interim plan or monitoring 21 plan.

22 MR. MALONE: We're in the process of setting up 23 meetings with the individual producers, specifically CIM, 24 Chino Hills, and Chino, to first of all figure out how 25 they pump their wells, their schedule for pumping their

wells, under what constraints are we going to operate
 under to adopt specific pump tests.

If it's not possible to do, it's not possible to construct specific pump tests, then how are we going to monitor your production when the well turns on, when the well turns off, those sorts of specifics we want to discuss at the individual meetings.

8 THE REFEREE: So I guess the question for John, 9 when you get to October 1, will there be agreements for 10 pump testing or the kind of monitoring that you 11 discussed, that Andy discussed that you'll need to 12 evaluate this first three months of --

MR. ROSSI: You know, I had envisioned that we'd 13 actually have per se written agreements and get that 14 formal. But we put up kind of a straw man, if you will, 15 16 through these meetings, and this is what we'd like to accomplish and here's the cooperation we need from you. 17 Here's the equipment we put in at this duration, this 18 19 time frame; is that okay with you? I am expecting that they'll go back and then come back to us, Well, we need 20 to do this and we have these concerns, but let's work 21 2.2 with that.

23 We would then produce an outline, if we get to 24 that point and we agree, on the first part Andy talked 25 about which is a specific pump test with their

cooperation. This is how we're going to put it together
 and this is how we're going to do it. Get that done by
 October 1st.

In the event that for any reason an agency says, No, we really are not comfortable with the controlled pump test where we turn wells on and off in specific time frames, but we don't have a problem with you monitoring what we'd otherwise pump anyway, then we'll outline that protocol, if you will, and submit that.

But we certainly are shooting for and Wildermuth's is working on a protocol that would have a specific element of pump testing with their cooperation. THE REFEREE: The technical group will continue in existence, it would appear, through the creation of a long-term plan. Is that right?

16 MR. ROSSI: That's right.

THE REFEREE: There's a provision in the interim 17 plan related to the technical group that calls for 18 19 consensus and the use of a facilitator if necessary. And I'd like someone to discuss the concept there because I'm 20 not sure what triggers a facilitator having to be 21 2.2 involved and how that affects the ability of Watermaster 23 to proceed on a timely basis. What was that provision intended to address and when was it? The long-term 24 program or even this monitoring program? 25

1 MR. SLATER: Let me see if I can try. First of 2 all, there is no veto by a technical group over the 3 actions of Watermaster. Watermaster is obliged to carry 4 out an interim plan and is going to do so. Watermaster 5 is obliged to carry out a long-term plan and intends to 6 do so.

7 The technical group is designed to keep, at the 8 front end, Watermaster on track in terms of developing 9 the program that carries out the will of the parties most 10 affected. So we intend to seek unanimity where possible 11 by members of the technical group about where Watermaster 12 is going and how it's going to go there.

To the extent that we can, we're going to work very hard at doing that, and if it is useful to us to bring in a facilitator because one or more parties believes that that would be beneficial to developing unanimity as opposed to consensus, we'll do that.

18 MR. ROSSI: For the recommendations from the 19 committee.

20 MR. SLATER: To develop a unanimous 21 recommendation. We're also mindful that unanimity is 22 difficult to come by. So we are obliged to get input and 23 peer review; we are not obliged to get unanimity before 24 we move forward again. No member of the technical group 25 has a veto. Responsibility of the Watermaster staff

would be then after vetting with the group to go through
 the Watermaster process and carry out its program?
 THE REFEREE: Thanks. That helps.
 I had hoped to get an idea of something like a
 laundry list of what will be included in the monitoring
 program. And I'm not sure that that's what you did in

7 this presentation. Sort of contemporaneously can you 8 give me some sort of a laundry list of what you will be 9 doing.

10 Let me give you an example. I understand that 11 there are InSAR data from 1987 on and when you base-line 12 your analysis, you would use 1987, it sounds like. Is this study going to try to look at pre-1987 subsidence? 13 14 For example, in the report how far back do you go? How far forward are you projecting? And in addition to 15 ground level monitoring and InSAR and piezometers and 16 extensometers, is there a laundry list of other things 17 that you're going to be looking at? 18

MR. ROSSI: Probably turn that question over to Mark or Andy.

21 THE REFEREE: Can there be --

22 MR. WILDERMUTH: What you just said was pretty
23 comprehensive.
24 MR. ROSSI: Mark, you have to speak up a little

25 bit.

MR. WILDERMUTH: What you just stated was fairly 1 2 comprehensive. The things we'll do, in addition to that, there are still some benchmark data from foregone days 3 4 we'd like to collect. But on a go-forward basis, there will be other groundwater level production and water 5 quality programs that we'll also be using in this as part б 7 of Watermaster's normal monitoring that would help us 8 out. It will be for research -- is that the question? 9 As much as we can. We have done some in that capacity. 10 We were stopped by the complexity of the process as I 11 mentioned earlier. 12 THE REFEREE: So when you do the monitoring program, it should -- it would seem to include a 13 14 comprehensive scope of what you will be including in this interim plan work? 15 16 MR. SLATER: What the Referee is asking is, will you have a checklist of all the available information. 17 18 And the answer is we will; right? 19 MR. WILDERMUTH: We will. THE REFEREE: And so the question that maybe 20 precedes that is, In your view what is the scope of what 21 22 all that information should cover? That would be a 23 horizontal versus a vertical checklist. Will you be doing that? 24 25 MR. WILDERMUTH: Yes.

MR. SLATER: Do you have anything more about 1 2 what -- again to summarize, what would be in the universe 3 of data that you're going to be looking for? 4 MR. WILDERMUTH: I'm not trying to be 5 argumentative. 6 THE REFEREE: Maybe Joe can ask the question. I 7 guess the other thing that I wonder about in terms of the 8 monitoring program, it's going to have a schedule of 9 priorities of what you would like to do in that? 10 MR. WILDERMUTH: Yes. 11 MR. SCALMANINI: Is there anything you wanted to 12 say? THE REFEREE: That concludes my questions on 13 14 that part of it. MR. SCALMANINI: I brought some prepared 15 questions, and I brought some that I just sort of evolved 16 as you went along. I'll look at you if that's okay. 17 18 MR. MALONE: Okay. MR. SCALMANINI: You can punt it if you want to. 19 MALE VOICE: Can you speak up. I don't think 20 the court reporter can hear you. 21 22 THE REPORTER: Just barely. But it really would 23 help. MR. SLATER: That's unusual. 24 25 MR. SCALMANINI: That's very unusual, yes. But

I'll try to take them in order, I believe, the way we 1 2 went through the slides. If you want to put them back up, it's your choice. There's one that -- this one, 3 4 Andy. MR. MALONE: Okay. 5 MR. SCALMANINI: It's a lot closer to the 6 7 beginning, if I remember correctly. 8 MR. WILDERMUTH: 9 or 10. There it is. 9 MR. SCALMANINI: The '87 datum is nominally 10 80 years after what Mendenhall reported as having 11 static water levels, quote, unquote, at the ground 12 surface, or something close to that, for water levels in the area. Is there anything -- so everything in the way 13 14 of plots below that is relative to the '87 data? 15 MR. MALONE: Right. 16 MR. SCALMANINI: Do you know or are you going to look at any information that would document subsidence 17 18 that could be possibly associated with the, I'll say, nominally 70-ish years of water level change in 19 20 Management Zone 1 prior to the judgment given, that 21 they've kind of recovered or stayed black since then? 22 MR. MALONE: Go ahead, Mark. 23 MR. WILDERMUTH: We have done a really thorough data dump of NGS -- (inaudible) --24 25 THE REPORTER: I can't hear.

MR. SLATER: You have to talk louder.

1

2 MR. WILDERMUTH: I'm sorry. We have done a pretty rigorous dump of benchmark data from the National 3 4 Geodetic Survey and have looked into getting other local survey data. The problem we have is getting that data 5 uncorrected. In other words, it comes corrected. Many 6 7 of the surveys aren't from stated benchmarks; they're 8 floating benchmarks. But there is some data out there 9 which we can go back and get some estimates of what the 10 past history was like. We didn't spend a time on that 11 when we got into it because it didn't seem to be very 12 reliable. And our effort thus far has been on a go-forward basis, pretty much. Our monitoring program 13 14 that we're set up for now is a go-forward basis to come up with the data we need to develop the management plans. 15 16 However, if we can get that data from the past and identify it and find uncorrected, unadjusted survey 17 data, if we can get the survey notes and try and adjust 18 it ourselves, that would be useful. But there really 19 isn't very much of it. That's our sort of speculation 20 base. Someone else did the same analysis in the past, I 21

22 $\,$ think back in the '60s, and the USGS came to that

23 conclusion in Chino Basin.

24 MR. SCALMANINI: Then.

25 MR. WILDERMUTH: Yes. There may have been

some -- someone may have done a study we don't know
 about. Hopefully that will surface and they've done a
 good job on the survey.

4 MR. SCALMANINI: So the answer is you're looking 5 and your expectation is you probably won't find very 6 much. I'm not going to quote you back at yourself. I'm 7 just trying to -- (inaudible) --

8 MR. WILDERMUTH: My qualified response is that I 9 don't think it would be as useful to coming up with a 10 management plan in the future as it will be to 11 concentrate on getting high quality data from this point 12 forward.

13 MR. SCALMANINI: Andy, the lithologic, slash --14 what was it called? The lithologic cross-section that 15 also shows well completions, can you put that up for a 16 second. I was trying to take notes and interpret the 17 black and white version while you were talking.

18 MR. MALONE: Yeah. Hard to see in black and 19 white.

20 MR. SCALMANINI: The blue column to the far left 21 is a range of water levels in the wells?

22 MR. MALONE: In that well there, yeah.

23 MR. SCALMANINI: In that particular well?

24 MR. MALONE: In that particular well. And it 25 didn't come out on the other ones here.

MR. SCALMANINI: Is that the straight line 1 2 that --MR. MALONE: The straight line on the side, 3 4 yeah. So the range of water levels. And I would assume that some of those are pumping water levels. 5 6 MR. SCALMANINI: I see what this is. It says 7 range and static. But that's to be investigated in more 8 detail? 9 MR. MALONE: Yeah. 10 MR. SCALMANINI: I've just been handed a color 11 version of that. I can see lithology and well completion details, and those lines are now blue. That answers the 12 13 question. 14 MR. MALONE: In the Program Element 4 memorandum, there are bigger drawings, 11 by 17. So if 15 16 you have that memorandum --17 MR. WILDERMUTH: It's in your 6-foot stack of 18 papers. MR. SCALMANINI: Yeah, I think I do. 19 The water level histories or the hydrographs, 20 the groupings of the hydrographs, you have one for 21 22 shallow wells and one for -- a couple of deep -- or I 23 guess one deep well and one shallow well. 24 MR. MALONE: Right. 25 MR. SCALMANINI: Let's take the shallow

1 hydrograph first.

