

1

PUBLIC MEETING  
SANTA BARBARA COUNTY  
CENTRAL COAST REGIONAL WATER QUALITY CONTROL BOARD

Amendment of Waste Discharge )  
Requirements, the National )  
Pollutant Discharge Elimination )  
System Permit No. CA0048143 )  
for the City of Santa Barbara, )  
El Estero Wastewater Treatment )  
Facility Order No. R3-2010-0011 )  
\_\_\_\_\_ )

TRANSCRIPT OF PROCEEDINGS  
Santa Barbara, California  
Thursday, January 29, 2015

Reported by:  
ADRIANA PATRON,  
CSR No. 13834

Job No.:  
3947WQSLO

3

1 APPEARANCES:  
2  
3 WATER QUALITY CONTROL BOARD:  
4  
5 Jean-Pierre Wolff, Board Chair  
6 Monica Hunter, Vice Chair  
7 Kathleen Thomasberg, Board Member  
8 Jeffrey S. Young, Board Member  
9 Karina Cervantez, Board Member  
10 Michael Johnston, Board Member  
11 Bruce Delgado, Board Member  
12 Ken Harris, Executive Officer  
13 Michael Thomas, Assistant Executive Officer  
14 Tammie Olson, Clerk to the Board  
15 Tamarin Austin, Board Counsel  
16 Lori Okun, Board Counsel  
17 Steven Moore, State Board Liaison  
18 Peter von Langen, Board Staff  
19 Megan Powers  
20 Shawn Hagerty, Counsel for the City  
21 Rebecca Bjork  
22 Joe Monaco  
23 Helene Schneider, Mayor of Santa Barbara  
24 Phil Wyels, Assistant Chief Counsel for State Water Board  
25 Victoria Whitney, Deputy Director of Water Board

2

1 SANTA BARBARA COUNTY  
2 CENTRAL COAST REGIONAL WATER QUALITY CONTROL BOARD  
3  
4  
5 Amendment of Waste Discharge )  
6 Requirements, the National )  
7 Pollutant Discharge Elimination )  
8 System Permit No. CA0048143 )  
9 for the City of Santa Barbara, )  
10 El Estero Wastewater Treatment )  
11 Facility Order No. R3-2010-0011 )  
12 \_\_\_\_\_ )  
13  
14 TRANSCRIPT OF PROCEEDINGS, taken at  
15 105 East Anapamu Street, Fourth Floor,  
16 Santa Barbara, California, commencing at  
17 11:09 a.m. on Thursday, January 29, 2015,  
18 reported by ADRIANA PATRON, CSR No. 13834,  
19 a Certified Shorthand Reporter in and for  
20 the State of California.  
21  
22  
23  
24  
25

4

I N D E X

PUBLIC COMMENTS:	PAGE
1	
2	
3	
4	Kira Redmond 120
5	Ray Stokes 132
6	Joshua Haggmark 134
7	Leslie Wiscom 135
8	Susan Jordan 137
9	Joe Geever 139
10	Conner Everts 140
11	Sheila Lodge 142
12	Russel Ruiz 144
13	Michael Cohen 145
14	Tom Mosby 147
15	Kate Rees 149
16	Mike Jordan 152
17	
18	
19	
20	
21	
22	
23	
24	
25	

5

1 Santa Barbara, California, Thursday, January 29, 2015  
2 11:09 a.m.  
3  
4  
5 MR. WOLFF: Since we are now starting Item 9 I will  
6 close the speaker cards at this time. So if you have a  
7 speaker card, please provide it right now for this Item 9,  
8 because after the commencement of Item 9, I will not accept  
9 additional speaker cards for this particular topic.  
10 Mr. Harris, will you please introduce the item?  
11 MR. HARRIS: Before I introduce the item, a couple  
12 things: I want to mention that the State Board Division of  
13 Drinking Water is with us today. So in the event you have  
14 any questions regarding the drinking water aspect of this,  
15 he's here to answer your questions. Also, after I do the  
16 introduction, Ms. Austin has some procedural issues she  
17 needs to go over.  
18 So Item 9 is an Amendment of Waste Discharge  
19 Requirements, the National Pollutant Discharge Elimination  
20 System Permit Number CA0048143 for the City of Santa  
21 Barbara, El Estero Wastewater Treatment Facility Order  
22 Number R3-2010-0011.  
23 Dr. Peter von Langen is the staff person who will  
24 give a brief overview to the amendment to the NPDES permit  
25 for the City of Santa Barbara Wastewater Treatment Plan and

6

1 Charles Meyer Desalination Facility. This amendment is to  
2 facilitate the city in its efforts to start up a  
3 desalination facility in the drought emergency in compliance  
4 with the drafts of the State Water Board's Desalination  
5 Policy Amendment to the California Ocean Plan.  
6 At this time I'll turn it over to Ms. Austin.  
7 MS. AUSTIN: Thank you. I just want to draw the Board's  
8 attention to a handout that was placed in front of you  
9 during the break. This is a copy of the Notice of Public  
10 Hearing in the City of Santa Barbara water rights.  
11 You all received this last week; is that correct,  
12 Mr. Young?  
13 MR. YOUNG: Can you repeat that? Mr. Robertson was  
14 asking me something and it's hard for me to do two things at  
15 once.  
16 Did you want me to discuss this flyer?  
17 MS. AUSTIN: I just wanted you to confirm your receipt  
18 of this last week; is that correct?  
19 MR. YOUNG: I'm a resident of the City of Santa Barbara.  
20 I drink the city's water. I may be drinking the city's  
21 desal water and whatever comes with that.  
22 I've received in the mail a notice of public  
23 hearing involving potential water rate increases. This is  
24 the notice of the public hearing, and in the back -- this is  
25 a two-page front and side flyer. And there was on the back

7

1 part of this a City of Santa Barbara drought frequently  
2 asked questions. In here there are some comments --  
3 questions and comments made of the desal plant.  
4 I thought because it touches on the desal plant, I  
5 brought it to Council's attention and let them make a  
6 decision as to whether it should be part of the record.  
7 They said, "Yes, definitely." That's where this came from.  
8 MS. AUSTIN: Just to confirm, you received that last  
9 week?  
10 MR. YOUNG: It may be before last week. I may have  
11 gotten it a couple weeks ago and it sat on my kitchen table  
12 and I just stared at it after I read it and thought of what  
13 to do with it, thinking it might be something I might want  
14 to read as I was actually reading the staff terms. It's  
15 been a couple of weeks.  
16 MS. AUSTIN: So for our records, we are making this part  
17 of the record consistent with Government Code Section  
18 1143050. Ms. Olson has additional copies of this document  
19 if there are folks in the audience who would like to review  
20 this.  
21 Also for our record today -- this is with respect  
22 to our supplement that we provided -- there was an e-mail  
23 from Joe Monaco. It's dated December 17th to Megan Powers  
24 and it concerns the permitted capacity of the plant. And  
25 just to clarify for our record that this is part of the

8

1 record.  
2 Those are my procedural notes and feel free to --  
3 MR. WOLFF: Also for the record, is counsel, Lori Okun,  
4 still on the phone?  
5 MS. AUSTIN: Yes.  
6 MR. YOUNG: Mr. Chair, would this be the time where any  
7 contacts would be disclosed?  
8 MR. WOLFF: Yes.  
9 MR. YOUNG: Just to be safe, I have not spoken to  
10 anybody about this flyer, but I did want to say a number of  
11 months ago, I did have a discussion with Rebecca Bjork. It  
12 had very little to do with desal and mostly had to do with  
13 seeing what the City could do in terms of increasing its use  
14 of recycled wastewater. I think at the time the desal issue  
15 may not have been agendized. We really didn't get into it  
16 at all.  
17 Separate from that contact, maybe about a week ago,  
18 I gave Mike Jordan a call mainly to wish him a belated happy  
19 New Year and tell him I was going to miss him being on the  
20 Water Board. And he had mentioned something about he would  
21 be appearing today and speaking on behalf of the City. We  
22 had a very brief chat about CEQA and what this process  
23 looked like.  
24 It was a very general discussion. I didn't learn  
25 anything from Mr. Jordan that would persuade me one way or

1 the other about this. But it was very little exchanged  
2 about this in particular, and it was really a call I made  
3 just to say hello. I just wanted that to come out.

4 MR. WOLFF: Any other comment before we proceed,  
5 Mr. Harris?

6 MR. HARRIS: I have nothing further, Mr. Chair.

7 MR. WOLFF: So ready for the staff presentation.

8 DR. VON LANGEN: Chair Wolff, I'm Peter von Langen,  
9 Water Board Staff, and I'll be giving this presentation on  
10 Item 9 regarding Charles Meyer Desalination Facility and El  
11 Estero Waste Water Treatment Plan. Along with me is  
12 California Sea Grant Fellow working with the State Water  
13 Board, Dr. Megan Powers.

14 The big question is why we are here today? It's to  
15 propose an amendment to the NPDES permit to the Charles  
16 Meyer Desalination Facility. The NPDES permit lacks a  
17 necessary findings -- for California Water Code Section  
18 13142.57(b).

19 This amendment finds and clarifies that the  
20 facility is considered existing. A brief overview and  
21 timeline for the NPDES facility is the following, and the  
22 City can address this in their presentation following. This  
23 desalination facility was first permitted and constructed in  
24 the early 1990s. The facility was put into a long-term  
25 storage once the rains occurred in 1992 or so. The storage

1 was put after that, in 1996, as part of the City's long-term  
2 water supply plan.

3 There's been several renewals since the permit of  
4 the desalination facility was first done in 1991. There's  
5 been about four renewals and the latest was 2010 for the  
6 renewal of the El Estero Wastewater Plant that included the  
7 desalination facility. The City, again, wants to reactivate  
8 this desalination facility due to the drought that we're now  
9 incurring in California.

10 A brief schematic about the desalination facility  
11 and wastewater treatment plant locations on the coast east  
12 of Stearns Wharf and Santa Barbara Harbor: The desalination  
13 facility is just across the street from El Estero Wastewater  
14 Treatment Plant and these facilities share a discharge  
15 approximately 1.65 miles offshore in the Pacific Ocean, in  
16 the Santa Barbara Channel, where it discharges in about 70  
17 feet of water through the multi-diffuser, with 60 diffuser  
18 ports.

19 The intake for the desalination facility is  
20 approximately half a mile up-shore in about 30 feet of  
21 water. This intake pipe used to be the former discharge  
22 pipe of the wastewater treatment plant.

23 We're dealing today with the intake of the facility  
24 because there are impacts to the marine environment from  
25 intakes of seawater, industrial uses of seawater. One of

1 the main impacts is called impingement, whereby fish are  
2 trapped against screens if the velocity of the intake is  
3 great and so the fish can't swim away and get trapped and  
4 die.

5 Another impact is entrainment, whereby smaller  
6 larvae can fit through the slot size of the screen, get  
7 entrained and pass through the industrial process and killed  
8 in that process. Other impacts in the marine environment  
9 occurring from ocean intakes are the construction-related  
10 impacts from building pipes or building subsea floor intake  
11 systems.

12 You can disturb sandy floor habitat, which is less  
13 biodiverse with less organisms than, let's say, a rocky  
14 beach habitat where kelp can thrive with all the  
15 biodiversity associated with kelp forests. So the impacts  
16 can disrupt the breeding grounds, vegetation during this  
17 construction.

18 The specific Water Code Section, 13142.5(b), that  
19 we're addressing today that the permit amend is that for  
20 each new or expanded facility, several measures need to be  
21 looked at to minimize mortality and intake of marine life.  
22 The best combination of these measures, meaning the site,  
23 design, technology and mitigation, have to be looked at as a  
24 whole to look at the best overall intake for a facility  
25 using industrial seawater.

1 This amendment provides a finding based on the  
2 information that was available back when the desalination  
3 facility was first constructed in the early 1990s. There  
4 were four types of measures, again, site, design,  
5 technology, and mitigation, that was used in this draft  
6 amendment. First the site was chosen adjacent to the El  
7 Estero Wastewater Facility because it was decided that it  
8 was the best in minimizing the mortality of marine life  
9 because it leaves the existing infrastructure of the outfall  
10 and intake parts. This limited environmental impacts of  
11 constructing new pipes elsewhere.

12 These intake and outfall parts are located in sandy  
13 marine habitat, which is less biodiverse and less sensitive  
14 compared to rocky beach structures where some of the other  
15 sites were looked at by the City. They also chose the site  
16 because the existing water distribution system was near El  
17 Estero so it made it easier to distribute water after  
18 desalination throughout the area.

19 The reason the designs that were looked at for the  
20 facility were that the location of El Estero Wastewater  
21 Treatment Plant, again, allowed the use of the existing  
22 intake and outfall structures. It allowed brine, which is  
23 denser than seawater to be mixed with fresh water from the  
24 wastewater plant and more easily dispersed and diluted in  
25 the ocean outfall. The outfall was also constructed with a

13

1 60-port diffuser system to increase the dispersion of the  
2 brine.  
3 And finally, the intake structure was designed in a  
4 way to have a very slow intake of .1 feet per second, which  
5 would virtually eliminate impingement from the ocean  
6 environment.  
7 The technology was chosen in the early 1990s based  
8 on the feasibility and hydrologic studies of subsurface  
9 intakes offshore. They found out there wasn't enough water  
10 from the multi-beach wells to get enough water for the needs  
11 of the city and, at that point, the needs of Goleta and  
12 Montecito -- the technology used of the outfall is another  
13 aspect looked at to consider this best technology at the  
14 time. Again, the low velocity screen intake system was the  
15 best technology to minimize mortality of the marine layer.  
16 There was no mitigation proposed in the early  
17 1900s. The impingement effects were considered  
18 insignificant within the screen intakes, and the unavoidable  
19 entrainment impacts were also considered insignificant due  
20 to the relatively high productivity of the area and there  
21 would be no impact discernable on plankton populations.  
22 The City is volunteering to do the following  
23 environmental projects with the amendment today: They're  
24 proposing to construct wedge wire screens on the intake,  
25 which will eliminate impingement and have some reduction to

14

1 entrainment. This is considered a newer technology than the  
2 existing screens that are on there now.  
3 The City is also volunteering to spend \$500,000 for  
4 the Devereux Slough Project about ten miles west of the  
5 facility on the west part of the UCSB campus. It's an  
6 important local habitat for intertidal species and there's  
7 an estuarine nexus with flowing into the ocean during winter  
8 months.  
9 They are also proposing to do a study by 2017 to  
10 assess the feasibility of subsurface intakes and potable  
11 reuse, and they're going to present this at our future  
12 Regional Board meeting.  
13 So in conclusion, there should have been 13142.5(b)  
14 finding, but there wasn't one. The facility would be  
15 considered existing per this finding and the amendment is to  
16 find that this finding would have been done back in 1990 and  
17 1991 when the facility was first built and permitted.  
18 And finally, the City volunteers beneficial  
19 environmental projects with this amendment. So the  
20 recommendation is to adopt the NPDES order today and the  
21 amendment and the supplement sheets.  
22 MR. WOLFF: Thank you for this presentation. And  
23 because this topic is very technical, what we will do is  
24 have the Board ask questions after the presentation. So in  
25 this instance, we have the presentation from staff and we

15

1 will have the presentation from the City and then public  
2 comments, because I think it will allow us to be more  
3 specific when things are fresh in our mind.  
4 So at this time, looking at my left here, do we  
5 have questions? Mr. Delgado?  
6 MR. DELGADO: Thank you.  
7 How much money, approximately, will the City invest  
8 to reopen this facility?  
9 DR. VON LANGEN: I believe it's somewhere around  
10 20 million, but the City would be better to answer that  
11 question.  
12 MR. DELGADO: That's fine. What's the point of  
13 assessing subsurface intake alternatives by 2017, let's say,  
14 if there's already been significant financing, 20 million or  
15 whatever it is, put into reopening the facility before that  
16 happened -- before 2017?  
17 DR. VON LANGEN: That's another question -- the City  
18 should answer that question.  
19 MR. DELGADO: I'll wait on that one.  
20 So the only thing I have left to ask is: It said  
21 in one of your slides and in our staff report that as of  
22 1990, it wasn't expected there would be an impact -- a  
23 significant impact to plankton communities or other marine  
24 life from entrainment.  
25 Has it been confirmed that that is still true some

16

1 20 years later?  
2 DR. VON LANGEN: As staff, I would assess that the  
3 entrainment levels are relatively small when you look at the  
4 volumetric approach, when you compare something like this  
5 to, say, a large power plant like Diablo Canyon that takes  
6 2.4 billion gallons a day. All the scientific studies from  
7 over the decades still cannot discern an environmental  
8 impact from these types of studies.  
9 So it would be very difficult to find any impact  
10 from a small desal facility based on the entrainment study.  
11 There's been one done up in Santa Cruz for a pilot project  
12 that was for the Santa Cruz proposed desalination project.  
13 This was done by Tenera with the oversight of the technical  
14 work group and the findings of that year-long study showed  
15 minimal to non-detectable -- or not detectable on the  
16 environmental side, but you can see minimal effects or de  
17 minimus effects from entrainment.  
18 MR. DELGADO: I understand that impingement is not  
19 significant because of the low velocity intake, but then  
20 later you mentioned there would be wire screens put up to  
21 reduce impingement.  
22 Why is it necessary if there's not a lot to begin  
23 with?  
24 DR. VON LANGEN: These wire screens are looked at as the  
25 best available technology for power plant intakes from the

1 316(b) rules of the Clean Water Act. It is proposed in the  
2 State Board Desalination Policy to require wedge wire  
3 screens if ocean subsurface intakes is not feasible.

4 MR. DELGADO: That's a new requirement that is not  
5 required here, but the proposal is to do it anyway?

6 DR. VON LANGEN: The City is volunteering to do it.

7 MR. DELGADO: Thank you.

8 MR. WOLFF: Mr. Johnston?

9 MR. JOHNSTON: Thank you, Mr. Chair. I have a few  
10 questions.

11 I've heard several different numbers tossed around  
12 as far as the acre-feet-per-year capacity of the plant. I  
13 heard a 10,000 acre-foot as the original studies were done  
14 up. The 7,500, which I think is what it's permitted for --  
15 I'm reading the City's flyer. It says they're planning on  
16 opening at 3,125, I think, and potentially expanding it  
17 later to 7,500.

18 Can you explain how those numbers fit together?

19 DR. VON LANGEN: Originally, the facility was permitted  
20 for 10,000 acre-foot in early 1990s. I think Megan Powers  
21 would be able to explain this better or the City's  
22 consultants will get into the details of that. The City  
23 would be a better source.

24 MR. JOHNSTON: I see in their statement it's permitted  
25 for 7,500. Your understanding is it's permitted for 10,000?

1 DR. VON LANGEN: There was different permits over the  
2 years, but I believe originally the permit was 7,500  
3 acre-feet and that was expanded to 10,000 in the early  
4 1990s. But I think the City should answer that question.

5 MR. JOHNSTON: Okay. But from our perspective, is it  
6 currently permitted for 10,000?

7 DR. VON LANGEN: Yeah. Our discharge of the brine is up  
8 to 12 and a half MGD. If you do the math to calculate to  
9 acre-feet, it turns out to be the 10,000 acre-feet a year.

10 MR. JOHNSTON: So our permitting was based on the amount  
11 of discharge rather than on the amount of water produced,  
12 clean water produced?

13 DR. VON LANGEN: Yes. Our NPDES permits have the  
14 discharge volume in there, and we have 12 and a half MGD  
15 of brine. If you double that, more or less, to get the total  
16 volume that's taken in by the intake, half of that being  
17 reverse osmosis water and half discharge, that calculates to  
18 about 10,000 acres per year.

19 MR. JOHNSTON: Is that based on the -- I know that the  
20 RO systems are becoming dramatically more efficient.

21 Is that based on '90s technology or current  
22 technology, that concept of doubling the discharge to get  
23 the intake?

24 DR. VAN LANGEN: That's just a good rule of thumb to  
25 have.

1 MR. JOHNSTON: So when we initially permitted this, were  
2 we -- I'm trying -- someone told me that -- I forget if it  
3 was in a briefing or what -- that we didn't issue a  
4 finding -- what is it? A 131425(b) or whatever it is  
5 initially because at the time those were being issued only  
6 for power plants. And I guess until somebody sued around in  
7 the 2000s, they weren't looked at for desal plants.

8 Is that more or less true?

9 DR. VON LANGEN: Yes, that's a good assessment.

10 MR. JOHNSTON: So when we initially permitted this, were  
11 we permitting the intake as well as the discharge? I see  
12 our permit looking at siting and I see it talking about the  
13 siting and such, but was that -- was our permit focused just  
14 on the discharge or was it equally focused on the intake?

15 DR. WON LANGEN: The intake was included in the permits  
16 as being mentioned, and the environmental documents that  
17 were looked at back then, probably by staff at the time,  
18 would have considered the intakes, but I don't know if  
19 they -- they didn't put a finding in the permit because that  
20 wasn't the normal procedure back then. Every section of the  
21 Water Code isn't normally spelled out in an NPDES permit.

22 MR. JOHNSTON: Certainly the environmental impact  
23 documents talked about the intake as well as the discharge  
24 because those documents were used for a variety of  
25 permitting, not just our permits.

1 I guess my question is: Did our staff consider the  
2 intake, or were they really looking at the outfall when they  
3 gave the initial permit?

4 DR. VON LANGEN: I would venture that since it was  
5 mentioned in the permit and shown in the diagrams and so on  
6 of the original permits, the intake was considered.

7 MR. JOHNSTON: Now, I see that there was -- the initial  
8 environmental documents referenced in the staff reports that  
9 back in '91, infiltration galleries or beach wells were not  
10 considered practical because they didn't have the ability,  
11 given the geology, to generate the amount of water they  
12 needed.

13 Has that changed? Has that technology changed? I  
14 mean, would that still be the case or what's the deal on  
15 that?

16 DR. VON LANGEN: There are now examples of infiltration  
17 galleries at the scale that could potentially supply the  
18 water to this size of desalination facility if the geology  
19 was suitable for that type of technology.

20 MR. JOHNSTON: From the reading of staff reports,  
21 apparently the assertion was made at the time that the  
22 geology was not -- wouldn't accommodate those infiltration  
23 galleries.

24 Is that old technology or do we know?

25 DR. VON LANGEN: Well, the infiltration gallery is a

21

1 newer type of technology. They looked at the old beach  
 2 wells, which was a more standard technology back then. But  
 3 the beach wells -- they couldn't get enough water through  
 4 the beach wells for the size that they were proposing to  
 5 make for the desalination facility.  
 6 MR. JOHNSTON: Just for my information, is an  
 7 infiltration gallery something they put subsea floor as  
 8 opposed to on the beach?  
 9 DR. VON LANGEN: Yes. It goes out under the sea floor  
 10 and sucks through a sand layer above it.  
 11 MR. JOHNSTON: So I think you may have answered this for  
 12 Mr. Delgado. I'm not sure. If it were -- if they were  
 13 currently in a situation where it were not feasible to use  
 14 undersea floor intake, would the entrainment and  
 15 infiltration protections provided by the existing design,  
 16 plus the modifications that the City proposes to make, meet  
 17 our current standards?  
 18 DR. VON LANGEN: Current, yes. And it depends on what  
 19 goes on with the State Board Desal Policy down the road.  
 20 MR. JOHNSTON: We don't know if the State Board is going  
 21 to impose a higher standard or if they're discussing a  
 22 higher standard. I understand they're discussing, where  
 23 feasible, undersea floor intake, and that's the big question  
 24 that the City is looking at.  
 25 But where that's not feasible, is the

22

1 State Board -- do we know if the State Board is looking at a  
 2 higher standard than would be -- than is going to be applied  
 3 to this intake?  
 4 MR. HARRIS: I just want to remind the Board that we do  
 5 have State Board staff here, so if you want to, you can  
 6 direct your questions to Mr. Wyels.  
 7 MR. JOHNSTON: I would love that, and I believe so would  
 8 you.  
 9 MR. WYELS: Thank you, Dr. von Langen. Good morning.  
 10 I'm Phil Wyels. I'm an assistant chief counsel with the State  
 11 Water Board, and I advise the State Board on water quality  
 12 issues. Just to be clear, I'm not acting as your attorney  
 13 here. You have two very capable attorneys here that are  
 14 advising you, Tamarin Austin and Lori Okun on the telephone.  
 15 With me is Victoria Whitney. She's the Deputy  
 16 Director of the Division of Water Quality. We are both  
 17 working with the State Board as it develops this Ocean Plan  
 18 Amendment for desalination facilities.  
 19 I can answer your question specifically,  
 20 Mr. Johnston, which is that the Ocean Plan Amendment, which  
 21 has not been adopted by the State Board, does contemplate  
 22 for new facilities that there would be a fairly thorough  
 23 level of analysis to ensure that the combination, as  
 24 Dr. Von Langen explained, of site and design and technology  
 25 and mitigation is the best available, feasible combination

23

1 for new facilities.  
 2 I don't think it's possible to say whether --  
 3 assuming subsurface for this Santa Barbara facility is  
 4 determined not to be feasible, whether the rest of the site  
 5 and design and mitigation and technology would or would not  
 6 meet what the State Board is ultimately going to adopt  
 7 because it essentially anticipates a process to evaluate all  
 8 of those factors and to evaluate whether or not -- as a new  
 9 facility is proposed whether or not it would meet current  
 10 standards for site, design, technology and mitigation.  
 11 I think the bottom line is we would not be able to  
 12 tell, without doing a thorough analysis, whether this  
 13 facility would meet the current standards for a new facility  
 14 under the proposed Ocean Plan Amendment.  
 15 MR. JOHNSTON: Finally, I think this is back to you,  
 16 Doctor. The City is talking about reopening it at  
 17 3,125 acre-feet per year. I'm hearing from you that our  
 18 permitting is based on how many million gallons of brine  
 19 they put out. So I'm assuming that even if they open it at  
 20 that level, which is a lower level than they operated at  
 21 decades ago, and later expanded it to 7,500 or 10,000 or  
 22 whatever, that as long as it were within the permitted range  
 23 of gallonage, we would not consider that an expansion; is  
 24 that correct?  
 25 DR. VON LANGEN: Yes, that's my understanding.

24

1 MR. JOHNSTON: Have you got something different?  
 2 MR. WYELS: No. I just want to point out that maybe it  
 3 would be useful for the Board for me to put this in context  
 4 in terms of how this action relates to the Ocean Plan  
 5 Amendment generally and why this is before the Regional  
 6 Board now.  
 7 But the short answer is the Ocean Plan Amendment  
 8 does contain a proposed definition for an expanded facility.  
 9 And under a circumstance where the facility is originally  
 10 approved, permitted, and the original determination under  
 11 this Water Code Section 13142.59(b) anticipates this future  
 12 expansion, in that circumstance there would be no further  
 13 need to go back and look at whether that future expansion  
 14 triggers a new determination under 13142.5(b).  
 15 MR. JOHNSTON: The order that the State Board is  
 16 contemplating similarly measures desal plants by the brine  
 17 discharge; is that correct?  
 18 MR. WYELS: Maybe I should take a moment and explain the  
 19 general context because we're hitting on individual points.  
 20 MR. JOHNSTON: Sure. Then I'll give up the microphone  
 21 here.  
 22 MR. WYELS: I want to -- what's really critical here,  
 23 both for the State Board and the Ocean Plan Amendment, and  
 24 the reason this situation is before you is because the Water  
 25 Code Section that we're talking about, 13142.5(b), is,

1 frankly, unique in terms of the statutes that the Water  
2 Boards administer under the Porter Cologne Act.

3 The terms of that section -- first of all, they  
4 don't -- there's not a clear statement that we actually are  
5 supposed to issue permits for intakes. There's a -- there's  
6 a limitation that it applies only to new or expanded coastal  
7 power plants or other industrial installations that use  
8 seawater for cooling, heating, or industrial processing.

9 The key is its for new or expanded. This Board is  
10 used to having continuing jurisdiction over any type of  
11 discharge of waste you might have authorized in the past and  
12 is used to being able --

13 (Interruption in the proceedings, Lori Okun  
14 disconnected and reconnected)

15 MR. WYELS: She's heard this before. I'll continue.

16 We're talking primarily about the intake of  
17 seawater. The discharge of waste, the legislature has  
18 granted to the Regional Board continuing authority to  
19 oversee and regulate that discharge of waste and as  
20 technology evolves, as our thinking about the impacts of  
21 those discharges of waste evolve, this Regional Board has  
22 clear authority to continue to ratchet down, continue to  
23 require new technologies to apply to those existing  
24 discharges of waste, and even to say, "We used to let you  
25 discharge waste here, and now we're not going to anymore and

1 you need to take the expense and time to find another way to  
2 take care of your wastewater issues."

3 13142.5(b) is different. It's for new or expanded  
4 facilities. You can look at it as if we get one bite at the  
5 apple and is when a proposal comes forward for either a new  
6 facility or expansion of a facility.

7 Because it's so key that it has those terms, the  
8 proposed State Board Ocean Plan Amendment has proposed  
9 definitions for those terms. That's essentially the genesis  
10 of why we're here. The City of Santa Barbara, at the State  
11 Board hearing in the summer, objected to the definitions of  
12 what we were proposing. Let me read to you what the main  
13 definition is so you get a sense of it. We create a  
14 distinction between a new or existing facility in the  
15 proposed amendment. We also have a definition for expanded  
16 facilities, which I can mention if you like, but we really,  
17 in this proceeding, are talking about new versus existing.

18 Essentially, every facility would be either new or  
19 existing. If it's not existing, it's new. The proposed  
20 definition says, in part, an existing facility does not  
21 include a facility for which permits and approvals were  
22 issued and construction commenced after the effective date  
23 of this Water Code Section if the Regional Water Board did  
24 not make a determination under this Water Code Section.

25 So the proposal is to say that a facility was

1 permitted, was constructed, but these factors were not  
2 considered at the time then we're not going to treat it as  
3 an existing facility. We will instead treat it as a new  
4 facility and require that that analysis be done, even though  
5 the facility has already been constructed and may be  
6 operating at this time.

7 I should point out that this is not a final  
8 definition. The State Board may well change it, but what  
9 happened in summer of 2014 is the City stood up and objected  
10 to this and said, "Wait a minute. We have the Charles Meyer  
11 facility. It was permitted. It has been constructed. It's  
12 been in standby mode." They'll tell you more about this.

13 What this proposed definition does do is create  
14 uncertainty about whether or not we can reactivate this  
15 facility in this time of drought. The State Board members  
16 at the hearing were sympathetic to that concern, certainly  
17 the drought concern, and asked its staff, myself, and  
18 Victoria and her staff to see if we couldn't reach a  
19 resolution with the City that would preserve the proposed  
20 language to the Ocean Plan Amendment, but also creates  
21 certainty for the City of Santa Barbara in terms of its  
22 plans to reactivate the facility in the time of drought.

23 We talked to the City, and frankly, the best we  
24 could come up with at a staff level was to go back and look  
25 at the record of all of the permits and the CEQA

1 documentation and whatever was available to the Regional  
2 Water Board back in the early '90s, and determine whether or  
3 not the Regional Board could, today, say that the  
4 information that was available back in the '90s -- using the  
5 lens of what was the best available, feasible site, design,  
6 mitigation and technology, whether at the time, it met the  
7 13142.5(b) determination.

8 I will be the first to admit this is unusual --  
9 this procedural posture is unusual. I think it's probably  
10 unprecedented, but it's the most appropriate way we figured  
11 we could address the issue to let the City move forward with  
12 its desalination reactivation.

13 The City did offer, as Dr. von Langen  
14 explained, it did offer to do some additional work. These  
15 are not things we are proposing the Regional Board mandate,  
16 but we're proposing the Regional Board recognize these are  
17 the City's plans in terms of the screens, in terms of the  
18 mitigation.

19 Essentially, then, what we plan on doing is  
20 reporting back to the State Water Board as it continues to  
21 consider the Ocean Plan Amendment, whether or not they're  
22 able to resolve this issue such that the City could move  
23 forward with its facility and whether or not the State Board  
24 should consider any changes to the proposed amendment on  
25 this issue.

1 I do understand this is odd. This is unusual.  
2 There are concerns about whether this even makes sense. I  
3 want to say that I understand those concerns. I will say,  
4 though, that I don't see this as providing much of any kind  
5 of dangerous precedent because of the nature of what we're  
6 dealing with here. We're dealing with a statute that's  
7 unique in the sense that it's not continuing jurisdiction to  
8 change things.

9 We've taken a look and this really is -- first of  
10 all, it's the only facility that objected to the proposed  
11 definition. But more importantly, it's the only facility we  
12 know of that fits in this sort of category of being a major  
13 portion of a region's long-term water supply portfolio in  
14 this drought circumstance. And falling into this sort of  
15 odd situation where we're -- we're not looking at this issue  
16 back in the '90s, and we're looking at it much more closely  
17 now.

18 MR. WOLFF: Thank you. Ms. Cervantez?

19 MS. CERVANTEZ: Thank you. My question is -- I just  
20 have one question and it has to do with figuring out the  
21 timelines of all these various different events regarding  
22 the permit application and some of the renewals and some of  
23 the conversations around the Ocean Plan Amendments. Staff  
24 made a presentation regarding the renewal permit that came  
25 to the Board in 2010 and within that there was already

1 mention about desal discharge.

2 So I'm wondering, within that permit and that  
3 conversation with the Board then, how much was it clear that  
4 the City of Santa Barbara would be seeking to reactivate the  
5 desal facility? And if that was obvious to the Board that  
6 that was going to be the intent of the City, why wasn't the  
7 City seeking a determination of findings then in 2010? I do  
8 see in some of the documentations from the City of Santa  
9 Barbara that it is part of their general plan -- part of the  
10 plan for their long-term water supply. I'm wondering why  
11 the conversation about determining the findings and  
12 compliance wasn't started then.