2 MR. MALONE: Okay. MR. SCALMANINI: No, no, no. Sorry. Go forward 3 4 to the one that has the deep -- that one. I'll say it; then you can interpret it as a question. It's possible, 5 I think, to tie the shallow hydrograph with those that б 7 you just had up, for example, to develop a reasonable 8 picture of what the shallow aquifer looked like 9 historically for some lengthy period of time. And the problem, I think, is that if this starts in the late 10 11 '80s, that's about the time that deep wells were first 12 constructed. MR. WILDERMUTH: Middle '80s. 13 MR. SCALMANINI: Is there any anecdotal, I don't 14 know, or other data that suggests what the head was on 15 16 that deeper aquifer when it was first penetrated, quote, unquote, by man 20 years ago, 15 to 20 years ago. 17 18 MR. MALONE: There are -- the City of Chino has 19 a deep well that was in operation prior to City of Chino Hills constructing their wells. 20 MR. SCALMANINI: I wasn't picking on anybody's 21

22 in particular well, just what does it look like.

23 MR. MALONE: So there is some deeper data that 24 extends back prior to 1988. I can't tell you off the top 25 of my head what it looks like. But as I recall, that

well is also perforated in shallower zones too so it
 might be more of a composite water level.

3 MR. SCALMANINI: I was trying to get some feel 4 'cause in a couple other places we've encountered, you know, the first time into a deep aquifer that truly is 5 well-confined, despite the fact that that's, quote, б 7 unquote, decades after man's been pumping from shallower 8 horizons, you find this uniquely high piezometric 9 surface. I was just curious to see if there was some 10 semblance of that because that water level is 630 to --11 nominally 200 feet below the ground surface. Does that 12 sound about right?

13 MR. MALONE: Yeah.

MR. SCALMANINI: And if we had artesian 14 conditions once upon a time, did those preserve 15 themselves? Is the confinement good enough to preserve 16 that despite the decline in the shallow area? 17 MR. MALONE: We may in our piezometer 18 19 completion, if we're successful in completing some of these piezometers in the interior of these aquitards, we 20 may see more virgin core pressures that have not been 21 22 influenced by pumping in the aquifer. 23 MR. SCALMANINI: This is just jumping ahead. It

24 doesn't take a repeat of any of your illustrations. In
25 the drilling operation that's going on today, a little

1 more detail on the status just at that stage. First you
2 said, just your words -- and I don't mean to get hung up
3 on what you said -- here you see the reverse circulation
4 mud rotary rig.

5 My curiosity question is, which one is it? I 6 couldn't tell from the picture quick enough. Are you 7 drilling with mud or drilling in reverse? Or do you 8 drill in reverse with mud?

9 MR. MALONE: With mud. Reverse with mud.
10 MR. SCALMANINI: Okay. Have you completed what
11 would be a building of a test hole or a first pass, or do
12 you have a log today of the profile?

MR. MALONE: Today, as it stands today, we've hit the bottom. We've drilled as far as we're going to drill. We've run the geophysical logs this morning.

16 MR. SCALMANINI: This morning?

MR. MALONE: Yeah, this morning. and so we're beginning completion of the first piezometer, the deepest piezometer today.

20 MR. SCALMANINI: It's an unfair question in 21 light of that time, but I'll ask it anyway. Have you had 22 a chance to, in effect, corroborate the cross-section 23 that we just had up here or have questions -- I realize 24 you're looking in more detail than was shown on the 25 cross-section.

MR. MALONE: Not in detail, but in general, yes, 1 2 as we've been going through the sediments. Yes, it more 3 or less corroborates what we were expecting to see. 4 MR. SCALMANINI: Okay. Now I'll try to pick up on Anne's question about other data. At this point --5 which was the next slide after that. The headline 6 "Monitoring Program." This is where I interrupted you 7 8 and asked, you know, is this sort of global to just, I'll 9 call it the investigation of subsidence, or is it unique to the interim plan? I think we got to the answer that 10 11 it's kind of both. It's just global. It works for 12 whatever is going on. MR. MALONE: Uh-huh. 13 MR. SCALMANINI: On the list is the 14 extensometer, slash, piezometer. And then later you 15 describe how the piezometer would be done in nominally a 16 month and then there'll be this three-month intense 17 period, and then you'll design the details of the 18 19 extensometer and put that in, et cetera. There's ground surface surveys and there is InSAR mapping. That's all 20 that's on this list. 21 2.2 So at the time I wrote in the margin, what about 23 other data? And then later you got to, you know, this I'll call it cooperative effort. And then we 24 subsequently talked a little bit about pump testing, 25

whatever that means. I want to come back to the pump 1 2 testing in a second. But I think what I heard was that -- later I 3 4 went back and I wrote down myself, I wrote Q and W L. So 5 you are going to monitor pumpage on hopefully a cooperative basis -б 7 MR. MALONE: Yes. MR. SCALMANINI: -- including pumping cycles, 8 9 starts and stops, pumping cycles? You are going to 10 monitor water levels, static and dynamic conditions, in 11 some network of wells, I'll say radially around the location of the extensometer. 12 MR. MALONE: Right. 13 14 MR. SCALMANINI: Is that a good summary of that? MR. MALONE: Yes. 15 16 MR. SCALMANINI: Intensely for three months, whatever "intensely" means, and then on an ongoing basis 17 after that, you think? 18 19 MR. WILDERMUTH: That's the intent. MR. SCALMANINI: That's the intent. 20 MR. WILDERMUTH: You know, I think part of 21 22 what's happened here -- this is not an apology -- is that 23 the content of the workshop snuck up on us. Short notice. So there may be a few omissions at times when 24 25 you ask questions, we won't know.

MR. SCALMANINI: We timed it on purpose, Mark, 1 2 so it would get here the day you came back from vacation. No problem. I understand. 3 4 The cooperators are logically the State/Chino Institute, Chino Hills, and Chino as being the closest 5 around. So that's who you're having these discussions б 7 with now about pump cycles. 8 MR. MALONE: We haven't had any discussions yet, 9 but we're initiating the process. 10 MR. SCALMANINI: Okay. I'll switch over to the 11 sort of outline I made for myself before I came down 12 here. Could you discuss the term "pump testing" a little bit. I mean, that has a meaning sort of as a term of art 13 to people like you and me, but I want to make sure that 14 we're interpreting it the same way. 15 16 MR. MALONE: I think generally what we'd like to do is stress certain aquifers at one time and so --17 MR. SCALMANINI: What might normally be called 18 19 an aquifer test, you mean? MR. MALONE: Yeah. 20 MR. SCALMANINI: Recover the static, turn it on 21 22 constant rate, that kind of thing? 23 MR. MALONE: Right. And so it would be hopefully a controlled test where we might be able to 24 25 limit the amount of pumping that is in one aquifer zone

and stress one aquifer zone in an isolated manner and see how that propagates through the system towards our piezometer and the other monitoring points that we have out there. Then switch and stress another aquifer zone. That's optimally what we'd like to do in a controlled way.

7 MR. SCALMANINI: Oh, as a function of how 8 existing wells are completed?

9 MR. MALONE: Exactly.

10 MR. WILDERMUTH: It may not be practical to do 11 this, but we have to work that out. In an ideal world, 12 that's what we'll do. Just people have to supply water, 13 and that may be difficult.

MR. SCALMANINI: These are the kinds of things that are good candidates for wintertime things to do when the demand is down, a little more flexibility in the operation system, et cetera. It has to do with the individual systems, not with us sitting here and saying this is what we're going to do.

I guess the last kind of global thing, to segue over to some other questions, is that what I took away from the description of everything from start to finish was a very thorough investigation of subsidence, period. And then what I also took away was almost no nexus with what is, quote, the interim plan. And so can

we try to close that loop a little bit. In particular, if I read the interim plan as submitted literally, that hopefully on this October 1st it will start and there'll be a voluntary reduction of pumpage, and there'll be a substitute water supply. And what I heard today was pretty close to October 1st the piezometers are going to be ready to go to work, so to speak.

8 And so how does the yet to be specifically defined voluntary reduction in pumpage that will play 9 into, I'll call it, a fall-winter-spring water demand by 10 11 those who participate have an effect on or be factored 12 into the monitoring that you're doing, I'll say, as a global investigation on the subsidence problem? 13 14 MR. MALONE: I'm going to punt on that one. MR. WILDERMUTH: It may make it more difficult 15 to do this short-term testing, yeah. But I think there's 16 got to be some way to get some of this done. There's got 17 to be some flexibility. Hopefully that will be the case. 18 19 If not, we're going to go into a different mode of capturing the data, which is going to take longer to 20 do . . . overdemand/signal analysis. 21 2.2 THE REFEREE: So is it the case that the

forbearance of pumping and use of the substitute water just in an interim plan is sort of on a different track than your continued work on your monitoring program in

1 that in an optimal world you might not have people
2 forbearing from pumping and instead be doing pump tests
3 in your monitoring work?

4 MR. WILDERMUTH: I think the forbearance, it has 5 potentially a limitation as to a certain well you want to 6 use. But it also has a benefit in that it may reduce the 7 stress on the system so that we pick up the stress from 8 the wells we want to test better. I don't know if that 9 make sense.

10 THE REFEREE: Is there flexibility in mind in 11 this monitoring -- I mean in the interim plan that would 12 allow you to do pump testing with a well that was 13 otherwise in the forbearance program?

MR. WILDERMUTH: There may be some wells that we would like to do that might be limited by it, but we would have to look for some way or some exception to it. I don't think we'll know for sure.

18 MR. MALONE: I think that's a good point. 19 MR. WILDERMUTH: It's something we've thought 20 about for a long time 'cause when we reduce production, 21 we have trouble testing. And I think the way it's set 22 up, it looks pretty flexible. I've got to believe that 23 as a technical committee and the group, if it's of value 24 to run a certain test, we will run that test.

MR. SLATER: Again, I go back to what we started

25

with. There are three prongs to this plan. One prong is study and data and collection of data and analyzing data for purposes of learning more. It's an iterative interim plan. It's not a long-term plan; it's not the final interim plan. That's the purpose of having a technical group, and it is only of the duration for three years. It can be rolled over and extended if necessary.

8 So the three elements are study, monitor, and 9 analysis. There's that grouping. The second is 10 modification -- voluntary modifications of production. 11 And in the beginning we wanted to pursue an avenue in 12 which no party was harmed by participation, and we thought that the easiest way to do that was to offer 13 14 backup or substitute water. So we linked the commitment to forbear to having an available substitute supply. 15

16 That doesn't mean if the technical group and Watermaster come to the conclusion that a pump test 17 without securing substitute water is a good idea to 18 19 include in the data development program or is an otherwise harmless modification of pumping, that we 20 couldn't pursue that. We just don't have enough 21 22 information or commitment to do it at the initiation of 23 the plan.

24 Then I'd say, again, the third part of this 25 program of our interim plan is creating an atmosphere of

discussion and peer review and collaboration to get us to
 the long-term plan.

So those are really the three prongs, and we see
the interim plan that we submitted matching up with that.
THE REFEREE: When you were introducing the
subject of this whole workshop this morning you talked a
little bit about participation in the forbearance
program.
MR. SLATER: Yes.

10 THE REFEREE: In reading the interim plan, it

11 appears on its face to be very important to have full 12 participation in the forbearance program.

13 MR. SLATER: We agree with that.

THE REFEREE: But the presentation today that 14 Andy gave hasn't mentioned that as any element in the 15 16 collection of information. So my question is, Is my understanding correct that there is a track that is to 17 minimize subsidence, that includes the forbearance 18 19 program, and that track is separate and apart from the work to create a monitoring program and carry it out? 20 MR. SLATER: I'll try and let the others answer 21 2.2 as well. I think there is an obvious overlap. But the 23 plan itself includes a requirement, or as designed by Program Element 4, we were to seek an effort to 24 25 voluntarily reduce production in the vicinity of recent

groundwater -- or ground fissures, which is what our
 forbearance is primarily aimed at doing.

3 THE REFEREE: Correct.

4 MR. SLATER: It may provide other benefits for 5 purposes of studying, monitoring, and analysis. But we 6 were obliged to find voluntary modification -- or pursue 7 voluntary modification that accomplished the first goal, 8 which is what the primary directive was, but obviously 9 there is overlap.

10 THE REFEREE: So on the forbearance track full 11 participation would better achieve the goal expressed in 12 Program Element 4 in various places of minimizing a 13 problem.

14 MR. SLATER: Correct.

15 THE REFEREE: On the other hand, if you get less 16 than full participation in your forbearance program, that 17 will not necessarily adversely affect your ability to 18 thoroughly complete a monitoring program.

MR. SLATER: I would ask Andy and Mark to answer that, but I understand -- well, I want you to answer.

21 MR. WILDERMUTH: I don't think either way having 22 the forbearance or -- with or without the forbearance 23 would really affect the monitoring program. We may have 24 to find some other way of doing things or collecting 25 data, but for the most part it won't affect the utility

1 of the work.

2 MR. SCALMANINI: In going through the interim 3 plan as submitted, describing the things that basically 4 what you described today, the first piece was the 5 formation of a technical group. And reviewing what the 6 technical group's going to do, we get down towards the 7 end, and it says it's going to develop with Watermaster 8 an interim plan and a long-term plan.

9 Now, if you read that literally, there is still 10 an interim plan to be developed, but if you listen today, 11 the interim plan is this. And I'm not picking on 12 anybody's writing skills here. I just want to make sure 13 I have it straight.

14 MR. SLATER: Again, perhaps if words on paper 15 have created a different impression than what I 16 articulated today, I guess you could call that to my 17 attention, and I'll try to explain it better. But I 18 believe it is as I have stated.

19 This is a Watermaster program which is to be 20 generated by Watermaster, taken to the technical group 21 from the ground up, and worked on to develop buy-in in 22 this technical group process, at which point it will be 23 day-lighted. It will be day-lighted through the 24 Watermaster process and then adopted through the 25 traditional pool advisory committee board process.

1 MR. SCALMANINI: That describes the interim 2 plan?

MR. SLATER: That describes what has previously 3 4 happened to file this interim plan with you. Now, it is an adaptive and iterative plan because this group is 5 going to be meeting frequently and Watermaster is б 7 collecting data. And as it collects data and learns 8 more, there may need to be new elements added or 9 corrections changed -- corrections made and directions 10 changed. And the group is very strong that they didn't 11 want to commit to an extensive five- or seven-year 12 program now before they knew more. MR. SCALMANINI: I'm okay with that, Scott. 13 Here's what I read. "The technical group and Watermaster 14

15 shall develop the interim and long-term plans consistent 16 with the Peace Agreement and OBMP."

17 When I read "shall develop," I read future 18 tense. Then I read interim plan next. So my question is 19 just simply, Is there really some interim plan to be 20 developed in the future by the technical committee, or is 21 this the interim plan and that's just an accident of 22 words to bring in the, quote, unquote, consistency with 23 the Peace Agreement and OBMP?

24 MR. SLATER: I think it is -- you use the words,25 the phrase "accident of words." The intention clearly is

that this is the interim plan, but the interim plan is
 adaptive and iterative and the technical group can
 provide input and Watermaster can correct.

4 MR. SCALMANINI: Okay. Under Monitoring Program there's, you know, a discussion of the extensometers and 5 piezometers. And then there's a section called "Initial б 7 Wells Included Within Study Zone." Then there is an 8 attached exhibit which is a list of wells. And when you 9 go to the exhibit, it's exactly that. It's a list of wells. Is there some significance to it? What is it? I 10 11 mean, there is a pumpage history attached to the list of 12 wells but nothing as regards anything else in the associated monitoring plan. 13

MR. SLATER: I'll look for backup on this, and I'll venture the legal answer, and the technical group can fill in around.

The legal answer on why the list of wells is 17 that there were varied points of view in the technical 18 19 community about wells that might be eligible for study and eligible to provide useful information. So we took 20 an expansive view and tried to grab a list of wells which 21 22 were in an area -- going back to our Program Element 4 23 directive, which were in an area that was for which we could seek a voluntary reduction and which would also 24 have the prospect of providing useful information if we 25

were to associate them with the forbearance agreement.
And then so we started with that landscape
first. And then we took that list, and we applied a
test, ultimately select wells for participation in the
forbearance program, so a list of wells generically
eligible.

7 And then we had to say okay. For which of those 8 wells can we actually get them substitute water from Met 9 and IEUA that matches on a cost basis, and that's the 10 next list.

11 THE REFEREE: Let me ask, the Exhibit E, which 12 is the schedule for participating producers, is that the 13 list of wells for which you supply substitute or 14 alternate water?

MR. SLATER: Yes. Recall that a fundamental 15 precept of the voluntary program was that of like quality 16 and quantity. And the only way that we knew that we 17 could efficiently and economically make substitute water 18 19 available, frankly, was through an offer from IEUA, which was only recently confirmed by the Metropolitan this 20 week, that they could make water available at \$233 per 21 22 acre-foot under their program.

23 So we knew we had those costs and quality 24 constraints, and then we had to look at how we could 25 actually move the water into the zone.

THE REFEREE: Just for my edification, 'cause 1 2 this is fact-finding, can you put up something and just show me quickly where the C wells are and the D wells 3 4 are. MR. SLATER: The list on the big C, and then 5 within that where the participating wells would be. б MR. WILDERMUTH: I don't think we can really see 7 8 it on there very good. Could we have that map handout we 9 brought? 10 MR. ROSSI: Sure. It's right here, if we could pass that out, Mary. There's 50 of them. 11 12 MR. SCALMANINI: Andy, when you had this map of the piezometer monitoring plan, which is described as 13 14 something, I think, you were starting to kick around, is there some nexus between this map and either Exhibit C or 15 16 E? MR. MALONE: No. That's a very recently 17 generated map. 18 MR. SCALMANINI: This seems to be a lot more 19 local than Exhibit C or E. 20 MR. MALONE: Right. 21 2.2 MR. SCALMANINI: The substitute water supply, 23 3,000 acre-foot per year, can you -- can somebody elaborate on that? Let's start with just the source of 24 25 the number and then work our way up from there.

1 MR. SLATER: Sure. Again, the 3,000 acre-feet 2 was probably a triage or a combination of various factors 3 that led us to the number. First is availability. We 4 were initially hamstrung by not having access to water at 5 such a low rate, and so we were perplexed on how we were 6 actually going to entice people into the program to 7 forbear.

8 And Rich Atwater from IEUA was gracious enough 9 to suggest that under a preexisting program from 10 Metropolitan that they might be able to secure a nominal 11 amount of water that could be used in connection with 12 this program in the event that we were able to achieve a 13 compromise.

There were also opportunities discussed in the context of a broader in-lieu program or storage and recovery project, frankly, that were premature. And no one felt that it was desirable to make such a delivery part of that program.

So we had some discussions with IEUA about what was achievable, and preliminary indications were it may be in the 2,000 acre-foot range was possible.

We had some further discussion with the group and tried to evaluate what was possible in terms of conveyance as opposed to supply. What could we actually move through existing conveyance facilities and, given

1 existing contractual entitlements and limitations,

2 primarily the WFA, whether we could move additional water 3 into the zone.

4 And then a third consideration really related to 5 the ability of somebody to take that water in lieu and what their other demand scenario looked like. In other 6 words, did they need to pump ground water from their 7 8 wells during peak demand periods to meet their needs? 9 We considered those three elements. And then I guess Burt Gindler's in the room, and he would admonish 10 me if I didn't mention this. There was a fourth 11 12 consideration which is the cost of securing that 13 available supply from Metropolitan. It was very important in how that cost was going to be distributed 14 because many of the other producers, while they wanted to 15 see the study program go forward, they did not want to 16 incur huge costs associated with making large quantities 17 available in the zone. 18

So ultimately the 3,000 was settled on over a period of months in trying to get us to a position of what could we convey, what could parties take on demand, meet from a peak demand standpoint in the zone, and what would Met provide.

24 MR. SCALMANINI: Is it available on a year-round25 basis or nine-month-only basis?

MR. SLATER: It is -- I believe, John and Traci, 1 2 it's available beginning October 1, correct, on an annual basis. So it would be available for twelve months. 3 4 MS. STEWART: No. MR. SLATER: No? 5 MS. STEWART: Nine 6 7 MR. SLATER: Availability is nine months? MR. ROSSI: I believe it's only the non-peak 8 9 months. Nine or ten. 10 MR. SLATER: Nine or ten. And then there is the 11 overlay of peak demands within the summer months 12 essentially, high demand periods. MR. SCALMANINI: Well, in the interest of 13 14 following my own outline, I'd like to come back to that peak demand thing. 15 16 MR. ROSSI: Sure. MR. SCALMANINI: Okay? John, could I ask, can 17 we verify the -- get rid of the "I think it's only 18 available" at some time after this? 19 MR. ROSSI: Sure. I know it's within the period 20 that we have now in the interim plan. 21 2.2 MR. SCALMANINI: I know that too. I can read 23 that. What I'm trying to get at is, ultimately what the plan kind of says is that we want to minimize subsidence 24 25 through or not make it worse by forbearing some pumping;

okay? And there's a little bit of, I'll call it, 1

2 intuitive conflict to me that says, But we'll go back to pumping during the time of year when we pump the hardest, 3 4 which is when we would lower the water levels the most. 5 So what I'm trying to get at, you know, is the 3,000 acre-foot limitation to nine months a year driving б the fact that we have to go back to pumping in the 7 8 summertime? Or is it that there's some other factor in 9 the overall delivery scheme that drives it? So I want to come back to that later. 10

11 MR. SLATER: I think we have Mark Kinsey who is 12 prepared to provide some additional elaboration. Mark. MR. SCALMANINI: Let me save that for a few 13 minutes. I want to stay where I am at. I'll get back to 14 you, Mark. Are you Chino or Chino Hills, Mark? 15 16

MR. KINSEY: Neither.