13 DR. VON LANGEN: I didn't work on that permit, but the  
14 City -- it's in a permit that they were planning on using  
15 this desalination facility as needed for droughts back then  
16 and that preceded the drought.

17 MS. WHITNEY: I can respond to that. We didn't have a  
18 definition in our Ocean Plan of an expanded facility at that  
19 time. I don't think it was really on the radar of the City  
20 or of the Regional Board staff. It wasn't until after that  
21 that we realized that in order to implement that Water Code  
22 Section in the Ocean Plan, we had to define what an expanded  
23 facility and an existing facility and what a new facility  
24 is.

25 Sorry. Victoria Whitney, Deputy Director of Water

1 Quality for the State Board.

2 MR. WOLFF: Thank you. Mr. Young?

3 MR. YOUNG: Mr. Wyels, this is very unique. This is a  
4 very unprecedented situation. I don't know that we've  
5 had -- except for EPA staff joining us when we had certain  
6 permits, I don't think we've had the pleasure of having you  
7 or seeing your State Water Board staff. So the whole thing  
8 is kind of like a conundrum in a way, trying to make this  
9 kind of work out as best we can.

10 My initial question to you is: Why don't you just  
11 exempt the City in the plan amendment and just kind of get  
12 rid of this if the State Board staff is so comfortable with  
13 what has been done before?

14 MR. WYELS: Totally fair question. Frankly, like I  
15 said, I don't know what the end result will be with the  
16 State Board when it finally adopts the Ocean Plan Amendment.  
17 I don't know what will happen after that in terms of whether  
18 we've satisfied people -- that's all not knowable today.

19 But I can tell you that I would not be comfortable  
20 writing in a single industry -- or single facility exemption  
21 into -- or proposing that the State Board turn it into a  
22 rule-making proceeding. Now, it's possible -- and a lot of  
23 times you'll see the legislature write general laws where  
24 there is a fairly obvious but not explicit exemption.  
25 Generally speaking, when we adopt the Water Quality Control

1 plans, like the Ocean Plan, we try to come up with rules of  
2 general application, not specific application.

3 MR. YOUNG: What is the timing for the Ocean Plan  
4 Amendment to be finalized? Is the State Board flexible when  
5 that might happen, such that the Board determines, "You know  
6 what? Maybe we're onboard with this, but we need to add  
7 some additional language, requirements"?

8 You know, to me it looks like some of the factors  
9 actually were studied and considered. I don't feel, at this  
10 point, comfortable with that, but I'm going to be asking  
11 some of the staff to explain some of their studies. Maybe  
12 if we feel mitigation wasn't really addressed maybe the way  
13 we would have addressed it 20 years ago, let's say that  
14 takes some time for us to do, is the State Board flexible on  
15 its calendar for finalizing this Ocean Plan Amendment?

16 MS. WHITNEY: This project is one of the projects that  
17 the State Board members have identified as a high priority  
18 for the Division of Water Quality staff. We have a number  
19 of those projects. Some of them have been completed. So  
20 we're trying to get this done as quickly as we can.

21 Our current schedule calls for the staff to bring  
22 it to the Board later this spring. We are -- the current  
23 status is we've had numerous workshops on the desal  
24 amendments. We've prepared a CEQA document. It's been out  
25 for public comment. The environmental document drafted --



1 this is the planning activity. The desal amendments have  
 2 been out for comment and we're preparing the responses to  
 3 comments. The responses to comments on the desal amendment  
 4 itself are substantially completed and undergoing management  
 5 and legal review. We're still working on the responses to  
 6 comments on the CEQA SED. It's pretty imminent.

7 We didn't think, at the time we were having the  
 8 conversations with Santa Barbara last summer and last fall,  
 9 that we were going to have the Ocean Amendment completed  
 10 prior to the time that they needed to go out for bid on  
 11 their contracts for their construction in order to get the  
 12 desal facility operating by next water year, which is what  
 13 their timeline called for based on their water supply  
 14 studies.

15 They do have contracts with the State Water  
 16 Project. I don't know if you guys know this. The State  
 17 Water Project is oversubscribed in terms of the contracts,  
 18 in part because when it was originally contracted, the water  
 19 was supposed to be diverted from the Eel River to the  
 20 Sacramento River Basin. President Reagan, in his past life,  
 21 killed that project.

22 So the Department of Water Resources does not have  
 23 adequate supplies to fulfill all of its contractual  
 24 agreements. Folks, like in Santa Barbara, who have  
 25 contracts for water often don't get enough of the water that

1 this sort of scope and nature in terms of the Regional Water  
 2 Supply as this one.

3 MR. YOUNG: This is the largest one?

4 MR. WYELS: Yes.

5 MR. YOUNG: Okay. Thank you.

6 MR. WOLFF: Could I just ask a favor from all of you.  
 7 We have a court reporter and some of us have a tendency of  
 8 speaking very fast, and I see you trying to -- really being  
 9 challenged in taking notes. So if we can just make sure  
 10 that we speak a little more slowly, that would be  
 11 appreciated. Thank you.

12 MR. YOUNG: You have said that -- this is slide 9 --  
 13 that impingement will be eliminated from the use of the  
 14 screen mechanism. I just wanted to know, do you have any  
 15 information to support that conclusion or is that something  
 16 the City should speak to?

17 DR. VON LANGEN: Yes. Recent studies that were done  
 18 by Tenera up at the Santa Cruz Plant, where they did  
 19 impingement studies. So a 7-million-gallon-a-day intake  
 20 showed no impingement from using a pilot project there and  
 21 they documented it with camera footage and by other studies.

22 MR. YOUNG: Is it based on the same anticipated intake  
 23 flow?

24 DR. VON LANGEN: It's approximately the same. It's a  
 25 7 million gallon a day intake at the Santa Cruz project,

1 they had contracts for, which is one of the factors, as well  
 2 as the drought, that figures into their water supply  
 3 portfolio concerns.

4 MR. YOUNG: Have you noticed the Ocean Plan Amendment  
 5 agenda item yet?

6 MS. WHITNEY: No.

7 MR. YOUNG: Okay. So there is a little bit of  
 8 flexibility there as to which Board meeting you actually  
 9 get?

10 MR. WYELS: I think we heard earlier this morning we  
 11 were aiming for April. I think it's fair to say that's the  
 12 earliest we can get.

13 MR. YOUNG: Are there other entities similar to  
 14 Santa Barbara and they didn't object? Are they out there?  
 15 Would they fall under this new amendment language and be  
 16 forced to do studies?

17 MR. WYELS: The answer is, I believe, yes. There are  
 18 some, and there's a list of approximately ten in our staff  
 19 report. And looking through that list, none of them seem to  
 20 fit the sort of characteristics of the City of  
 21 Santa Barbara where it really is a potentially significant  
 22 amount and needed for the region for water supply  
 23 reliability. They are much smaller in nature. Monterey Bay  
 24 Aquarium, for example, is, I believe, in something like  
 25 .04 million gallons per day for their visitors, nothing in

1 about 20 million gallons a day at the Santa Barbara Project.  
 2 So it's comparable. The intake velocities are comparable  
 3 to -- the intake velocity at the Santa Barbara is supposed  
 4 to be less than .1 feet per second, which is dramatically  
 5 slower than the proposed statewide policy and for the  
 6 Federal Clean Water Act 316(b) rules for power plants of .5  
 7 feet per second.

8 MR. YOUNG: Did they look at entrainment?

9 DR. VON LANGEN: Yes. The Santa Cruz project looked at  
 10 entrainment as well.

11 MR. YOUNG: What was the mesh size of those?

12 DR. VON LANGEN: I believe they used 1- or 2-millimeter  
 13 intake mesh, offhand. So it was -- the proposed project  
 14 here is 1-millimeter less. It's more protected than the one  
 15 used in Santa Cruz or equal.

16 MR. YOUNG: Then you just said they looked at  
 17 entrainment. In that study up there, what were the  
 18 conclusions on entrainment?

19 DR. VON LANGEN: The conclusion that the most entrained  
 20 species is the white croaker, a sandy bottom fish. It would  
 21 be expected that would be the most entrained species around  
 22 here as well. Yearly entrainment of larvae were found to be  
 23 less than .06 percent of the source water body of the area  
 24 around the intake pipe.

25 It was basically scaled up to make the equivalent

1 of larvae entrained as one white croaker adult female would  
2 have in its offspring in their lifetime. So one adult fish  
3 is the most --

4 MR. YOUNG: One adult fish, that was the equivalent.  
5 The entrainment study is just looking at larvae and eggs?  
6 That's all that can get through one millimeter mesh?

7 DR. VON LANGEN: Yes.

8 MR. YOUNG: Do you have the other subsection to the  
9 statute, Subsection D? Can you put that on the screen?

10 DR. VON LANGEN: I don't have a slide of that.

11 MR. YOUNG: I'd like to explore that. I think that's  
12 part of the discussion. It's the one that basically says  
13 there should be some baseline studies done to assess  
14 environmental loss.

15 MS. AUSTIN: Would you like me to read it into the  
16 record? Would that be helpful?

17 MR. YOUNG: Subsection D, as in David.

18 DR. VON LANGEN: I can read it into the record if you  
19 like.

20 MR. YOUNG: Well, we have an ELMO projector here. It  
21 helps the public if we can display this so we all know what  
22 we're talking about.

23 DR. VON LANGEN: We're using 1991 technology with this  
24 cable.

25 MR. WOLFF: While they're setting up, do you have

1 in the staff report.

2 So if we had been doing this 20 years ago, we  
3 wouldn't be asking these questions about, "Okay. What are  
4 the studies? What were the results? What were the  
5 impacts?" What I got back from my comments to staff was a  
6 list of species that were probably impinged and entrained.  
7 I'd like more information about those in terms of  
8 percentages and identifying which ones are offshore species.

9 DR. VON LANGEN: They didn't do an entrainment study  
10 back in those days.

11 MR. YOUNG: What kind of study was it?

12 DR. VON LANGEN: It was an assessment of how much  
13 plankton and larvae would have been taken in. It was  
14 plankton tows.

15 MR. YOUNG: That's what I thought. It's a different  
16 kind of study. Someone went out in a boat with a plankton  
17 net and did some tows and then looked at what was in the  
18 tows.

19 Was it done monthly? Over a year period? Was it  
20 done one time?

21 MS. POWERS: Megan Powers, State Water Board.

22 I read the study and it's a pretty basic  
23 oceanographic study. They did zooplankton tows over three  
24 years from 1982 to 1984. They were able to capture seasonal  
25 variability and also capture an El Nino event. It was a

1 perhaps another question?

2 MR. YOUNG: I do. What I want to get into is that I  
3 see, from reading the source documents that were provided by  
4 staff, that the City did do oceanographic studies back in  
5 '88, '89. The only study that they have relied upon to  
6 assess any kind of loss to marine life was the Ormond Beach  
7 study.

8 It looks to me like the statute that I'm asking you  
9 to put up on the ELMO requires that a site-specific study be  
10 done to assess loss of marine life. I just wanted to get  
11 staff's reaction to that.

12 DR. VON LANGEN: I reviewed the work that was done in  
13 1991 and 1994 EIRs that looked at the site assessments of  
14 the area. And the plankton studies that were done in Ormond  
15 Beach were similar types of plankton concentrations that you  
16 would expect to find here. I think the consultant for the  
17 City would better explain the details of that. Overall,  
18 there is a lot of work at the old outfall and intake  
19 location of the benthic epifauna and infauna other work that  
20 was done in that region.

21 MR. YOUNG: I know that's what they relied upon. What  
22 I'm trying to get at is shouldn't we be looking at something  
23 specific to the site? That's what the statute speaks to.  
24 Ormond Beach is down in Ventura. It's not here. I didn't  
25 see any of the results of the study. I just saw conclusions

1 pretty standard procedure using standard volumetric net  
2 tows.

3 From my knowledge of zooplankton, I would expect  
4 that -- even if it's 40 miles down the coast, I would expect  
5 very similar assemblages and species of plankton would also  
6 exist in Santa Barbara. They did not -- the study was done  
7 at Ormond Beach offshore, and they did transect. They did  
8 four different stations along the Southern California Bight.

9 MR. YOUNG: Over a three-year period?

10 MS. POWERS: Yes, 1982 to 1948.

11 MR. YOUNG: How frequently did they do these studies? I  
12 ask these questions because plankton and larvae vary year to  
13 year.

14 MS. POWERS: It depends --

15 MR. YOUNG: It's seasonal.

16 MS. POWERS: In the same study they also did studies on  
17 nutrients and looking at trying to understand why is  
18 plankton volume different in one area and not the others.  
19 They did about four or five sampling events each year.

20 MR. YOUNG: Each year. So they kind of did it  
21 quarterly? So about 12 events over the course of a  
22 three-year study?

23 MS. POWERS: Roughly.

24 MR. YOUNG: Why is the City voluntarily offering to do  
25 anything if there's going to be no impingement? And it

1 looks like the entrainment, then, is negligible from what  
 2 we're being told. Why offer to do anything?  
 3 MS. POWERS: You mean why offer to do any mitigation?  
 4 DR. VON LANGEN: The City is environmentally conscious,  
 5 and they can speak to it more than I can.  
 6 MR. YOUNG: In the plankton tows that were done over a  
 7 three-year period, what was the percentage of offshore  
 8 species versus inshore?  
 9 MS. POWERS: They didn't look -- they looked at just  
 10 volumetric. They actually -- well --  
 11 MR. YOUNG: Even by volume, if they look at species,  
 12 they would know where -- just by identification, where the  
 13 species' habitats are.  
 14 MS. POWERS: This was done offshore. So a lot of these  
 15 areas are, like, oceanographic pelagic type plankton species,  
 16 not benthic. They were done -- an oblique tow where they  
 17 throw the net in the water and then they tow it back up to  
 18 the surface.  
 19 MR. YOUNG: So what the City is proposing is \$500,000  
 20 towards the Devereux project. Wouldn't that primarily just  
 21 help estuarine species and intertidal species and it would  
 22 not benefit offshore species?  
 23 MS. POWERS: I think there are some species that  
 24 probably -- larvae, fish larvae, that take refuge in  
 25 wetland areas. I don't think you make that comparison to

1 oceanographic species. But I think it's really difficult  
 2 to have any kind of mitigation so having these -- how to  
 3 actually create an oceanographic environment and trying to  
 4 recreate that environment someplace else. One of the best  
 5 options would be a wetlands kind of recovery, in my opinion,  
 6 because it will also offer habitats for other intertidal  
 7 species that live in the area.  
 8 MR. YOUNG: So what you're saying is there's a loss of  
 9 offshore species that we just don't have a good tool for  
 10 mitigating and all we can do is help intertidal benthic  
 11 species?  
 12 MS. POWERS: Yeah, I would say that. It's very  
 13 difficult to mitigate for those kind of open-ocean  
 14 environments.  
 15 MR. YOUNG: An infiltration gallery, is that the same as  
 16 subsurface intake?  
 17 MS. POWERS: That's a technical question.  
 18 MS. WHITNEY: It is one kind of subsurface intake. You  
 19 can have plant wells, infiltration galleries. An  
 20 infiltration gallery, if you wanted to visualize it is where  
 21 you go in and dig out the ocean bottom and put in a square  
 22 series of filters. And then you put all the pipes  
 23 underneath and then you put the ocean bottom materials back  
 24 on top of it. And the ocean bottom acts as a filter as the  
 25 water is being pulled in. We have an environmental

1 engineering design firm that is working with the City, and I  
 2 expect he can answer your questions.  
 3 MR. YOUNG: It's more like a square area that is dug up  
 4 and a matrix is put down. A subsurface intake the way we're  
 5 now thinking of is more like an intake line buried in the  
 6 sand with ports in it.  
 7 MS. WHITNEY: In Monterey, you're looking a series of  
 8 slant wells, which are basically exactly what they sound  
 9 like, the wells that you drill at an angle.  
 10 Infiltration galleries used in Japan -- there's  
 11 one facility there that sizeable, but not as big as the one  
 12 that's being proposed in Carlsbad. There are different  
 13 technologies you can use and which one you pick depends on  
 14 the circumstance of how much water you need to intake,  
 15 et cetera.  
 16 MR. YOUNG: So you have the statute up there,  
 17 Subsection D.  
 18 So does staff feel we don't need to comply with  
 19 that section? Can you use your pointers?  
 20 DR. VON LANGEN: It says, "Independent baseline studies  
 21 of the existing marine system should be conducted in the  
 22 area that could be affected by a new or expanded industrial  
 23 facility using seawater in advance of the carrying out of  
 24 the development."  
 25 MR. YOUNG: It's a "should," not a "shall," but it does

1 contemplate some kind of independent study being done at the  
 2 site. My concern is whether that has been done or not or  
 3 whether it should be done.  
 4 MR. WYELS: If I can, the proposed Ocean Plan Amendment  
 5 actually does require an analysis of any proposed new  
 6 facility and a lot of that analysis does require the  
 7 collection of baseline data. And so certainly we are using  
 8 that same concept in Subdivision D to support the  
 9 requirements that new facility proponents actually go out  
 10 and study things.  
 11 In some cases, we had proposed up to three years of  
 12 independent baseline studies. That may change, but we're  
 13 certainly adding some areas where the current proposal is  
 14 for a year's worth of study prior to conducting the analysis  
 15 of the data to determine whether that facility will meet the  
 16 site, design, technology and mitigation that most feasible  
 17 for here.  
 18 I think -- you know, my view is that certainly this  
 19 section was -- this subdivision was in existence back in the  
 20 early '90s. I suspect -- I think what I heard from  
 21 Dr. Powers is that the type of baseline studies that were  
 22 conducted at that time may have been somewhat different than  
 23 the types of studies we would be requiring today.  
 24 Certainly I agree with the premise that ideally  
 25 those studies would have been undertaken back in the '90s to

1 support the proposal for this desalination facility. Some  
2 studies were done, but your question was about the types of  
3 studies.

4 MR. YOUNG: I would think we would have done something.  
5 Looking back 20 years, we didn't have this mindset on. So  
6 we didn't have that filter on. We weren't thinking of  
7 entrainment and impingement. How can we be thinking about  
8 what would be an applicable study to comply with the  
9 section?

10 MR. WYELS: As Appendix G tries to explain, we are in  
11 large part suggesting that we use what we think were our,  
12 you know, current standards for studies, site design,  
13 mitigation, everything, what we think those were back in the  
14 early '90s to see whether or not today the Board can decide  
15 that "Yeah, this project actually did satisfy what we think  
16 were the standards back then." It's a bit of a conundrum.

17 MR. YOUNG: What currently is the State Board  
18 contemplating as policy in terms of compliance with  
19 Subsection D? In other words, I'm curious, without having  
20 the intake in place doing its take on species, how do you  
21 ever get a baseline study? I don't know if plankton towing  
22 going around in the channel or the ocean necessarily tells  
23 you exactly what's going to be impinged or entrained. Maybe  
24 it does. That would be my question.

25 MR. WYELS: If you give me a moment, I can point -- or

1 We didn't see any point in making folks go through  
2 and do the high levels of studies if they were going to  
3 conclude they were going to put in a subsurface intake  
4 anyway. They will obviously have to do some study to  
5 determine whether or not subsurface intakes were feasible  
6 for other reasons. It's much harder, for instance, to put a  
7 subsurface intake in a rocky outcrop than in a sandy bottom  
8 kind of situation.

9 But they're not required in every situation by our  
10 policy simply because we're relying on the work and the  
11 advice that was given to us by the expert panels.

12 MR. YOUNG: If someone in the future proposed to do a  
13 subsurface intake, would they not have to do any baseline  
14 studies?

15 MR. WYELS: They would, I believe. Let me just read to  
16 you the general provisions for baseline studies. There's a  
17 general provision that says the Regional Board consulting  
18 with State Water Board staff -- the assumption there is some  
19 additional ocean expertise the State Board -- can require  
20 the owner or operator of one of these new or expanded  
21 facilities to provide any additional studies or information  
22 as needed, subject to the approval of the Regional Water  
23 Board.

24 The main study is for mitigation and the  
25 provision -- the proposed provision is that the owner or

1 read to you the sections that require baseline studies in  
2 the proposed Open Ocean Plan Amendment.

3 MS. WHITNEY: Actually, I want to augment what Phil is  
4 looking for. We have three places where we require studies.  
5 In two of those places, the studies are required only if  
6 someone is proposing alternative technologies. We set up  
7 preferences in the Ocean Plan Amendment for subsurface  
8 intakes. There's an out, if you will, where a subsurface  
9 intake isn't feasible. It's where people are proposing  
10 something other than a subsurface intake that we're  
11 requiring these studies.

12 The same thing goes for discharges. We have a  
13 preference for high pressure diffusers as a discharge  
14 technology. If somebody wants to use something other than  
15 that, they have to do studies to show the discharge will  
16 achieve the same levels of environmental protection that the  
17 pressure diffusers would achieve.

18 So it isn't a situation where -- the reason we  
19 wrote it that way is because we recognize that some of these  
20 facilities are very small. Some of the communities may be  
21 cash strapped. Based on the information we had available to  
22 us, which was developed in part by three expert panels that  
23 reconvened over the last few years, it looked like the  
24 subsurface technologies were the better technologies if they  
25 were feasible.

1 operator submit a report to the Regional Water Board -- I'm  
2 sorry. I will speak slowly -- to the Regional Water Board  
3 projecting the marine life mortality resulting from  
4 construction and operation of the facility.

5 That report shall include a detailed entrainment  
6 study. Entrainment study period shall be at least 36  
7 consecutive months and should be designed to account for  
8 variation in oceanographic conditions and larval abundance  
9 and diversity, such that abundance in the studies will be  
10 accurate. That's a three-year baseline study in terms of  
11 what the impacts will be for the purposes of figuring out  
12 what kind of mitigation is necessary to deal with those.

13 And Vicky wants me to emphasize that's the current  
14 staff proposal. It's consistent with the notion in  
15 Subdivision D that we do want to require, going forward,  
16 that, at least new facilities or expansions of facilities  
17 that they do these baseline studies. We would hold them to  
18 what we believe today is the right way to do those studies.

19 MR. YOUNG: Thank you. I don't have any more questions.

20 MR. WOLFF: Thank you. Dr. Hunter?

21 MS. HUNTER: I'm going to pursue a little bit further  
22 some of the issues raised by Mr. Young.

23 So, Peter, in your presentation, I noted, in part,  
24 the determination that there was insignificant impact  
25 associated with current design of this facility in part is

1 related to the fact there are high larval populations known  
2 for that area. I agree with that statement to the extent we  
3 saw a very extended process associated with identifying  
4 highly productive fishery areas associated with the Marine  
5 Protection Act and the establishment of marine protected  
6 areas.

7 The Santa Barbara Channel area, in particular,  
8 underwent -- in addition to that, the Channel Islands  
9 National Sanctuary conducted its 20-year review of its  
10 National Plant and established a number of marine protected  
11 areas based on the value of the Channel for fishery  
12 production.

13 Again, getting to what Mr. Wyels just mentioned,  
14 that baseline studies would incorporate specific diversity  
15 of oceanographic and ocean population, I have the same  
16 problem that Mr. Young has raised in looking, for example,  
17 at Santa Cruz, which is not necessarily, in my view -- my  
18 understanding in following the process, considered highly  
19 productive and valued for its commercial fishery potential.

20 So I think that the assumption that those higher  
21 larval populations is insignificant -- somehow we have extra  
22 population there we can consider insignificant, I think it's  
23 just the opposite. If we have a higher larval population  
24 and you were to actually do the studies required or you  
25 would find information that could give us some idea of what

1 is the density of the larval population in that area, then  
2 we might see the entrainment is actually significant because  
3 it is a high and rich and diverse ocean environment.

4 So by association with the State's study of its  
5 marine resources, we may find there are studies that have  
6 been done that could contribute to our -- what is the  
7 potential significant impact from entrainment. So that  
8 would be one issue.

9 I'm not going to ask Peter to respond. I think you  
10 did respond to Mr. Young in that way. I just want to reiterate  
11 that. I don't see the studies that we're relying on -- and I  
12 heard the word "assumption" being used a number of times to  
13 say we assume that because this study shows a low impact, that  
14 a study -- has the same type of impact based on the design and  
15 system, not based on the oceanographic conditions.

16 The second issue I have, and maybe this is for  
17 Mr. Wyels, concerns the issue of expansion. And my question  
18 is something I haven't heard addressed and that regards the  
19 original permit that was issued. And I'm seeing this in  
20 several ways, and I have not found it in the permit itself.

21 If the original permit was issued for a temporary  
22 facility and now the City is shifting and considering this  
23 facility as part of its permanent water portfolio, would  
24 that be considered an expansion? Because I'll give you two  
25 things that made me raise this question. In this flyer, on

1 the last page under the heading "Is the desalination plant a  
2 regional facility?" In the first line, it reads, "When the  
3 temporary desalination plant was constructed in 1991." The  
4 City is referring there to the temporary desalination plant.

5 In the next section it says, "What would be the  
6 alternative if the desalination plant is not reactivated?"  
7 In the second line it says that the program includes "the  
8 conversion of the temporary emergency facility to a  
9 permanent part of our water supply," and that this has been  
10 approved by the City Planning Commission, the California  
11 Coastal Commission, and the City's El Estero Wastewater  
12 discharge permit. So now we're talking about going from  
13 something that was considered temporary to something that  
14 was considered -- to something we can now regard as  
15 permanent.

16 I also want to bring into this point that I'm  
17 raising in Attachment 4 in response to comments, response  
18 No. 9, the staff also -- I'm not sure who completed this  
19 document, if this was a combination of Regional Board staff  
20 with State Water Board staff. I don't know. This also  
21 refers to the City -- does not -- towards the bottom of  
22 paragraph 9 response, "Furthermore, the City currently does  
23 not intend to operate this facility continuously."

24 So we've got staff calling it a temporary facility.  
25 You have -- the original permit, I believe, would show it

1 was a temporary facility as described by the City itself.  
2 And then you have the statement in this flyer that this now  
3 is going to become part of the City's permanent water  
4 portfolio.

5 So is that an expansion under the definition?

6 MR. WYELS: First of all, let me acknowledge -- let me  
7 acknowledge that Victoria and I did work with your staff to  
8 help draft the proposal, help look through the comments and  
9 draft responses to comments. We had a difficult time,  
10 frankly, trying to understand the history of this project.  
11 I think we have it right, but certainly we should confirm  
12 with the City we have it right.

13 In both the first paragraph of Attachment G and  
14 also in response No. 9, to the Channelkeeper question, what  
15 we say is that it was originally permitted as a temporary  
16 facility. That was in 1991. Temporary operation of the  
17 facility was the original permit. And then in 1996, it was  
18 permitted for permanent operation. Now, all along it has, I  
19 believe, been intended to be used only intermittently. I  
20 want to distinguish temporary from intermittent.

21 I believe the City will tell us today that that is  
22 still their intent to only operate this desalination  
23 facility intermittently when their water needs get to the  
24 point where they have to operate it. Again, let's confirm  
25 that with the City.

1 Now, your question was does that constitute an  
2 expansion? And I will tell you that if the State Board does  
3 adopt the amendment to the Ocean Plan as currently  
4 drafted -- let me do the easy one first. What if it were a  
5 new facility that someone was dreaming of today and coming  
6 to the Regional Board for approval today. The answer is  
7 that it would depend on what the Regional Board actually  
8 analyzed when it did this Water Code 13142.5(b) to determine  
9 if the analysis assumed and took into account some type of  
10 operation that was intermittent.

11 And certainly we would talk about how many gallons  
12 per day would be taken in through the intakes. And if the  
13 project proponent later, after that determination was  
14 concluded, decided to increase the amount of time that the  
15 facility was operating or decided to bring in more water  
16 when it was operating, then the Ocean Plan Amendment would  
17 certainly consider that to be an expansion and require a new  
18 13142.5(b) determination prior to initiating that expansion.

19 How does that apply to this facility? Frankly, I  
20 think the way I'm viewing it is that I think we have it  
21 right in terms of the analysis and I think the information  
22 in the record does support viewing this as not an expansion  
23 from what was originally contemplated in the early 1990s.  
24 But it's absolutely a good question.

25 If I can, while I have the microphone, the issue

1 about marine protected areas. I just wanted to point out  
2 that that is certainly an issue for us, not in terms of how  
3 to calculate the mortality from entrainment, but the current  
4 draft does have a specific provision dealing with MPAs. So  
5 our current thinking anyway is that the language reflects --  
6 the intake structures cannot be located within an MPA and  
7 the discharge must be located sufficiently far from an MPA  
8 so there would be no impact from the discharge on the MPA.  
9 Certainly today, we are focused on protecting those areas.

10 MR. WOLFF: Thank you, Dr. Hunter.

11 Most of my questions I'm going to hold off until I  
12 hear the presentation from the City. One question I have is  
13 a somewhat peripheral question relating to jurisdictional  
14 authority.

15 Does the Coastal Commission have any input on this  
16 in terms of what's happening to the plant, the discharge,  
17 the location, the change of application, the screen,  
18 et cetera?

19 DR. VON LANGEN: I can answer that briefly. The City  
20 can do a better job of the details, but the Coastal  
21 Commission first permitted this back in the '90s and it's  
22 considered an existing facility to the Coastal Commission,  
23 but there is a maintenance permit required for the intake  
24 structure changes, is my understanding.

25 MR. WOLFF: I'll ask a few more questions of the City,

1 actually, on the topic of maintenance of the system.

2 Without duplicating questions from my colleagues, I  
3 still struggle with the insignificant impact. I realize  
4 "insignificant" is not the same as nonexistent, but if the  
5 State is looking at subsurface technologies -- and  
6 Ms. Whitney gave a brief introduction of the different  
7 technologies contemplated -- that to me is implicit that  
8 there is an impact when you have the kind of technology that  
9 is currently proposed. So I'm still struggling with that  
10 aspect.

11 In regards to the Devereux Slough Project, and  
12 perhaps this is a better question for the City, why that  
13 site? Has there been a robust analysis of what other  
14 potential mitigation sites could have been chosen?

15 MS. POWERS: The amount of -- the restoration project  
16 was based on a review of the need for support of projects  
17 within the Santa Barbara region. And staff identified the  
18 Devereux Slough Project with the Southern California Wetland  
19 Recovery Project. So we looked at different projects within  
20 the area of the city and basically made a determination  
21 about that project based on its scale, need for funding, and  
22 location.

23 So the scale is such that hopefully the amount the  
24 City has provided for the project will mitigate past the  
25 impact that the facility will be operational. The

1 restoration project -- we found support to help restore  
2 wetlands within the general area of the source water body.  
3 It's ten miles up the coast by UCSB campus.

4 The larvae and things that will be protected and  
5 restored in this area won't be entrained by the intake  
6 system that's down -- down in the desalination intakes.  
7 That's the basis for how we came up with the --

8 MR. WOLFF: The last question, for now, that I have is  
9 for Dr. Von Langen. We talked about well tests that had  
10 been done many years ago and the fact that the yield was  
11 insufficient to meet the expected amount of daily gallonage  
12 needed, but I'm not too clear on how extensive, you know,  
13 the site study was done. Did they pick one location and  
14 say, "Let's see what happens there," or was there a very  
15 good, detailed study looking at various locations and  
16 actually performing some of the exploratory wells in various  
17 locations or it became site specific in locations where they  
18 contemplated or actually tested?

19 DR. VON LANGEN: There were several studies and the  
20 first study was approximately a mile of beach where they  
21 did nine wells.

22 MR. WOLFF: Could you repeat that?

23 DR. VON LANGEN: There were several studies. I believe  
24 the first study was approximately one mile of beach along  
25 the beach wells. And based on the hydraulics -- they would

57

1 take 100 to 200 wells. That wouldn't be enough to get the  
2 3,000-plus AFY that they were looking at originally.  
3 And subsequent to that, they decided to get a  
4 bigger intake project just after they did the study. It  
5 wouldn't be suitable for that as well.  
6 MR. WOLFF: That means just one location. It's almost  
7 the analogy of when you perform tests for septic systems.  
8 You just don't pick one location and say, "That didn't  
9 work." You use often other locations as well.  
10 If I understand you correctly, there was really  
11 only one location where these tests were performed and  
12 physically there were no other locations where these tests  
13 were being performed. Do I understand correctly?  
14 DR. VON LANGEN: I recall that further studies looked up  
15 and down at other locations along East Beach and closer to  
16 Stearns Wharf. I think the City's consultant, Joe Monaco,  
17 can go into much more detail and specifics.  
18 MR. WOLFF: I will hold off further on asking questions  
19 on that topic until we have a chance to hear from the City.  
20 You know, I see a motion from my colleagues here.  
21 What I'd like to propose is that unless there is a real key  
22 question that you have still, we will take our break after  
23 the series of questions and then we'll reconvene after that  
24 with the City.  
25 So did you have one?

58

1 MR. YOUNG: It's kind of key to me. This might help us  
2 frame how we're going to be analyzing this. Let me get my  
3 question out, and our attorneys can answer this. I  
4 shouldn't be looking at you, Mr. Wyels.  
5 We're being asked to look back in time 20 years and  
6 make these findings now as though they were made then.  
7 Would it be just as appropriate for us to have, upon the  
8 five-year renewal for this NPDES -- every time it came up  
9 for a renewal that we renewed it, would it have been  
10 appropriate at those five-year increments to have also gone  
11 through this process but then looked at the current  
12 technology at that point in time?  
13 It was done in 1991 and 1996 and then 2001. Could we  
14 have done this and just go with what we had technology-wise?  
15 MS. AUSTIN: The issue of the Code Section is the new  
16 and expanded language. That's why we go to 1991. So  
17 conceivably in the abstract, could we have made these  
18 findings? I guess we could have, but it boils down to  
19 reasons that we stated, which I think, as Mr. Wyels  
20 explained earlier, having to do with the more recent  
21 litigation and this coming to the floor as an issue  
22 pertaining to desalination plans and not just the cooling  
23 facilities but, in the abstract, we could have. But the  
24 reason we look back today to 1991 as opposed to another  
25 cycle in the permit is that is when the facility was new.

59

1 MR. YOUNG: Fair enough.  
2 MR. DELGADO: I had one question. Up in Monterey, State  
3 Water Resources Control Board told California American Water  
4 to prove that slant well technology is infeasible before  
5 going ahead with open intake.  
6 So my question is: If we're seeing today some  
7 studies showing that the -- not studies, but the  
8 recommendation that the open intake mortality due to  
9 entrainment is so minimal, then why does the State Water  
10 Resource Control Board make Cal Am spend an estimate of  
11 5 million on a feasibility study of slant well technology?  
12 MR. WYELS: Let me -- the project -- for better or  
13 worse, we're looking at that at the beginning of the  
14 project, not hindsight 20 years later. My assumption is  
15 that what you're referring to is that it would be considered  
16 a new facility under the Ocean Plan Amendment as long as the  
17 State Board adopts it.  
18 MR. DELGADO: Right. I'm trying to get to -- I'm sorry  
19 to interrupt you. This insignificant impact to larvae, if  
20 it's insignificant here, then why -- why have a  
21 preference -- or why designate a subsurface intake as  
22 environmentally preferable if it's insignificant?  
23 MS. WHITNEY: I don't think you can conclude that the  
24 impact is insignificant all along the coast. Monterey is  
25 proposing to put their intake in the National Marine

60

1 Sanctuary.  
2 For one thing, it's highly productive and has a lot  
3 of ocean life. The expert panel that we convened on intake  
4 issues concluded that you can't, whatever you do -- except  
5 for subsurface technology because you can't use the ocean  
6 floor as a screen. You can't mitigate for 100 percent of  
7 the impacts from the open-water intakes, which is why they  
8 recommend the ETM/APF methodology for determining what the  
9 responsibility of the desal facility should be in terms of  
10 mitigation.  
11 And one of the things that we have been struggling  
12 with is the same thing that you addressed earlier,  
13 Mr. Young, which is that you -- in kind mitigation seems to  
14 be pretty much impossible in certain circumstances, if the  
15 intake is to reef species you can put a reef in, but if it's  
16 to sandy bottom habitat, nature determines where the sandy  
17 bottom habitat exists.  
18 And of forces of the ocean has more impact on that  
19 than a mitigation project that we could conceive of, at  
20 least at this time. We are having discussions with our  
21 Board members about whether they want to continue to  
22 propose, in kind mitigation in the Ocean Plan. That's  
23 something that might change based on the realities of the  
24 situation. I think it is incorrect to assume it's  
25 insignificant everywhere. It is site specific.

61

1 MR. WYELS: If I could add a little to that. The  
 2 approach we're taking in the current Ocean Plan proposed  
 3 amendment is not based on levels of significance in terms of  
 4 impact. We're reading the statute now to say essentially  
 5 that the project proponents need to use the best feasible  
 6 site design technology available to minimize mortality.  
 7 We are then saying once we've done that under the  
 8 proposed amendment, we want you to go out and essentially do  
 9 mitigation that will replace the remaining marine life.  
 10 We're not taking the position we're only going to require  
 11 mitigation for significant impacts. We're trying to create  
 12 an approach under the section today that requires minimizing  
 13 mortality and then applying mitigation to take care of all  
 14 of the remaining impacts.  
 15 The point we're trying to make in Appendix G is  
 16 that that was not an approach that was in vogue in the early  
 17 '90s. In the early '90s, mitigation was conceived as -- not  
 18 using 13142.5 generally, but using CEQA generally. You only  
 19 mitigate significant impacts. That's the distinction for  
 20 what we project would have been the analysis in the '90s  
 21 versus what we're proposing the State Board adopt as a rule  
 22 for how we do that now.  
 23 MR. WOLFF: So thank you, Ms. Whitney and Mr. Wyels, for  
 24 your assistance. I think at this time it is appropriate to  
 25 take a lunch break.

62

1 We will have a closed session, so we do need an  
 2 hour. The good news, however, is the rest of the afternoon  
 3 is pretty much dedicated to this item. We will have ample  
 4 time.  
 5 MR. HARRIS: A couple of announcements. Item No. 10 is  
 6 going to be pulled from the agenda due to illness.  
 7 The enforcement report we can push until tomorrow,  
 8 and Item 12, which is closed session, we'll deal with during  
 9 lunch. So you are correct.  
 10 Also, Ms. Austin has to make a statement on the record.  
 11 MS. AUSTIN: Just announcing we will be meeting in  
 12 closed session, pursuant to Government Code 11126E2A regarding  
 13 Items 13 and 14 on the agenda. Thank you.  
 14 MR. WOLFF: Thank you.  
 15 (Lunch recess)  
 16 MR. WOLFF: Please go ahead.  
 17 MS. BJORK: My name is Rebecca Bjork. I'm the Public  
 18 Works Director for the City of Santa Barbara and presenting  
 19 with me today is Joe Monaco, who has been working on this  
 20 project with the City and he's with the firm of Duedeck,  
 21 and our honorable mayor, Helene Schneider.  
 22 I just wanted to take a few minutes to give some  
 23 background and some setting as to our role in this  
 24 presentation. The State Board and the Regional Board have  
 25 been working to make our permanent facility consistent with

63

1 a future proposed policy. The City is supportive of that  
 2 action. We believe it adds clarity to the permitted status  
 3 of our facility and that it helps to support the State  
 4 Board's proposed policy.  
 5 However, we do also believe we have done what we  
 6 needed to do in permitting our plants over the history -- I  
 7 do want to take some special time to appreciate the work of  
 8 the State Board staff and the Regional Board staff on this  
 9 project. Our city has been putting huge resources into  
 10 desal and it really has stressed our ability to accomplish  
 11 some of our other work. We certainly appreciate the work  
 12 that the State Board and Regional Board have put to our  
 13 desal issue as well.  
 14 This is an important issue to us because it  
 15 addresses the unique circumstances of trying to implement a  
 16 plan that's part of our long-term plan during a time of  
 17 evolving policy. As was indicated, the State Board is  
 18 updating and adopting a policy that hasn't historically  
 19 existed. Past practices for permitting did not include  
 20 certain findings that are now being proposed to be standard.  
 21 And so we believe that this is a creative way to help  
 22 resolve some of those evolving policy issues.  
 23 We also think this is consistent with the Govern's  
 24 drought declaration in that it helps our facility, our city  
 25 and community implement its long-term water supply plan in

64

1 support of our residents and visitors. I do want to take  
 2 some time because I think it's important to understanding  
 3 why we're pursuing desal, to understand the role it plays in  
 4 our city's water supply plan.  
 5 Desal is being discussed and pursued in Santa  
 6 Barbara in part because of our very limited local water  
 7 resources since the late 1980s. I do want to just mention  
 8 that water has shaped the development of Santa Barbara from  
 9 the very beginning with the first aqueduct being built in  
 10 the 1700s by the missionaries.  
 11 In 1991, the question of whether to make desal a  
 12 permanent part of the city's water supply was put to a vote  
 13 to the public and was overwhelmingly supported. Over 80  
 14 percent of our population voted to make desal a part of our  
 15 long-term water supply plan. Council took action in 1994  
 16 and formally adopted desal into this long-term water supply  
 17 plan, and the City Council has continued to affirm that  
 18 during its update of its general plan and long-term water  
 19 supply plan processes. Those are all public processes that  
 20 have extensive public involvement.  
 21 In 2011, the most recent long-term water supply  
 22 plan was adopted, including desal as a drought supply. I'm  
 23 going to spend some time on this slide because it's really  
 24 important to the understanding of how we anticipate using  
 25 desal.



1 So this is our water supply planning chart. It's  
 2 the basic tool we use to try to communicate with our council  
 3 and our public about how we are planing on using our water  
 4 supply going forward. At the very bottom is our recycled  
 5 water. You can see it's a tiny sliver here. We've been  
 6 having some difficulty with the technology of our recycled  
 7 water, even before we went into the current drought.

8 As a result, we have been in the process of  
 9 replacing that plant. We are actively under construction  
 10 right now and anticipate having that plant back online this  
 11 year. The timing is unfortunate. We were rushing to get to  
 12 it, hoping we would have it done ahead of the next drought.  
 13 Unfortunately, this drought came fast and hard.

14 We are right here near year four. I'm going to go  
 15 back to year one. It is important to us because it's how we  
 16 manage water supplies. As soon as Cachuma stops filling, we  
 17 assume we're in year one of drought, and we start managing  
 18 our water supplies with an eye to preserving and conserving  
 19 water so we will be able to respond to later years of  
 20 drought.

21 You can see that this Cachuma box represents a  
 22 substantial part of our supply in year one. It was a very  
 23 dry year. We had higher than average demand. But we also  
 24 have a lot of water in Cachuma and we've been able to  
 25 conserve a substantial amount in the past to be able to

1 In year three, we did use some of that water, but  
 2 you can see we still have more water that we're planning to  
 3 carry forward even as we get into more severe drought. The  
 4 gray is our Gibraltar Reservoir, and our tunnel is virtually  
 5 dry at this point and giving us very little water.

6 Yellow is groundwater. Green is State water. You  
 7 can see the State water we have been saving elsewhere in the  
 8 state we were able to import. And then in March of last  
 9 year, our Council declared Stage 2 drought and asked for  
 10 exceptional conservation. Our populace responded extremely  
 11 well, conserving 20 percent from the time of the Stage 2  
 12 drought declaration. We did see substantial extraordinary  
 13 conservation last year.

14 We're now in year four. Water year four starts  
 15 October 1. We're in year four. This is our plan going  
 16 forward of how we expect to meet our demands should this  
 17 extremely dry weather persist. You can see our dependence  
 18 on allocated water from Cachuma has dropped to a very small  
 19 part of our supply. We are still carrying water that we  
 20 have saved from past years forward. Our Gibraltar -- we are  
 21 hopeful that we will get some small amounts of water to  
 22 Gibraltar that will be able to provide supplies.

23 We are drawing more heavily on our groundwater  
 24 basins. I do want to say that our groundwater basins are  
 25 not large. One of the basins is used by a number of

1 carry it forward.

2 This is Gibraltar, our other surface water supply,  
 3 our groundwater supply, and State Water. Year two is  
 4 interesting because you see no State water. We typically  
 5 are required to take a certain amount of state water in  
 6 order to supply it in exchange with another agency.

7 We didn't need the water that year, but we had an  
 8 opportunity to store it in San Luis Reservoir. So we were  
 9 concerned we might need it in the future years. So we made  
 10 a deal with somebody else to make that exchange. Instead,  
 11 we preserved our water supply and banked it for future  
 12 droughts.

13 Year three, last year, you can see we used a  
 14 substantially diminished amount of Cachuma water allocation  
 15 and instead relied on water from our previous year's  
 16 allocations we had not used in order to make up the  
 17 difference. We are sort of banking and carrying forward  
 18 water in our Cachuma account to try to make up and get us as  
 19 far through the drought as possible.

20 MR. WOLFF: You're speaking pretty fast for our court  
 21 reporter, and I missed the last sentence that you said.

22 MS. BJORK: We really rely on trying to keep -- we get a  
 23 certain allocation of Cachuma water each year. And each  
 24 year we work very hard to use less than that so we can save  
 25 it for future years.

1 different users and is somewhat already reduced in its  
 2 capacity, although the one basin that is controlled by the  
 3 City of Santa Barbara alone is at this time full because we  
 4 do try to use that as a groundwater supply bank.

5 We will have a couple of years of being able to  
 6 pull more heavily on that basin than on others.  
 7 Unfortunately, it's also the basin that is subject to  
 8 seawater intrusion. It's right next to the ocean downtown.  
 9 We have to manage that supply very carefully or we will have  
 10 intrusion that will affect the supply for many years to  
 11 come.

12 The green water is the State water allocation that  
 13 has been made this year. You may note it's a 15 percent  
 14 allocation. That amounts to about 500 acre-feet of water  
 15 for us. Then the orange is water we have been able to  
 16 purchase and expect to be able to have delivered through our  
 17 State water pipes.

18 The next bar is water that we have purchased, but  
 19 we aren't sure we will have the capacity to deliver because  
 20 we only have the rights to a certain amount of capacity in  
 21 those pipes. If everyone else is using their capacity, we  
 22 may not be able to have that water delivered to us.

23 Then the top is the 20 percent extraordinary  
 24 conservation that we are very fortunate to be able to accept  
 25 from our customers because I know others have been much more

1 challenged in getting conservation out of their customers.  
 2 So looking forward to year five, you can see it  
 3 looks more or less the same, with increased reliance on  
 4 carry-over water. No new groundwater allocations, but our  
 5 recycled water being more fully online. Recycled water is a  
 6 great resource, but it doesn't fully replace potable water  
 7 in that you can't drink it or use it inside. It's only  
 8 useful for irrigation.

9 Then looking out at the out years, which is when we  
 10 would start to need desal. This is our desal block right  
 11 here. You can see we really are limited. We have not  
 12 secured State water for those years. We might be able to.  
 13 Even if we are able to secure it, we only have the capacity  
 14 to supply about the amount that we still have in shortage.  
 15 We don't know what the State water market will be like if  
 16 this drought persists for another two years. So we  
 17 really -- even with desal in year six, we are really going  
 18 to be challenged for our water supply.

19 We are hopeful. This is a very conservative  
 20 approach to water supply planning, so we're hopeful that  
 21 this water shortage will resolve itself. If not, we would  
 22 really be in a critical situation and taking the desal away  
 23 would put us in an even more critical situation.

24 I think the one thing I want to emphasize at this  
 25 point is a lot of people say, "Why don't you just buy

1 spot-market water and get through this drought?" The  
 2 problem is this capacity issue. We can't get it here. We  
 3 can't get it here in time. That's really where desal comes  
 4 in. As I said, the long-term supply plan does have it as a  
 5 policy as a drought supply and use it as late in the drought  
 6 as possible. Doing so makes it even more reliant on having  
 7 it ready if and when we need it.

8 I just want to illustrate that it has been a part  
 9 of our developed water supply. Over the last 15 or so  
 10 years, we spent over -- almost \$2.3 million doing routine  
 11 maintenance and repair of the desal plant.

12 In addition, we have maintained our permits for the  
 13 desal plant. We do have current active permits for the  
 14 desal plants that will allow operation of the plant. As I  
 15 said earlier today, action recommended by your staff is  
 16 really to resolve this evolving policy issue about how  
 17 findings were made at the time.

18 So just to touch on our schedule for desal based on  
 19 the water supply review, we will be receiving proposals from  
 20 design-build operators to construct and operate the plant in  
 21 March. We would accept or award a contract in June and  
 22 begin production in the summer of 2016. So you can see  
 23 we're really coming quickly to making a decision about  
 24 desal. If we are lucky, it will rain cats and dogs and we  
 25 will be able to put this off for a year or more, but at this

1 point in time, it's kind of very much of the essence for us.

2 With that, I'd like to turn it over to Joe Monaco  
 3 to talk about some of the technical issues.

4 MR. MONACO: So I'd just like to walk through some of  
 5 the basic features of the desal plant, the schematic, which  
 6 is provided with the material the Board has been provided in  
 7 the past. It shows the basic flow diagram. It starts with  
 8 the intake structures, the existing intake structures, the  
 9 filter feed, pump. You then push the water through the  
 10 media filters that are onshore, and then a second pass  
 11 through cartridge filters, and then finally through the RO  
 12 trains.

13 Those first two filter processes generally remove  
 14 the suspended solids. And the finished water would then be  
 15 produced with -- flush and backwash required as an -- in  
 16 order to maintain the media filters. And then finally a  
 17 brine pump station to dispose of the hypersaline brine.

18 So basically, this is the plan or the design and  
 19 essentially how it is currently in place today. At the  
 20 point when the City made the determination to put the plan  
 21 into long-term storage mode, some of the more perishable  
 22 materials, like the membrane filters and so forth, were  
 23 removed. And in addition to that, the proposed repair and  
 24 maintenance activities include refurbishing and updating  
 25 some of the technology.

1 This slide, I want to highlight that a substantial  
 2 amount of analysis was conducted, some of which you heard a  
 3 little bit about earlier this morning. Basically, different  
 4 desalination technologies, locations and capacity levels  
 5 were analyzed at the outset, prior to the construction of  
 6 the plant. All of these studies are included in the  
 7 materials that are part of the record and have been  
 8 submitted to the Board and also to the State Board and  
 9 Channelkeeper as well.

10 So in terms of timelines, these studies then  
 11 preceded the decision to construct the project. The permit  
 12 that was issued by the Regional Board in 1991 in conjunction  
 13 with the NPDES permit for the El Estero Wastewater Treatment  
 14 Plant was subsequently renewed in '92, '99, 2004 and finally  
 15 in 2010.

16 In 1992, the plant being again in operation for a  
 17 brief period of time. Then the rains came, which gave  
 18 drought relief. In 1996, the council directed staff to  
 19 place the plan into long-term standby mode. About that same  
 20 time, the plant was made part of the long-term water supply,  
 21 for the City recognized it would be needed in the future.  
 22 As I mentioned, 2010 was the latest renewal of the NPDES  
 23 permit. In 2011, it was confirmed for a long-term water  
 24 supply commitment.

25 So this next slide, I want to spend a little more

1 time on the -- because there were a lot of questions related  
2 to this. These are the basic conclusions of the subsurface  
3 tests that were performed. And in all, there were a series  
4 of four tests or technical memos that addressed subsurface  
5 intakes, three different kinds of subsurface intakes: Deep  
6 wells, shallow wells, and subsurface infiltration galleries.

7 The deep wells were initially determined infeasible  
8 and dismissed because of issues with well production deals  
9 as well as potential for impacts on the groundwater basin.  
10 Through the series of the three additional studies that came  
11 after that, there was testing and reconfirming of the  
12 hydraulic conductivity of the materials, leading to the  
13 conclusion in the final memo that you see on the slide here  
14 that for a production level of 3,500 acre-feet a year, which  
15 is the production level that was being considered at the  
16 time of these studies -- obviously, the plant was permitted  
17 at 10,000-acre per year. So between 100 to 200 wells using  
18 the shallow well which will be needed along the coast line.  
19 That is dependent upon how close to shore those wells are  
20 located.

21 And then infiltration galleries were determined to  
22 be technically feasible but extensively more costly, and at  
23 the time, were an unconventional technology and had not been  
24 tested. The one large-scale infiltration gallery in  
25 place -- in the world was in Japan and had not been

1 constructed at that point.

2 So also, we had some discussion on impingement and  
3 entrainment. There were extensive studies that were  
4 conducted. We know that it supports the 13142.5(b) findings.  
5 I think there's evidence that suggests that 13142.5(d) is  
6 also satisfied through those studies to the extent that that  
7 subsection refers to information on marine systems -- which  
8 were pretty extensively characterized, you know, well beyond  
9 the entrainment effects. The characteristics of water  
10 quality, other marine habitats and other effects of the  
11 project other than entrainment were addressed and  
12 characterized through those studies.

13 Those supported findings that staff has presented  
14 in the draft amendment that's before you today. They also  
15 supported the findings of the Coastal Commission made in the  
16 two separate coastal developments occurring, basically  
17 finding that the plan operation is consistent in all the  
18 coastal marine life policies in place.

19 With that I will turn it over to the mayor.

20 MS. SCHNEIDER: Thank you. My name is Helene Schneider.  
21 I'm mayor of the City of Santa Barbara. Welcome to Santa  
22 Barbara and thank you for holding this particular hearing  
23 here in Santa Barbara.

24 I think the one issue I really want to take home  
25 here and emphasize is that it's always been City Council

1 policy and is currently that the desalination plant and the  
2 use of it is a last resort. The issue is that we are at the  
3 last resort. Considering the planning we've had in front of  
4 us, we are now at that point.

5 Our City water customers have been tremendous in  
6 their extraordinary conservation efforts that have been  
7 shown. In fact, since the last drought, the city per capita  
8 is using 20 percent less water now than it did before the  
9 last drought. We take it very seriously in looking to see  
10 what we can do in conservation efforts as much as we can.

11 We were an early adopter of recycled water with the  
12 recycled water facility in 1989 and we support the staff  
13 recommendation and the Board's decision to amend the City's  
14 NPDES permit to provide clarity of how the State's evolving  
15 policy applies to the city's existing facility and achieve  
16 beneficial regulatory certainty.

17 Our residents made a long-term investment, as was  
18 mentioned before, in a diversified water supply portfolio,  
19 including the planning for, constructing and maintaining the  
20 desalination plants as part of its permanent supply. The  
21 investment is very significant, as you have seen earlier.  
22 It was \$34 million to build the facility back in 1991. You  
23 saw almost 2.3 million since then in terms of keeping its  
24 permits up to date and maintained, and also the additional  
25 cost it will have to take on in order to bring it back fully

1 into production.

2 The voters, as mentioned, have supported this  
3 overwhelmingly in addition -- in the beginning. It's this  
4 planning and major commitment and investment and support  
5 that has allowed the City to defer the use of the facility  
6 until the time comes for a long-term shortage.

7 So it's now time for the City to use its  
8 investment, to implement this long-term plan. This is  
9 crucial to avoid potentially catastrophic results of a  
10 long-term drought to the city. We all wish and hope it will  
11 rain, but we can't guarantee that at all. That's what the  
12 planning is for, and we believe we're using the desalination  
13 plant, as was mentioned in the long-term water supply plan,  
14 as a last resort.

15 As part of the process placing the plant back into  
16 the production, we're committed to the additional measures  
17 as reflected in Attachment G. We also unanimously last year  
18 directed the staff to study the use of subsurface intakes as  
19 well as increase in the City's current water reuse program  
20 that is currently part of the direction from Council to  
21 staff.

22 So we urge the Board to adopt the amendment as  
23 presented and asking previous Board action to evolving State  
24 policy. I thank you for your time. We're at the  
25 20 minutes, and we'll be open for any questions you may

1 have.  
 2 MR. WOLFF: If you need just a couple more seconds to  
 3 complete, I don't want to stop you.  
 4 MS. SCHNEIDER: Thank you. I usually cut people off  
 5 when I run meetings, so I wanted to acknowledge the time.  
 6 I'll just end by saying how vital it is for the  
 7 City to move forward with implementing its long-term water  
 8 supply plan by placing this facility back into production.  
 9 You're a key component in making that happen. We're not  
 10 taking this decision lightly. It's a very serious one.  
 11 It's an expensive one, but it's obviously one that we really  
 12 need to have for our residents to have adequate water  
 13 supply.  
 14 MR. WOLFF: So now could you turn the lights up?  
 15 What I propose now is for our Board to ask  
 16 questions to the City. As a refresher, the next speakers we  
 17 will have after that is Channelkeeper and they'll have an  
 18 opportunity to clarify questions. I'll start on my right.  
 19 Mr. Young?  
 20 MR. YOUNG: Thank you, Mr. Chair.  
 21 Does the City have an estimate of what it would  
 22 cost if it went ahead and just decided to do subsurface  
 23 intake installation with the refurbishment and upgrade of  
 24 the facility at this point?  
 25 MS. BJORK: Mr. Young, we do not -- have not done the

1 MR. YOUNG: What you're describing is the same type of  
 2 subsurface system that Mr. Wyels was describing that the  
 3 State Board amendment to the Ocean Plan is considering?  
 4 MR. MONACO: Correct.  
 5 MR. YOUNG: Do you have an idea of cost?  
 6 MR. MONACO: It's really hard to estimate cost. There  
 7 is a piece of information out in the public right now based  
 8 on studies that are being done for the Huntington Beach  
 9 project. In that case, it's a process that the Coastal  
 10 Commission has engaged with the applicant for that  
 11 particular project to examine this particular issue.  
 12 They've done extensive studies on the technical  
 13 feasibility of subsurface intakes. They've engaged an  
 14 independent science panel to review those studies. And  
 15 their determination was that the concept is technically  
 16 feasible, and if -- I believe I'm getting my statistics  
 17 right. For 154-million-gallon-per-day intake, which is  
 18 what is required for that particular project, that a  
 19 40-acre area of seabed would need to be constructed.  
 20 There were some issues with the construction  
 21 methods and the time frame for construction and so forth.  
 22 The expert panel basically then conveyed those issues to  
 23 another panel that will consider all of those, as well as  
 24 economic and social issues as well.  
 25 So the process for that has not been confirmed yet,

1 studies to evaluate whether a subsurface intake is feasible  
 2 at this time. So we do not have an estimate of the cost,  
 3 but the committee may be able to answer that better, as well  
 4 as describe a little bit more about a subsurface  
 5 infiltration gallery, which is what the last remaining issue  
 6 really is.  
 7 MR. MONACO: Certainly. So a subsurface infiltration  
 8 gallery, generally speaking, is a series of perforated pipes  
 9 that are connected and laid within an excavated area of  
 10 seabed and then covered with either an engineered media or  
 11 the native materials if they are of suitable transmissivity.  
 12 And then the water is collected through that, as I believe,  
 13 Ms. Whitney indicated, through the seabeds. The filtering  
 14 happens through the seabeds. The pressure is dispersed over  
 15 a larger area.  
 16 Generally speaking, it does require a fairly large  
 17 area of seabed to produce the volumes of water that we're  
 18 talking about here. It makes sense because you're trying to  
 19 reduce the pressure over that large area. So the water is  
 20 taken in and that becomes your intake.  
 21 One of the important considerations with the  
 22 infiltration gallery is to what extent the currents and  
 23 existing wave action and so forth can clear away the debris  
 24 that gets filtered out, the flow rate through the  
 25 infiltration gallery and, of course, the currents.

1 so I don't want to speculate too much on cost. It would be  
 2 in line with the estimates that were at the time of --  
 3 MR. YOUNG: That's 150 million gallons per day?  
 4 MR. MONACO: Yes.  
 5 MR. YOUNG: So the City's operation will be considerably  
 6 smaller than that?  
 7 MR. MONACO: Correct.  
 8 MR. YOUNG: So if that's 40 acres, we're talking about  
 9 five acres? Four acres?  
 10 MR. MONACO: I wouldn't go as far as to say we can  
 11 necessarily scale it that way, I just don't have the  
 12 information to support that at this time. But the intake  
 13 for this facility at maximum permitted capacity would be 24  
 14 to 25 million gallons a day.  
 15 MR. YOUNG: There's sufficient sandy bottom beyond the  
 16 harbor area to accomplish this?  
 17 MR. MONACO: Generally, that is the area in the vicinity  
 18 of the existing intake sandy bottom habitats.  
 19 MR. YOUNG: Rebecca, you put a table up of the routine  
 20 maintenance costs that the City has incurred over the past  
 21 20 years. Could you go back to that, please?  
 22 I'm interested -- I thought the plant was totally  
 23 mothballed because filters were sold off and their  
 24 components were missing because they've been sold.  
 25 So how is it that you have costs, electrical costs?

1 MS. BJORK: We have. The public perception is that  
2 there is nothing there. In actuality, we've done our best  
3 to maintain the portions of the plant that have a longer  
4 life: Our filter vessels. We have pumps there that we have  
5 gone and rotated the pumps to keep them operational. We do  
6 have some basic electrical and watering needs to keep the  
7 site secure and the landscape maintained.

8 Just as we would a well we take offline, even  
9 though it's not producing water, we still have some basic  
10 maintenance for that, whether it's pulling the pump or  
11 replacing the pump. We have actively maintained this as  
12 standby mode as opposed to -- I know the terminology is  
13 mothballed and makes you think it's off on its own, but  
14 we've had an active maintenance program throughout in order  
15 that we can preserve the facility in a way we can put back  
16 online.

17 MR. YOUNG: But the plant has not had the ability to do  
18 any kind of desalination?

19 MS. BJORK: I'm sorry. Repeat the question.

20 MR. YOUNG: The plant has not had the capacity or  
21 ability to desalinate any water?

22 MS. BJORK: The filter membranes were sold. They had a  
23 very short life, and we were able to recoup some of our  
24 investment. We would have had to have replaced those  
25 anyway.

1 MR. YOUNG: Mr. Monaco, if we can get back to -- I think  
2 what we're supposed to be doing with this hearing is looking  
3 at what was known back in '91 or so as the feasibility  
4 analysis that we were supposed to do then, we're going to do  
5 now. Can you take us through the shallow beach well studies  
6 that were done with specificity? I have read through -- I  
7 put the -- there's a 1989 document that was provided to me  
8 called "July 31 TM3 Report on Preliminary Testing on East  
9 Beach." I've looked at a 1991 March '01 report called  
10 "Desal Feasibility." That's my knowledge of what was done.  
11 I didn't find anything after that because it looked like an  
12 EIR was generated after that point. I just assumed that I  
13 reviewed what was available.

14 Is that right?

15 MR. MONACO: Well, there are some studies in between  
16 those.

17 MR. YOUNG: If you can highlight and go through what --  
18 the shallow beach well analysis that we should be looking  
19 at.

20 MR. MONACO: So the Technical Memo 2 you referenced from  
21 1989 was where these four intake options were first laid  
22 out. As I mentioned, the deep well was dismissed based on  
23 information that was available at that time and concerns  
24 over groundwater consumption and things like that.

25 So that left the two subsurface intakes

1 alternatives as well as the open intakes. And at the time  
2 these were all being evaluated based on technical  
3 feasibility and cost. And there were cost concerns over the  
4 open intake, given the design, at the time, involved  
5 basically establishing a new pipeline adjacent to an  
6 existing outfall.

7 The City was looking very carefully at the  
8 subsurface intake alternatives. The assumption in that 1988  
9 Technical Memo 2 is that a rate of about 200 feet per day  
10 could be achieved with the shallow wells. That was  
11 recommended for further testing, and there was subsequent  
12 Technical Memorandum 3 in 1989 where some testing was  
13 actually conducted in the East Beach area, and that resulted  
14 in hydraulic conductivity. That's the 20-feet-per-day  
15 figure.

16 MR. YOUNG: That was done in the worst-case location,  
17 the worst place, from my reading; right? The City at that  
18 time wanted to look at the shortest beach area and the worst  
19 geology and test for, bottom line, what the minimum would  
20 be?

21 MR. MONACO: So there was -- because of that, there was  
22 a sense that there may be -- we need to look at better  
23 productivity in other areas. Additional testing was  
24 recommended, also, in that technical memorandum

25 MR. YOUNG: Where was that additional testing done?

1 MR. MONACO: That came in -- let's see, two studies away  
2 from that. First there was a feasibility study that was  
3 conducted in 1990, and that's where the ocean -- between 20  
4 and 200 feet per day could be achieved with those shallow  
5 wells.

6 So additional testing was recommended. The test  
7 area was expanded to east-west in the Ledbetter Beach areas.  
8 Approximately two and a half miles of shoreline were tested,  
9 and the result of that was that -- that's basically what I  
10 showed you on the slide, the 100 to 200 wells, depending on  
11 the well placement, would be needed for that 3,500 acre-feet  
12 of production volume. Again, you're looking at -- which is  
13 what was -- one of the options that was being considered at  
14 the time. Keep in mind the City was looking at a variety of  
15 alternatives from plant capacities to intakes and so forth.

16 MR. YOUNG: What hydraulic conductivity was that  
17 estimated at?

18 MR. MONACO: I can look that figure up and get that for  
19 you, but essentially, for the yield of that 3,500 acre-feet  
20 it was the 100 to 200 wells within 50 to 100 feet of  
21 shoreline.

22 MR. DELGADO: You say 50 to 100 feet from shoreline?

23 MR. MONACO: Correct. So depending on where the wells  
24 were placed, the yield would vary. So the closer they are  
25 to the water source, the better yield was achieved, so fewer

1 wells were necessary closer to the beach.

2 But, again, there are issues associated with  
3 feasibility of drilling in those areas in the location  
4 involved. That's why it was presented in terms of a range  
5 of options.

6 MR. YOUNG: One of the reports -- maybe it's the second  
7 one we looked at -- came up with an average hydraulic  
8 conductivity of 110 feet per day.

9 How was that determined?

10 MR. MONACO: That was in the feasibility study in 1990.

11 MR. YOUNG: I think --

12 MR. MONACO: I can go back and get the details on that.  
13 That's where they took that range of between 20 to 200 feet.  
14 We still believe that they could achieve better than that  
15 minimum. The feasibility study was more of an estimate,  
16 more of a desktop exercise based on what could potentially  
17 be yielded if they expanded the well field. That's the 110  
18 feet per day from -- the empirical testing came later than  
19 the hydraulic testing.

20 MR. YOUNG: Well, all this discussion really just  
21 focuses on an ability to only get through 3,500 acre-feet;  
22 right? And the plan is permitted for 10,000 acre-feet. So  
23 even if you could get 3,500-acre-feet out of 200 beach  
24 wells, where could the City get 10,000 acre-feet out of  
25 beach wells? I don't know that it's feasible.

1 MR. MONACO: Correct. I don't know the specific  
2 sequence of decision making, but I believe the decision to  
3 forgo the wells and go with the open intake was made prior  
4 to that determination of range up to 10,000 acre-feet per  
5 year.