MR. SCALMANINI: I'll just say this rather than 17 ask a question. When I read this as regards, you know, 18 19 the reduction in pumping, there was a discussion here that we're going to monitor conditions in Management 20 Zone 1, but I think today served to clear up the fact 21 22 that that's a pretty general description of what 23 monitoring means.

Is there any vision today of what some other 24 so-called, quote, "voluntary measures," unquote, might 25

1 be?

MR. SLATER: Well, actually I thought your 2 3 questions were going to one, which would be inducing or 4 encouraging people to engage in pump tests to the extent that they were not receiving substitute supply. That 5 might be a forbearance ultimately within the management б 7 zone where somebody isn't receiving a substitute supply. That's not on the plan. That's not possible -- or it's 8 9 not contemplated presently because we haven't had an 10 opportunity to go out and visit with each of the well 11 producers within Management Zone 1 and to inquire as to 12 whether or not that's appropriate. MR. SCALMANINI: Do you have to have a 13 substitute supply to run a pump test? 14 MR. SLATER: Probably not. 15 16 MR. SCALMANINI: The answer is no, yeah, so --MR. SLATER: Wait a second. If the pump test 17 means the water supply is unavailable to me and my 18 19 business for three weeks or a month, you know, then we 20 have some practical constraints. MR. SCALMANINI: Why don't we discuss the 21 22 details of pump testing off the record. Okay? 23 MR. SLATER: Check. MR. SCALMANINI: Been there, done that too many 24 25 times.

THE REFEREE: What would be a logical duration 1 2 of a pump testing that you would have to be doing? MR. WILDERMUTH: I'm going to have to refer to 3 4 Francis. Would you like to respond? 5 MR. RILEY: I'm sorry. Excuse me. I really couldn't hear the question. б 7 MR. WILDERMUTH: What kind of pump test would 8 you like to do right now in the first three months of the 9 piezometers? 10 MR. SLATER: What is the duration? 11 MR. RILEY: I think we can get by with 12 relatively short-term testing during that first three months because our primary goal is to establish the 13 responses for the different depth numbers and use those 14 responses to design the extensometer. And also to give 15 us some preliminary ideas about how to design a more 16 comprehensive and longer running, possibly, test once the 17 extensometer is in place to measure the responses to that 18 19 test. MR. WILDERMUTH: Francis, define short. 20 21 MR. RILEY: Let's say a week. 22 MR. SCALMANINI: Maybe we have already discussed 23 the Exhibit C and E. Well, is there an anticipated result from the 24 interim plan forbearance as it's drafted today? Does the 25

1 plan have a goal?

2 MR. WILDERMUTH: Can you repeat the question. I'm not sure I understand it. I'll try to restate it. 3 4 MR. SCALMANINI: Is there an anticipated result of the interim plan? The way Scott has summarized it 5 this morning was nominally 1500 acre-feet of forbearance б 7 by one pumper for three years and nominally 8 1500 acre-feet forbearance by another pumper for a year, 9 with all the flexibility we could extend, et cetera, et cetera. Is there an expected result of that? 10 11 MR. WILDERMUTH: Of the forbearance? 12 MR. SCALMANINI: Yeah. MR. WILDERMUTH: I crafted that part of the 13 OBMP, and the concept was that we needed time to develop 14 a plan that we could get our arms around and support and 15 do for the long term. 16 MR. SCALMANINI: Long term, yes. 17 MR. WILDERMUTH: But there was also concern that 18 19 if we considered to continue the status quo, that that might lead to unacceptable subsidence and fissuring. 20 So the concept was what can we reasonably do to 21 22 minimize that potential subsidence? What could we agree 23 to? That's what you have in front of you, the forbearance plan. Is it going to reduce subsidence, or 24 is it going to increase subsidence? Hopefully it will 25

have a beneficial impact in the short term. That's the
 anticipated result.

3 MR. SLATER: To add, still we want to make sure 4 that we do as little harm as possible while we are 5 trying -- while we analyze and develop a long-term plan 6 that works.

7 MR. ROSSI: Joe, does your question include all 8 the things it might do during this study, during this 9 plan, or just the forbearance part?

10 MR. SCALMANINI: Well, this isn't a good answer 11 back at you, John, but the word you just used "study," 12 you know, strikes me as a better word than "plan." There 13 is a study going on, and my impression is that the 14 forbearance is an action kind of embedded in the 15 long-term study plan. Simplest way I can state it. 16 Okay?

When we've asked about the nexus between all the 17 monitoring that was described this morning, et cetera, 18 19 pump testing, measuring water levels, monitoring pump cycles, routine operation of wells, as well as the very 20 focused stuff like the extensometers when they're there 21 22 and the piezometers starting in about a month -- that all 23 has a global, ongoing focus of figuring out the subsidence phenomenon and ultimately crafting what we 24 call the long-term plan, which I suspect is synonymous 25

1 with a hoped-for solution.

2 But there is no specific anticipated objective 3 of forbearing 1500 to 3,000 acre-feet of pumpage. Andy's 4 plot here earlier today suggests that the rate of 5 subsidence has drastically calmed, has changed, has 6 slowed down.

7 And so is this just an action, you know, along 8 the way which I've heard Mark and Andy say they can sort 9 of monitor around or monitor through. Whatever the system does, it will do. And if it happens to include 10 11 ongoing pumping without this action, they'll be 12 monitoring that. If it happens to include that action, they'll be monitoring that, and they'll be, along with 13 some focused efforts like pump testing, trying to figure 14 out how the aquifer system works. 15

So I've had difficulty from the first read, you 16 know, of what's this intended to accomplish? And 17 ultimately landing on is this more an action than it is a 18 19 plan. I kind of want to look to Mr. DeLoach over Andy's shoulder and laugh about some debate between the words 20 "program" and "plan" as regards to something called an 21 22 OBMP two or three years ago. You know, what is this? 23 But that's just a fun recollection for Mr. DeLoach.

24 So back to this point, you know, is this really 25 an interim plan that has some specific focus to it, or is

1 it just something along the way that's certainly not a
2 bad idea, probably a good idea given the -- I don't
3 know -- the picture, the physical picture that's out
4 there. I'll stop it there. Is it a study and then has
5 this little piece that's embedded in it?

MR. ROSSI: Well, I guess if you ask the 6 7 question -- the reason I asked that question was simply 8 that I think that the most significant outcome of this 9 plan is a long-term plan or a long-term implementation program. In different words, the ability to study, to 10 11 gain the data necessary to have the group come together 12 on what the long-term plan would be. In the meantime we all agree forbearance is more than just a good idea. I 13 don't know if that answers your question. 14

MR. SLATER: Let me -- I'll go back to my 15 opening. It is -- you say what is the plan? Is it just 16 a study and an element and an action item? And the 17 answer is that's what it is today. We're launching this 18 19 puppy here helpfully in October, and it includes a study program. There is reluctance, broad reluctance to 20 designate a long-term course until the study is 21 2.2 completed. So there's that.

Then there is a measure that there is consensus behind, that that will -- it will do no harm and it may do much good, and that is reducing pumping in a defined

area. There's some quarrel about how broad that
 reduction needs to be and how the burden of cost and
 expenses associated with that production would be
 implemented.

5 So our initial measure of nominally 6 3,000 acre-feet could grow, could broaden, could lessen, 7 or could be redirected depending on what information is 8 developed in the first area.

9 And there may be other things that the technical group decides are material on the interim basis. We 10 11 don't have any measures that have leaped to the front of 12 our minds, but that's what the technical group is designed to do, and we recognize that there is a spirited 13 14 debate among the technical people about what else might be employed by Watermaster. So it is at least study plus 15 16 action and the ability to pull in other things.

MR. WILDERMUTH: I don't mean to be 17 argumentative, but you can call it whatever you want to 18 19 call it. You can call it bus. What we said we were going to do, we're going to do some kind of -- we call it 20 forbearance, voluntary reduction. And then we said we're 21 22 going to do monitoring and subsequently develop a plan. 23 So if it's a bus, it's a bus. If it's the interim plan, than it's called the interim plan. 24

25 MR. SLATER: It is what the Program Element 4

1 states.

THE REFEREE: This sort of brings to my mind 2 questions about timing and how fast you will learn what 3 4 management actions are required. You've explained that in three months, if all goes well, you should be able to 5 obtain enough information that you can put the б 7 extensometer in and then use that to gain even further 8 information with or without pump testing and all your 9 other data collection ongoing.

10 I guess the question is, how fast in an optimal 11 world with optimal participation by the parties can you 12 get to the point where you can identify management actions? I don't see anywhere in the presentation that 13 14 there's any inkling of when you get to a long-term management plan. I don't even want to ask you what might 15 16 be in that plan because that's pretty obvious from reading Program Element 4, from reading OBMP, and 17 everything else, that's going to be a difficult set of 18 19 issues.

But when do we get there? Is it a year? If it's more than a year before you have a pretty good idea of what management actions you could at least look at as alternatives, then I would think it gets more and more important to have actions or buses, as Joe is describing it, to minimize potential effects or to take other

1 actions in some interim period.

2 The interim period is going to last as long as 3 you let it last, in some ways. On the other hand, it's 4 going to have to last as long as it takes for you to get 5 the information you need.

6 So the question is, if everything were done 7 optimally with optimal agreement on all sides, when would 8 you have a good sense that you could start developing a 9 long-term plan?

10 MR. WILDERMUTH: The challenge with the question 11 is that we have to have the end in mind to know what that 12 is. I can't give you the real defined answer. I'm 13 thinking three to five years, be done.

When you start coming up with management concepts, I think those discussions need to happen right away. Definitely. Some of the first things we do is talk about how do you manage to stop subsidence. Well, we get the technical work done and figure out what the problems are and the system to manage it.

For example, the kind of question you're going to have to answer is how much of subsidence can you take, how much are we willing to accept? Is there -- maybe we don't want any subsidence. Those things define management actions.

25

We will get some preliminary information early

with the piezometers. Those kinds of things might be,
 well, like a year. But we still got to get two or three
 years of data showing data that will be useful to
 understand, come up with a hypothesis.

5 The other part is pretty straightforward. The 6 part that might not be straightforward is getting people 7 to agree on a management plan and how to pay for it. I 8 can't begin to speculate on all of that.

9 THE REFEREE: So I'm seeing a plan to do data 10 collection and analysis but no segue to how to get to a 11 long-term plan yet. Is that something that needs to be 12 addressed further as you work on this interim plan and 13 get some of the up-front issues resolved?