6 MR. YOUNG: Rebecca, one of the other slides you had,  
7 you had a desal component in to the City's water supply.

8 Is that 3,500 acre-feet?

9 MS. BJORK: I think it's 3,125.

10 MR. YOUNG: Really what we're looking at -- I mean, any  
11 other coastal community is faced with the same thing except  
12 they don't have the desal option. So they're really faced  
13 with lesser options.

14 MS. BJORK: There's a huge variability in water supplies  
15 in coastal communities. Even in southern Santa Barbara  
16 County, both Goleta and Carpinteria have substantially  
17 larger groundwater basins than the City does. Montecito has  
18 the fewest.

19 We have, since the 1980s, really diversified our  
20 water supply. In the late 1980s, we had Gibraltar and  
21 Cachuma and our wells. We now have Gibraltar, Cachuma,  
22 State water, a really successful and substantial  
23 conservation program. In the 1980s, our average annual  
24 demand was greater than 16,000 acre-feet. Our average  
25 annual demand is now less than 14,000 acre-feet, despite

1 population growth.

2 We can still count on our customers to do  
3 extraordinary conservation. We've really worked hard to  
4 diversify to try and drought-proof ourselves. This  
5 unprecedented drought has really sped up our water supply  
6 horizon.

7 In fact, when we most recently updated the  
8 long-term supply plan, we moved from a five-year planning  
9 horizon to a six-year planning horizon to really try to push  
10 off desal to year six because we get three-year droughts  
11 pretty often. But it's unusual to get a four-year drought  
12 and we knew we needed at least a year to get the desal plant  
13 back online and we didn't want to get going with that if  
14 it's just going to rain.

15 We're now well into year four. It's drier -- as  
16 you heard your staff say, it's the driest January on record  
17 in many parts of the state. We need the plan much sooner in  
18 our planning than we had expected.

19 MR. YOUNG: My last question is for Mr. Monaco. You  
20 made a statement that you thought that the statute dealing  
21 with Subsection D -- that sufficient studies had been done  
22 back in the '90s to address the entrainment issues.

23 Could you elaborate on that?

24 MR. MONACO: Sure. We provided a summary. The  
25 environmental impact report that was prepared for the

1 original construction of the facility in 1991 provided an  
2 extensive characterization of the marine environment in two  
3 different areas. One was related to marine water quality as  
4 it relates to the discharge and the effects on marine  
5 biology as a result of that. The other was related to the  
6 intake.

7 There was -- in addition to the Ormond Beach data  
8 that was mentioned earlier, there were additional volumetric  
9 plankton data collected that was site specific for the EIR.  
10 It was a one-time study, so it doesn't fully take into  
11 account all the seasonal variation and things like that. It  
12 was consistent with the data collected previously.

13 There was also reference to a number of previous  
14 studies that had been done over the years within the project  
15 area, both in terms of plankton density as well as the  
16 environment and effects that might result from both  
17 construction and operation in the plan.

18 MR. YOUNG: Is this the three-year study we heard about  
19 earlier?

20 MR. MONACO: No, it's not. There was additional data  
21 that was collected specifically for the EIR in 1991 related  
22 to plankton, as well as -- they did a dive survey,  
23 essentially so they characterized the marine environment in  
24 general and provided a plankton count as well.

25 MR. YOUNG: How did they do the plankton count, with

1 these plankton tows that were done?  
 2 MR. MONACO: I believe so. There isn't a lot of data on  
 3 the methodology of the study, but the results are contained  
 4 in the EIR.  
 5 MR. YOUNG: Do you have a handle on the results of what  
 6 they indicated to being not significant in terms of loss?  
 7 MR. MONACO: The results are quantified in terms of --  
 8 again, characterizing the existing baseline in numbers per  
 9 cubic meter -- 980 copepods, 150 larvaceans, 50 ostracods.  
 10 Those are the primary of zooplankton. The rest were less  
 11 than 1 percent in numbers.  
 12 In terms of how they were used for characterizing,  
 13 I would say generally that was done consistent with how  
 14 these studies were conducted back in 1991 and that includes  
 15 those studies that -- and obviously, for facilities like  
 16 this, there weren't many examples to look to. But there  
 17 were -- within the power plant, once through the cooling  
 18 permitting process -- these studies was very common and  
 19 this methodology was very similar and consistent with the  
 20 methodology at that time.  
 21 MR. YOUNG: So you mentioned copepods. Did they do  
 22 any fish identification of the plankton?  
 23 MR. MONACO: Yes. That's part of the less than one  
 24 percent. The group that composed less than 1 percent  
 25 included larval fish.

1 MR. YOUNG: Do you have something you can project?  
 2 MR. MONACO: I don't. This is just my notes and  
 3 summary.  
 4 MR. YOUNG: Could you tell us what the percentages were  
 5 made up of? Do you have that in your notes?  
 6 MR. MONACO: I don't have them as percentages. I don't  
 7 believe they were presented as percentages in the EIR.  
 8 MR. YOUNG: Okay. Do you have questions?  
 9 MR. HARRIS: You need to get closer to the mike.  
 10 MS. THOMASBERG: You answered my question about the  
 11 increase in water usage. My concern was that once you get  
 12 this operational, then your population will outgrow the  
 13 capacity of the plant.  
 14 So I think you're okay as far as I can see.  
 15 MS. BJORK: If you're okay, maybe I won't say anything.  
 16 MS. HUNTER: I just have a few questions. One more on  
 17 the studies that were done.  
 18 Who conducted those studies?  
 19 MR. MONACO: Are you referring to the subsurface intake  
 20 studies?  
 21 MS. HUNTER: The plankton tow. You said you didn't know  
 22 what the methodology was. I'm just wondering, was it UCSB?  
 23 MR. MONACO: I believe it was. I'll look at the  
 24 records. I believe it was Ecolab for the city for the  
 25 one-day study I was referencing.

1 MS. HUNTER: That's a contracted service provider to the  
 2 city?  
 3 MR. MONACO: Correct.  
 4 MS. HUNTER: Do they do other kinds of work like this or  
 5 that was just a request specific to this project? I'm just  
 6 curious. If you're citing a study that you're relying on to  
 7 say, "We're satisfied that we've learned what we need to  
 8 know about the potential for this area," there needs to be  
 9 some scientific factors that you can rely on and say,  
 10 "This is the methodology and this is -- these are the  
 11 percentages of what we saw," and those kinds of things are  
 12 typically reported out. Maybe that's something that you  
 13 don't have at hand. That's why I was asking who did this  
 14 study.  
 15 MR. MONACO: There were approximately a dozen or so data  
 16 sources that were referenced in that study. I guess the  
 17 point I was trying to make on the site-specific --  
 18 project-specific data were just that. That in addition to  
 19 the existing data, there was a site-specific study through  
 20 the EIR contractor.  
 21 MS. HUNTER: I'll roll forward to the -- one of the  
 22 three actions that are identified -- pardon me. Identified  
 23 in Attachment G that note there are three actions the City  
 24 is undertaking, including upgrading the screens and the  
 25 mitigation funding. And the third is to conduct -- the

1 following April, to begin exploring a range of alternatives,  
 2 including subsurface intakes and potable reuse options.  
 3 I'm going to take the third one and the second one.  
 4 The third one, can you tell me, then, what -- or do you have  
 5 a plan for what type of studies you're going to conduct and  
 6 where those studies are going to occur? Are you currently  
 7 in the process of preparing for that which would include  
 8 literature review of the -- not most recent, but recent,  
 9 like, the last five years?  
 10 I know a lot of research has been put into the  
 11 fishery value -- value of the fisheries to the State of  
 12 California. That particular location, the Santa Barbara  
 13 Channel, is the point at which the northern currents and  
 14 southern currents circulate. It's highly rich in its  
 15 environment. I suspect that UCSB, among others, have  
 16 conducted a number of studies.  
 17 I'd be interested to know if you or your  
 18 consulting/contracting services have started to benefit from  
 19 this data being developed and collected on a statewide level  
 20 to assess the value of the fisheries. The Channel Islands  
 21 represents a huge fishing ground that stretches from  
 22 Monterey to San Pedro. The fisheries that come to the Santa  
 23 Barbara Channel are long-standing for that very reason.  
 24 So I'm curious where you are in the process of  
 25 assessing what studies you'll do and what existing

1 information can you help to build on that?  
 2 MR. MONACO: I think I'll start by saying the direction  
 3 from City Council and from staff was to -- at that point in  
 4 time when the contract documents came, if the plant were  
 5 moving forward, the direction would be given to engage in  
 6 those studies.  
 7 MS. SCHNEIDER: And also, the direction that Council  
 8 was -- irregardless (sic) if we said yes or no to the  
 9 contracts, that we wanted to have those studies document  
 10 and -- both on the subsurface intake and on other potable  
 11 reuse options.  
 12 So even if there was another March Miracle, for  
 13 example, we knew there would be another drought in the  
 14 future. So thinking long-term, we knew we needed to start  
 15 looking at those options. The Council, when we made that  
 16 decision, was a combination of practical timing of where we  
 17 were in the drought in the current facility versus a longer  
 18 term policy consideration.  
 19 MS. HUNTER: So that is entirely reasonable and logical.  
 20 I'm asking, does that mean that the April period is when you  
 21 envision and you'll begin to organize or create your  
 22 strategy and plan for who you're going to hire to do the  
 23 studies?  
 24 MS. SCHNEIDER: The answer is detailed. I can tell you  
 25 the thought behind the motion of the Council was that the

1 amount of time and energy and resources of staff at that  
 2 time that it would take to get to getting the contract  
 3 before us, we understood that that was the primary focus.  
 4 Of course we've been talking about it ever since we  
 5 made that motion. In terms of the depth of research at this  
 6 point, we didn't expect too much of that until the contract  
 7 was ready for the Council to consider.  
 8 MS. HUNTER: So you're not at that stage yet?  
 9 MS. BJORK: I will say that our intention is to return  
 10 to Council -- as the mayor has indicated, we've been very  
 11 much focused on getting to a point where we can be ready to  
 12 go forward with the desal plant because that was our  
 13 emergency plan. We've been making that plan for the  
 14 emergency and now enacting it.  
 15 Once we get to the point where that plan is well  
 16 underway, that can take us to the next level, which is  
 17 "Okay. If we want to do things differently, what does that  
 18 look like? If we want to do a subsurface intake, what does  
 19 that look like? If we want to try to get away from  
 20 desalination through potable reuse, is that feasible? What  
 21 would it look like?" Those are the type of studies we  
 22 expect to be returning with. We have not anticipated  
 23 looking at impact on fisheries because the idea was to move  
 24 away to evaluate what alternatives would take us away from  
 25 that.

1 MS. HUNTER: Okay. But you will be looking at the  
 2 potential -- the feasibility of subsurface --  
 3 MS. BJORK: That's correct. That's what we've been  
 4 directed by Council to return with.  
 5 MS. HUNTER: Then to the mitigation. I'm interested in  
 6 understanding the thinking behind the amount that you  
 7 developed. Typically, mitigation is determined with some  
 8 definition of what the impacts are, you know, some way of  
 9 correlating the level of impact to the mitigation, as well  
 10 as the nexus between those species being affected.  
 11 MS. BJORK: Right. As indicated, we aren't really  
 12 considering mitigation. There was not found a need to do  
 13 mitigation. We consider this an environmental project.  
 14 I think it's very attractive to staff because it  
 15 allows us to put money to an ecosystem that we know is  
 16 highly productive that we know can serve as a nursery for  
 17 juvenile marine species. It's also one of our most  
 18 critically endangered habitats. There's a project underway,  
 19 well defined, and likely to come to fruition, which is  
 20 always hard in mitigation or environmental restoration  
 21 projects that we could contribute meaningfully to.  
 22 I'm not as familiar as Joe with the expert panels,  
 23 but we do look at the expert panels' evaluations for  
 24 mitigation. They weren't drastically substantial. We  
 25 wanted to make a meaningful contribution that would actually

1 result in habitat.  
 2 One of the reasons to do it is that I think that  
 3 some of the things you're struggling with are some of the  
 4 things we struggled with, which is it's hard to go back in  
 5 time. And so this question of what is the effect on the  
 6 marine environment may not be able to be clearly defined  
 7 through the lens we would have looked at back in time.  
 8 We think that we can provide a beneficial effect  
 9 that hopefully will go -- be offset, hopefully more than  
 10 offset, but what negative effects might occur. I do want to  
 11 reinforce that we're thinking about desal on the south coast  
 12 because of the projects that are out there in the public  
 13 right now. They're large-scale projects that are expected  
 14 to operate 24/7 from now on. Santa Barbara still didn't  
 15 contemplate having a plan of that kind. Our Council policy  
 16 remains that this is a drought supply.  
 17 MR. MONACO: I'll just offer a point of clarification  
 18 in terms of mitigation costs and the expert panel, where  
 19 this was one of the early expert panels that the State Board  
 20 had assembled to look at entrainment impacts as part of the  
 21 Ocean Plan Amendment, and they did look at a mitigation fee  
 22 concept. The State Board staff determined for a variety of  
 23 reasons not to carry that recommendation forward, but we  
 24 felt that -- again, this is all on the City's side. We were  
 25 just looking for ideas on what kind of contribution would be



1 meaningful. We thought there was good guidance provided in  
2 that expert panel. So we used that as a guideline, and the  
3 actual number we came up with was substantially larger than  
4 that fee.

5 MS. HUNTER: I agree. Thank you for helping to open  
6 this up a little bit in terms of where you think you're  
7 headed.

8 I agree it is very complicated to try to move back  
9 and forth in time and consider the options and steps that  
10 have been taken. It's really hard to unring the bell. We  
11 are in a place where we have invested a tremendous effort in  
12 the stakeholder processes to better understand our marine  
13 environment.

14 Certainly, the Santa Barbara coastline, it stands  
15 out. It's a jewel. So I think the considerations in  
16 looking at the context of now understanding our marine  
17 resources and the importance of sustaining those marine  
18 resources -- you know, this is something we understand a  
19 great deal more about.

20 I'm hoping to see the benefit of that work put into  
21 your process going forward so that there is some connection.  
22 You're not -- you really do have a great deal of  
23 information, I believe, that you're going to find available  
24 to you that's very specific to the questions before us in  
25 terms of impacts to sea life.

1 MS. BJORK: 1992. Oh, sorry.

2 MR. DELGADO: So March Miracle was in 1991, and then a  
3 year later, this plant started operation for a few months  
4 and then stopped and hasn't reopened since?

5 MS. BJORK: Correct.

6 MR. DELGADO: What's the point -- we kind of got to it,  
7 so it's okay if you tell me you already answered that  
8 question. You'll start in the future studies looking at  
9 subsurface after potentially spending up to \$40 million to  
10 reopen this plant.

11 So let's say you spend 30 to 40 million, and you  
12 started doing some studies, and in about a two- to  
13 three-year period of time after you reopen this plant, your  
14 studies show that wells or something else was feasible.  
15 What's the point of doing them after you spend up to 40  
16 million?

17 MS. SCHNEIDER: I'll start and maybe Ms. Bjork can get  
18 into more detail. The 30 to \$40 million is not just about  
19 the intake. There's -- a significant portion of that cost  
20 is going to be about the filters and the processes on site.  
21 So that won't change.

22 It's the change, potentially, of the intake valves,  
23 whether it's above surface or subsurface. It's not like  
24 these 30 to \$40 million will be completely irrelevant in  
25 terms of what we constructed at the desal plant because of

1 And so that would be my -- that's my kind of hope  
2 is that the work that you undertake is not so narrowly  
3 defined that you don't help to contribute to the constant  
4 building of our understanding. The value to the community  
5 in Santa Barbara and its tourism, I would think, is another  
6 dimension of your concerns, looking at economic viability of  
7 the City and maintaining its resources.

8 MS. SCHNEIDER: I think a lot of what you said is in the  
9 minds of both staff and the Council and time has been the  
10 kind of conflicting factor here. So thank you for those  
11 comments.

12 MR. WOLFF: Mr. Delgado?

13 MR. DELGADO: Yeah, thank you.

14 Looking at your website, it seems to indicate that  
15 the plant was built for approximately a \$34 million cost to  
16 the City but has only been operated from March to June in  
17 1992; is that correct?

18 MS. BJORK: Yes. There was what's become known as the  
19 "March Miracle," which in the space of one month, Lake  
20 Cachuma went from basically a lake bed to spilling. So a  
21 few months later, the Council decided at that point, for a  
22 number of reasons, to go back to looking to our water supply  
23 from Lake Cachuma rather than continuing producing water  
24 from the desalination plant.

25 MR. DELGADO: So the March Miracle was in 1991?

1 the materials and equipment needed to run it. Plus some of  
2 the funding is also actually production of the water, the  
3 3,125 acre-feet of water.

4 So I think you have to parse out which part of the  
5 contract will cost for how much. The other piece, again,  
6 has to do with time. The thought process was the time it  
7 would take to do the studies to see if something is feasible  
8 would not give us the time by 2017, when we basically would  
9 absolutely need desal as part of our water supply.

10 It would be too late -- it would be about that time  
11 when we would even know whether or not it was feasible than  
12 going through the permitting process with a newer facility,  
13 however long that would take. And so it was a timing issue,  
14 as well, of why this looks like it's the cart before the  
15 horse.

16 MR. DELGADO: All right. That makes sense.

17 MS. SCHNEIDER: It's about \$2 million of that 30 to \$40  
18 million for the that intake, just to put in context the  
19 whole picture of the amount.

20 MR. DELGADO: Are there studies done about actual  
21 mortality during operation of intake flow? You talked about  
22 estimating it by index means, but how about actual  
23 operation?

24 MR. MONACO: The studies that were done -- again, they  
25 were volumetric based, as indicated by Regional and Staff

1 Board. We don't have -- they're not done in the same  
2 methodology of studies -- entrainment studies that are done  
3 today where you look at a percentage of losses on a  
4 species-by-species basis. It's the total volume of larvae  
5 that would be taken in and lost associated with the volume  
6 of water being taken in. So that was basically the method  
7 of how that could happen.

8 MR. DELGADO: Joe, you mentioned that cost of subsurface  
9 would change depending on proximity to shore.

10 Does it get more expensive farther out or closer  
11 in?

12 MR. MONACO: I believe the farther away the well is from  
13 the water source is what required additional wells. That's  
14 what would cost -- the additional cost.

15 MR. DELGADO: So in Monterey, they just put in some  
16 slant wells, and you described a lot of detail about  
17 infiltration galleries.

18 Are they one and the same?

19 MR. MONACO: No, they're not. That's a good point.  
20 Slant wells are not a technology that were considered at the  
21 time. It is -- I'm not completely up on the technology. It  
22 is fairly new technology. Essentially, you're familiar with  
23 how a slant well works. It's similar to a vertical well.  
24 It's put in at an angle. So you get more surface area,  
25 essentially, in the well casing and the water is drawn

1 experience in the last drought -- the last drought was  
2 pretty devastating to the City of Santa Barbara. So  
3 learning from that, the long-term supply plan actually calls  
4 for 10 percent extraordinary conservation. When we renewed  
5 that in 2011, we thought we could ask a little more from our  
6 customers. We adopted a policy of 15 percent.

7 This drought, as you know, is historic. In order  
8 to address the very severe water supply and climate issues,  
9 we ask for more but also, importantly, to be consistent with  
10 the State policy.

11 MR. DELGADO: The reason I ask that, as you pointed out,  
12 you showed what looked to my eyes to be a white blank where  
13 at the top you still have a water shortage.

14 Would one of your options in the future be to  
15 increase the conservation to above 20 percent in sort of a  
16 mandatory fashion?

17 MS. BJORK: I believe we would be severely challenged to  
18 do so. Our gallon per capita per day is currently about 84.  
19 And so you're looking at another -- these two bars represent  
20 about 20 to 25 percent. Understand, the way we generate  
21 gallons per capita per day is based on water use and  
22 population.

23 Santa Barbara is a little unique. We're heavily  
24 tourist-dependent. We get 5 million visitors per year.  
25 They're not included in that calculation. Similarly, we are

1 through a larger surface area of the well. So you generally  
2 get better yields through a slant well if you have the  
3 appropriate conditions.

4 MR. DELGADO: So it's my understanding CAL-AM is  
5 spending \$5 million to install a slant well that's currently  
6 operating, just started a few weeks ago. For two years,  
7 they'll be testing the water they're getting out of that,  
8 and it goes about 800 to 1,000 feet offshore. But that's  
9 not something that's been evaluated yet as an alternative at  
10 this point in time, going back 20 years, in the case of  
11 Santa Barbara's desal history?

12 MR. MONACO: Correct. At the time it was really just  
13 those two alternatives that I mentioned: The deep well,  
14 shallow wells, the beach wells and the infiltration gallery.

15 MR. DELGADO: Then 20 percent of extraordinary  
16 conservation, how did it end up being 20 percent and not  
17 18 percent?

18 MS. BJORK: That's a great question. It's been pretty  
19 close to 20 percent as we accumulated. We've had -- the  
20 first month or so I think it was 18. In December we had  
21 32 percent. In our plan moving forward we're still getting  
22 that 20 percent is what we're planning on. That's  
23 consistent with the State Drought Declaration and what's is  
24 asked of the community.

25 The City's long-term supply plan, based on our

1 a community for work. We have 25,000 people a day come into  
2 the city. They're not included in that calculation. So it  
3 makes you understand how far we've gone already.

4 If the drought persists, I'm worried about our  
5 cultural landscape. We have a lot of -- just really  
6 important landscape that will also not be able to be  
7 supported. So I think relying solely on additional  
8 conservation and rationing may have adverse effects for the  
9 community that would be difficult to bear. Of course, that  
10 would be a policy decision.

11 We would be continuing to pursue purchases of  
12 water. At this point in time, we cannot count on those. We  
13 have not identified them. We would hope that there would be  
14 some rainfall. Again, we can't count on that. That's why  
15 that blank is there. As we get closer to that time, we have  
16 to figure out how to fill that gap. One option is to  
17 increase the size of the desal plant. We certainly would  
18 hope to plan not to do that.

19 MR. DELGADO: You mentioned an 84-gallon per day per  
20 capita. Monterey is similar in tourism being big. They're  
21 in similar straits. They're down to -- it's been reported,  
22 to 58 gallons per day. I don't know what that saves if  
23 you're able to get down to 70 gallons per day. But it seems  
24 like rather than desal being the last resort, it seems like  
25 there could be some sharing in last resort being more

1 conservation.

2 That's all I have.

3 MR. WOLFF: Mr. Johnston?

4 MR. JOHNSTON: Thank you, Mr. Chair. I'm still -- I  
5 think we have -- maybe in the interest of clarity of record,  
6 I asked the staff what the permitted capacity of the plant  
7 was. And the response was 7,500 acre-feet per year, and the  
8 City has been consistently saying 10,000. When I look at  
9 the first page of Attachment G of our draft revised order,  
10 it speaks to a 10,000-gallons-per-day capacity. I don't  
11 want a fuzzy record where nobody really knows what we're  
12 talking about.

13 MS. BJORK: It's 10,000 acre-feet per year.

14 MR. JOHNSTON: Let me just ask, the way you anticipate  
15 running this plant is in drought mode. I'm assuming that  
16 that's running it 24/7, basically, for 12 months?

17 MS. BJORK: During the drought period? I believe so.  
18 Part of it is we haven't gotten the proposals yet, but  
19 part of that would be based on how the proposers want to  
20 submit -- I would guess they would want to be running it  
21 full-time and having the least capital investment.

22 MR. MONACO: I would agree with that.

23 MR. JOHNSTON: So when I look at our proposed draft  
24 order, it speaks to a 10,000-gallon permitted capacity of  
25 production and a 12-and-a-half-million-gallon-per-day

1 average -- monthly average brine limitation. When I use our  
2 staff's rough number, that the brine that would come out is  
3 roughly equal to the fresh water produced amount, it seems  
4 like you could do that at 10,000 gallons a day -- 10,000  
5 acre-feet a year. It seems you could do a little better  
6 than that.

7 So is that your sense as well that your brine  
8 production is about equal to your fresh water production?  
9 Because it is a limitation in permit.

10 MR. MONACO: There are certain assumptions that are  
11 being made as to the design phase. When the bids come in  
12 with greater specification on design and operation, we'll  
13 have a better sense of what the recovery rates will be from  
14 the filtration process, as well as the utilization  
15 percentage of the plant. In terms of what we can do with  
16 the limitations of permit, they are at a 10,000 acre-feet  
17 per year production capacity and the 12.5 MGD discharge.

18 MR. JOHNSTON: On an average monthly basis?

19 MR. MONACO: Correct.

20 MR. JOHNSTON: Okay. Thank you.

21 MR. WOLFF: So the couple of questions that I have, one  
22 of them is associated with the maintenance. You touched  
23 base a little bit earlier before the lunch break that you  
24 had a maintenance program. Since now your intake is going  
25 to be a different configuration, I have not seen, in the

1 information I received, any reference to the maintenance  
2 program you'll have as part of this permit.

3 MS. BJORK: Mr. Chair, the maintenance we've been doing  
4 has been on the onshore facilities. The intake facilities,  
5 at the time they were permitted through the Coastal  
6 Commission, the permitting included and anticipated that  
7 those would be removed and maintained offshore, which is  
8 very similar in pumps and screens.

9 We could potentially clean screens through diving,  
10 but that's going to be a new activity. All of those things  
11 are covered in our Coastal Commission permit. The operation  
12 and maintenance of the plant and the maintenance of the  
13 offshore facilities, we are, as indicated, seeking a Coastal  
14 Commission Maintenance and Repair Permit for the conditions  
15 about anchoring the boat and cleaning the intake structures  
16 and those types of things at this time.

17 MR. WOLFF: The reason I ask that question is not to  
18 duplicate what the Coastal Commission does. We've had  
19 significant conversation about impingement, et cetera. If  
20 you're going reduce a screen from 28 to one millimeter,  
21 obviously, there's going to be perhaps a little more  
22 potential clogging and requiring some regular maintenance  
23 program.

24 MR. MONACO: Again, we will be gathering more  
25 information when the bids come in with respect to the

1 specific screen design. But in terms of the commitment of  
2 the City in terms of the technology upgrade, the proposal is  
3 for a one-millimeter wedge wire slot opening.

4 The reason is -- we worked with State Board staff  
5 in developing that. It falls within the range of slot-sized  
6 openings that are addressed in the draft of the Ocean Plan  
7 Amendment. I believe the State Board staff has been  
8 soliciting comments from the desal proponents community in  
9 terms of what tests have been done and so forth.

10 Our understanding is that in terms of the empirical  
11 testing for various sizes, there is one study that has been  
12 referenced at West Basin Municipal Water District. They did  
13 find there was substantial clogging at slants less than a  
14 millimeter. One millimeter seems to be the minimum where  
15 you have the fewest maintenance problems and still get the  
16 smallest slot opening.

17 MR. WOLFF: Okay. If you do have partial clogging, you  
18 increase the velocity in the remaining surface area of the  
19 screen, which is going to increase the amount of potential  
20 impingement -- could you put on the screen the plot plan of  
21 the plant? Could you highlight the portions that will  
22 require upgrades? Because I understand you have problems.  
23 You have incoming electrical, power, infrastructure,  
24 et cetera. Can you point out to me what is going to be new  
25 within this plot plan that you have?

1 MR. MONACO: So starting with the intake, as we  
 2 mentioned, the screens have currently been removed. They  
 3 will be replaced by the new technology. In addition to  
 4 that, there are offshore pumps that draw the water through  
 5 the screens and wiring -- electrical wiring and  
 6 communication cables that serve those that need to be  
 7 replaced.

8 In the immediate filtration area, I believe the  
 9 basic infrastructure there, the media -- filter media would  
 10 obviously be replaced, as well as the cartridge filters. We  
 11 mentioned that those perishable elements, including the RO  
 12 filters and so forth, have been removed. Those would be  
 13 replaced.

14 I believe there were also some check valves and  
 15 other facilities that would be upgraded. And the onshore  
 16 pumps would be updated. Part of the reason for that is that  
 17 some of these older models are difficult to get parts for.

18 MR. WOLFF: So what about your INC and EFDs, and control  
 19 variables? You're talking -- if I did the math right,  
 20 that's 20-year-old technology. In today's standard -- you  
 21 know, no offence, but some of it today is museum-grade if  
 22 you look at the current technology.

23 MR. MONACO: I should clarify. I'm not the design  
 24 engineer, so my knowledge is a little bit limited. I  
 25 believe the full project description that was submitted with

1 in terms of the size of the slot opening and the surface  
 2 area that's required to get the required water draw. The  
 3 problem from a marine environment protection standpoint is  
 4 that anything smaller than that slot opening would go  
 5 through, regardless of the velocity of the flow.

6 MR. WOLFF: That's correct, but you would significantly  
 7 reduce the clogging effect because you could use velocity.  
 8 And I guess the point I'm missing, you're saying the pipe --  
 9 the size of the pipe -- well, the size is determined because  
 10 you're using an existing pipe. So we're -- you're not  
 11 modifying it.

12 MS. BJORK: I think the point here is that -- I think it  
 13 speaks very much to the point of this hearing is that we  
 14 have a permitted plant, and we're trying to work within the  
 15 framework of that permitted plant. The issue that we're  
 16 here to assess today is really the alignment of the policy  
 17 of the State Board on how they're going to do permitting in  
 18 the future with the way our plant was permitted in the past.

19 If we start to make substantial design  
 20 modifications, our plant will need additional permits that  
 21 we'll need additional time to get. We are trying to  
 22 incorporate those pieces of technology that we have found to  
 23 be developed that we know are improvements for the way our  
 24 plant will behave in the environment into any preexisting  
 25 permit and design at this time.

1 the permit application was also provided to the State Board.  
 2 We can certainly provide that to you.

3 MR. WOLFF: Last question that I have: You know, the  
 4 screen -- obviously, there was a lot of thought going  
 5 through reducing the size of the screen and whether or not  
 6 one millimeter was adequate and what we calculated the  
 7 velocity would be with one millimeter and the effect all  
 8 that would have on impingement.

9 Looking at the enhancement of putting a smaller  
 10 screen, a tighter screen, versus looking at options of  
 11 subsurface, is there any other alternative considered on  
 12 modification of the intake without going to, you know,  
 13 subsurface technologies, et cetera?

14 MR. MONACO: We're not aware of any technology, other  
 15 than screen design, that could provide any differences in  
 16 terms of protection of the marine environment.

17 MR. WOLFF: For example, performing engineering -- small  
 18 study -- one example would be, for instance, to take the end  
 19 and install a wide connection with a one-millimeter  
 20 screen -- you know, same technology, but if you have a 'Y'  
 21 that is extended to a certain distance, you actually reduce  
 22 the velocity in half because you still have the same amount  
 23 of water intake, more or less, because, you know, friction  
 24 losses.

25 MR. MONACO: I believe that the design contemplates that

1 And then, as directed by Council, and as you heard  
 2 that we've been directed by Council, we also intend to go  
 3 back, look again with the understanding of all the things  
 4 that have changed in the time we have permitted those  
 5 plants, identify whether those are where the City needs to  
 6 be going, and begin that whole process after we get through  
 7 this emergency.

8 I think in answer to your question, a lot of the  
 9 considerations about what we have and have not been able to  
 10 do, considered in this particular reactivation, are driven  
 11 by the current status of our permits.

12 MR. WOLFF: You acknowledge the need to enhance the  
 13 intake by reducing the mesh size from three-eighths to one  
 14 millimeter. And there's -- so in good engineering practice,  
 15 when you make an improvement, often without necessarily  
 16 compromising the grandfather clause of having an existing  
 17 facility, you still can have an enhancement.

18 So the difference between -- and I'm not suggesting  
 19 that, you know, the 'Y' is the answer. I'm just giving you  
 20 this as an example of bad engineering as part of this  
 21 project. I also recognize that time is of the essence. I  
 22 think that's pretty clear. That's well respected in the  
 23 current drought situation we have.

24 By having some possible alternatives or small  
 25 enhancements that do not require time-consuming, very

1 extensive, very expensive solutions -- to have those  
2 considered. I was just exploring if you had looked beyond  
3 the wire mesh itself and some other alternatives that could  
4 be implemented.

5 I think, you know, you recognize the fact that  
6 there is some impact; otherwise, you would not have offered  
7 half a million dollars to help offset this project. If you  
8 have some other, smaller enhancements you could make, it  
9 certainly would help ultimately mitigate some effects to the  
10 environmental impact by reducing the velocity.

11 MR. MONACO: One thing I think is important to note is  
12 that through the design process, we expect that some of what  
13 you've identified in this value of engineering would occur  
14 and that --

15 (Interruption in the proceedings)

16 MR. WOLFF: Make sure they're not texting you about me.

17 MR. MONACO: Also to address your point, I believe the  
18 conceptual design from the contractors who provide their  
19 bids will mimic some of the concepts you're talking about.  
20 The intake pipe itself is adequately sized. It's just a  
21 question of how do you ensure that the through-screen  
22 velocity is maintained at that optimal rate and doesn't  
23 degrade over time. There are a couple things that may come  
24 through this design process, including technology such as an  
25 air burst system to remove debris. The materials themselves

1 of those issues -- we've been saying all along about  
2 conservation being important, about the environmental -- the  
3 environment project at the Slough was very important. We  
4 were very serious in our motions about moving forward with  
5 the alternatives.

6 So I think it's worth having that conversation. I  
7 think that would be looked at very seriously. I can't  
8 account for my colleagues and their vote. If that's what it  
9 says, we'll work with what we can work with.

10 MR. HAGERTY: My name is Shawn Hagerty. I'm counsel for  
11 the City on this particular issue.

12 To answer your question, maybe Mr. Wyels or others,  
13 the counsel for the Board, can add that while the City has  
14 volunteered to do those three items -- and they're not  
15 relevant to the findings that are part of the Water Code  
16 Section -- if this Board were to approve the recommendation  
17 and if the City were to go forward with the desalination  
18 facility based upon those findings, the City would do those.  
19 They would have to do those three items. They're written in  
20 such a way that they're mandatory.