MR. SLATER: Absolutely. I think if I could unpack your question into two pieces, and that is what is the minimum time period that people believe would be necessary for data development.

And you wouldn't be surprised to learn that there are different points of view about the minimums necessary. There's at least one point of view that's been expressed that we have enough information to go tomorrow. And there's another point of view that's expressed that it's not obtainable within a decade of study and analysis.

25 So I think Mark used three to five years on the

data development side. When do we have enough 1 2 information to know how to spend our money wisely? 3 And then there's a second piece about what 4 people are willing to do in order to implement it, what kind of cost structure are they willing to assemble. And 5 that would probably follow -- if it's three to five years б 7 to have the data, the business deal probably follows soon 8 thereon, and one would expect maybe twelve months to wrap 9 that piece up. 10 I think that is a fair answer, is if it's three 11 to five years on data, give yourself twelve months to 12 take that data and implement it in a workable plan. THE REFEREE: Meanwhile you could have five or 13 six years, then, where you have partial participation in 14 a forbearance program which is the only element in this 15 interim plan to address minimizing the problem while you 16 study it. 17 MR. SLATER: It is the only measure that there 18 19 is a consensus to support at present. MR. ROSSI: We should note that the agreement 20 calls for a three-year term so I believe we know we will 21 22 be around the table in less than three years to get to a 23 point where we have something that goes from there. MR. SLATER: I will say that we're -- we 24 shouldn't suggest to you that we're devoid of 25

opportunities or ideas. We have a desalter project which is soon to be up and running, up and running in some context. It's going to be more prolific soon, and there are opportunities for other supplemental or substitute supplies of water. We are just presently constrained by conveyance and Met water.

7 But as we move forward, there will be 8 opportunities that identify themselves, and hopefully 9 opportunities are paralleling advances in information. 10 So that again, I go back to the fact that we're 11 doing 3,000 today doesn't mean to Watermaster and 12 shouldn't mean to the Referee of the Court that just because that's where we are today that we're expecting to 13 14 pass for five years. We're not.

We're expecting to launch this now, to develop an interim iterative process, and report to you what our progress is. So I think it should be understood in that context. We're not saying, See you later and in five years we'll come back to you. That's not what we're saying.

21 THE REFEREE: That helps, because I at least 22 didn't get the sense of it being an iterative process 23 with this particular bus action from the documents. 24 MR. SLATER: I feel certain that no one thinks

25 that this is the last stroke on this, that there is much

1 more art work that's coming.

MR. HENSLEY: I don't feel that certain. I 2 don't share that certainty when you said that you feel no 3 4 one -- I looked at this as being the final plan. THE REFEREE: So I guess the question is, this 5 is an interim plan, it's not a final plan, it's certainly б 7 not a long-term plan --MR. HENSLEY: Final interim. 8 9 THE REFEREE: -- but it's not a final interim plan, and there is a chance to go back -- is that 10 11 correct, Scott? -- and maybe clarify some of these 12 issues. MR. SLATER: There would be no purpose -- well, 13 sorry -- there is a dual purpose for the technical group 14 which is written in, and I think, Gerry, you were citing 15 from. The purpose is we're filing -- we've launched a 16 plan, we've filed it with the Court. We said -- we did 17 exactly what we were supposed to do within the context, 18 19 the contours of Program Element 4. But the purpose of the technical group is to 20 21 provide input to Watermaster so that it is iterative. 22 And if we need to make course corrections and do other 23 things, we will on an interim basis because we also recognize we don't want to commit to a long-term program 24 25 until it's right. So it's not intended to be the final

1 word.

2 MR. HENSLEY: May I? 3 THE REFEREE: What's your question? 4 MR. HENSLEY: Scott made the point about the 3,000 acre-feet might grow with changes or might need to, 5 based upon the circumstances, if the area grows and б 7 expands as far as study. It's not written that way. And 8 Chino Hills' perspective was we were willing to sign up 9 on a year-by-year basis depending on where it was headed, 10 were the studies moving forward, was everybody moving 11 forward in good faith. 12 What I heard Scott describe it is exactly what we wanted to do, but that's not how the plan was drafted. 13 There's a buy-in for three years. You had to designate 14 everything now. We thought that made no sense. And 15 16 so --THE REFEREE: I'll ask you a question, then. 17 Does it make sense as Scott just described it? 18 19 MR. HENSLEY: Certainly makes a lot more sense to me to be an iterative plan where every year, maybe 20 it's more often than every year, maybe it's every three 21 22 months, six months, there are changes depending on the 23 information that's developed. That was one of our big 24 concerns. 25 We also have the concern that we don't want to

be three years in a program where nothing is occurring.
We signed up, and there's no -- candidly, we think
Watermaster needs to have his feet to the fire and keep
moving and doing things. I expect it's the one area
where Chino and Chino Hills agree, that this thing needs
to move along.

7 MR. SLATER: May I respond?

8 THE REFEREE: Would you respond, Mr. Slater. 9 MR. SLATER: The rationale behind the 10 3,000 acre-feet, again, this is a legislative process at 11 Watermaster. And Watermaster through the advisory 12 committee and the board were trying to be responsive to a 13 number of concerns.

And I go back to again picking on Burt Gindler, 14 15 but there were many parties to the process who were concerned about Watermaster committing to purchase water 16 from an outside independent agency, first IEUA and then 17 Metropolitan, making a financial commitment, and then 18 19 securing the supply. And so the thought was, is that we needed a commitment from the parties to then turn around 20 and incur a subsequent financial commitment with IEUA and 21 2.2 Met. That was one piece.

And the second was, I think, actually what some of Joe's questions were with regard to the nominal 1500 or nominal 3,000 acre feet, the thought was here at least

1 as a showing of good faith for this program which may 2 indeed last more than three years and which may have additional bells and whistles, that at least there would 3 be a firm commitment of 3,000 acre-feet for three years. 4 5 So it was seen as being a material commitment, not burdensome, and also to satisfy other parties about б 7 Watermaster getting on the hook, to buy the supplemental 8 water without a commitment from somebody to take it. 9 That's what went into the 3,000. THE REFEREE: So it's an iterative process, but 10 11 you would have to engage in that same process again to 12 come up with more water? MR. SLATER: That's correct. 13 THE REFEREE: I guess the question for Chino 14 Hills would be, isn't it better to have 3,000 than less? 15 MR. HENSLEY: Well, actually our position is 16 that the study area is too small, that it needs to be 17 enlarged. There needs to be more participants. We were 18 19 willing to participate at some level, but we wanted it to be annual. We wanted to keep the Watermaster's feet to 20 the fire. We wanted to make sure it actually made sense. 21 2.2 It could be after a year and we do this and 23 determine there is no need for us to be in some sort of voluntary program. We don't know. We're willing to 24 participate, but we think it's flawed from the 25

perspective of the study area. It's not big enough, there's not enough. We have historical data, and maybe not as much as everyone would like to have, but at least we can look back into that. We have reports that are, I think, much more thorough than the ones we've seen today. And it's flawed initially. Just the study area is not large enough.

8 There should have been -- I think that 9 Mr. Scalmanini asked the question about, Well, what are 10 these other voluntary measures, what are other parties 11 going to do? We asked the same questions, and I find the 12 answers to be unsatisfactory. It's, well, we don't know. 13 Maybe somebody will do something.

14 What was written in the plan is incredibly 15 ambiguous, and I don't see any commitment by any other 16 parties to step forward and do anything so far.

We are willing to participate so long as it's on an annual basis, the plan is making sense, and people are working at it, they are looking at all the options, and they are not just studying one small area. In fact, our data shows that the area they are studying isn't even necessarily the area where most of the subsidence or the greater area of subsidence is.

24 THE REFEREE: So am I hearing this right, you're25 willing to participate in the forbearance program and in

1 the technical group, going in with the view that it's not 2 an adequate description of the study area but that it's an iterative process, and maybe you can convince people 3 4 to change the study over time as it starts getting --5 MR. HENSLEY: So long as we don't have to make more than the annual commitment to the program as far as б reduction. It was Watermaster's original recommendation 7 8 two days before this was adopted that it be an annual 9 program. I don't know why exactly it got changed at the 10 last minute, but it did. 11 THE REFEREE: But now you would do it if it were 12 an annual program? MR. HENSLEY: If we could opt in and out 13 14 annually, we would participate. We've made that clear for the better part of five months. 15 16 THE REFEREE: You'll participate in the technical group? 17 18 MR. HENSLEY: We've always made that clear, regardless of whether we forbear or reduce our pumping in 19 that area, that we're going to participate in the 20 technical group. We've never said that we would not do 21 22 that. 23 We've been participating already. One of the things we're a little concerned about while there's 24 25 discussion of the piezometers and the extensometers and

getting the buy-in of everyone, some of that work's 1 2 already being done and we don't have any of the information respecting that. We'd certainly like to have 3 4 been involved a little bit more before they got to where 5 they are today. THE REFEREE: Will you play catch-up? 6 MR. HENSLEY: We have been playing catch-up 7 8 since February or March, which is a separate issue, 9 although I would like to address it briefly. You know, 10 it was a year and a half that went by before anything was 11 done. 12 THE REFEREE: You know, I'm worried that if you address it briefly, I will have to hear some brief 13 14 addressing by everybody. Joe had a couple questions. MR. HENSLEY: Anyway, we've been playing 15 catch-up a long time. 16 MR. SCALMANINI: When you said a minute ago we 17 think the study area is too small and we have data that 18 19 shows certain things, et cetera, et cetera, is that information that you -- is that basically what you 20 offered earlier today when you said I have reports that 21 22 you've given copies of? 23 MR. HENSLEY: Absolutely. THE REFEREE: Before you do that --24 25 MR. HENSLEY: We have a lot of copies.

THE REFEREE: I think it's great that you're 1 2 going to give copies of that to the Watermaster. I think that's great, but I'd prefer that you didn't do it as 3 part of this workshop because we are trying very hard to 4 not have this be an evidentiary proceeding of any sort. 5 So if you would just transmit it to the Watermaster for б 7 dissemination or you could file a pleading and file it in 8 court if you wanted. Either way.

9 MR. HENSLEY: We may do that. The only thing I 10 would note is, the presentation made today, this is the 11 first time we've seen that. And so there's been sort of 12 an evidentiary presentation already that's never been, to 13 my knowledge, shown to the group.

14 THE REFEREE: But I've tried hard to draw a distinction. I'll try one more time. The presentation 15 that we asked them to do was to describe for us so we can 16 describe to the Court the interim plan. And at least I 17 think my questions and Joe's have been trying to figure 18 19 out for ourselves what it is we read and how that matches or doesn't with what is going on in a more global way 20 with the monitoring program and everything else. 21

Just for the record, I think the more information that can be made available on the substantive issues, the better. I am one who just always thinks it's a good idea to share data and analyses and day-light

1 everything possible.

2 It's one of my concerns -- or the source of one 3 of my concerns about a technical group is the 4 confidential agreement. I understand perfectly why that has to happen, but the more information that can be 5 shared, the faster you can probably reach some kind of an 6 7 understanding together on what to do next. I think it's 8 good that you are considering handing that material over 9 to the whole group to benefit everyone.

10 MR. HENSLEY: You asked a question -- that's 11 fine. I appreciate that. You asked the question earlier 12 about the confidentiality of information and what not. And briefly I would only say that we were very concerned 13 14 with meetings generally attended by lots of attorneys. I'm an attorney. I think these meetings would be much 15 16 better if no attorneys attended them and they were done solely by the technical people. 17

And the reason we want -- we support having the provision about confidentiality is so that people aren't showing up with questions loaded from their attorneys for purposes of litigation. We're more interested in getting a result that makes sense to solve this problem.

23 We have grave concern that that has not been 24 everybody's intentions coming to those meetings. So 25 that's one of the reasons I think it's important that

decision be there. Ultimately people can gather whatever
 data they want and litigate about the things they want.
 At least these meetings should be aimed toward the
 technical people trying to come up with solutions.

5 THE REFEREE: It sounds to me that is consistent 6 with Mr. Slater's comments earlier. Do you have more 7 questions, Joe?

8 MR. SCALMANINI: Yeah. I wanted to come back to 9 the water demand stuff and the timing of delivery. But 10 as a preface to that, is it fair to say that the focus of 11 the interim plan and the ongoing study is basically on 12 the relationship between groundwater production, water 13 levels, and subsidence?

14 MR. WILDERMUTH: In current hypothesis.

15 MR. SCALMANINI: And that is -- in effect you 16 said, Mark, the hypothesis on which it's based, I think 17 you say conclusion, that a voluntary reduction in pumpage 18 can't do any harm and could do some good.

So, John, back to the, when is the water available. It continues to be counter-intuitive to me, then, why would we not want to try to do this on a year-round basis if we can. So if the answer to the question -- in this case 3,000 acre-feet, but whatever amount of volume of water we might ever be talking about -- if it's time-constrained during the year, then

1 there's no point to talking about other things that 2 constrain it.

Scott went through this sort of triage and ended 3 4 up with four factors that you considered in what we can get delivered. One of those was conveyance capacity, and 5 the other was, the way I wrote it, impact of other 6 delivery demand factors, what the purveyor needs to meet. 7 8 So, John, if the answer comes back that it is 9 only available nine months a year, then all the rest of what I want to go into in the next few minutes is kind of 10 11 academic. But if the answer comes back that it is 12 available or could be available in the future, you know, twelve months a year, then I'd like to pursue some of the 13 14 following to get a feeling for whatever the constraints are on being able to meet water demand when you have a, 15 quote, substitute water supply. Which in its simplest 16 form says if I don't pump the well, I'm just taking the 17 water from someplace else, but there must be some factors 18 19 that constrain it if the purveyor says it doesn't work for me. I'd like to get an understanding of that, if 20 21 that's okay.

22 MR. ROSSI: Sure, absolutely. My understanding 23 of the Met program is they have a new rate structure 24 going in, that the program is going to change. Currently 25 they have a program that's nine months' availability.

But the policy allows the general manager of Metropolitan
 Water District to allow for water in other periods of
 time. So it could be twelve months in a given year based
 on what he might do.

5 And then there is ongoing discussions with this 6 program -- we don't know where that will end up -- but 7 there is a possibility, there's been discussions, it 8 could be a 12-month program.

9 So to answer your question, there's a
10 probability -- I don't know exactly what it is -- that in
11 the next three-year interim plan period there could be a
12 twelve-month availability.

13 MR. SCALMANINI: Then in the interest of maybe 14 saving a chunk of time, is it fair to say right now if 15 that were the case, that is, water were available on a 16 year-round basis, that there are other constraints that 17 keep it from being taken as a bona fide substitute supply 18 during peak demand periods?

MR. ROSSI: That is my understanding.
MR. SCALMANINI: Can we spend some time
understanding that. You knew I was interested so if you
have something that you want to just --

23 MR. SLATER: No. I think that Watermaster has 24 received representations from the producers. We have not 25 gone behind the producers' representations to know the

1 intricacies of their system so I think you have to be --2 the affected producers are here today and could respond 3 to any questions, I presume. 4 MR. SCALMANINI: Is it fair to say the affected 5 producers, as far as --MR. SLATER: Chino and Chino Hills. 6 7 MR. SCALMANINI: Chino and Chino Hills. You mentioned Mr. Kinsey. Since I know he doesn't work for 8 9 either one of those entities -- at least the last time I was here, he didn't. 10 11 MR. SLATER: I think he's our expert on the WFA. 12 MR. KINSEY: Conveyance capacity. MR. SCALMANINI: I put it together in the order 13 of looking at water demands first and then thinking about 14 delivery capacity. If you have something that is, I'll 15 call it, organized that you can just tell me about 16 constraints in that regard, you know, without me trying 17 to flush it out with questions, I'd be happy to listen. 18 19 MR. KINSEY: What we did as part of the analysis was that when we identified the Water Facilities 20 21 Authority as a potential supply source, alternate or 22 supplemental supply source, we evaluated the demands that 23 are currently being placed on the Ramona feeder, which is jointly, obviously, Montclair and the city of Chino 24 25 Hills, in terms of deliveries of water versus available

1 capacity.

2 And what we found looking at historical usage is that during the peak demand periods, as you'd expect 3 4 typically June through, I think, September, in that time frame, is that the pipe is basically full given a 5 retarded flow rate, 40 or 50 over five -- (inaudible) -б 7 THE REPORTER: I'm sorry. I can't hear. 8 MR. KINSEY: Keep the velocities down in the 9 pipeline to a reasonable number. So when we analyzed it, it was during this nine-month window that there was 10 11 surplus conveyance capacity available to move the water 12 through that system to the user. MR. SCALMANINI: It's not demand; it's delivery 13 capacity that's the constraint? 14 MR. ROSSI: On that piece. 15 MR. SCALMANINI: On that piece of the hardware. 16 Okay. Just to take it the rest of the way, so you've got 17 whatever, a 5- or 10-foot-per-second constraint on the 18 19 pipeline that says if I try to shove more water through it, I'm going to operate it at too high a velocity. 20 That's undesirable. That limits my ability in the peak 21 22 months bringing water to these, I'll call it, new 23 turnouts. MR. KINSEY: Existing turnouts, yes, correct. 24 25 MR. SCALMANINI: Then global question, either

one first, at Chino and Chino Hills, if that constraint 1 2 weren't in place, is there a constraint in the distribution system of either one of those that says, I 3 4 couldn't take the water during the months of July, August, and September or June through September, whatever 5 the peak demand period is. 6 MR. HENSLEY: We probably wouldn't be in this 7 8 position today, as I understand it, if the pipeline 9 project was completed. 10 MR. KINSEY: The Monte Vista -- (inaudible) --11 MR. HENSLEY: Right. 12 MR. KINSEY: That's correct. In terms of the --MR. HENSLEY: We actually tried to fix this 13 problem, held up by some litigation. We're now moving 14 forward with the south end of that pipeline project. So 15 once that's done, it does give us additional capacity as 16 far as transmission. I'll let either Ron or Mike Maestas 17 address the second part of your question. 18 19 MR. MAESTAS: It's like Mark was saying -- Mike Maestas, City of Chino Hills -- we currently do have some 20 restraints on it. Summertime, as Mark indicated, we can 21 22 currently take around 16 mgd through there. With the new 23 42-inch pipeline, the last section we're putting in, it's been designed to carry 43 inches. So it more than 24

25 doubles the capacity.

1 MR. SCALMANINI: "Through there" means through 2 the connection? MR. MAESTAS: Actually through the pipeline 3 4 itself into Chino. MR. SCALMANINI: To go from 16, what did you 5 say, to 42 mgd? б 7 MR. MAESTAS: It was designed at 43. 8 MR. SCALMANINI: Do you know concisely what 9 average day and max day water demands are? 10 MR. MAESTAS: Through the City of Chino Hills, 11 summertime max day is around 25 mgd, approximately. 12 MR. SCALMANINI: Let me come back to source capacity in just a second. How about Chino? Same kind 13 14 of questions. MR. CROSLEY: Max day demand currently is 15 approximately 55 acre-feet per month -- max month demand. 16 Max day demand is approximately 66 acre-feet. 17 18 MR. SCALMANINI: Max monthly, what did you say 19 again? MR. CROSLEY: 55. 20 MR. SCALMANINI: 55. And what about your 21 22 ability to take water, I guess -- I don't know all the 23 plumbing that well -- so ultimately from the WFA into your system, are there constraints in terms of pipe sizes 24 25 or anything else that would allow you -- keep you from

1 being able to distribute the water if you got it at a 2 high enough capacity? MR. CROSLEY: There are constraints, Joe. We 3 4 feel that during the off peak time of the year, we could take perhaps as much as 2,000 acre-feet. 5 MR. SCALMANINI: Oh, distribute it through the б 7 other nine months. 8 MR. CROSLEY: Yes. 9 MR. SCALMANINI: But it could only take zero in 10 the other three months? 11 MR. CROSLEY: No, that's not what I mean. 12 MR. SCALMANINI: I wasn't trying to put words in your mouth. I'm just --13 14 MR. CROSLEY: During the other three months we could take the 2,000 acre-feet as well. 15 16 MR. SCALMANINI: It's just distributed over twelve months as compared to nine? 17 18 MR. CROSLEY: I'm not sure I understand the 19 question. MR. SCALMANINI: What I thought I heard you say 20 was you could take 2,000 acre-feet over the course of a 21 22 year. A year could be nine months long or a year could 23 be twelve months long. Your system will take it either 24 way. 25 MR. CROSLEY: Yes.

MR. SCALMANINI: That's what I thought you said. 1 2 THE REFEREE: Would you like to take a break? (Recess in proceedings from 2:23 to 2:35 p.m.) 3 4 MR. SLATER: Okay. I think we're ready to get 5 back going again. I think, Joe, you had a question on the floor. 6 7 Or actually had you finished? You had gotten a response? MR. SCALMANINI: I think we got enough of a 8 9 response. Maybe one back to Mark Kinsey. 10 When you talked about no surplus capacity in the 11 summertime --MR. KINSEY: Yes. 12 MR. SCALMANINI: -- can you put a number on what 13 the capacity was in the non-summertime in terms of 14 available capacity? 15 16 MR. KINSEY: I would have to go back and look. What we did is when we saw numbers around 17 or 18 mgd, 17 we said there is no more surplus capacity; we've utilized 18 19 the capacity in the pipeline. So when you got into the June, July time frame, you were getting flow rates up 20 there and they were at that level throughout the 21 2.2 summertime or even a little higher. 23 MR. SCALMANINI: So my question is that, then, as you come out of the peak period -- and what was the 24 25 flow rate you just said?