21 They're not mandatory if the project doesn't go  
22 forward, but if it does go forward, those things have to  
23 occur. They are mandatory. They're not conditions under  
24 the Water Code, but they would be required to be performed  
25 as part of the operations of the facility.

1 are made out of copper nickel alloy. It was also part of  
2 the West Basin study and other studies that have been  
3 conducted. I think Santa Cruz did a study on the -- screen  
4 material.

5 The idea is to create a design that will continue  
6 to perform at optimal performance specifications for this  
7 facility.

8 MR. WOLFF: Thank you. I appreciate your explanations  
9 and flexibility and answering these various questions we  
10 have. I will give another little opportunity for questions  
11 and then I would like to proceed with Channelkeeper after  
12 that.

13 Mr. Johnston?

14 MR. JOHNSTON: I noticed that the City has proposed  
15 three different things: One, that they would go to a  
16 one-millimeter screen. Two, they would put half a million  
17 dollars into a watershed project. And three, that in 2017,  
18 they would study alternatives to the open intake, including  
19 under seabed and potable reuse.

20 And I also -- my question is, what would the City's  
21 reaction be were that to be included as mandatory in the  
22 order?

23 MS. SCHNEIDER: Well, I'm one of seven council members,  
24 so I certainly can't speak on behalf of my colleagues, but  
25 certainly that is worth a discussion, and I think the issue

1 MR. JOHNSTON: So if I understand you correctly, you're  
2 saying that it's your view that the draft order, as written,  
3 would require the City to perform those actions if they were  
4 to go forward with the project?

5 MR. HAGERTY: Correct. At the time set forth in the  
6 order itself, they would have to perform those functions.

7 MS. AUSTIN: Is there anything within Santa Barbara's  
8 own resolutions or other authorizations of this project that  
9 would require those three things?

10 MR. HAGERTY: As the project moves forward to various  
11 decision points with the City subject to this action and  
12 other actions, those would be locked in. So they would be  
13 requirements either of -- for example, the screens. If they  
14 were part of the contract, they would have to be  
15 reinstalled. With regard to the funding, it actually says  
16 in the order itself that that funding has to occur before  
17 the production occurs.

18 And with regards to the studies, there is the  
19 outside time frame to report back to this Board in 2017. So  
20 they would be further implemented as requirements in the  
21 City's agreements. We view those requirements to be  
22 requirements if the Board were to approve them, not that  
23 somehow we could choose not to do them and still go forward.  
24 We would have to do them if we went forward.

25 MR. JOHNSTON: Just a quick question: Let's assume for

1 the sake of argument that we approve this as written and  
2 that elections happen, you could have a different City  
3 Council in a couple years, and that those studies are never  
4 done. This is -- you know, as somebody said, you can't  
5 unbreak the egg.

6 Would we have any recourse at that point?

7 MR. HAGERTY: I think the studies are probably the most  
8 difficult issue. We could not go forward with the other  
9 two -- with the production unless those other two items  
10 occurred.

11 With regard to the studies, there's no specific  
12 recourse that would be in there. That, in essence, is more  
13 of a commitment from the City to perform those studies. If  
14 the order does go forward, we would have to report back and  
15 make that commitment. That one is the one that is probably  
16 the most significant.

17 MS. SCHNEIDER: I'll just add that the seven council  
18 members that made that motion and passed it 7-0 will be the  
19 same Council members that will definitely be still in office  
20 between now and January of next year because we won't have  
21 an election until this November. So at least -- we can  
22 initiate that process starting this April. I can't imagine,  
23 even with a seat change of Council into next year, should  
24 there be one with an election, that -- the public wants  
25 this. Our constituents want us to be able to do these

1 MR. YOUNG: Mr. Hagerty, let me get this part from you.  
2 Is it your position that this Water Board doesn't  
3 have authority or you would contest us putting in these  
4 additional provisions in this permit if we were to amend it?  
5 In other words, is your position -- I don't want you guys to  
6 look back 20 years ago. And our position is the studies  
7 that were done then are sufficient and that -- don't have  
8 the right to go ahead and insert any of these volunteer  
9 efforts that the City has suggested they would do into the  
10 permit. I don't want that done. Is that --

11 MR. HAGERTY: No. We don't think they're relevant to  
12 the analysis under the Water Code provision. We do think it  
13 would be inconsistent with the way the Code section is  
14 written and the way it's presented in this lens of 1991  
15 analysis we're going through to include that in the  
16 findings.

17 In my mind, if you adopt this order as presented  
18 and add it to those permits, those two provisions you're  
19 absolutely including as requirements. It will be part of  
20 the provisions that are now part of our permit.

21 With regards to the studies, I would need to defer  
22 to the City with regard to whether that's acceptable to them  
23 or not.

24 MR. YOUNG: I was just curious whether you felt that was  
25 something you would contest if we made it a mandatory part

1 studies. It would be very difficult to unring the bell if  
2 we started something in April, to then say we're no longer  
3 going to do studies on something that may be feasible in the  
4 future. So as a practical matter, I don't see us moving  
5 backwards after initiating studies that have already been  
6 directed by Council to the staff.

7 MR. YOUNG: If I'm hearing you correctly, that means if  
8 we take these things the City is willing to do on its own  
9 and insert it into this permit, then we really shouldn't  
10 have an issue or dispute?

11 MS. SCHNEIDER: I just want to say something that  
12 legally might -- I'm going to --

13 MR. YOUNG: It sounds like --  
14 (Speaking simultaneously)

15 MR. HAGERTY: I think they are in here. Say, for  
16 example, the screens. The screens have to be in place and  
17 properly maintained at all times. We can't do anything with  
18 the desalination facility unless we meet this requirement.  
19 And the mitigation has to be done by the reactivation date  
20 or before, at the City's discretion. And the studies --

21 MR. YOUNG: The studies were the most interesting.

22 MR. HAGERTY: The studies have -- you heard the  
23 commitment from the mayor. The studies are basically --  
24 we would be required to report back at the date certain,  
25 June 30, 2017, or earlier.

1 of the permit because they weren't relevant to the findings  
2 that needed to be made 20 years ago.

3 MR. HAGERTY: I think it's appropriate to include the  
4 provisions that are reflected in the determination. By  
5 definition, they'll be included as part of the permit. I  
6 don't think that -- I contest the inclusion of it as part of  
7 the analysis, but whether they can, through the discussion  
8 of being included in the permit, you could do that.

9 MR. YOUNG: My last question is: What is the mesh  
10 material made of?

11 MR. MONACO: The proposed screen?

12 MR. YOUNG: Yeah.

13 MR. MONACO: It's copper nickel alloy.

14 MR. YOUNG: So you will not have biofouling?

15 MR. MONACO: Correct.

16 MR. YOUNG: Okay. Thank you.

17 MR. WOLFF: This should wrap up the questions we have to  
18 the City. I would like to thank you very much for your  
19 willingness to answer all our questions. I do have next the  
20 speaker card requesting eight minutes from Kira Redmond of  
21 the Santa Barbara Channelkeeper.

22 After this presentation from Channelkeeper, if our  
23 Board has questions, we will address those and then take a  
24 break before we get to the public comments,

25 MS. REDMOND: Since I only have eight minutes, I'm going

121

1 to speak fast so I can stay within my eight minutes.  
 2 MR. WOLFF: She's going to have difficulty.  
 3 MS. REDMOND: I'll hand her this when I'm done.  
 4 I've been an environmental policy advocate for 22  
 5 years and I've seen some farfetched policy-making in my  
 6 time, but this one takes the cake. It seems as though your  
 7 staff thinks there is a time machine and you can go back to  
 8 1991 to fix the mistake of failing to determine that  
 9 Santa Barbara complied with Section 13142.5(b) of the Water  
 10 Code when the desal plant's brine discharge was first  
 11 permitted.  
 12 There's no such thing as a time machine, and,  
 13 unfortunately, the proposed fix doesn't fix the mistake at  
 14 all and would actually make a far worse mistake. You can't  
 15 contrive a retroactive determination of compliance now based  
 16 on information that's 24 years old. The implications of  
 17 such a decision will not occur 24 years ago, but today and  
 18 for decades to come.  
 19 Desal technology has changed, as has our knowledge  
 20 of the harmful impacts of open ocean intakes on the marine  
 21 environment, and as such, State policy to address those  
 22 impacts.  
 23 We recognize that Santa Barbara is in panic mode  
 24 and rushing headlong into desal in a scramble to meet  
 25 projected water supply shortfalls. And the Water Boards

122

1 want the Santa Barbara problem to go away before the Ocean  
 2 Plan Amendment on desal is enacted so the City doesn't sue  
 3 and delay the policy, since Santa Barbara's desal plant is  
 4 considered new under the current draft and would have to  
 5 comply with Section 13142.5(b).  
 6 Nobody wants Santa Barbara to derail the State  
 7 policy, but we don't want to be the sacrificial lamb either.  
 8 You're trying to sweep us under the rug with this fatally  
 9 flawed retroactive Water Code analysis, which would leave us  
 10 stuck with an open ocean intake that is clearly not the best  
 11 available technology and will harm marine life in the Santa  
 12 Barbara Channel, which is of enormous value to this  
 13 community and to the State of California.  
 14 There's no legal precedent for what is being  
 15 proposed. You can't pretend to know what would have  
 16 occurred had the proper analysis been done in 1991, and  
 17 trying to fabricate a retroactive analysis is dubious at  
 18 best. Let's pretend for a moment that we accept the notion  
 19 that you could feign Water Code compliance today as if it  
 20 were 1991. Even so, the proposed analysis doesn't come  
 21 close to proving that the City used the best available site,  
 22 design, technology and mitigation measures feasible to  
 23 minimize the intake and mortality of marine life in 1991 as  
 24 the Water Code requires.  
 25 The draft amendment says various other sites were

123

1 examined and rejected in the City's 1991 EIR. But the City  
 2 did not examine the best available site feasible to minimize  
 3 intake and mortality of marine life because CEQA doesn't  
 4 require it. Section 13142.5(b), however, does. The staff  
 5 report from the 1991 EIR examined the best available design  
 6 feasible. Again, a CEQA document is inappropriate and not  
 7 equivalent to what's required under the Water Code.  
 8 In terms of technology, the draft amendment cites  
 9 studies prepared for the 1991 EIR and findings made by the  
 10 Coastal Commission in determining compliance with the  
 11 Coastal Act, but CEQA and the Coastal Act do not require the  
 12 use of best available technology feasible to minimize the  
 13 intake and mortality of marine life.  
 14 The EIR concluded a screened intake would not  
 15 result in a significant depletion of certain marine  
 16 organisms but again, this is not the appropriate standard.  
 17 The draft cites a plankton study using data from Ormond  
 18 Beach 40 miles south of here from 30-plus years ago, which  
 19 concluded that no mitigation was required. However, the  
 20 Water Code requires the best available mitigation to  
 21 minimize the intake and mortality of all forms of marine  
 22 life.  
 23 Not only did the City not look at all forms of  
 24 marine life, just plankton, but it did not do any  
 25 mitigation. Clearly, no mitigation is not the best

124

1 mitigation feasible. Moreover, there are scientific and  
 2 policy guidelines for determining appropriate mitigation.  
 3 The \$500,000 offered by the City and proposed to your staff  
 4 to be accepted as mitigation has no relation whatsoever to  
 5 the actual mortality which will occur from the City's use of  
 6 the open ocean intake because this has never been assessed.  
 7 Not only does the City not comply with each of the  
 8 four individual elements required under 13142.5(b), but it  
 9 didn't analyze what combination of site, design, technology  
 10 and mitigation would minimize intake and mortality as  
 11 required by the Water Code.  
 12 Further evidence of the inadequacy of what's being  
 13 proposed can be found in the San Diego Regional Board's  
 14 permit for the Carlsbad desal plant. While we don't think  
 15 that permit is adequate, it nonetheless provides an example  
 16 of what a real 13142.5(b) analysis looks like.  
 17 The San Diego Regional Board required Poseidon to  
 18 submit a Flow, Entrainment and Minimization Plan to address  
 19 each of the requirements of Section 13142.5(b), both  
 20 separately and together, and required several revisions  
 21 before approving the NPDES permit three years later. They  
 22 required restoration of 55.4 acres of wetlands as  
 23 mitigation, despite the fact that the project's EIR found  
 24 the facility would not cause significant adverse  
 25 environmental impact.

1 The minimization plan and the Regional Board's  
 2 order both contain extensive analyses of the feasibility of  
 3 alternatives to the proposed site, design and technology.  
 4 The San Diego Regional Board did a 236-page responsiveness  
 5 summary with separate chapters for each of the four pillars  
 6 of Section 13142.5(b) and conducted several public hearings  
 7 before approving the permit. This is all laid out in the  
 8 *Surfriders v. San Diego Regional Board* court decision, which  
 9 is cited in your response to comments. The paltry six pages  
 10 put forward here obviously pales in comparison.

11 We understand why Santa Barbara is pushing so hard  
 12 for this. We don't agree with their aggressive pursuit of  
 13 desal before exhausting other less expensive and  
 14 environmentally harmful supply-and-demand management  
 15 alternatives. But we appreciate their dilemma, and unless  
 16 it rains a lot really soon, we have no choice but to swallow  
 17 the desal pill, which Santa Barbara Channelkeeper reasonably  
 18 asked the City to include a subsurface intake feasibility  
 19 analysis in its request for proposals for the contract to  
 20 design, build and operate the desal plant.

21 The City Council voted unanimously no to do so.  
 22 They did, however, make a different, second, token,  
 23 non-committal gesture to direct their staff to begin  
 24 exploring the possibility later. So they know it's the  
 25 right thing to do. They just need to be bound to do it.

1 Simply asking the City to share their findings with you two  
 2 and a half years from now, as the proposed amendment does,  
 3 is way too squishy.

4 We get that Santa Barbara is a unique situation and  
 5 presents a quandary for you and the State Board. One could  
 6 argue that Santa Barbara's desal plant is existing because  
 7 you can point to a physical structure. One could more  
 8 convincingly argue that spending \$40 million to turn it back  
 9 on and produce any quantity of water constitutes an  
 10 expansion from its current zero production.

11 Whether the plant was designed 25 years ago to  
 12 potentially produce up to 10,000 acre-feet or has a  
 13 20-year-old Coastal Development Permit or a permit to  
 14 discharge brine is irrelevant. It is not fair to the people  
 15 of Santa Barbara who care about healthy marine resources  
 16 in the Santa Barbara Channel, whose livelihoods depend on  
 17 them and who work hard to protect them, to excuse Santa  
 18 Barbara from doing what the State Board is set to require of  
 19 every other desal plant in California based on a highly  
 20 tenuous pretense that would allow them to use outdated and  
 21 environmentally harmful technology and inadequate  
 22 mitigation.

23 To adopt the amendment as currently drafted is  
 24 slipshod and downright bad policy. It would set a dangerous  
 25 precedent and begs a legal challenge which would cost

1 everyone a lot of precious time and money. We offer a  
 2 multipart solution to avoid that. First, we urge you to  
 3 reject the proposed amendment and instead amend the City's  
 4 permit to authorize the temporary operation of the desal  
 5 plant with the open ocean intake only as a drought emergency  
 6 measure to be rescinded as soon as the drought emergency is  
 7 lifted.

8 The City now intends to continue operating the  
 9 facility at some point after this drought is over and the  
 10 requested amendment -- and requested this amendment so it  
 11 can move ahead with reactivating its desal facility quickly  
 12 as a drought response measure, so this should be acceptable.

13 Second, we urge you to add a condition to the  
 14 permit binding them to begin a subsurface intake feasibility  
 15 analysis now. The City has already expressed its intention  
 16 to begin exploring this this spring. We believe it's your  
 17 responsibility to require them to do so and that the City,  
 18 in a show of good faith, should voluntarily accept such a  
 19 requirement as a condition of the permit.

20 Third, we ask you to direct your staff to work with  
 21 the City to conduct a thorough present-day 13142.5(b)  
 22 analysis based on best site, design, technology and  
 23 mitigation available today, as required by the Water Code.  
 24 We would then expect future actions requiring the City to  
 25 implement the best available measures found feasible through

1 that analysis.

2 We think this is an extremely reasonable compromise  
 3 solution to the Santa Barbara problem that everyone could  
 4 live with, and we hope you proceed as such. Thank you.

5 MR. WOLFF: Thank you. Do we have questions?

6 Mr. Delgado.

7 MR. DELGADO: After basically using current standards to  
 8 perform -- citing studies, et cetera, what was the fourth  
 9 piece of that multipart solution?

10 MS. REDMOND: That was actually something I was  
 11 requesting you to do today, but I said we would then expect  
 12 future actions to require the City to comply with the best  
 13 available measures found feasible through that present-day  
 14 13142.5(b) analysis.

15 MR. DELGADO: So basically, do the studies and then  
 16 based on the conclusions, modify the infrastructure.

17 MS. REDMOND: If feasible.

18 MR. DELGADO: Most of my questions based on what we just  
 19 heard would be to hear staff response, but maybe others have  
 20 questions of you.

21 MR. WOLFF: Share your perspective with me again?

22 MR. DELGADO: The questions I have based on her  
 23 statements would be directed to staff to ask their response  
 24 to statements she made.

25 MR. WOLFF: Well, what we plan on doing, when we wrap



1 up, we will have staff response and we'll do it in one set  
2 of responses rather than piecemeal. I think it will be more  
3 efficient.

4 Any questions on my right?

5 MR. YOUNG: Yes. Are you going down the line?

6 MR. WOLFF: Oh, we went down the line.

7 MR. YOUNG: You essentially went through the factors  
8 within the statute, siting, design, technology, mitigation.  
9 And you're making a point you feel the City 20 years ago did  
10 not look at the superior elements of each of those that  
11 could have been put forth at that time, I think, because  
12 they did an EIR analysis and not an analysis the way we  
13 would under this statute.

14 MS. REDMOND: Correct.

15 MR. YOUNG: Isn't there information in the studies they  
16 have done that can be taken out and looked at in terms of  
17 them being superior? If we go back in time, we weren't  
18 looking at subsurface intakes, except for infiltration  
19 galleries or shallow sand wells.

20 Is it fair to the City, who has really done nothing  
21 in this -- it was the Water Boards that didn't recognize  
22 they should invoke this statute back then.

23 Is it fair to the City that they be bootstrapped up  
24 in the present and be made to comply with current standards?

25 MS. REDMOND: This is an extremely unusual thing that

1 then. I'm saying they didn't do that. You can't make  
2 findings they did.

3 MR. YOUNG: Okay. You made a comment, I think, they may  
4 be more aggressive in pursuing desal.

5 What else could the City be doing in terms of  
6 securing water?

7 MS. REDMOND: I think we can point to many large  
8 facilities south of us who are aggressively pursuing recycled  
9 water and stormwater capture and conservation. I think  
10 we're beyond that point now. The City is already kind of  
11 far down the path from when we were first initially talking  
12 about this. I understand we -- desal is the last resort  
13 after we've exhausted everything else. We don't believe  
14 that's the case.

15 MR. YOUNG: If we amended this permit and secured a  
16 requirement that they conduct the subsurface feasibility  
17 study, would that be satisfactory to Channelkeeper, or is  
18 that just the first step? You want to see something that  
19 says if it is feasible, that it be pursued?

20 MS. REDMOND: Obviously, we would like to see that.  
21 That was one part of our request. I think the more  
22 important thing here is that trying to pretend you can go  
23 back in time and say the City complied with the Water Code,  
24 you can't do that. It's bad policy. It's a bad precedent.  
25 So we would like to see a present-day 13142.5(b) be enacted

1 you're proposing to do. It's virtually impossible. You  
2 cannot turn back the clock and pretend it's 1991 and presume  
3 to know what would have happened then.

4 So mitigation is a good example. They didn't do  
5 any mitigation because CEQA doesn't require it, but you're  
6 saying they complied with Section 13142.5(b) because they  
7 did all they could to minimize the intake and mortality?

8 MR. YOUNG: I don't know that they did mitigate. That's  
9 one thing I can preserve right now because I think that's  
10 still a question mark in my mind. Mitigation was never  
11 considered, so something may be appropriate.

12 But in terms of the technology and the siting, are  
13 there any other sites they should have considered?

14 MS. REDMOND: I wasn't here in 1991, and I wasn't  
15 considering the Water Code at that time, which is what  
16 you're trying to do right now.

17 MR. YOUNG: I understand. It makes sense that the site  
18 that they have picked is probably the most feasible.

19 MS. REDMOND: I think technology and the mitigation are  
20 the main issue.

21 MR. YOUNG: Okay. Not the siting?

22 MS. REDMOND: Right. Arguably, the technology that was  
23 looked at was looked at based on CEQA, not based on  
24 minimizing the intake and mortality of all forms of marine  
25 life, which is what you're trying to say today that they did

1 based on technology, site, design, feasible today.

2 MR. YOUNG: Thank you.

3 MR. WOLFF: We'll take a short ten-minute break and  
4 reconvene just a little bit before 4:00.

5 (Recess)

6 MR. WOLFF: Okay. We're going to reduce the time for  
7 each person to two minutes. I know it's tight, but this  
8 will give an opportunity for all of you to speak to us and  
9 get a response from the Board.

10 So I will call two, three names in advance so you  
11 can queue and that will make the process a little bit more  
12 efficient.

13 So I would like to start with Ray Stokes. Then  
14 we'll have Robert Sulnick, and we'll have Leslie Wiscom.

15 MR. STOKES: My name is Ray Stokes, and I'm the  
16 Executive Director for the Central Coast Water Authority,  
17 the agency responsible for treating and delivering water  
18 from the California State Water Project to 13 cities, water  
19 districts, and other entities in Santa Barbara County.

20 The City of Santa Barbara is one of the cities  
21 served by CCWA and the State Water Project. As a member of  
22 CCWA, the City of Santa Barbara has taken steps from prior  
23 years to maximize the use of available state water supplies.  
24 With a contract in the amount of 3,300 acre-feet per year  
25 from the State Water Project, the City has been in a

133

1 position to store State water that was considered to be in  
 2 excess of its current needs. For example, in 2013, the  
 3 City was able to utilize its other local sources of water,  
 4 delivery and demands, which enabled the City to store  
 5 approximately 2,600 acre-feet of its 2013 water, for use in  
 6 calendar year 2014.

7 Similarly, the City has banked almost 1,500  
 8 acre-feet in earlier years with other State Water Project  
 9 contractors, which may be able to be drawn upon as needed in  
 10 2015. In 2014, the City requested additional water supplies  
 11 to supplement the 2,600 acre-feet of water it had stored from  
 12 2013. We were successful in acquiring those 3,100 acre-feet  
 13 on behalf of the City.

14 While the supplemental water purchases were  
 15 essential in enabling the City to meet its water needs in  
 16 2014 and 2015, over the long term, purchases of supplement  
 17 water delivered to the CCWA facilities will not be sufficient  
 18 to meet the City's needs.

19 As we can see, the feasibility to deliver water to  
 20 the project participants is limited to about 15,000  
 21 acre-feet per year in total for the cities of Santa Barbara,  
 22 Montecito, Carpinteria, Goleta, and La Cumbre. Santa  
 23 Barbara's annual advance is around 14,000 acre-feet per year,  
 24 a guaranteed share of 15,000 -- around 3,000 acre feet per  
 25 year.

134

1 As another component of the City's water supply  
 2 portfolio, the proposed desalination plant appears to be  
 3 prudent for the City of Santa Barbara.

4 MR. WOLFF: Thank you for your comments.  
 5 Robert Sulnick, please.

6 MR. HAGGMARK: I'm here on behalf of Robert Sulnick. He  
 7 had to get going. He left me with his notes and comments,  
 8 which I will submit for the record. Robert Sulnick is a  
 9 constituent of Santa Barbara, a resident, and he has working  
 10 knowledge of desal plants, state of research on subsurface  
 11 intakes and he was here as a citizen to speak with you.

12 Santa Barbara is in a water crisis. The drought  
 13 continues in 98 percent of the state. Lake Cachuma has  
 14 fallen below 70 percent capacity. The Sierra Snowpack is at  
 15 46 percent of normal.

16 There is no data or scientific evidence for a  
 17 full-scale desal plant anywhere in the world which supports  
 18 the position that it's an environmentally superior form of  
 19 intake. Those advocating the position should show you their  
 20 data and tell you which of the nine different types they are  
 21 talking about. Only existing data, small-scale pilot  
 22 projects and slant wells are experimental at this point. The  
 23 one in Japan has no valid data that supports superior option  
 24 of subsurface.

25 The State Water Board's position is not that open

135

1 intakes are default technology. The draft Ocean Plan states  
 2 that subsurface has constructability problems excavating  
 3 areas of ocean bottom. Viability is dependent on  
 4 site-specific conditions and hydrology. It may be overly  
 5 restrictive and requiring subsurface as the only intake may  
 6 result in eliminating desal as an option for some  
 7 communities.

8 The Independent Scientific Technical Advisory  
 9 Panel, which is working on the Huntington Beach project, has  
 10 been looking at nine subsurface alternatives; seven they  
 11 have found to have fatal flaws and two are moving forward  
 12 for further research. More information should be known  
 13 about those two options this summer, hopefully providing  
 14 some insight into potential other applications.

15 That's it.

16 MR. WOLFF: Thank you very much for your comments.

17 MR. YOUNG: What was the speaker's name? He said he was  
 18 speaking on behalf of someone, but I didn't hear his name.

19 MR. HAGGMARK: Joshua Haggmark.

20 MR. WOLFF: Good catch, Mr. Young. Leslie Wiscom,  
 21 please.

22 MS. WISCOM: Good afternoon, Mr. Chair and members of  
 23 the Board. My name is Leslie Wiscom. I'm not here to  
 24 address the technical aspect of the desal permit, although  
 25 as a retired landscape architect who was lead on water

136

1 quality projects such as wetland restoration, I found  
 2 today's meeting quite interesting.

3 I'm here as the City of Santa Barbara's Parks and  
 4 Recreation Commissioner, as the UCCE Master Gardener of  
 5 Santa Barbara County, and as a resident of Santa Barbara.  
 6 The Master Gardeners are partners with the City of Santa  
 7 Barbara to develop and present free public workshops to help  
 8 educate our community on water saving practices for the home  
 9 gardener. High attendance at these workshops is testimony  
 10 to our residents' commitment to reduce their water usage.

11 Santa Barbara has a rich horticulture heritage and  
 12 a great climate. It's a combination of these things that  
 13 make it a great place to live, work, and play. While our  
 14 parks, landscape, parkways and tree-lined streets contribute  
 15 to the city's beauty, they also provide immeasurable health  
 16 benefits for our community. Our trees, including our  
 17 historic and specimen trees, provide pleasant walking and  
 18 cycling environments with shade protection. And our parks  
 19 provide comfortable and safe places to recreate, relax and  
 20 play.

21 We have a thoughtful, professional, long-term water  
 22 supply plan and the City and community have stepped up to  
 23 meet our aggressive conservation goals. We have implemented  
 24 an urban forest management plan in 2014 that helps us protect  
 25 the precious resource, our public trees. To complement

137

1 these successes, the desal plant is a critical component  
2 moving forward and in planning for inevitable future drought  
3 cycles.  
4 Without the desal plant, we can sustain permanent  
5 damage to some of the important civic and horticulture  
6 treasures in our community. We hope you will keep the  
7 process of restarting the desal plant moving forward without  
8 delay. Thank you for your time.  
9 MR. WOLFF: Thank you for your comments.  
10 Next I have Susan Jordan and Joe Geever and  
11 Conner Everts.  
12 MS. JORDAN: Susan Jordan. I'm the Director of the  
13 California Coastal Protection Network. I've been working on  
14 desalination in California for roughly 20 years. I was one  
15 of the leads on the Poseidon Project before the Coastal  
16 Commission -- where they withdrew their project and were  
17 told to look back into subsurface studies as required by  
18 the Coastal Commission.  
19 I want to make very clear that if you're about to  
20 approve a permit based on 1991 data, I want you to think  
21 about the future and how do you get a grip on conditioning  
22 this permit as it moves forward. I want you to think about  
23 the challenge for the next 20, 30, 40, 50 years. There's no  
24 saying that this facility will ever go away.  
25 How do you get Santa Barbara to bring it into

138

1 current technology? I understand the crisis and we're  
2 sympathetic, but we have some ideas here and it's a  
3 compromise, not that we're too happy about it. We believe  
4 with the Stage 3 drought emergency in April, that this  
5 amended permit should be viewed much as the CCC, the Coastal  
6 Commission, views an emergency permit, with a beginning and  
7 a reopener, and that the City be allowed to operate until  
8 the emergency subsides; that you require, as part of this  
9 amended permit, that the City conducts a subsurface  
10 feasibility study now to be evaluated within a new Section  
11 13142.5(b) analysis once the drought subsides.  
12 It has to be -- that requirement has to be in your  
13 amended permit. The language in there, as their attorney  
14 basically told you, you get the first two, you maybe get the  
15 third, which are the studies and are extremely important.  
16 For the \$500,000, I'm not sure it should go to the  
17 Devereux Slough. I don't believe there is as liberative,  
18 open, transparent process there. Let them put that towards  
19 starting the subsurface studies now.  
20 Should the drought continue beyond a specified  
21 period of time, I'd like to see the City and your Board  
22 complete the subsurface study and the new Section 13142.5(b)  
23 analysis no later than 2020.  
24 We're sympathetic. We want to help. It's a  
25 compromise. We don't like it, but we're willing to work

139

1 with the City. Thank you.  
2 MR. WOLFF: Joe Geever, please.  
3 MR. GEEVER: Thank you. My name is Joe Geever, and I  
4 was the Water Programs Manager for Surfrider from 2000 to  
5 2014. In that capacity -- before I started the Surfrider  
6 Foundation, I worked on seawater withdrawals, federal cooling  
7 water regs. It also included desal at one point and working  
8 on these intake technologies for 20 years and the law,  
9 enforcing them.  
10 So we knew for years that the Santa Barbara problem  
11 was coming. We knew this permit wasn't issued properly and  
12 we knew it was going to collide with the State regs. We  
13 know there has to be a solution to this.  
14 Let's be clear, the Water Code was passed in '77.  
15 They were required to enforce this law in '91. You know,  
16 that law requires finding on the intake. It was a huge  
17 mistake not to put those findings in the permit in '91. You  
18 can't go back now and pretend that that happened. I've  
19 heard a lot of questions about what the technology may have  
20 been.  
21 There was some discussion about horizontal wells  
22 and all these things. If we had had that debate and invited  
23 the public to comment on it, a lot of this may have been  
24 discovered. You can't go back and pretend you know what may  
25 have happened. Everyone knows this is pure speculation.

140

1 You're undermining the public process and the benefits.  
2 Look, I don't know -- I think that is a hard thing  
3 to do, but if you take the Keepers up on their solution, you  
4 get a lot of things. One, you don't stop the City from going  
5 forward and dealing with this drought emergency. You don't  
6 make any findings on definition of new or whatever that  
7 may -- legal complications that may have. You ensure that  
8 you've gone back and done the public process that didn't  
9 happen in '91.  
10 Look, this is a reasonable thing to do. Just doing  
11 studies doesn't get you there. The studies lead to an  
12 impact or an enforcement analysis. Whatever that analysis  
13 that this Board is deciding on, that's mandatory.  
14 Thank you.  
15 MR. WOLFF: Thank you. Conner Everts.  
16 MR. EVERTS: My name is Conner Everts, Desal Response  
17 Group. Like my colleague, Joe Geever, I've worked on  
18 numerous desal proposals in California and have spent many  
19 years working on the Ocean Plan Amendment for desal.  
20 I was in the area during the long drought that led  
21 to Santa Barbara building the desal facility. I reviewed  
22 the proposal for Ventura for Patagonia, actually, to  
23 consider a desal facility at the time, but we chose to  
24 address the emergency with stricter conservation measures  
25 and maximizing local water resources, including recycled

141

1 water.  
2 That choice has served the area well during wet and  
3 dry weather. It's an option Santa Barbara should seriously  
4 consider first. When I served on the Casitas Municipal  
5 Water District for Ojai, we learned that lesson as well.  
6 It's not something you can insist Santa Barbara do, but  
7 we're talking about the opportunities within this permit. I  
8 mention it because it seems like much of this discussion is  
9 driven by a sense of urgency, the same sense of urgency that  
10 created the problems in the 1991 permit that you're  
11 attempting to resolve with this amendment.  
12 Sure, people have to conserve more, but that's the  
13 reality for the rest of the state as well. We've seen  
14 demand go down. We have examples in Marin, Santa Cruz, Long  
15 Beach and even the city of Los Angeles that chose to do that  
16 rather than desal. Decisions made in panic mode will  
17 invariably cause problems down this road you're about to  
18 take.  
19 I want to add another comment to Joe's about the  
20 flawed reliance on CEQA findings as a substitute for  
21 findings in compliance with the Water Code. Joe is right  
22 that CEQA is not the same, and the argument in the draft  
23 amendment is flawed. But what Joe didn't say is that the  
24 errata sheet now documents the EIR findings were based on  
25 inaccurate numbers. The EIR was flawed. Nonetheless, the

142

1 revised draft findings argue that even though the EIR was  
2 based on intake volumes that were dramatically  
3 underestimated, the conclusion of no significance would have  
4 been adopted back then.  
5 I strongly urge you to deny the proposed amendment.  
6 I believe there is a way to settle the problems in the  
7 permit without resorting to this unacceptable amendment  
8 process. An acceptable compromise --  
9 MR. WOLFF: Can you wrap up?  
10 MR. EVERTS: Yes -- along the lines of what  
11 Channelkeeper is recommending. Thank you very much.  
12 MR. WOLFF: Thank you for your comments.  
13 The next speaker will be Sheila Lodge and then  
14 we'll have Russel Ruiz and then Michael Cohen.  
15 MR. YOUNG: This is former Mayor Lodge, Mr. Chair.  
16 MS. LODGE: Thank you, Mr. Young. Good afternoon,  
17 Chair Wolff and members of the Board. I am Sheila Lodge,  
18 former mayor of Santa Barbara 1981 to 1993, which included  
19 six years of drought.  
20 The City responded admirably. Our citizens ended  
21 up competing with themselves to see how little water they  
22 could use. The City gave out \$80 rebates on every toilet  
23 that was replaced. We handed out free low-flow showerheads  
24 and anything else we could think of that would help reduce  
25 water use.

143

1 Water use was reduced by 45 percent. That  
2 reduction resulted in a permanent reduction in demand by  
3 about 2,000 acre-feet per year. As you heard, it was over a  
4 16,000 acre-feet demand before the drought, and it's now,  
5 even with increased population, about 14,000 acre-feet.  
6 This makes it a little difficult to do more than the  
7 20 percent in addition to what the public is doing.  
8 In 2011, the City's plan showed a declining water  
9 use, given all the modern State requirements of that time  
10 about plumbing and water conserving, even with the increase  
11 in population. However, the City's water sources are  
12 limited. They all depend on rain. Desal is the only water  
13 source that is not dependent on rain.  
14 Given that we're facing possibly permanent change  
15 in climate -- this morning's news included a report that  
16 2014 was the warmest year ever in California, as long as  
17 records have been kept. We need to have this kind of water  
18 resource. It's the only resource that's going to be there  
19 no matter what, unless the ocean dries up. It's a source  
20 that's under the City's control. It's flexible, and it's a  
21 source that's used only when needed.  
22 Tourism is very important to Santa Barbara's  
23 economy. A city with dead and dying trees is not one that's  
24 going to be attractive to the tourists.  
25 So I urge you to -- it was very carefully

144

1 considered what alternatives to pursue back in 1991. We  
2 picked the desal plant because of its reliability and  
3 flexibility. I urge you, please, adopt the amended --  
4 proposed amendment to the existing order.  
5 Thank you.  
6 MR. WOLFF: Thank you for your comments. Russel Ruiz.  
7 MR. RUIZ: Good afternoon, members of the Board and  
8 welcome to Santa Barbara. My name is Russel Ruiz. I've  
9 been asked to speak today in my capacity as a member of the  
10 City of Santa Barbara Water Commission.  
11 The Water Commission is appointed by the City  
12 Council. Pursuant to the City Charter, we have oversight  
13 authority over the City's water and wastewater system, and  
14 we are active in an advisory capacity to the City Council on  
15 those subjects.  
16 We are a Brown Act body. We hold regular noticed  
17 public meetings. Our meeting agendas and all our agenda  
18 material is posted on the city website. And at our regular  
19 public meetings, we strongly encourage public input. In  
20 fact, Ms. Redmond, on behalf of Channelkeeper, has attended  
21 several of our meetings.  
22 The focus of my comment is the fact that for well  
23 over 20 years now, the City, in a very open and public  
24 manner and in complete good faith, has described our  
25 existing desal facility as a permanent part of our long-term

1 water supply plan that would be used to meet our minimum  
2 health and safety requirements when we were -- encounter an  
3 extreme and prolonged drought and here we are.

4 I actually beat the mayor to the term, but she used  
5 it before I got to it. It is our water supply of last  
6 resort. I know I'm not telling you anything you don't know,  
7 but I'm not such a young man anymore. I've lived here all  
8 my life. The Cachuma Reservoir is at its lowest level it's  
9 ever been in my lifetime. Gibraltar Reservoir, also a  
10 vitally important part of our water supply, is effectively  
11 dry. If the drought continues, there are scenarios that say  
12 Cachuma may be effectively dry by the end of this year.

13 All we ask is that you please take an action that  
14 is consistent with your staff's recommendation and do not  
15 delay our implementation of our long established Drought  
16 Water Supply Plan.

17 MR. WOLFF: Thank you for your comments.

18 MR. RUIZ: I brought my desalinated water, but I ran out  
19 of time.

20 MR. WOLFF: Looked like a very good vintage.

21 So Mr. Michael Cohen.

22 MR. COHEN: Hello, everyone. My name is Michael Cohen.  
23 I operate Santa Barbara Adventure Company. I'm a tour  
24 operator here in town with 16 years' experience. We take  
25 about 10,000 people out on tours. I'm also a member of

1 So this subsurface intake system seems to be the most  
2 superior. I really do support Channelkeeper's  
3 recommendations be included into the proposition. Thank  
4 you.

5 MR. WOLFF: Thank you for your comments.

6 Mr. Tom Mosby.

7 MR. MOSBY: Good afternoon, members of the Board. I'm  
8 the general manager of the Montecito Water District.

9 The following letter is being submitted by the  
10 Montecito Water District Board of Directors to the Central  
11 Coast Regional Water Quality Control Board for the  
12 administrative record and to voice the District's support  
13 for the City of Santa Barbara's desalination project.

14 The City's foresight and leadership on the south  
15 coast has led to the building of a vibrant and charming  
16 community and a destination for travelers from all around  
17 the world. The ambiance, attraction and health of  
18 Santa Barbara is dependent on having a reliable water supply  
19 for the public health and safety needs.

20 The City's water supply and Montecito Water  
21 District rely primarily on surface water and are threatened  
22 during the period of drought. We are -- the crippling  
23 drought, which has reached emergency levels affecting water  
24 supplies statewide. Such droughts have become more the norm  
25 than the exception.

1 Visit Santa Barbara Board of Directors, which is a tourism  
2 board, as well as on the Channel Island National Marine  
3 Sanctuary Advisory Council.

4 I'm here to talk about the desalination plant and  
5 just show my support for Channelkeeper's recommendation.  
6 I've seen several inservices about the current projects,  
7 particularly those in Monterey. I feel there are 18  
8 projects in the pipeline, some 290 million gallons of  
9 seawater that's going to be sucked up every day once these  
10 projects are all put into place.

11 This project is talking about 10 million to 20  
12 million gallons of water per day, and that's going to have  
13 some effect on tourism. We have to have a healthy marine  
14 environment. So many of our organizations are tied to that.  
15 Outfitters and operators, such as myself, whale watching  
16 industries, school groups and outdoor education programs,  
17 hotels, all depend on the health of the marine environment.  
18 We cannot see taking up all of these zooplankton and  
19 phytoplankton without having some negative effect on the  
20 marine environment.

21 I think having watched several of these debates  
22 and -- I think Dr. Hunter was correct in the value of the  
23 sanctuaries in Santa Barbara Channel with the marine habitat  
24 there is so vital to our economy that we have to be very  
25 measured in taking these marine organisms out of the water.

1 In planning for its future, the City recognized  
2 that desalination would be an important and necessary  
3 component of its water supply portfolio. In the early  
4 1990s, along with Montecito and the Goleta Water Districts,  
5 built a regional desalination facility. Even with the  
6 arrival of the State water in 1997, the City has continued  
7 to maintain and identify the water supply in its long-term  
8 water supply plan, although Montecito and Goleta  
9 discontinued participation.

10 The Water Supply Plan also includes an aggressive  
11 conservation program. The City's success cannot be  
12 overstated as the current water levels are 20 percent lower  
13 than in the 1980s. The City's pursuit of a long-term,  
14 reliable, environmentally sound facility is vital in  
15 upholding the value of Santa Barbara. With the south coast  
16 water agencies sharing regional water supplies available to  
17 our communities, having desalination in operation will also  
18 become a regional asset and provide a regional benefit  
19 during periods of water shortages.

20 Montecito Water requests you affirm, and through  
21 the City, permit the desalination facility as a permanent  
22 water supply facility, recognizing that the planned use will  
23 provide for future water supply security and offset the  
24 continued degradation and unreliability of previously  
25 dependable sources of water supply. Thank you.

149

1 MR. WOLFF: Thank you for your comments.  
 2 MS. AUSTIN: Mr. Chair, I have a quick comment.  
 3 Normally when we have late submissions, there is an analysis  
 4 and a decision by the Chair as to whether or not to accept  
 5 those into the record.  
 6 MR. WOLFF: That's why I suggested that he read it  
 7 aloud, his letter.  
 8 MS. AUSTIN: Are you accepting the letter as well?  
 9 MR. WOLFF: No.  
 10 MS. AUSTIN: Okay. Thank you.  
 11 MS. HUNTER: I think it's about the transcript.  
 12 MS. AUSTIN: We are not accepting actual letters for the  
 13 record, but the comments are in the record on the  
 14 transcript.  
 15 MR. WOLFF: Correct.  
 16 MS. REES: I thought you were finished. I'm sorry. I  
 17 thought perhaps my card did not make it into the stack.  
 18 MS. HUNTER: Your card was entered into the Heal the  
 19 Ocean, so it was set aside. It said Heal the Ocean, but she  
 20 did submit it.  
 21 MR. WOLFF: This is -- you are to speak on this  
 22 particular item?  
 23 MS. REES: Yes, No. 9. I'm sorry. I put it in this  
 24 morning, and I thought maybe it didn't make it in. Thank  
 25 you.

150

1 Good afternoon, Regional Board. My name is  
 2 Kate Rees. I'm the former general manager Cachuma Operation  
 3 and Maintenance Board, also known as COMB, and also former  
 4 manager for the Cachuma Conservation Release Board, known as  
 5 CCRB.  
 6 COMB is primarily responsible for the operation and  
 7 maintenance of the water delivery system from Lake Cachuma  
 8 on the south Santa Ynez River, through Tecalote Tunnel to the  
 9 South Coast Conduit. It's also responsible for orientation  
 10 of the fisheries program on the lower Santa Ynez River per  
 11 the terms of the Cachuma Biological Opinion for Steelhead  
 12 Trout.  
 13 CCRB is responsible for protection of its other  
 14 agency's water rights -- Cachuma water rights with the State  
 15 Water Resources Control Board, and it fully supports  
 16 development of supplemental water sources, as the Cachuma  
 17 Project is really unable to provide sufficient water to meet  
 18 demands during severe drought. CCRB is also responsible for  
 19 negotiating a new biological opinion with the National  
 20 Fisheries Service.  
 21 All of these activities affect water supply and  
 22 they must be managed and coordinated carefully to maximize  
 23 water for people, agriculture, and also balancing the needs  
 24 of endangered species and species that you're addressing  
 25 today.

151

1 The City of Santa Barbara is a member agency of  
 2 COMB and CCRB and has been a leader in accomplishing these  
 3 goals. However, as a result of the longest drought in our  
 4 history, Gibraltar Reservoir and Lake Cachuma have been  
 5 severely depleted and alternative water sources must be  
 6 considered to meet demands, even with the exemplary water  
 7 conservation already achieved.  
 8 I also served on the City's Water Commission with  
 9 Mr. Ruiz for a while. I was there ten years and during that  
 10 time, witnessed firsthand how carefully water supply  
 11 planning is done for the city. During my time as the Water  
 12 Commission, I participated in the development of long-term  
 13 water supply plans, annual water supply planning,  
 14 maintaining the water delivery system, and encouraging  
 15 conservation, establishing a water recycling system, and  
 16 rehabilitation of the State's groundwater wells --  
 17 MR. WOLFF: Can you wrap up?  
 18 MS. REES: I'm sorry.  
 19 All of the City's water sources are important to  
 20 the City's long-term supply planning. However, the desal  
 21 plant has always been considered an emergency supply and  
 22 will continue to be an emergency supply.  
 23 To prevent substantial shortage in 2016 and 2017,  
 24 reactivation of the desal plant is really necessary.  
 25 Therefore, I urge the Regional Board to adopt the amendment

152

1 to the permit and its findings. Thank you.  
 2 MR. WOLFF: Thank you very much. Dr. McGowan is not  
 3 here. So last but not least is Mr. Mike Jordan. And we  
 4 wanted to have a lasting impression here. So we'll have you  
 5 come to the podium, and we will make sure that Mr. Young  
 6 does not interrupt you and he promised to be listening and  
 7 learning.  
 8 MR. JORDAN: Those kind words you had about being  
 9 concise and right to the point earlier, you can forget  
 10 those. I'm not really sure which is less painful, out here  
 11 or up there.  
 12 Despite my baggage, I'm just here as a resident  
 13 of the City of Santa Barbara and most of my points today  
 14 have already been made by your staff, the State Water Board  
 15 staff, and our City staff.  
 16 A State of California oversight 20 years ago has  
 17 led to a vested permit and a vested operational permit of  
 18 the facility in the city, one that is \$35 million into asset  
 19 development and is looking at another \$30 million investment  
 20 to get it up to what they expect to be a running facility,  
 21 and another \$5 million a year to operate.  
 22 I don't have a time machine, but I don't think you  
 23 need one. Clearly, the case has been made that you don't  
 24 need to go back in time. You just need to ask yourself, was  
 25 adequate data available back in 1991 to make what would have

1 been a couple paragraphs worth of findings that weren't made  
2 at that time due to an oversight?

3 Multiple EIRs, multiple volumes of studies, all  
4 talking about feasibility and analysis, all coming to the  
5 same conclusion that there was less than a significant  
6 environmental impact, all analyzing multiple locations,  
7 multiple techniques, multiple types of technologies and  
8 coming to the same conclusion that the most feasible and the  
9 one with the less impact than what is out there today.

10 I'd encourage you to pass the amended order or  
11 resolution making the findings for staff. The one thing I'm  
12 a little shocked at is to hear the consternation and the  
13 questions involved about the City's offer of their three  
14 items. I think Mr. Johnston asked why is the City doing  
15 that. The quick answer to that is because this city has  
16 been and continues to be one of the leaders, if not the  
17 leader in your region, of cities that are onboard with your  
18 mission.

19 The City has not just followed your mission, but  
20 has many times led your mission by example. That's why you  
21 see those offers on the end. They might have a different  
22 answer, but from a perspective as a resident of this city  
23 and former Water Board member, it's plain to see that that's  
24 the reason.

25 Thank you for your time. Thanks for the day of

1 could get direction from the Board today and that's  
2 something we could come back at a later date as opposed to  
3 trying to scramble.

4 MR. WOLFF: Thank you very much. Do we have any  
5 comments back from staff at this time, or could we entertain  
6 input from my colleagues here?

7 MR. PACKARD: Ideally, we'd have a few minutes to talk  
8 about a recommendation and summation. I'd hesitate to get  
9 into that without having a few minutes to do that.

10 MR. WOLFF: So what I'll do at this time -- you heard  
11 some options that are proposed by counsel. I think what we  
12 want to do is -- being able to make good, sound decisions.  
13 You know, this item took quite a bit of time, but I think it  
14 is complex. It's an important issue. I think at the same  
15 time we all recognize the urgency of making decisions, but  
16 we need to make good decisions.

17 I'd like you to -- open to input from my fellow  
18 Board members on which direction you would like to go with  
19 this item.

20 MR. YOUNG: Well, I would -- I do need to hear from  
21 staff. We've heard a lot of things. It seems like we have  
22 this most bizarre situation of having a permit that was  
23 issued, supposedly fully issued, but now there's a problem  
24 with it. Was it ever really completed?

25 You know, there's a piece missing there. That

1 entertainment.

2 MR. WOLFF: Thank you. Are you going through  
3 withdrawals? Thank you very much.

4 I would like to request Counsel Austin to help us  
5 strategize a little bit with the time allowance that we  
6 have, a little bit with the time that we have, where we  
7 could go from here in moving forward.

8 MS. AUSTIN: There are several possible options. One,  
9 of course, is to deliberate in the next 23 minutes and come  
10 up with a solution one way or the other. This could be put  
11 over and continued until tomorrow for additional  
12 conversation and discussion.

13 I would just want to inform the Board that if there  
14 is a desire by the Board to amend the permit to more clearly  
15 state the three measures, which sometimes have been called  
16 voluntary measures, but counsel for Santa Barbara is saying  
17 they may be required measures. If there is a desire to  
18 clearly state those three measures and conditions to the  
19 permit, that is something I would recommend we take that  
20 back with staff and spend time working on good, well-written  
21 conditions, and that is something we could bring back in the  
22 March meeting.

23 So again, these are options for you to decide how  
24 you would like to proceed. I do want to mention if you are  
25 contemplating amending the permit, that is something we

1 piece needs to get put into it. I don't know how we even,  
2 say, grant some kind of temporary permit because the State  
3 Water Board is going to do its policy within, like, 90 days,  
4 and if this language in Attachment G is not in this permit,  
5 the City is going to, by default, have to do -- be treated  
6 as a new facility.

7 I'm very sensitive to the City's position. I don't  
8 think the City has done anything wrong getting to this point  
9 in time. Perhaps it could have come forward ten years ago  
10 and asked for this thing to be fleshed out and amended then.  
11 Now we're backed up against the wall. I think it's kind of  
12 a legal fiction for us to go back in time and speculate as  
13 to what the Water Board would have done then based on what  
14 we are looking at now through our eyes sitting here 24 years  
15 later. I have a problem with that.

16 I'm just contemplating how to reconcile these  
17 things. I want the City to have the ability to turn the  
18 plant on when it wants to. I just want to make sure we have  
19 covered ourselves in terms of the right review as to the  
20 technology it should be investigating and what type of  
21 mitigation would be appropriate.

22 I think we need time to flesh that out, and I would  
23 like staff to get back to us. Really, your recommendation  
24 is one way. Once you've heard from all of us, I would like  
25 to expand the recommendations that are possible. Anyway, I

1 agree with more time. I agree with having staff weighing in  
2 and giving us some direction.

3 MS. HUNTER: Yes. Mr. Packard, I would like to hear  
4 from staff, and I think you do need -- we have heard a lot  
5 of information, a lot of perspectives today, including the  
6 time travel thing. I would -- I don't know if it would be  
7 appropriate if we have staff at least make summary comments,  
8 perhaps carry this over until tomorrow morning and give you  
9 a chance to prepare some possibilities for what you see  
10 coming out of the discussion today to help us in determining  
11 where we -- how we map this going forward.

12 I think more time is going to reform or allow for  
13 all of us to consider what the different urgencies are.  
14 Some of them are short-term and some are long term. I  
15 consider them to be equally critical. I don't know -- of  
16 course, we want to understand what parameters we have in  
17 order to move this forward in the most expedient way  
18 possible, but I don't want to take any shortcuts.

19 MR. HARRIS: I think I can provide some clarification.  
20 I think really the issue here is whether the items that the  
21 City is proposing are a mandatory part of the permit or  
22 not. We've come to the conclusion that they are not. And I  
23 think, at least on this side of the room, we would like to  
24 have a chance to make them -- ensure they are a firm  
25 requirement of the City.

1 March.

2 MR. WOLFF: Before I comment, we'll have my colleagues  
3 give input. Mr. Delgado and then Mr. Johnston.

4 MR. DELGADO: I would like staff response to public  
5 comment, but specifically how CEQA compares to 13142.5(b).  
6 That was a lot of the Channelkeeper's testimony, such as  
7 whether that Code requires the best siting, and CEQA does  
8 not; whether that Water Code requires a combination of  
9 siting and technology and the best combination of those;  
10 whether San Diego required many minimization actions that  
11 have not been posed here. Anyway, just staff comment on  
12 public comments we heard.

13 And I'm unclear if there's been any mitigation done  
14 in the 1992 plant. If it was the \$34 million desal project  
15 that had zero mitigation -- if we're going to go back in  
16 time and try to fix some things, I don't think it's  
17 unreasonable to include mitigation. If they're going to put  
18 another 30 to 40 million into it, there needs some sort of  
19 commensurate mitigation. I don't see how you can do a desal  
20 into the ocean without having some sort of mitigation.

21 We're not talking about zero mitigation. But I  
22 think that we should go a little bit further than the three  
23 voluntary actions that have been talked about today. I  
24 agree they should somehow be made concrete. I also don't  
25 believe that studies done does anything. Once the studies

1 I think by doing that, and listening to the other  
2 speakers, I think that's the concern too that the studies  
3 get done and the City makes a good-faith effort towards  
4 looking at the technology. I don't think that would prevent  
5 the City moving ahead on their timeline if, for example, the  
6 Board gave direction to the staff to go back and revise the  
7 permit. If we were to bring it back to the Board in March,  
8 I think the City, from what I understand, they can move  
9 ahead with their -- what they need to do to get the  
10 engineering work done.

11 This Regional Board has supported this city even  
12 most recently with Lake Cachuma and the emergency pumping  
13 barge, where we did a permit so they can excavate the last  
14 intake on their intake structure. I suspect we're going to  
15 continue to support them. It's just a matter of clarity in  
16 the permit.

17 I don't think -- having done this many times at the  
18 State Board, what you don't want to do is rush through  
19 trying to revise a permit at the last minute, in the  
20 eleventh hour, because you ultimately end up with a bunch of  
21 mistakes. It's very difficult.

22 Consistent with one of the options that Ms. Austin  
23 proposed -- I think one you should strongly consider is  
24 direction to staff to take those three items, incorporate  
25 them into the permit and then bring it back for a vote in

1 are done, you can throw them in the trash. We are no further  
2 ahead had we not done the studies, as far as this particular  
3 case.

4 So I would like Council and staff to consider what  
5 kind of conditions we legally could include, such as having  
6 the studies completed by time certain, having some  
7 discussion of what kind of studies we're talking about and  
8 some kind of implementation of the studies -- conclusions of  
9 the studies' recommendation by a time certain. If the  
10 studies' recommendations and conclusions aren't enacted,  
11 then it's just a paper exercise to reopen the plant forever  
12 without coming up to today's standards. Those would be my  
13 comments.

14 MR. WOLFF: Mr. Johnston?

15 MR. JOHNSTON: Thank you, Mr. Chair. I would certainly  
16 be comfortable with -- I would be comfortable with approving  
17 this draft permit as written. I would prefer to have -- as  
18 counsel suggested was possible, to have the permit be -- to  
19 have the last three paragraphs of that permit looked at to  
20 see if there's a way we can create some comfort level by  
21 making those mandatory. I understand the City's position  
22 that the first two really are as a point of fact.

23 You know, as far as what was proposed by numerous  
24 commenters, that not only should a study be done, but if  
25 either, as a commenter said, under seabed intake was



1 feasible, or frankly, as the City's study proposes, if  
2 direct potable reuse is feasible because they're proposing  
3 studying that as well.

4 You know, it's been proposed by commenters that we  
5 put into this permit something that's along the lines that  
6 says this is provisional, that this is temporary, that if  
7 the study shows it's feasible, they have to go back and do  
8 that stuff. It's not clear to me how that fits legally with  
9 what we're actually doing here because this is not a normal  
10 renewable permit. This is sort of a one-time shot at  
11 findings.

12 I'm not sure how I feel as a Board member about  
13 that and whether I would vote to impose that as well with  
14 the potential challenges that might come with that. I would  
15 be willing to look at it. I would first like to hear from  
16 counsel, and if possible, maybe hear tomorrow before we give  
17 directions some analysis of is that even really feasible  
18 within the context of what we're doing here with the  
19 upcoming Ocean Plan with the fact that this is not really an  
20 element of a renewable permit, but instead a finding on  
21 13142.5(b), whatever the heck it is. I'd like to hear on  
22 that.

23 As I said, I'm not sure I would support that or  
24 not, but if it's not an option, I don't have to think about  
25 it.

1 to come back at the next meeting with answers, and we'll  
2 have had the time to frame a little bit better how we could  
3 amend this, making sure we're on solid ground, i think  
4 that's one point.

5 The other point that I would like to assure  
6 myself -- and I'm asking these questions to the State  
7 Board -- is if we did postpone a decision to the next March  
8 meeting, is this going to jeopardize in any way the progress  
9 work that the City of Santa Barbara has done? I know  
10 there's issues of timing that were brought up. I would like  
11 to make sure that we do not have any unintended consequences  
12 here causing overlapping of the final ruling from State  
13 Board --

14 MR. HARRIS: Mr. Chair, if it's the Board's desire to  
15 carry this over, I would be -- I would ask the staff here to  
16 transmit to the Board members of the State Board not to move  
17 ahead with the desal policy necessarily before we come back  
18 and make a final decision. I think that's a reasonable  
19 request.

20 MR. WOLFF: I think we need to be fair with the City.  
21 The City is obviously trying to do their best. It's sort  
22 of -- they're trying to do their best. We're in a bit of an  
23 unusual situation here. So I think you showed a good-faith  
24 effort. If there was a way to have the assurance that if we  
25 delay this to March, it is not going to have a negative

1 MS. AUSTIN: Let me be clear. It's whether or not we  
2 can put additional conditions in the permit?

3 MR. JOHNSTON: Whether or not, as numerous commenters  
4 suggested and as my colleague Mayor Delgado just inferred,  
5 whether or not we can actually say we're going to approve  
6 something that has the study down the road that requires  
7 them in the future to implement the results of that study if  
8 shown to be technically feasible.

9 I don't even know if that's within the boundaries  
10 of what we're able to do here. If it's not, I don't want to  
11 spend a lot of time talking about it. If it is, then we  
12 have to decide if that's the approach we want to take. I'd  
13 like to get some guidance maybe tomorrow before we tell you  
14 guys where we want you to go on that question.

15 I'm hearing that from my colleague Mayor Delgado,  
16 and, you know, the threshold is, is it even something that's  
17 within the realm of what we can do.

18 MR. WOLFF: So, you know, I'm a little concerned about  
19 moving this item until tomorrow. I'm not convinced that  
20 overnight staff will have the opportunity to calibrate the  
21 time machine and -- I mean, there's a long list of questions  
22 here. There are also certain questions that will require a  
23 little more legal counsel review, and those answers may not  
24 be available necessarily tomorrow morning.

25 I think Mr. Harris's suggestion of requesting staff

1 impact on the decision and if you can currently proceed with  
2 some of the engineering work, maybe that's a possibility.

3 MR. HAGGERTY: Two of us will address some of  
4 those concerns. One thing from my perspective is I'd be  
5 happy to work -- to counsel and staff, I don't know that the  
6 changes with regard to making the three measures that the  
7 City has committed to doing -- making those part of the  
8 permit or more enforceable to provide the Board a heightened  
9 level of certainty, I don't know that those are significant  
10 changes. Maybe they are. I don't think they are. We read  
11 them as being requirements.

12 Clearly, on the subsurface issue, we would have to  
13 flesh out a time frame and some milestones. And I think the  
14 City is willing to discuss those. So I think from a timing  
15 perspective from a legal point of view, it would be great to  
16 try to make some progress and bring something back tomorrow.  
17 Maybe it's not adopted if it's not perfect, but at least  
18 there's a heightened level of certainty about where the  
19 direction is. Our preference would be to have this done  
20 today or tomorrow because our timing is very tight.

21 MS. BJORK: I think your comments about engineering are  
22 correct. We are waiting for a proposal to be submitted to  
23 us. What we are still working hard on and working with  
24 another branch of the State Board is financing, whereas we  
25 are fairly certain we have a valid -- we would like to make

1 sure that we have our I's dotted and our T's crossed and  
2 that we are not out of step with the State. And the  
3 financing issue is what's put at risk by waiting until  
4 March.

5 So I agree that if we can move on the process  
6 now -- we've tried to work hard to get this earlier in the  
7 process -- I would just say that in 2009, we did do fairly  
8 extensive study of our desal plant and what it would take to  
9 put it back online, including looking at whether the permits  
10 were all valid. At that time, this issue was not  
11 identified. So it really has caught us unaware and it's a  
12 major hiccup for us. We're really worried about being able  
13 to deliver to our customers.

14 MR. HARRIS: Mr. Chair, a couple items: We certainly  
15 can work with the Division of Financial Assistance to  
16 minimize any impact to the City.

17 There must be something in the water here in Santa  
18 Barbara. It seems like every time we come down here, we end  
19 up with these very long sessions that tend to impact the day  
20 before we have a very contentious ag item, which is tomorrow.

21 So I am a little concerned about trying to get this  
22 done before we deal with tomorrow, which will very likely  
23 run just as long.

24 I'm again going to recommend we not try to make  
25 adjustments to the permit tonight and continue it to March,

1 to require future stuff down the road on the basis of a  
2 study or not, within the frame where we're working with  
3 them.

4 We have to give some sense of direction to both the  
5 staff and City where we're going on this.

6 MS. AUSTIN: We do that all the time. There are  
7 frequently actions by the Board where we adopt a permit  
8 which requires a study with the intent of implementing the  
9 result of that study.

10 Obviously, the criteria and what the expectations  
11 are and the fuzzy language about "to the extent feasible,"  
12 which inevitably brings these types of provisions, that kind  
13 of thing would need to be worked out. The general concept  
14 of having a permittee study something and later implement the  
15 results of that study, that is not a novel concept.

16 MR. JOHNSTON: Even in the context of what we're doing  
17 here is essentially a -- I forget a number of the section  
18 findings?

19 MS. AUSTIN: I want to be cautious about what we're  
20 talking about doing is a potential permit amendment to a  
21 condition of the permit, which is completely separate from a  
22 finding.

23 In terms of requiring something, I think that's  
24 been sort of the conversation here about whether or not this  
25 is something that's an enforceable condition of the permit.

1 and we can work with the City Division of Financial  
2 Assistance and the State Board to try to minimize any impact  
3 on the City.

4 MR. WOLFF: Mr. Johnston.

5 MR. JOHNSTON: The problem I have with that, with what  
6 Mr. Harris just said, is that we've got two distinctly  
7 different threads that have come out of the Board discussion  
8 here. One is let's tweak the language here to make those  
9 three items that the City's already proposed stronger, and  
10 the other is let's discuss a somewhat different framework  
11 that has mandatory -- it's either on a temporary basis and  
12 gets revisited or has mandatory, if feasible, changes to the  
13 infrastructure down the road.

14 You know, I think in fairness to the City, it would  
15 be good if we could at least -- I understand what counsel  
16 was saying. You don't necessarily have to see a resolution  
17 out, but they want to get a sense of where we're going on  
18 that. In terms of efficiency of staff time, if we can  
19 resolve which of those two directions we're going, then  
20 we're creating a lot less work for you folks and we're  
21 giving the City some certainty down the road.

22 So I wasn't proposing we revisit this tomorrow and  
23 pass a resolution tomorrow. I was just proposing we hear  
24 back -- and maybe counsel's prepared to answer right now --  
25 on the question of whether it is practical to do something

1 That's the sense of staff, that it would make sense to amend  
2 the permit to more clearly state it as a condition or  
3 requirement of the permit.

4 MR. HARRIS: So we have to do it now and you adopt the  
5 permit. We can't put off making a requirement later after  
6 we adopt the permit.

7 MR. JOHNSTON: What you're saying is, for example, we  
8 could say if we chose to, you know -- the deliverables on  
9 the studies, and if the studies find that there are  
10 technically feasible superior ways to do the intake, either  
11 under sea floor or whatever, that the City would be required  
12 to do that and we could put that all in the amendment?

13 MS. AUSTIN: You could draft permit conditions along  
14 those lines.

15 MR. WOLFF: I think that, Mr. Wyels you had comments?

16 MR. WYELS: Phil Wyels. Let me put a slightly finer  
17 spin on this. I think, frankly, what we've come to you with  
18 here is a proposal that does not require the Regional Board  
19 to definitively state that this is a new facility as of  
20 today. I think the proposal that is being queried about  
21 whether the Regional Board could say today, "Go do a  
22 feasibility study for intakes," and if it's determined,  
23 presumably by the Regional Board or by the City, that detail  
24 has to be worked out.

25 If it is determined that it is feasible, then the

1 City is required to install subsurface intakes. The only  
2 way the Regional Board might be able to get there is by  
3 saying that this is a new, non-existing facility. I'm not  
4 saying you can or you can't. That would be the only way to  
5 impose that kind of requirement would be to say this is a  
6 new facility.

7 MR. WOLFF: I'd like to circle back a little bit into  
8 the organizational aspect of this meeting.

9 MR. HARRIS: Mr. Chair, it's 5:00 o'clock. We have got  
10 to get out of here.

11 MR. WOLFF: I'm very uncomfortable looking at continuing  
12 this item tomorrow because what will happen is that is going  
13 to be a half a day discussion. Having my experience, this  
14 is going to be another four hours. There are a lot of  
15 questions asked, and I think it would be -- would do a  
16 disservice to ourselves and also to the City by trying to  
17 say, "Well, we'll cover this tomorrow," because there are  
18 quite a few issues there that still will require staff  
19 interpretation and comments.

20 I think ultimately, if we do not harm the City by  
21 having these delays and we have assurance from the State  
22 Board, as suggested by Mr. Harris, that they will work with  
23 the timing so it does not cause challenges with the  
24 regulations, I think that having it delayed to March would  
25 be possible.

1 supply shortage issues and resolve them. We issued a  
2 statewide recycled water order recently in record time  
3 following that directive. We're compelled to get this stuff  
4 wrapped up too.

5 MR. WOLFF: Another important element was the grant.  
6 You suggest, Mr. Harris, that possibly --

7 MR. HARRIS: You mean the DFA? I'd like to respond to  
8 Ms. Whitney in that our staff and their staff, we've worked  
9 very hard to try to bring this to you in a timely manner  
10 working with the City. The Board has brought up a number of  
11 issues, as have the stakeholders. And so the outcome is the  
12 outcome today. We have tried very hard and will continue to  
13 work hard with everyone involved.