MR. KINSEY: We looked nominally 18, 19 mgd, 1 2 somewhere in that --MR. SCALMANINI: That is the pipeline capacity? 3 4 MR. KINSEY: Yes. MR. SCALMANINI: So when the demand on the 5 pipeline gets to that number, the pipeline is max'd out. б 7 My question is, How much surplus capacity gets generated 8 in terms of pipeline capacity when you come out of the --9 when you come into the October, November --10 MR. KINSEY: It varies. It varies. 11 MR. SCALMANINI: Is there -- if you looked at 12 it, is there a summary of the results of looking at it, some simple form summarizing that? 13 14 MR. KINSEY: I would say probably get numbers as low as 4 and 5 mgd in the wintertime. 15 16 MR. SCALMANINI: Of surplus capacity? MR. KINSEY: Total flow. 17 18 MR. SCALMANINI: Of demand on the pipeline? 19 MR. KINSEY: Yes. THE REFEREE: I asked for a map that's 20 disappeared, a map that shows the ground water production 21 22 facilities. 23 MR. WILDERMUTH: Anybody else needing a --THE REFEREE: And then I got off track. I 24 25 didn't finish asking my questions. Can you generally

show me on that map which of the wells are the 1 2 Exhibit E wells that would be part of the 3,000 acre-feet forbearance and substitute water supply. 3 4 MR. ROSSI: Here's the laser, Mark. MR. WILDERMUTH: Yes. If you look at the 5 Exhibit E, if you look at the City of Chino, their wells б 7 4 and 6 are right in here. THE REFEREE: 4 and 6? 8 9 MR. WILDERMUTH: There is a well up in here, up in here. 10 11 THE REFEREE: One of those four? 12 MR. WILDERMUTH: Yes. It's the one in the upper left. Okay. Chino Hills, I'm starting out with well 19. 13 Well 19 is right about here. And you have well 17 which 14 is right here. Well 15-B, which is -- you have Chino 15 Hills doing this. Well 14 down here. 16 MR. ROSSI: You had it. It's on the other side. 17 It's over here. 18 MR. WILDERMUTH: 16, it's up here. And then 1-A 19 and 1-B down in this area. 7-A and 7-B are over in this 20 cluster over here. 21 22 THE REFEREE: Before you leave, would you show 23 me where the two Pomona wells on list C are. MR. WILDERMUTH: Sorry. There's one here and 24 25 one here, 26 and 29.

1 THE REFEREE: 26 and 29.

Can I go back to a question for Chino Hills. So 2 you are willing to participate in a forbearance program 3 4 for a year with these wells. And is there some -- is that right? 5 MR. HENSLEY: There are other conditions, but б 7 yes. There are other conditions. 8 THE REFEREE: But you're willing to participate 9 with these wells for one year; is that correct? 10 MR. HENSLEY: Make sure the wells -- are those 11 the right wells, Mike? 12 Also including well 7-A and -B. THE REFEREE: Yeah. I got 7-A and -B on that 13 14 list that Mark has. MR. HENSLEY: Again, subject to other 15 16 conditions. 17 THE REFEREE: That's my question. What are the 18 other conditions? MR. HENSLEY: We wanted Monte Vista to commit to 19 not produce out of the wells. Pomona -- I'm sorry? 20 THE REFEREE: That's a vision. 21 22 MR. SLATER: Mark's having a heart attack. 23 Sorry. MR. KINSEY: My ears perked up. 24 25 THE REFEREE: I was enjoying it.

MR. HENSLEY: It would be our city would make a 1 determination as to which wells and how much out of which 2 wells to be produced. 3 4 THE REFEREE: That's the group we're talking 5 about? MR. HENSLEY: Right. The other issue relates to 6 7 the Rule 15-B motion filed by Chino. We don't see the 8 point of voluntarily reducing our wells while at the same 9 time litigating having them shut down. We're going to 10 participate, we're not also going to be in litigation 11 with Chino over shutting the wells down. 12 THE REFEREE: I'll go back to that question. What about the comment about Pomona's wells? 13 MR. HENSLEY: Correct. We wanted on an annual 14 basis for them to commit for the next year they would not 15 produce out of 26 and 29. 16 THE REFEREE: Is Pomona here? 17 18 MR. PEPPER: Yes. THE REFEREE: So you heard this condition. Is 19 Pomona pumping these wells now? 20 MR. PEPPER: Yes, they are. Either or both at 21 2.2 different times. 23 THE REFEREE: Okay. So you have responded to this request. You have or have you not? 24 25 MR. PEPPER: Verbally at meetings. I don't know

1 specific meetings.

2 MR. CIAMPA: I know of no formal written request that has been made to Pomona. So we have not formally 3 4 responded in writing. We are not agreeable to that. THE REFEREE: Are these wells and locations 5 where you could get a substitute supply from this б 7 program? 8 MR. PEPPER: No. 9 MR. HENSLEY: It was our understanding they weren't pumping out of those wells for the last couple of 10 11 years. 12 THE REFEREE: So there is some question about how much you've produced with those wells in recent 13 14 history currently. Do you have that information? 15 MR. PEPPER: Have that with you? The 16 information on 26 -- both wells. MR. GARIBAY: No, I don't have it. 17 18 MR. PEPPER: We'd have to research and report 19 back. MR. GARIBAY: It should show seven years. I 20 don't have it with me. Last seven or eight years. 21 22 THE REFEREE: So there's another unknown too. 23 MR. SLATER: To help here and provide a little context in foundation for the answer, again, we started 24 25 with the original list. We applied a test to it of

whether we could get supplemental water. And these wells did not -- this portion of the Pomona service area did not qualify to be able to get supplemental water. So that was one consideration why we didn't transmit an offer to them.

6 In terms of their production history, I believe 7 we all settled on a seven-year band to look at historical 8 production and compare the forbearance against that. And 9 I believe for these wells, Pomona had not pumped recently 10 but that it had expressed a desire to move them into its 11 rotation. Is that roughly accurate, Henry?

12 MR. PEPPER: Yes. Is that true, Raul?

13 MR. GARIBAY: Yes.

14 MR. PEPPER: Yes.

MR. SLATER: So they had to pump recently, but they were planning to move the wells through their normal production cycle.

18 THE REFEREE: So unless the criteria that led to 19 the interim plan were changed, then those wells can't be 20 in that program.

21 MR. SLATER: We have no present ability to ship22 them substitute supply at those locations.

23 MR. HENSLEY: I'm not certain it's been really 24 adequately looked at, the ability for them to cut back in 25 that area and other arrangements to be made. I think

1 that that should be discussed further. There were 2 different settlement discussions, and I don't want to get 3 into those. I think we need to respect those 4 discussions. But I think it's an area that bears more 5 discussion.

6 THE REFEREE: Seems that this could be discussed 7 in a technical group. And if this weren't able to be 8 accomplished in the first year with Chino Hills 9 participating for this year and try to figure it out for 10 next.

11 MR. HENSLEY: Potentially. That was another 12 issue that we had raised. Right now CIM doesn't have apparently, any other alternative. But perhaps in a year 13 there may be other alternatives. That was one of the 14 reasons again we wanted an annual iterative process. Are 15 other parties doing their share of trying to participate 16 in this program? Are we doing enough to motivate the 17 other parties to participate? And so right now Pomona 18 19 seemed like at least a potential. Next year it could -might not be this year; maybe it's next year. We should 20 be looking at CIM also. 21

THE REFEREE: I guess the question is, would you consider participating for this year if one of the iterations to be included in the interim plan work is to consider those additional pumping facilities?

MR. HENSLEY: I think that, again, it's 1 2 something that we have to discuss. I would expect as long as there's progress being made including other 3 4 producers in the future looking at whether that makes sense or not, but, yes, again if it's for a one-year 5 period. б 7 THE REFEREE: Okay. Those were my questions 8 about Exhibit C and E. Joe, do you have more questions 9 in general, because I'd like to move on so Chino and 10 Chino Hills can ask their questions and say what you want 11 that's brief about the implementation or the interim 12 plan. MR. SCALMANINI: One quick one. Dave, do you 13 14 know how much water you use in a year? 15 MR. CROSLEY: Yes. Just a moment. 16 MR. SCALMANINI: Chino Hills know the same thing? Annual water demand as compared to max daily. 17 18 MR. MAESTAS: City of Chino Hills is just slightly over 17,000 acre-feet a year. 19 MR. SCALMANINI: That's a year? 20 MR. CROSLEY: City of Chino's annual demand is 21 22 approximately 15,600 acre-feet per year. 23 MR. SCALMANINI: Thank you. THE REFEREE: So Chino and Chino Hills. Was 24 25 there anyone else who wanted to ask a question?

MR. MAESTAS: Joe. I gave you a wrong number.
 That was from my projected number for this next year.
 Actually it's about sixteen-four.

THE REFEREE: Was there anyone other than those
two thumper parties who would like to ask any questions?
Well, who wants to start?

7 MR. GLOVER: We had a power point presentation 8 all ready for you. And when you initially talked about 9 we're going to make sure we stayed focused, we don't go 10 through any concepts or causation or anything, my 11 presentation got down to two slides so that will serve in 12 getting us out of here much faster.

We prepared a document that went through many of the exact slides that were brought forth in the power point by Wildermuth Engineering. In fact, some of them are exact copies of curves and maps so we'll go ahead and skip to the points we want to make.

18 The two slides we want to show -- we're not even 19 going to bother setting up the power point on it, are 20 just -- I don't know if you've seen it before, but what a 21 fissure is. I know we have blue lines on the maps, but 22 this one ran directly through a single family dwelling on 23 12th Street and made it uninhabitable.

24 So what we're dealing with is real openings in 25 the earth, and it is a serious matter in the City of

Chino. We've been monitoring this all along. We were
 the ones who worked with JPL doing the first InSAR data.
 We've done all the survey work. We've paid a lot of
 money to research this and we were participating in the
 plan all along.

6 We support the interim plan. It's not what we 7 wanted. We wanted it to go much further, but we 8 understood the constraints. We were compromising 9 constantly for the many months that this process was 10 going on.

11 The last slide we had was what we feel should 12 occur to mitigate subsidence. And when we get to the 13 plan, that's a decrease to our original position. It was 14 done through many months of compromise.

15 We just want to say we do support the plan 16 because it gets us started. We feel our system can 17 participate and can deliver the water. We could be held 18 whole by the water that's been made available. We think 19 as many details as could be worked out for this plan have 20 been.

And we just wanted to state that we did hire Dr. Yoshi Moriwaki to do a lot of work for us in the soil mechanics of subsidence. He's produced reports that we made available all along to Wildermuth Engineering, and in discussions with Andy, those have been helpful.

1 So we're just here to answer any questions that 2 you may have, and Joe's already asked some questions 3 today about our system. And that's basically it in a 4 nutshell. We do have a copy of this presentation, but if 5 you thumb through it, you'll see just about everything 6 that was said in the original presentation is contained 7 in that.