14 MR. WOLFF: So do my colleagues agree not to bring this  
15 to tomorrow and basically request staff and legal counsel to  
16 take the inputs -- the questions we had and finalize this in  
17 March?

18 MR. JOHNSTON: I would still like to see if we can give  
19 staff a little clearer direction as to where we want them to  
20 go. Are we directing them to sit with the City and see if  
21 they can rewrite the draft to simply concrete more the three  
22 offers or are we directing them to go back and create a  
23 somewhat different framework in terms of mandatory  
24 conditions on the study?

25 MR. YOUNG: We do need to come back in the morning -- at

1 MS. HUNTER: I think we're all considering the impact to  
2 the City, but we have many stakeholders today that came to  
3 also share the urgency that they feel. I don't want to  
4 overlook the possibility that they also want an opportunity  
5 to -- that deliberation will continue in a way that allows  
6 us to deal with these complications. So I don't want to  
7 just say this is about the City. This is about the  
8 stakeholders that came forward today representing many  
9 different perspectives.

10 MR. WOLFF: When I use the term "the City," it's a  
11 holistic term because it is implicit to all the stakeholders  
12 and the City.

13 So, Ms. Whitney, I think you wanted to add a  
14 comment.

15 MS. WHITNEY: I'm quite sure the State Board is not  
16 going to act on the desal amendment by March. That said,  
17 Megan Powers, who's been assisting your staff in writing  
18 these conditions, her last day is the day -- Monday, and so  
19 she'll be leaving. And, you know, my directions with the  
20 desal amendment are get it to the Board as quickly as I can.

21 Mr. Harris's comments notwithstanding, I'm going to  
22 follow the direction from the Board's executive director.  
23 They're anxious to get this done in no small part because we  
24 have an executive order from the Governor that directs the  
25 State Board to work with local entities to address water

1 some point tomorrow and we do need to give staff better  
2 direction. It's too loose at this point, and I've got more  
3 to say on these three measures and what I think is  
4 acceptable and what isn't.

5 I don't want staff running off right now on one  
6 tangent when I think some of these things need a little more  
7 clarification in terms of what we are thinking of doing.

8 We just heard from Mr. Wyels, who I believe just  
9 said if we condition the permit, we're essentially declaring  
10 it a new facility. Am I correct? If we condition the  
11 permit with the three requirements at the tail end of  
12 Attachment G, we're essentially saying it's a new facility?

13 MR. WYELS: No, that's not what I meant. If the three  
14 conditions at the end of Attachment G -- that's easy.  
15 Somebody suggested, and I agree with them, we can rewrite  
16 them as true permit conditions. But that's not what you're  
17 looking at right now.

18 The question about whether you can take another  
19 fourth step and say, essentially, and if the result of the  
20 subsurface feasibility study is that some entity determines  
21 it is feasible to do subsurface intakes, then the City must  
22 install subsurface intakes, my view is that the only way  
23 that would be consistent with the Board's jurisdiction is to  
24 say that this is a new or expanded facility and the Board  
25 gets a second bite at the apple now.

1 MR. YOUNG: Well, that's what our staff would need to  
2 come back with and advise us on. That would be a  
3 consideration as to how we approach that.

4 MR. JOHNSTON: I think we need to give them some  
5 direction. First of all, I'd like to hear from our counsel,  
6 because I respect your opinion, but you're not representing  
7 us. I'd like to hear from our counsel. I don't know if  
8 you're comfortable right now, or if you'd rather do that  
9 tomorrow morning.

10 Secondly, I would like for us to give direction to  
11 staff before today -- or today and tomorrow is over as to  
12 what we want them to come back with. I don't want them to  
13 bring us back a whole Chinese menu and have another day of  
14 discussion and meanwhile the City has no idea where we're  
15 going.

16 MR. YOUNG: Can we come back tomorrow morning,  
17 Mr. Chair?

18 MR. WOLFF: What I'd like to see tomorrow is us giving  
19 directions, not basically reopening a debate back and forth  
20 to staff. I'm totally comfortable to better articulate  
21 tomorrow direction to staff. If we do this tomorrow  
22 morning, with that in mind, I'm also totally fine with that.

23 MS. AUSTIN: We do have the option to closing the  
24 hearing to additional public comments. We can restrict this  
25 conversation to deliberations and a specific clarification.

1 can also get that information. And that way we still  
2 accomplish the end result.

3 I would like to -- on that note, to close today's  
4 meeting. It is ten past 5:00, and we will reconvey tomorrow  
5 morning for approximately an hour on this.

6 MR. YOUNG: At what time?

7 MR. HARRIS: The agenda says 9:00, so we have to come  
8 back at 9:00.

9 MR. WOLFF: Thank you very much, everyone.  
10 (Meeting adjourned at 5:15 p.m.)  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

1 MR. WOLFF: I think that will be the best approach to  
2 manage our time tomorrow morning. As Mr. Harris said, we  
3 have a busy agenda and we want to be fair with the other  
4 parties coming tomorrow.

5 MR. DELGADO: Would it make more sense to hear this item  
6 in the afternoon than to hear the item in the morning?

7 MR. HARRIS: I would suggest that we come back in the  
8 morning because there's continuity, and we try to limit it  
9 to an hour or something. I hope we can do it in an hour.  
10 The ag issue is going to be there. Everything else we can  
11 push off the table if we need to.

12 MR. DELGADO: My concern is that in the interest of  
13 getting this wrapped up, we're not going to get a very  
14 thorough response to the public comment and we're going to  
15 be in the mode of making a decision without having heard all  
16 the information that kind of got us in the problem in the  
17 first place. It wasn't a completed process back in the '90s  
18 on. The difference between CEQA and the 13142.5(b), I don't  
19 know if staff has the time to answer that question. If so,  
20 great.

21 MS. AUSTIN: I'll have that answer tomorrow morning.

22 MR. HARRIS: We're not proposing for this to go for a  
23 vote tomorrow.

24 MR. YOUNG: Just direction.

25 MR. WOLFF: If there is further clarification, then we

<b>A</b>				
<b>\$2</b> 100:17	20:22	76:23 78:23	170:25	124:24
<b>\$2.3</b> 70:10	<b>accomplish</b>	116:11 145:13	<b>addressed</b> 32:12	<b>advice</b> 47:11
<b>\$30</b> 152:19	63:10 80:16	<b>actions</b> 91:22,23	32:13 50:18	<b>advise</b> 22:11
<b>\$34</b> 75:22 98:15	175:2	116:3,12	60:12 73:4	173:2
159:14	<b>accomplishing</b>	127:24 128:12	74:11 108:6	<b>advising</b> 22:14
<b>\$35</b> 152:18	151:2	159:10,23	<b>addresses</b> 63:15	<b>advisory</b> 135:8
<b>\$40</b> 99:9,18,24	<b>account</b> 48:7	167:7	<b>addressing</b>	144:14 146:3
100:17 126:8	53:9 66:18	<b>active</b> 70:13	11:19 150:24	<b>advocate</b> 121:4
<b>\$5</b> 102:5 152:21	88:11 115:8	81:14 144:14	<b>adds</b> 63:2	<b>advocating</b>
<b>\$500,000</b> 14:3	<b>accumulated</b>	<b>actively</b> 65:9	<b>adequate</b> 33:23	134:19
41:19 124:3	102:19	81:11	77:12 110:6	<b>affect</b> 68:10
138:16	<b>accurate</b> 48:10	<b>activities</b> 71:24	124:15 152:25	150:21
<b>\$80</b> 142:22	<b>achieve</b> 46:16,17	150:21	<b>adequately</b>	<b>affirm</b> 64:17
<b>a.m.</b> 2:17 5:2	75:15 85:14	<b>activity</b> 33:1	113:20	148:20
<b>ability</b> 20:10	<b>achieved</b> 83:10	107:10	<b>adjacent</b> 12:6	<b>afternoon</b> 62:2
63:10 81:17,21	84:4,25 151:7	<b>acts</b> 42:24	83:5	135:22 142:16
85:21 156:17	<b>acknowledge</b>	<b>actual</b> 97:3	<b>adjourned</b>	144:7 147:7
<b>able</b> 17:21 23:11	52:6,7 77:5	100:20,22	175:10	150:1 174:6
25:12 28:22	112:12	124:5 149:12	<b>adjustments</b>	<b>AFY</b> 57:2
39:24 65:19,24	<b>acquiring</b>	<b>actuality</b> 81:2	165:25	<b>ag</b> 165:20
65:25 67:8,22	133:12	<b>add</b> 32:6 61:1	<b>administer</b> 25:2	174:10
68:5,15,16,22	<b>acre</b> 133:24	115:13 117:17	<b>administrative</b>	<b>agencies</b> 148:16
68:24 69:12,13	<b>acre-feet</b> 18:3,9	119:18 127:13	147:12	<b>agency</b> 66:6
70:25 78:3	18:9 23:17	141:19 170:13	<b>admirably</b>	132:17 151:1
81:23 96:6	68:14 73:14	<b>adding</b> 44:13	142:20	<b>agency's</b> 150:14
104:6,23 112:9	84:11,19 85:21	<b>addition</b> 49:8	<b>admit</b> 28:8	<b>agenda</b> 34:5
117:25 133:3,9	85:22,24 86:4	70:12 71:23	<b>adopt</b> 14:20 23:6	62:6,13 144:17
155:12 162:10	86:8,24,25	76:3 88:7	31:25 53:3	174:3 175:7
165:12 169:2	100:3 105:7,13	91:18 109:3	61:21 76:22	<b>agendas</b> 144:17
<b>absolutely</b> 53:24	106:5,16	143:7	119:17 126:23	<b>agendized</b> 8:15
100:9 119:19	126:12 132:24	<b>additional</b> 5:9	144:3 151:25	<b>aggressive</b>
<b>abstract</b> 58:17	133:5,8,11,12	7:18 28:14	167:7 168:4,6	125:12 131:4
58:23	133:21,23	32:7 47:19,21	<b>adopted</b> 22:21	136:23 148:10
<b>abundance</b> 48:8	143:3,4,5	73:10 75:24	64:16,22 103:6	<b>aggressively</b>
48:9	<b>acre-feet-per-...</b>	76:16 83:23,25	142:4 164:17	131:8
<b>accept</b> 5:8 68:24	17:12	84:6 88:8,20	<b>adopter</b> 75:11	<b>ago</b> 7:11 8:11,17
70:21 122:18	<b>acre-foot</b> 17:13	101:13,14	<b>adopting</b> 63:18	23:21 32:13
127:18 149:4	17:20	104:7 111:20	<b>adopts</b> 31:16	39:2 56:10
<b>acceptable</b>	<b>acres</b> 18:18 80:8	111:21 119:4	59:17	102:6 119:6
119:22 127:12	80:9,9 124:22	133:10 154:11	<b>ADRIANA</b> 1:23	120:2 121:17
142:8 172:4	<b>act</b> 17:1 25:2	162:2 173:24	2:18	123:18 126:11
<b>accepted</b> 124:4	36:6 49:5	<b>address</b> 9:22	<b>adult</b> 37:1,2,4	129:9 152:16
<b>accepting</b> 149:8	123:11,11	28:11 87:22	<b>advance</b> 43:23	156:9
149:12	144:16 170:16	103:8 113:17	132:10 133:23	<b>agree</b> 44:24 49:2
<b>accommodate</b>	<b>acting</b> 22:12	120:23 121:21	<b>Adventure</b>	97:5,8 105:22
	<b>action</b> 24:4 63:2	124:18 135:24	145:23	125:12 157:1,1
	64:15 70:15	140:24 164:3	<b>adverse</b> 104:8	159:24 165:5

171:14 172:15	<b>amended</b> 131:15	<b>analogy</b> 57:7	90:10 99:7	<b>appreciated</b>
<b>agreements</b>	138:5,9,13	<b>analyses</b> 125:2	<b>answering</b> 114:9	35:11
33:24 116:21	144:3 153:10	<b>analysis</b> 22:23	<b>answers</b> 162:23	<b>approach</b> 16:4
<b>agriculture</b>	156:10	23:12 27:4	163:1	61:2,12,16
150:23	<b>amending</b>	44:5,6,14 53:9	<b>anticipate</b> 64:24	69:20 162:12
<b>ahead</b> 59:5	154:25	53:21 55:13	65:10 105:14	173:3 174:1
62:16 65:12	<b>amendment</b> 1:7	61:20 72:2	<b>anticipated</b>	<b>appropriate</b>
77:22 119:8	2:5 5:18,24 6:1	82:4,18 119:12	35:22 94:22	28:10 58:7,10
127:11 158:5,9	6:5 9:15,19	119:15 120:7	107:6	61:24 102:3
160:2 163:17	12:1,6 13:23	122:9,16,17,20	<b>anticipates</b> 23:7	120:3 123:16
<b>aiming</b> 34:11	14:15,19,21	124:16 125:19	24:11	124:2 130:11
<b>air</b> 113:25	22:18,20 23:14	127:15,22	<b>anxious</b> 170:23	156:21 157:7
<b>alignment</b>	24:5,7,23 26:8	128:1,14	<b>anybody</b> 8:10	<b>approval</b> 47:22
111:16	26:15 27:20	129:12,12	<b>anymore</b> 25:25	53:6
<b>allocated</b> 67:18	28:21,24 31:11	138:11,23	145:7	<b>approvals</b> 26:21
<b>allocation</b> 66:14	31:16 32:4,15	140:12,12	<b>anyway</b> 17:5	<b>approve</b> 115:16
66:23 68:12,14	33:3,9 34:4,15	149:3 153:4	47:4 54:5	116:22 117:1
<b>allocations</b>	44:4 46:2,7	161:17	81:25 156:25	137:20 162:5
66:16 69:4	53:3,16 59:16	<b>analyze</b> 124:9	159:11	<b>approved</b> 24:10
<b>allow</b> 15:2 70:14	61:3,8 74:14	<b>analyzed</b> 53:8	<b>apparently</b>	51:10
126:20 157:12	76:22 79:3	72:5	20:21	<b>approving</b>
<b>allowance</b> 154:5	96:21 108:7	<b>analyzing</b> 58:2	<b>APPEARANC...</b>	124:21 125:7
<b>allowed</b> 12:21	122:2,25 123:8	153:6	3:1	160:16
12:22 76:5	126:2,23 127:3	<b>Anapamu</b> 2:15	<b>appearing</b> 8:21	<b>approximately</b>
138:7	127:10,10	<b>anchoring</b>	<b>appears</b> 134:2	10:15,20 15:7
<b>allows</b> 95:15	140:19 141:11	107:15	<b>Appendix</b> 45:10	34:18 35:24
170:5	141:23 142:5,7	<b>Angeles</b> 141:15	61:15	56:20,24 84:8
<b>alloy</b> 114:1	144:4 151:25	<b>angle</b> 43:9	<b>apple</b> 26:5	91:15 98:15
120:13	167:20 168:12	101:24	172:25	133:5 175:5
<b>aloud</b> 149:7	170:16,20	<b>announcements</b>	<b>applicable</b> 45:8	<b>April</b> 34:11 92:1
<b>alternative</b> 46:6	<b>amendments</b>	62:5	<b>applicant</b> 79:10	93:20 117:22
51:6 102:9	29:23 32:24	<b>announcing</b>	<b>application</b>	118:2 138:4
110:11 151:5	33:1	62:11	29:22 32:2,2	<b>Aquarium</b> 34:24
<b>alternatives</b>	<b>American</b> 59:3	<b>annual</b> 86:23,25	54:17 110:1	<b>aqueduct</b> 64:9
15:13 83:1,8	<b>amount</b> 18:10	133:23 151:13	<b>applications</b>	<b>architect</b> 135:25
84:15 92:1	18:11 20:11	<b>answer</b> 5:15	135:14	<b>area</b> 12:18 13:20
94:24 102:13	34:22 53:14	15:10,18 18:4	<b>applied</b> 22:2	36:23 38:14
112:24 113:3	55:15,23 56:11	22:19 24:7	<b>applies</b> 25:6	40:18 42:7
114:18 115:5	65:25 66:5,14	34:17 43:2	75:15	43:3,22 49:2,7
125:3,15	68:20 69:14	53:6 54:19	<b>apply</b> 25:23	50:1 55:20
135:10 144:1	72:2 94:1 95:6	58:3 78:3	53:19	56:2,5 78:9,15
<b>ambiance</b>	100:19 106:3	93:24 112:8,19	<b>applying</b> 61:13	78:17,19 79:19
147:17	108:19 110:22	115:12 120:19	<b>appointed</b>	80:16,17 83:13
<b>amend</b> 11:19	132:24	153:15,22	144:11	83:18 84:7
75:13 119:4	<b>amounts</b> 67:21	166:24 174:19	<b>appreciate</b> 63:7	88:15 91:8
127:3 154:14	68:14	174:21	63:11 114:8	101:24 102:1
163:3 168:1	<b>ample</b> 62:3	<b>answered</b> 21:11	125:15	108:18 109:8

111:2 140:20 141:2 <b>areas</b> 41:15,25 44:13 49:4,6 49:11 54:1,9 83:23 84:7 85:3 88:3 135:3 <b>Arguably</b> 130:22 <b>argue</b> 126:6,8 142:1 <b>argument</b> 117:1 141:22 <b>arrival</b> 148:6 <b>articulate</b> 173:20 <b>aside</b> 149:19 <b>asked</b> 7:2 27:17 58:5 67:9 102:24 105:6 125:18 144:9 153:14 156:10 169:15 <b>asking</b> 6:14 32:10 38:8 39:3 57:18 76:23 91:13 93:20 126:1 163:6 <b>aspect</b> 5:14 13:13 55:10 135:24 169:8 <b>assemblages</b> 40:5 <b>assembled</b> 96:20 <b>assertion</b> 20:21 <b>assess</b> 14:10 16:2 37:13 38:6,10 92:20 111:16 <b>assessed</b> 124:6 <b>assessing</b> 15:13 92:25 <b>assessment</b> 19:9 39:12 <b>assessments</b>	38:13 <b>asset</b> 148:18 152:18 <b>assistance</b> 61:24 165:15 166:2 <b>assistant</b> 3:13,24 22:10 <b>assisting</b> 170:17 <b>associated</b> 11:15 48:25 49:3,4 85:2 101:5 106:22 <b>association</b> 50:4 <b>assume</b> 50:13 60:24 65:17 116:25 <b>assumed</b> 53:9 82:12 <b>assuming</b> 23:3 23:19 105:15 <b>assumption</b> 47:18 49:20 50:12 59:14 83:8 <b>assumptions</b> 106:10 <b>assurance</b> 163:24 169:21 <b>assure</b> 163:5 <b>Attachment</b> 51:17 52:13 76:17 91:23 105:9 156:4 172:12,14 <b>attempting</b> 141:11 <b>attendance</b> 136:9 <b>attended</b> 144:20 <b>attention</b> 6:8 7:5 <b>attorney</b> 22:12 138:13 <b>attorneys</b> 22:13 58:3 <b>attraction</b> 147:17 <b>attractive</b> 95:14	143:24 <b>audience</b> 7:19 <b>augment</b> 46:3 <b>Austin</b> 3:15 5:16 6:6,7,17 7:8,16 8:5 22:14 37:15 58:15 62:10,11 116:7 149:2,8,10,12 154:4,8 158:22 162:1 167:6,19 168:13 173:23 174:21 <b>authority</b> 25:18 25:22 54:14 119:3 132:16 144:13 <b>authorizations</b> 116:8 <b>authorize</b> 127:4 <b>authorized</b> 25:11 <b>available</b> 12:2 16:25 22:25 28:1,4,5 46:21 61:6 82:13,23 97:23 122:11 122:21 123:2,5 123:12,20 127:23,25 128:13 132:23 148:16 152:25 162:24 <b>average</b> 65:23 85:7 86:23,24 106:1,1,18 <b>avoid</b> 76:9 127:2 <b>award</b> 70:21 <b>aware</b> 110:14 <hr/> <b>B</b> <hr/> <b>back</b> 6:24,25 12:2 14:16 19:17,20 20:9 21:2 23:15 24:13 27:24 28:2,4,20	29:16 30:15 38:4 39:5,10 41:17 42:23 44:19,25 45:5 45:13,16 54:21 58:5,24 65:10 65:15 75:22,25 76:15 77:8 80:21 81:15 82:1,3 85:12 87:13,22 89:14 96:4,7 97:8 98:22 102:10 112:3 116:19 117:14 118:24 119:6 121:7 126:8 129:17 129:22 130:2 131:23 137:17 139:18,24 140:8 142:4 144:1 152:24 152:25 154:20 154:21 155:2,5 156:12,23 158:6,7,25 159:15 161:7 163:1,17 164:16 165:9 166:24 169:7 171:22,25 173:2,12,13,16 173:19 174:7 174:17 175:8 <b>backed</b> 156:11 <b>background</b> 62:23 <b>backwards</b> 118:5 <b>backwash</b> 71:15 <b>bad</b> 112:20 126:24 131:24 131:24 <b>baggage</b> 152:12 <b>balancing</b> 150:23 <b>bank</b> 68:4	<b>banked</b> 66:11 133:7 <b>banking</b> 66:17 <b>bar</b> 68:18 <b>Barbara</b> 1:3,9 1:16 2:1,7,16 3:23 5:1,21,25 6:10,19 7:1 10:12,16 23:3 26:10 27:21 30:4,9 33:8,24 34:14,21 36:1 36:3 40:6 49:7 55:17 62:18 64:6,8 68:3 74:21,22,23 86:15 92:12,23 96:14 97:14 98:5 103:2,23 120:21 121:9 121:23 122:1,6 122:12 125:11 125:17 126:4 126:15,16,18 128:3 132:19 132:20,22 133:21 134:3,9 134:12 136:5,5 136:7,11 137:25 139:10 140:21 141:3,6 142:18 144:8 144:10 145:23 146:1,23 147:18 148:15 151:1 152:13 154:16 163:9 165:18 <b>Barbara's</b> 102:11 116:7 122:3 126:6 133:23 136:3 143:22 147:13 <b>barge</b> 158:13 <b>bars</b> 103:19 <b>base</b> 106:23 <b>based</b> 12:1 13:7
--	---	---	---	--

16:10 18:10,19 18:21 23:18 33:13 35:22 46:21 49:11 50:14,15 55:16 55:21 56:25 60:23 61:3 70:18 79:7 82:22 83:2 85:16 100:25 102:25 103:21 105:19 115:18 121:15 126:19 127:22 128:16 128:18,22 130:23,23 132:1 137:20 141:24 142:2 156:13 <b>baseline</b> 37:13 43:20 44:7,12 44:21 45:21 46:1 47:13,16 48:10,17 49:14 89:8 <b>basic</b> 39:22 65:2 71:5,7 73:2 81:6,9 109:9 <b>basically</b> 36:25 37:12 43:8 55:20 71:18 72:3 74:16 79:22 83:5 84:9 98:20 100:8 101:6 105:16 118:23 128:7,15 138:14 171:15 173:19 <b>basin</b> 33:20 68:2 68:6,7 73:9 108:12 114:2 <b>basins</b> 67:24,24 67:25 86:17 <b>basis</b> 56:7 101:4 106:18 166:11 167:1	<b>Bay</b> 34:23 <b>beach</b> 11:14 12:14 20:9 21:1,3,4,8 38:6 38:15,24 40:7 56:20,24,25 57:15 79:8 82:5,9,18 83:13,18 84:7 85:1,23,25 88:7 102:14 123:18 135:9 141:15 <b>bear</b> 104:9 <b>beat</b> 145:4 <b>beauty</b> 136:15 <b>becoming</b> 18:20 <b>bed</b> 98:20 <b>beginning</b> 59:13 64:9 76:3 138:6 <b>begs</b> 126:25 <b>behalf</b> 8:21 114:24 133:13 134:6 135:18 144:20 <b>behave</b> 111:24 <b>belated</b> 8:18 <b>believe</b> 15:9 18:2 22:7 34:17,24 36:12 47:15 48:18 51:25 52:19,21 56:23 63:2,5,21 76:12 78:12 79:16 85:14 86:2 89:2 90:7 90:23,24 97:23 101:12 103:17 105:17 108:7 109:8,14,25 110:25 113:17 127:16 131:13 138:3,17 142:6 159:25 172:8 <b>bell</b> 97:10 118:1 <b>beneficial</b> 14:18	75:16 96:8 <b>benefit</b> 41:22 92:18 97:20 148:18 <b>benefits</b> 136:16 140:1 <b>benthic</b> 38:19 41:16 42:10 <b>best</b> 11:22,24 12:8 13:13,15 16:25 22:25 27:23 28:5 31:9 42:4 61:5 81:2 122:10,18 122:21 123:2,5 123:12,20,25 127:22,25 128:12 159:7,9 163:21,22 174:1 <b>better</b> 15:10 17:21,23 38:17 46:24 54:20 55:12 59:12 78:3 83:22 84:25 85:14 97:12 102:2 106:5,13 163:2 172:1 173:20 <b>beyond</b> 74:8 80:15 113:2 131:10 138:20 <b>bid</b> 33:10 <b>bids</b> 106:11 107:25 113:19 <b>big</b> 9:14 21:23 43:11 104:20 <b>bigger</b> 57:4 <b>Bight</b> 40:8 <b>billion</b> 16:6 <b>binding</b> 127:14 <b>biodiverse</b> 11:13 12:13 <b>biodiversity</b> 11:15 <b>biofouling</b> 120:14	<b>biological</b> 150:11,19 <b>biology</b> 88:5 <b>bit</b> 34:7 45:16 48:21 72:3 78:4 97:6 106:23 109:24 132:4,11 154:5 154:6 155:13 159:22 163:2 163:22 169:7 <b>bite</b> 26:4 172:25 <b>bizarre</b> 155:22 <b>Bjork</b> 3:21 8:11 62:17,17 66:22 77:25 81:1,19 81:22 86:9,14 90:15 94:9 95:3,11 98:18 99:1,5,17 102:18 103:17 105:13,17 107:3 111:12 164:21 <b>blank</b> 103:12 104:15 <b>block</b> 69:10 <b>board</b> 1:4 2:2 3:3,5,7,8,9,10 3:11,14,15,16 3:17,18,24,25 5:12 8:20 9:9 9:13 14:12,24 17:2 21:19,20 22:1,1,4,5,11 22:11,17,21 23:6 24:3,6,15 24:23 25:9,18 25:21 26:8,11 26:23 27:8,15 28:2,3,15,16 28:20,23 29:25 30:3,5,20 31:1 31:7,12,16,21 32:4,5,14,17 32:22 34:8 39:21 45:14,17	47:17,18,19,23 48:1,2 51:19 51:20 53:2,6,7 59:3,10,17 60:21 61:21 62:24,24 63:8 63:8,12,12,17 71:6 72:8,8,12 76:22,23 77:15 79:3 96:19,22 101:1 108:4,7 110:1 111:17 115:13,16 116:19,22 119:2 120:23 124:17 125:4,8 126:5,18 132:9 135:23 138:21 140:13 142:17 144:7 146:1,2 147:7,10,11 150:1,3,4,15 151:25 152:14 153:23 154:13 154:14 155:1 155:18 156:3 156:13 158:6,7 158:11,18 161:12 163:7 163:13,16,16 164:8,24 166:2 166:7 167:7 168:18,21,23 169:2,22 170:15,20,25 171:10 172:24 <b>Board's</b> 6:4,7 63:4 75:13 124:13 125:1 134:25 163:14 170:22 172:23 <b>Boards</b> 25:2 121:25 129:21 <b>boat</b> 39:16 107:15 <b>body</b> 36:23 56:2 144:16
--	---	---	--	--



<b>boils</b> 58:18	98:15 148:5	154:15	152:23 160:3	75:16 164:9,18
<b>bootstrapped</b> 129:23	<b>bunch</b> 158:20	<b>calling</b> 51:24	<b>cases</b> 44:11	166:21
<b>bottom</b> 23:11	<b>buried</b> 43:5	<b>calls</b> 32:21 103:3	<b>cash</b> 46:21	<b>Certified</b> 2:19
36:20 42:21,23	<b>burst</b> 113:25	<b>camera</b> 35:21	<b>casing</b> 101:25	<b>Cervantez</b> 3:9
42:24 47:7	<b>busy</b> 174:3	<b>campus</b> 14:5	<b>Casitas</b> 141:4	29:18,19
51:21 60:16,17	<b>buy</b> 69:25	56:3	<b>catastrophic</b>	<b>cetera</b> 43:15
65:4 80:15,18		<b>Canyon</b> 16:5	76:9	54:18 107:19
83:19 135:3	<b>C</b>	<b>capable</b> 22:13	<b>catch</b> 135:20	108:24 110:13
<b>bound</b> 125:25	<b>CA0048143</b> 1:8	<b>capacities</b> 84:15	<b>category</b> 29:12	128:8
<b>boundaries</b>	2:6 5:20	<b>capacity</b> 7:24	<b>cats</b> 70:24	<b>Chair</b> 3:5,6 8:6
162:9	<b>cable</b> 37:24	17:12 68:2,19	<b>caught</b> 165:11	9:6,8 17:9
<b>box</b> 65:21	<b>cables</b> 109:6	68:20,21 69:13	<b>cause</b> 124:24	77:20 105:4
<b>branch</b> 164:24	<b>Cachuma</b> 65:16	70:2 72:4	141:17 169:23	107:3 135:22
<b>break</b> 6:9 57:22	65:21,24 66:14	80:13 81:20	<b>causing</b> 163:12	142:15,17
61:25 106:23	66:18,23 67:18	90:13 105:6,10	<b>cautious</b> 167:19	149:2,4 160:15
120:24 132:3	86:21,21 98:20	105:24 106:17	<b>CCC</b> 138:5	163:14 165:14
<b>breeding</b> 11:16	98:23 134:13	134:14 139:5	<b>CCRB</b> 150:5,13	169:9 173:17
<b>brief</b> 5:24 8:22	145:8,12 150:2	144:9,14	150:18 151:2	<b>challenge</b> 126:25
9:20 10:10	150:4,7,11,14	<b>capita</b> 75:7	<b>CCWA</b> 132:21	137:23
55:6 72:17	150:16 151:4	103:18,21	132:22 133:17	<b>challenged</b> 35:9
<b>briefing</b> 19:3	158:12	104:20	<b>Central</b> 1:4 2:2	69:1,18 103:17
<b>briefly</b> 54:19	<b>cake</b> 121:6	<b>capital</b> 105:21	132:16 147:10	<b>challenges</b>
<b>brine</b> 12:22 13:2	<b>Cal</b> 59:10	<b>capture</b> 39:24	<b>CEQA</b> 8:22	161:14 169:23
18:7,15 23:18	<b>CAL-AM</b> 102:4	39:25 131:9	27:25 32:24	<b>chance</b> 57:19
24:16 71:17,17	<b>calculate</b> 18:8	<b>card</b> 5:7 120:20	33:6 61:18	157:9,24
106:1,2,7	54:3	149:17,18	123:3,6,11	<b>change</b> 27:8
121:10 126:14	<b>calculated</b> 110:6	<b>cards</b> 5:6,9	130:5,23	29:8 44:12
<b>bring</b> 32:21	<b>calculates</b> 18:17	<b>care</b> 26:2 61:13	141:20,22	54:17 60:23
51:16 53:15	<b>calculation</b>	126:15	159:5,7 174:18	99:21,22 101:9
75:25 137:25	103:25 104:2	<b>carefully</b> 68:9	<b>certain</b> 31:5	117:23 143:14
154:21 158:7	<b>calendar</b> 32:15	83:7 143:25	60:14 63:20	<b>changed</b> 20:13
158:25 164:16	133:6	150:22 151:10	66:5,23 68:20	20:13 112:4
171:9,14	<b>calibrate</b> 162:20	<b>Carlsbad</b> 43:12	106:10 110:21	121:19
173:13	<b>California</b> 1:16	124:14	118:24 123:15	<b>changes</b> 28:24
<b>brings</b> 167:12	2:16,20 5:1 6:5	<b>Carpinteria</b>	160:6,9 162:22	54:24 164:6,10
<b>brought</b> 7:5	9:12,17 10:9	86:16 133:22	164:25	166:12
145:18 163:10	40:8 51:10	<b>carry</b> 66:1 67:3	<b>certainly</b> 19:22	<b>channel</b> 10:16
171:10	55:18 59:3	96:23 157:8	27:16 44:7,13	45:22 49:7,8
<b>Brown</b> 144:16	92:12 122:13	163:15	44:18,24 52:11	49:11 92:13,20
<b>Bruce</b> 3:11	126:19 132:18	<b>carry-over</b> 69:4	53:11,17 54:2	92:23 122:12
<b>build</b> 75:22 93:1	137:13,14	<b>carrying</b> 43:23	54:9 63:11	126:16 146:2
125:20	140:18 143:16	66:17 67:19	78:7 97:14	146:23
<b>building</b> 11:10	152:16	<b>cart</b> 100:14	104:17 110:2	<b>Channelkeeper</b>
11:10 98:4	<b>call</b> 8:18 9:2	<b>cartridge</b> 71:11	113:9 114:24	52:14 72:9
140:21 147:15	132:10	109:10	114:25 160:15	77:17 114:11
<b>built</b> 14:17 64:9	<b>called</b> 11:1	<b>case</b> 20:14 79:9	165:14	120:21,22
	33:13 82:8,9	102:10 131:14	<b>certainty</b> 27:21	125:17 131:17