8 Our city council has supported this plan. The 9 Watermaster, as you know, unanimously supported the plan. 10 And if we're getting into a process where we're going to 11 change that document, we'd definitely need to go take 12 that back to our city council and back to Watermaster. That was it. Basically those are our points we 13 wanted to bring out. And I think Jim Erickson has a 14 couple of additional points. 15

MR. ERICKSON: I'll try to be brief as well. I appreciate the opportunity to stand up. Sitting down is always tiresome.

However, I wanted to point out and try to
simplify what I think is some of the issues that were
addressed in the engineering goodspeak that I don't
really understand. Let me tell you what they are.
Watermaster has been and will be conducting
studies of subsidence. They've been doing it for years
and will continue to do it for years in the future. It

has little, if anything, to do with the interim plan
 that's being proposed. This is stuff that's been going
 on and has been planned for a long time.

4 The only -- in my view as a lawyer and a simplified engineer, the only thing of value in the 5 interim plan is the production reduction. To the best of б 7 our knowledge, based on all the credible evidence that we 8 have studied, there is one cause for the subsidence in 9 the City of Chino, and that is production from the deep aquifer wells of the City of Chino Hills. If that is not 10 11 the cause, it certainly is the one of the significant 12 possibilities.

And as a result, the interim plan was intended to primarily mitigate or abate, if possible, subsidence during the studies that had been going on and will be going on. That abatement or that mitigation is attributable only to one thing, and that is the reduction of production. If it doesn't occur, there isn't going to be that mitigation or abatement.

The mitigation or abatement has another purpose that hasn't been discussed, at least in my understanding so far. That is, it gives you a database to determine whether or not that particular production is the cause of subsidence. If you don't reduce the production, you don't find out. And I think we're falling short. That's

1 my point.

2 THE REFEREE: Thanks. MR. HENSLEY: Briefly I think I addressed a 3 4 number of your issues we wanted to address. I do want to respond briefly to Chino's points. 5 First, while they say they support the plan, I б 7 note that at every meeting the board member makes a 8 motion to make the voluntary program involuntary. And I 9 understand that another special meeting is being called for that purpose in the near future. So I don't think 10 11 they do support the plan. 12 Second, with respect to the cause of subsidence, which I thought we weren't going to get into --13 14 THE REFEREE: No, we're not. MR. HENSLEY: Chino has pumped 400 percent more 15 water out of the deep aquifer than the City of Chino 16 Hills in the last 20 years. 17 THE REFEREE: We're not going to go into 18 19 evidentiary areas. MR. HENSLEY: I know, but I had to sit and 20 listen to what the cause was. 21 2.2 THE REFEREE: But if you have comments about the 23 interim plan, that would be helpful. MR. HENSLEY: The interim plan, there are three 24 points. I think specifically Paragraph G in recitals and 25

1 paragraph 3-C are inconsistent with one another when it 2 deals with cost. One seems to reserve the rights of the parties to -- and I've broached the subject with Scott in 3 4 the past. 5 THE REFEREE: Recital G? MR. HENSLEY: Recital G, when you compare it 6 with paragraph 3-C. 7 8 THE REFEREE: All right. 9 MR. HENSLEY: The recital seems to reserve the right of the different members to challenge the cost 10 11 allegations. And then 3-C seems to have an agreement on 12 the cost allocation as it refers to taking the alternative water supply. I would like to see that 13 14 clarified, that there is no right to challenge. If we were to buy into the program and forbear the water, 15 16 someone can't then come in later and sue us and say no, we didn't agree with the cost of that. So I think that's 17 18 an area that needs to be clarified. 19 THE REFEREE: Do you want --MR. SLATER: Yeah. I'll clarify it on the 20 record now. It is not -- they are not inconsistent. 21 22 C is a recital, and it relates to -- actually which 23 recital was it, Mark? MR. WILDERMUTH: G. 24 25 MR. SLATER: That recital was added as a

1 telegraph that this plan and the commitments made in this 2 plan are only what they are with regard to cost. And 3 that anything new or different coming down the road is 4 subject to being contested by any producer on the basis that it violates the judgment, it's unfair, or is 5 otherwise inequitable. And that is designed to be a б 7 placeholder and a protective mechanism to allow fair 8 bargaining on future cost allocations.

9 With regard to the substantive element, which 10 is -- I believe it's 3-C, there's an expressed reference 11 to an exhibit which provides for the cost allocation, and 12 it is an express agreement on how that allocation is to 13 occur. So there is no redoing that, but new deals are 14 subject to new deals.

MR. HENSLEY: I'm glad to hear what your intent is and I agree with that intent. I just know the parties don't always agree at the end of the day on what the language says so that's a concern that I have.

19 THE REFEREE: Do you have a recommendation on 20 how to clarify the language? Would it be --

21 MR. HENSLEY: I would say with the exception -22 I've given language to Scott in the past.

23 THE REFEREE: For the record, is there language
24 that would go into Exhibit F, then?

25 MR. HENSLEY: No. I think it would go into the

recital to clarify that there could be no challenge to 1 2 cost allocation set forth in paragraph 3-C in the attendant exhibits. 3 4 THE REFEREE: And that would satisfy --MR. SLATER: Except for. In other words, except 5 for as provided in 3-C in Exhibit F. б 7 THE REFEREE: That would satisfy that? 8 MR. HENSLEY: Correct. 9 The next issue we've already addressed as far as the three-year election as far as it being annual, the 10 11 reasons for that. 12 And then finally paragraph 6 is, to me, hopelessly ambiguous as far as there ought to be more 13 14 teeth as far as what the Watermaster is going to try to attempt the other parties to do in the future with 15 16 respect to the plan. We made the point about the parties, there ought to be commitments by the Watermaster 17 to look at potentially widening the area of study, trying 18 19 to study other ways of producing, either monitor the subsidence levels at their wells and/or reduce the 20 production from those wells. It ought to be broader than 21 2.2 it is. 23 THE REFEREE: Well, those sound like issues that you have taken in through the technical group to the 24 25 process.

MR. HENSLEY: Well, potentially, but this is the 1 2 plan. This is the agreement that we're moving forward with, and I would like to see it be more specific about 3 what was going to be done. 4 THE REFEREE: So you're asking for more 5 definition in this other voluntary measure paragraph? 6 7 MR. HENSLEY: Yes. 8 THE REFEREE: Do you have language there? 9 MR. HENSLEY: I have presented it to Scott in the past. I did not bring it with me today, and I'll be 10 11 happy to send him more language. 12 THE REFEREE: Okay. MR. HENSLEY: Finally, I want to say that we do 13 support the technical aspect committee of the plan, the 14 plan to participate. We hope that the parties are all 15 going to participate in good faith. We will. We hope it 16 ends up resolving the problems some day in the future, 17 but we have been participating. 18 MR. SLATER: I have -- if I can -- I have 19 nothing to offer with regard to the other measures. I 20 think that the intention here is to -- the point to the 21 22 technical group and Watermaster staff can continue to 23 reply to the extent the measures come up, great. With regard to the monitoring program and the 24 breadth of the program, I call the Referee's attention to 25

1 paragraph 2 which says that the monitoring program will 2 be for all of Management Zone 1 and that we're putting in 3 the extensometers and the piezometers, and that the initial wells identified within the study zone are 4 carried out in B. But there's no limitation on the 5 technical group and what they decide to do. The study б 7 can go where the technical group and Watermaster staff 8 wants it to go. 9 MR. ERICKSON: May I respond. 30 seconds of comments. 10 11 THE REFEREE: Is it a response related to the 12 interim plan? MR. ERICKSON: It's a response related to the 13 interim plan. The representation was made by the City of 14 Chino's representative on the board of directors of 15 Watermaster has opposed the interim plan and suggested 16 that a substitution of a different one. The contrary is 17 true. The representative on the board along with all 18 other members of the board of directors of the 19 Watermaster approved this plan. 80 percent or more, 20 which is the mandatory vote of the advisory committee on 21 22 which these parties also sit, approved the plan. Chino 23 has endorsed the plan. Chino has also opted to reduce its production, 24 an option afforded to it under the plan as approved by 25

the board up until August the 1st. That date's gone by. 1 We decided to participate. We elected to participate. 2 Chino Hills did not. Chino Hills to the contrary said we 3 4 will participate in the endorsement plan if, and if it's only for one year, if we get to choose which wells we 5 reduce our production from, if we determine how much б 7 reduction we want, and if Chino dismisses its motion 8 under paragraph 15 of the judgment, and if Pomona reduces 9 its production as well. I don't think that's an 10 ungualified and enthusiastic endorsement. 11 THE REFEREE: I think we've tried to ask some 12 questions to figure out how we can narrow down the areas. MR. ERICKSON: We spent 17 weeks on weekly 13 14 meetings trying to do that very same thing without 15 success. 16 THE REFEREE: Thank you. MR. SCALMANINI: Do Pomona, Monte Vista, Chino, 17 Chino Hills, and Chino Institute have what could be, as 18 19 they are generally called, a water system master plan 20 type document? MR. HENSLEY: Chino Hills does. 21 2.2 MR. PEPPER: Pomona does. 23 MR. KINSEY: Monte Vista does. MR. SCALMANINI: Like to get those. 24 25 MR. CROSLEY: Chino has a draft.

1 MR. SLATER: Want me to collect those for you? 2 MR. SCALMANINI: Can you get those? MR. SLATER: We'll collect what they have. 3 4 THE REFEREE: Well, I'd like to close this workshop now. I appreciate everyone coming here and 5 sitting all day long. As I mentioned before, we have a б 7 very short time before we have to provide the report, and 8 it will be served on everyone, my report and comments on 9 the interim plan. That's the 18th, I think, of 10 September.

11 And then again there's a more elaborate process 12 now as we go to this next court hearing. I'm sorry Mr. Kidman is not here. As he pointed out, that where 13 14 referees actually hold hearing-like events, which this workshop is, that there are rules now that apply so that 15 16 everyone has ample time to read our report and comments on them and then respond, to comment on the comments. So 17 I hope that everybody is mindful of that schedule that's 18 19 in the last court order. So thank you very much. I appreciate. I've heard quite a bit. You've probably 20 heard a lot of this many times but I have not. I 21 22 appreciate it. Thanks. 23 (The proceedings concluded at 3:10 p.m.)

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REPORTER'S CERTIFICATE I, Winifred S. Krall, a certified shorthand reporter licensed by the State of California, hereby certify: That the foregoing oral proceedings, taken down by me in stenotype, were thereafter reduced to typewriting by computer-aided transcription under my direction; That this typewritten transcript is a true record of the foregoing oral proceedings. I further certify that I am not in any way interested in the outcome of this action and that I am not related to any of the parties thereto. Witness my hand the 10th day of September, 2002. WINIFRED S. KRALL, C.S.R. #5123