142:11 144:20 <b>Channelkeep...</b> 146:5 147:2 159:6 <b>chapters</b> 125:5 <b>characteristics</b> 34:20 74:9 <b>characterizati...</b> 88:2 <b>characterized</b> 74:8,12 88:23 <b>characterizing</b> 89:8,12 <b>Charles</b> 6:1 9:10 9:15 27:10 <b>charming</b> 147:15 <b>chart</b> 65:1 <b>Charter</b> 144:12 <b>chat</b> 8:22 <b>check</b> 109:14 <b>chief</b> 3:24 22:10 <b>Chinese</b> 173:13 <b>choice</b> 125:16 141:2 <b>choose</b> 116:23 <b>chose</b> 12:15 140:23 141:15 168:8 <b>chosen</b> 12:6 13:7 55:14 <b>circle</b> 169:7 <b>circulate</b> 92:14 <b>circumstance</b> 24:9,12 29:14 43:14 <b>circumstances</b> 60:14 63:15 <b>cites</b> 123:8,17 <b>cities</b> 132:18,20 133:21 153:17 <b>citing</b> 91:6 128:8 <b>citizen</b> 134:11 <b>citizens</b> 142:20 <b>city</b> 1:9 2:7 3:20 5:20,25 6:2,10 6:19 7:1 8:13	8:21 9:22 10:7 12:15 13:11,22 14:3,18 15:1,7 15:10,17 17:6 17:22 18:4 21:16,24 23:16 26:10 27:9,19 27:21,23 28:11 28:13,22 30:4 30:6,7,8,14,19 31:11 34:20 35:16 38:4,17 40:24 41:4,19 43:1 50:22 51:4,10,21,22 52:1,12,21,25 54:12,19,25 55:12,20,24 57:19,24 62:18 62:20 63:1,9 63:24 64:17 68:3 71:20 72:21 74:21,25 75:5,7 76:5,7 76:10 77:7,16 77:21 80:20 83:7,17 84:14 85:24 86:17 90:24 91:2,23 93:3 98:7,16 103:2 104:2 105:8 108:2 112:5 114:14 115:11,13,17 115:18 116:3 116:11 117:2 117:13 118:8 119:9,22 120:18 122:2 122:21 123:1 123:23 124:3,7 125:18,21 126:1 127:8,15 127:17,21,24 128:12 129:9 129:20,23 131:5,10,23	132:20,22,25 133:3,4,7,10 133:13,15 134:3 136:3,6 136:22 138:7,9 138:21 139:1 140:4 141:15 142:20,22 143:23 144:10 144:11,12,14 144:18,23 147:13 148:1,6 148:21 151:1 151:11 152:13 152:15,18 153:14,15,19 153:22 156:5,8 156:17 157:21 157:25 158:3,5 158:8,11 163:9 163:20,21 164:7,14 165:16 166:1,3 166:14,21 167:5 168:11 168:23 169:1 169:16,20 170:2,7,10,12 171:10,20 172:21 173:14 <b>city's</b> 6:20,20 10:1 17:15,21 28:17 51:11 52:3 57:16 64:4,12 75:13 75:15 76:19 80:5 86:7 96:24 102:25 114:20 116:21 118:20 123:1 124:5 127:3 133:18 134:1 136:15 143:8 143:11,20 144:13 147:14 147:20 148:11 148:13 151:8	151:19,20 153:13 156:7 160:21 161:1 166:9 <b>civic</b> 137:5 <b>clarification</b> 96:17 157:19 172:7 173:25 174:25 <b>clarifies</b> 9:19 <b>clarify</b> 7:25 77:18 109:23 <b>clarity</b> 63:2 75:14 105:5 158:15 <b>clause</b> 112:16 <b>clean</b> 17:1 18:12 36:6 107:9 <b>cleaning</b> 107:15 <b>clear</b> 22:12 25:4 25:22 30:3 56:12 78:23 112:22 137:19 139:14 161:8 162:1 <b>clearer</b> 171:19 <b>clearly</b> 96:6 122:10 123:25 152:23 154:14 154:18 164:12 168:2 <b>Clerk</b> 3:14 <b>climate</b> 103:8 136:12 143:15 <b>clock</b> 130:2 <b>clogging</b> 107:22 108:13,17 111:7 <b>close</b> 5:6 73:19 102:19 122:21 175:3 <b>closed</b> 62:1,8,12 <b>closely</b> 29:16 <b>closer</b> 57:15 84:24 85:1 90:9 101:10 104:15	<b>closing</b> 173:23 <b>coast</b> 1:4 2:2 10:11 40:4 56:3 59:24 73:18 96:11 132:16 147:11 147:15 148:15 150:9 <b>coastal</b> 25:6 51:11 54:15,20 54:22 74:15,16 74:18 79:9 86:11,15 107:5 107:11,13,18 123:10,11,11 126:13 137:13 137:15,18 138:5 <b>coastline</b> 97:14 <b>Code</b> 7:17 9:17 11:18 19:21 24:11,25 26:23 26:24 30:21 53:8 58:15 62:12 115:15 115:24 119:12 119:13 121:10 122:9,19,24 123:7,20 124:11 127:23 130:15 131:23 139:14 141:21 159:7,8 <b>Cohen</b> 4:13 142:14 145:21 145:22,22 <b>colleague</b> 140:17 162:4,15 <b>colleagues</b> 55:2 57:20 114:24 115:8 155:6 159:2 171:14 <b>collected</b> 78:12 88:9,12,21 92:19 <b>collection</b> 44:7 <b>collide</b> 139:12
--	--	---	--	--

<b>Cologne</b> 25:2	149:2 159:2,5	<b>communication</b>	<b>comply</b> 43:18	142:3 153:5,8
<b>COMB</b> 150:3,6	159:11 170:14	109:6	45:8 122:5	157:22
151:2	174:14	<b>communities</b>	124:7 128:12	<b>conclusions</b>
<b>combination</b>	<b>commenter</b>	15:23 46:20	129:24	36:18 38:25
11:22 22:23,25	160:25	86:15 135:7	<b>component</b> 77:9	73:2 128:16
51:19 93:16	<b>commenters</b>	148:17	86:7 134:1	160:8,10
124:9 136:12	160:24 161:4	<b>community</b>	137:1 148:3	<b>concrete</b> 159:24
159:8,9	162:3	63:25 86:11	<b>components</b>	171:21
<b>come</b> 9:3 27:24	<b>comments</b> 4:2	98:4 102:24	80:24	<b>condition</b>
32:1 68:11	7:2,3 15:2 33:3	104:1,9 108:8	<b>composed</b> 89:24	127:13,19
92:22 95:19	33:3,6 39:5	122:13 136:8	<b>compromise</b>	167:21,25
104:1 106:2,11	51:17 52:8,9	136:16,22	128:2 138:3,25	168:2 172:9,10
107:25 113:23	98:11 108:8	137:6 147:16	142:8	<b>conditioning</b>
121:18 122:20	120:24 125:9	<b>Company</b>	<b>compromising</b>	137:21
152:5 154:9	134:4,7 135:16	145:23	112:16	<b>conditions</b> 48:8
155:2 156:9	137:9 142:12	<b>comparable</b>	<b>conceivably</b>	50:15 102:3
157:22 161:14	144:6 145:17	36:2,2	58:17	107:14 115:23
163:1,17	147:5 149:1,13	<b>compare</b> 16:4	<b>conceive</b> 60:19	135:4 154:18
165:18 166:7	155:5 157:7	<b>compared</b> 12:14	<b>conceived</b> 61:17	154:21 160:5
168:17 171:25	159:12 160:13	<b>compares</b> 159:5	<b>concentrations</b>	162:2 168:13
173:2,12,16	164:21 168:15	<b>comparison</b>	38:15	170:18 171:24
174:7 175:7	169:19 170:21	41:25 125:10	<b>concept</b> 18:22	172:14,16
<b>comes</b> 6:21 26:5	173:24	<b>compelled</b> 171:3	44:8 79:15	<b>conduct</b> 91:25
70:3 76:6	<b>commercial</b>	<b>competing</b>	96:22 167:13	92:5 127:21
<b>comfort</b> 160:20	49:19	142:21	167:15	131:16
<b>comfortable</b>	<b>Commission</b>	<b>complement</b>	<b>concepts</b> 113:19	<b>conducted</b> 43:21
31:12,19 32:10	51:10,11 54:15	136:25	<b>conceptual</b>	44:22 49:9
136:19 160:16	54:21,22 74:15	<b>complete</b> 77:3	113:18	72:2 74:4
160:16 173:8	79:10 107:6,11	138:22 144:24	<b>concern</b> 27:16	83:13 84:3
173:20	107:14,18	<b>completed</b> 32:19	27:17 44:2	89:14 90:18
<b>coming</b> 53:5	123:10 137:16	33:4,9 51:18	90:11 158:2	92:16 114:3
58:21 70:23	137:18 138:6	155:24 160:6	174:12	125:6
139:11 153:4,8	144:10,11	174:17	<b>concerned</b> 66:9	<b>conducting</b>
157:10 160:12	151:8,12	<b>completely</b>	162:18 165:21	44:14
174:4	<b>Commissioner</b>	99:24 101:21	<b>concerns</b> 7:24	<b>conductivity</b>
<b>commenced</b>	136:4	167:21	29:2,3 34:3	73:12 83:14
26:22	<b>commitment</b>	<b>complex</b> 155:14	50:17 82:23	84:16 85:8
<b>commencement</b>	72:24 76:4	<b>compliance</b> 6:3	83:3 98:6	<b>conducts</b> 138:9
5:8	108:1 117:13	30:12 45:18	164:4	<b>Conduit</b> 150:9
<b>commencing</b>	117:15 118:23	121:15 122:19	<b>concise</b> 152:9	<b>configuration</b>
2:16	136:10	123:10 141:21	<b>conclude</b> 47:3	106:25
<b>commensurate</b>	<b>committed</b>	<b>complicated</b>	59:23	<b>confirm</b> 6:17 7:8
159:19	76:16 164:7	97:8	<b>concluded</b> 53:14	52:11,24
<b>comment</b> 9:4	<b>committee</b> 78:3	<b>complications</b>	60:4 123:14,19	<b>confirmed</b> 15:25
32:25 33:2	<b>common</b> 89:18	140:7 170:6	<b>conclusion</b>	72:23 79:25
131:3 139:23	<b>communicate</b>	<b>complied</b> 121:9	14:13 35:15	<b>conflicting</b>
141:19 144:22	65:2	130:6 131:23	36:19 73:13	98:10

<b>conjunction</b> 72:12	14:15 19:18 20:6,10 27:2	33:11 48:4 65:9 72:5	<b>continues</b> 28:20 134:13 145:11	<b>convinced</b> 162:19
<b>connected</b> 78:9	32:9 49:18	79:20,21 88:1	153:16	<b>convincingly</b> 126:8
<b>connection</b> 97:21 110:19	50:24 51:13,14	88:17	<b>continuing</b> 25:10,18 29:7	<b>cooling</b> 25:8
<b>Conner</b> 4:10	54:22 59:15	<b>construction-r...</b> 11:9	98:23 104:11	58:22 89:17
137:11 140:15	73:15 84:13	<b>consultant</b> 38:16	169:11	139:6
140:16	101:20 110:11	57:16	<b>continuity</b> 174:8	<b>coordinated</b> 150:22
<b>conscious</b> 41:4	112:10 113:2	<b>consultants</b> 17:22	<b>continuously</b> 51:23	<b>copepods</b> 89:9
<b>consecutive</b> 48:7	122:4 130:11	<b>consulting</b> 47:17	<b>contract</b> 70:21	89:21
<b>consequences</b> 163:11	130:13 133:1	<b>consulting/con...</b> 92:18	93:4 94:2,6	<b>copies</b> 7:18
<b>conservation</b> 67:10,13 68:24	144:1 151:6,21	<b>consumption</b> 82:24	100:5 116:14	<b>copper</b> 114:1
69:1 75:6,10	<b>considering</b> 50:22 75:3	<b>contact</b> 8:17	125:19 132:24	120:13
86:23 87:3	79:3 95:12	<b>contacts</b> 8:7	<b>contracted</b> 33:18 91:1	<b>copy</b> 6:9
102:16 103:4	130:15 170:1	<b>contain</b> 24:8	<b>contractor</b> 91:20	<b>correct</b> 6:11,18
103:15 104:8	<b>consistent</b> 7:17	125:2	<b>contractors</b> 113:18 133:9	23:24 24:17
105:1 115:2	48:14 62:25	<b>contained</b> 89:3	<b>contracts</b> 33:11	62:9 79:4 80:7
131:9 136:23	63:23 74:17	<b>contemplate</b> 22:21 44:1	33:15,17,25	84:23 86:1
140:24 148:11	88:12 89:13,19	96:15	34:1 93:9	91:3 95:3
150:4 151:7,15	102:23 103:9	<b>contemplated</b> 53:23 55:7	<b>contractual</b> 33:23	98:17 99:5
<b>conservative</b> 69:19	145:14 158:22	56:18	<b>contribute</b> 50:6	102:12 106:19
<b>conserve</b> 65:25	172:23	<b>contemplates</b> 110:25	95:21 98:3	111:6 116:5
141:12	<b>consistently</b> 105:8	<b>contemplating</b> 24:16 45:18	136:14	120:15 129:14
<b>conserving</b> 65:18 67:11	<b>constant</b> 98:3	154:25 156:16	<b>contribution</b> 95:25 96:25	146:22 149:15
143:10	<b>consternation</b> 153:12	<b>contentious</b> 165:20	143:20 147:11	164:22 172:10
<b>consider</b> 13:13	<b>constituent</b> 134:9	<b>contest</b> 119:3,25	150:15	<b>correctly</b> 57:10
20:1 23:23	<b>constituents</b> 117:25	120:6	<b>contrive</b> 121:15	57:13 116:1
28:21,24 49:22	<b>constitute</b> 53:1	<b>context</b> 24:3,19	<b>control</b> 1:4 2:2	118:7
53:17 79:23	<b>constitutes</b> 126:9	97:16 100:18	3:3 31:25 59:3	<b>correlating</b> 95:9
94:7 95:13	<b>construct</b> 13:24	161:18 167:16	59:10 109:18	<b>cost</b> 75:25 77:22
97:9 140:23	70:20 72:11	<b>continue</b> 25:15	143:20 147:11	78:2 79:5,6
141:4 157:13	<b>constructability</b> 135:2	25:22,22 60:21	150:15	80:1 83:3,3
157:15 158:23	<b>constructed</b> 9:23	114:5 127:8	<b>controlled</b> 68:2	98:15 99:19
160:4	12:3,25 27:1,5	138:20 151:22	<b>conundrum</b> 31:8	100:5 101:8,14
<b>considerably</b> 80:5	27:11 51:3	158:15 165:25	45:16	101:14 126:25
<b>consideration</b> 93:18 173:3	74:1 79:19	170:5 171:12	<b>convened</b> 60:3	<b>costly</b> 73:22
<b>considerations</b> 78:21 97:15	99:25	<b>continued</b> 64:17	<b>conversation</b> 30:3,11 107:19	<b>costs</b> 80:20,25
112:9	<b>constructing</b> 12:11 75:19	148:6,24	115:6 154:12	80:25 96:18
<b>considered</b> 9:20	<b>construction</b> 11:17 26:22	154:11	167:24 173:25	<b>council</b> 64:15,17
13:17,19 14:1			<b>conversations</b> 29:23 33:8	65:2 67:9
			<b>conversion</b> 51:8	72:18 74:25
			<b>conveyed</b> 79:22	76:20 93:3,7
				93:15,25 94:7
				94:10 95:4
				96:15 98:9,21
				112:1,2 114:23

117:3,17,19,23 118:6 125:21 144:12,14 146:3 160:4 <b>Council's</b> 7:5 <b>counsel</b> 3:15,16 3:20,24 8:3 22:10 115:10 115:13 154:4 154:16 155:11 160:18 161:16 162:23 164:5 166:15 171:15 173:5,7 <b>counsel's</b> 166:24 <b>count</b> 87:2 88:24 88:25 104:12 104:14 <b>County</b> 1:3 2:1 86:16 132:19 136:5 <b>couple</b> 5:11 7:11 7:15 62:5 68:5 77:2 106:21 113:23 117:3 153:1 165:14 <b>course</b> 40:21 78:25 94:4 104:9 154:9 157:16 <b>court</b> 35:7 66:20 125:8 <b>cover</b> 169:17 <b>covered</b> 78:10 107:11 156:19 <b>create</b> 26:13 27:13 42:3 61:11 93:21 114:5 160:20 171:22 <b>created</b> 141:10 <b>creates</b> 27:20 <b>creating</b> 166:20 <b>creative</b> 63:21 <b>crippling</b> 147:22 <b>crisis</b> 134:12 138:1	<b>criteria</b> 167:10 <b>critical</b> 24:22 69:22,23 137:1 157:15 <b>critically</b> 95:18 <b>croaker</b> 36:20 37:1 <b>crossed</b> 165:1 <b>crucial</b> 76:9 <b>Cruz</b> 16:11,12 35:18,25 36:9 36:15 49:17 114:3 141:14 <b>CSR</b> 1:23 2:18 <b>cubic</b> 89:9 <b>cultural</b> 104:5 <b>Cumbre</b> 133:22 <b>curious</b> 45:19 91:6 92:24 119:24 <b>current</b> 18:21 21:17,18 23:9 23:13 32:21,22 44:13 45:12 48:13,25 54:3 54:5 58:11 61:2 65:7 70:13 76:19 93:17 109:22 112:11,23 122:4 126:10 128:7 129:24 133:2 138:1 146:6 148:12 <b>currently</b> 18:6 21:13 45:17 51:22 53:3 55:9 71:19 75:1 76:20 92:6 102:5 103:18 109:2 126:23 164:1 <b>currents</b> 78:22 78:25 92:13,14 <b>customers</b> 68:25 69:1 75:5 87:2 103:6 165:13	<b>cut</b> 77:4 <b>cycle</b> 58:25 <b>cycles</b> 137:3 <b>cycling</b> 136:18 <hr/> <b>D</b> <hr/> <b>D</b> 4:1 37:9,17 43:17 44:8 45:19 48:15 87:21 <b>daily</b> 56:11 <b>damage</b> 137:5 <b>dangerous</b> 29:5 126:24 <b>data</b> 44:7,15 88:7,9,12,20 89:2 91:15,18 91:19 92:19 123:17 134:16 134:20,21,23 137:20 152:25 <b>date</b> 26:22 75:24 118:19,24 155:2 <b>dated</b> 7:23 <b>David</b> 37:17 <b>day</b> 16:6 34:25 35:25 36:1 53:12 80:3,14 83:9 84:4 85:8 85:18 103:18 103:21 104:1 104:19,22,23 106:4 146:9,12 153:25 165:19 169:13 170:18 170:18 173:13 <b>days</b> 39:10 156:3 <b>de</b> 16:16 <b>dead</b> 143:23 <b>deal</b> 20:14 48:12 62:8 66:10 97:19,22 165:22 170:6 <b>dealing</b> 10:23 29:6,6 54:4 87:20 140:5	<b>deals</b> 73:8 <b>debate</b> 139:22 173:19 <b>debates</b> 146:21 <b>debris</b> 78:23 113:25 <b>decades</b> 16:7 23:21 121:18 <b>December</b> 7:23 102:20 <b>decide</b> 45:14 154:23 162:12 <b>decided</b> 12:7 53:14,15 57:3 77:22 98:21 <b>deciding</b> 140:13 <b>decision</b> 7:6 70:23 72:11 75:13 77:10 86:2,2 93:16 104:10 116:11 121:17 125:8 149:4 163:7,18 164:1 174:15 <b>decisions</b> 141:16 155:12,15,16 <b>declaration</b> 63:24 67:12 102:23 <b>declared</b> 67:9 <b>declaring</b> 172:9 <b>declining</b> 143:8 <b>dedicated</b> 62:3 <b>deep</b> 73:5,7 82:22 102:13 <b>default</b> 135:1 156:5 <b>defer</b> 76:5 119:21 <b>define</b> 30:22 <b>defined</b> 95:19 96:6 98:3 <b>definitely</b> 7:7 117:19 <b>definition</b> 24:8 26:13,15,20 27:8,13 29:11	30:18 52:5 95:8 120:5 140:6 <b>definitions</b> 26:9 26:11 <b>definitively</b> 168:19 <b>degradation</b> 148:24 <b>degrade</b> 113:23 <b>delay</b> 122:3 137:8 145:15 163:25 <b>delayed</b> 169:24 <b>delays</b> 169:21 <b>Delgado</b> 3:11 15:5,6,12,19 16:18 17:4,7 21:12 59:2,18 84:22 98:12,13 98:25 99:2,6 100:16,20 101:8,15 102:4 102:15 103:11 104:19 128:6,7 128:15,18,22 159:3,4 162:4 162:15 174:5 174:12 <b>deliberate</b> 154:9 <b>deliberation</b> 170:5 <b>deliberations</b> 173:25 <b>deliver</b> 68:19 133:19 165:13 <b>deliverables</b> 168:8 <b>delivered</b> 68:16 68:22 133:17 <b>delivering</b> 132:17 <b>delivery</b> 133:4 150:7 151:14 <b>demand</b> 65:23 86:24,25 141:14 143:2,4
---	---	---	---	--

<b>demands</b> 67:16 133:4 150:18 151:6	121:19,24 122:2,3 124:14 125:13,17,20 126:6,19 127:4 127:11 131:4 131:12 134:10 134:17 135:6 135:24 137:1,4 137:7 139:7 140:16,18,19 140:21,23 141:16 143:12 144:2,25 151:20,24 159:14,19 163:17 165:8 170:16,20	22:24 23:5,10 28:5 43:1 44:16 45:12 48:25 50:14 61:6 71:18 83:4 106:11,12 108:1 109:23 110:15,25 111:19,25 113:12,18,24 114:5 122:22 123:5 124:9 125:3,20 127:22 129:8 132:1	<b>determined</b> 23:4 73:7,21 85:9 95:7 96:22 111:9 168:22 168:25	114:15 117:2 125:22 134:20 153:21 157:13 166:7,10 170:9 171:23
<b>denser</b> 12:23			<b>determines</b> 32:5 60:16 172:20	<b>differently</b> 94:17
<b>density</b> 50:1 88:15			<b>determining</b> 30:11 60:8 123:10 124:2 157:10	<b>difficult</b> 16:9 42:1,13 52:9 104:9 109:17 117:8 118:1 143:6 158:21
<b>deny</b> 142:5			<b>devastating</b> 103:2	<b>difficulty</b> 65:6 121:2
<b>Department</b> 33:22			<b>develop</b> 136:7	<b>diffuser</b> 10:17 13:1
<b>depend</b> 53:7 126:16 143:12 146:17		<b>design-build</b> 70:20	<b>developed</b> 46:22 70:9 92:19 95:7 111:23	<b>diffusers</b> 46:13 46:17
<b>dependable</b> 148:25	<b>desalinate</b> 81:21	<b>designate</b> 59:21	<b>developing</b> 108:5	<b>dig</b> 42:21
<b>dependence</b> 67:17	<b>desalinated</b> 145:18	<b>designed</b> 13:3 48:7 126:11	<b>development</b> 43:24 64:8 126:13 150:16 151:12 152:19	<b>dilemma</b> 125:15
<b>dependent</b> 73:19 135:3 143:13 147:18	<b>desalination</b> 6:1 6:3,4 9:10,16 9:23 10:4,7,8 10:10,12,19 12:2,18 16:12 17:2 20:18 21:5 22:18 28:12 30:15 45:1 51:1,3,4,6 52:22 56:6 58:22 72:4 75:1,20 76:12 81:18 94:20 98:24 115:17 118:18 134:2 137:14 146:4 147:13 148:2,5 148:17,21	<b>designs</b> 12:19	<b>developments</b> 74:16	<b>diluted</b> 12:24
<b>depending</b> 84:10 84:23 101:9		<b>desire</b> 154:14,17 163:14	<b>devellops</b> 22:17	<b>dimension</b> 98:6
<b>depends</b> 21:18 40:14 43:13		<b>desktop</b> 85:16	<b>Devereux</b> 14:4 41:20 55:11,18 138:17	<b>diminished</b> 66:14
<b>depleted</b> 151:5		<b>despite</b> 86:25 124:23 152:12	<b>destination</b> 147:16	<b>direct</b> 22:6 125:23 127:20 161:2
<b>depletion</b> 123:15		<b>detail</b> 57:17 99:18 101:16 168:23	<b>detail</b> 57:17 99:18 101:16 168:23	<b>directed</b> 72:18 76:18 95:4 112:1,2 118:6 128:23
<b>depth</b> 94:5		<b>detailed</b> 48:5 56:15 93:24	<b>DFA</b> 171:7	<b>directing</b> 171:20 171:22
<b>Deputy</b> 3:25 22:15 30:25		<b>details</b> 17:22 38:17 54:20 85:12	<b>Diablo</b> 16:5	<b>direction</b> 76:20 93:2,5,7 155:1 155:18 157:2 158:6,24 164:19 167:4 170:22 171:19 172:2 173:5,10 173:21 174:24
<b>derail</b> 122:6	<b>describe</b> 78:4	<b>detectable</b> 16:15	<b>diagram</b> 71:7	<b>directions</b> 161:17 166:19 170:19 173:19
<b>desal</b> 6:21 7:3,4 8:12,14 16:10 19:7 21:19 24:16 30:1,5 32:23 33:1,3 33:12 60:9 63:10,13 64:3 64:5,11,14,16 64:22,25 69:10 69:10,17,22 70:3,11,13,14 70:18,24 71:5 82:10 86:7,12 87:10,12 94:12 96:11 99:25 100:9 102:11 104:17,24 108:8 121:10	<b>described</b> 52:1 101:16 144:24	<b>determination</b> 24:10,14 26:24 28:7 30:7 48:24 53:13,18 55:20 71:20 79:15 86:4 120:4 121:15	<b>diagrams</b> 20:5	<b>directive</b> 171:3
	<b>describing</b> 79:1 79:2	<b>determine</b> 28:2 44:15 47:5 53:8 121:8	<b>die</b> 11:4	<b>director</b> 3:25 22:16 30:25
	<b>description</b> 109:25		<b>Diego</b> 124:13,17 125:4,8 159:10	
	<b>design</b> 11:23 12:4 21:15		<b>difference</b> 66:17 112:18 174:18	
			<b>differences</b> 110:15	
			<b>different</b> 17:11 18:1 24:1 26:3 29:21 39:15 40:8,18 43:12 44:22 55:6,19 68:1 72:3 73:5 88:3 106:25	

62:18 132:16 137:12 170:22 <b>Directors</b> 146:1 147:10 <b>directs</b> 170:24 <b>discern</b> 16:7 <b>discernable</b> 13:21 <b>discharge</b> 1:7,8 2:5,6 5:18,19 10:14,21 18:7 18:11,14,17,22 19:11,14,23 24:17 25:11,17 25:19,25 30:1 46:13,15 51:12 54:7,8,16 88:4 106:17 121:10 126:14 <b>discharges</b> 10:16 25:21,24 46:12 <b>disclosed</b> 8:7 <b>disconnected</b> 25:14 <b>discontinued</b> 148:9 <b>discovered</b> 139:24 <b>discretion</b> 118:20 <b>discuss</b> 6:16 164:14 166:10 <b>discussed</b> 64:5 <b>discussing</b> 21:21 21:22 <b>discussion</b> 8:11 8:24 37:12 74:2 85:20 114:25 120:7 139:21 141:8 154:12 157:10 160:7 166:7 169:13 173:14 <b>discussions</b> 60:20 <b>dismissed</b> 73:8 82:22	<b>dispersed</b> 12:24 78:14 <b>dispersion</b> 13:1 <b>display</b> 37:21 <b>dispose</b> 71:17 <b>dispute</b> 118:10 <b>disrupt</b> 11:16 <b>disservice</b> 169:16 <b>distance</b> 110:21 <b>distinction</b> 26:14 61:19 <b>distinctly</b> 166:6 <b>distinguish</b> 52:20 <b>distribute</b> 12:17 <b>distribution</b> 12:16 <b>District</b> 108:12 141:5 147:8,10 147:21 <b>District's</b> 147:12 <b>districts</b> 132:19 148:4 <b>disturb</b> 11:12 <b>dive</b> 88:22 <b>diverse</b> 50:3 <b>diversified</b> 75:18 86:19 <b>diversify</b> 87:4 <b>diversity</b> 48:9 49:14 <b>diverted</b> 33:19 <b>diving</b> 107:9 <b>Division</b> 5:12 22:16 32:18 165:15 166:1 <b>Doctor</b> 23:16 <b>document</b> 7:18 32:24,25 51:19 82:7 93:9 123:6 <b>documentation</b> 28:1 <b>documentations</b> 30:8 <b>documented</b>	35:21 <b>documents</b> 19:16,23,24 20:8 38:3 93:4 141:24 <b>dogs</b> 70:24 <b>doing</b> 23:12 28:19 39:2 45:20 70:6,10 82:2 99:12,15 107:3 126:18 128:25 131:5 140:10 143:7 153:14 158:1 161:9,18 164:7 167:16,20 172:7 <b>dollars</b> 113:7 114:17 <b>dotted</b> 165:1 <b>double</b> 18:15 <b>doubling</b> 18:22 <b>downright</b> 126:24 <b>downtown</b> 68:8 <b>dozen</b> 91:15 <b>Dr</b> 5:23 9:8,13 15:9,17 16:2 16:24 17:6,19 18:1,7,13,24 19:9,15 20:4 20:16,25 21:9 21:18 22:9,24 23:25 28:13 30:13 35:17,24 36:9,12,19 37:7,10,18,23 38:12 39:9,12 41:4 43:20 44:21 48:20 54:10,19 56:9 56:19,23 57:14 146:22 152:2 <b>draft</b> 12:5 52:8,9 54:4 74:14 105:9,23 108:6 116:2 122:4,25	123:8,17 135:1 141:22 142:1 160:17 168:13 171:21 <b>drafted</b> 32:25 53:4 126:23 <b>drafts</b> 6:4 <b>dramatically</b> 18:20 36:4 142:2 <b>drastically</b> 95:24 <b>draw</b> 6:7 109:4 111:2 <b>drawing</b> 67:23 <b>drawn</b> 101:25 133:9 <b>dreaming</b> 53:5 <b>drier</b> 87:15 <b>dries</b> 143:19 <b>driest</b> 87:16 <b>drill</b> 43:9 <b>drilling</b> 85:3 <b>drink</b> 6:20 69:7 <b>drinking</b> 5:13,14 6:20 <b>driven</b> 112:10 141:9 <b>dropped</b> 67:18 <b>drought</b> 6:3 7:1 10:8 27:15,17 27:22 29:14 30:16 34:2 63:24 64:22 65:7,12,13,17 65:20 66:19 67:3,9,12 69:16 70:1,5,5 72:18 75:7,9 76:10 87:5,11 93:13,17 96:16 102:23 103:1,1 103:7 104:4 105:15,17 112:23 127:5,6 127:9,12 134:12 137:2 138:4,11,20	140:5,20 142:19 143:4 145:3,11,15 147:22,23 150:18 151:3 <b>drought-proof</b> 87:4 <b>droughts</b> 30:15 66:12 87:10 147:24 <b>dry</b> 65:23 67:5 67:17 141:3 145:11,12 <b>dubious</b> 122:17 <b>due</b> 10:8 13:19 59:8 62:6 153:2 <b>Duedeck</b> 62:20 <b>dug</b> 43:3 <b>duplicate</b> 107:18 <b>duplicating</b> 55:2 <b>dying</b> 143:23
<hr/> <b>E</b> <hr/>				
E 4:1				
<b>e-mail</b> 7:22				
<b>earlier</b> 34:10 58:20 60:12 70:15 72:3 75:21 88:8,19 106:23 118:25 133:8 152:9 165:6				
<b>earliest</b> 34:12				
<b>early</b> 9:24 12:3 13:7,16 17:20 18:3 28:2 44:20 45:14 53:23 61:16,17 75:11 96:19 148:3				
<b>easier</b> 12:17				
<b>easily</b> 12:24				
<b>east</b> 2:15 10:11 57:15 82:8 83:13				
<b>east-west</b> 84:7				

<p><b>easy</b> 53:4 172:14  <b>Ecolab</b> 90:24  <b>economic</b> 79:24  98:6  <b>economy</b> 143:23  146:24  <b>ecosystem</b> 95:15  <b>educate</b> 136:8  <b>education</b>  146:16  <b>Eel</b> 33:19  <b>EFDs</b> 109:18  <b>effect</b> 96:5,8  110:7 111:7  146:13,19  <b>effective</b> 26:22  <b>effectively</b>  145:10,12  <b>effects</b> 13:17  16:16,17 74:9  74:10 88:4,16  96:10 104:8  113:9  <b>efficiency</b>  166:18  <b>efficient</b> 18:20  129:3 132:12  <b>effort</b> 97:11  158:3 163:24  <b>efforts</b> 6:2 75:6  75:10 119:9  <b>egg</b> 117:5  <b>eggs</b> 37:5  <b>eight</b> 120:20,25  121:1  <b>EIR</b> 82:12 88:9  88:21 89:4  90:7 91:20  123:1,5,9,14  124:23 129:12  141:24,25  142:1  <b>EIRs</b> 38:13  153:3  <b>either</b> 26:5,18  78:10 116:13  122:7 160:25</p>	<p>166:11 168:10  <b>EI</b> 1:9 2:7 5:21  9:10 10:6,13  12:6,16,20  39:25 51:11  72:13  <b>elaborate</b> 87:23  <b>election</b> 117:21  117:24  <b>elections</b> 117:2  <b>electrical</b> 80:25  81:6 108:23  109:5  <b>element</b> 161:20  171:5  <b>elements</b> 109:11  124:8 129:10  <b>eleventh</b> 158:20  <b>eliminate</b> 13:5  13:25  <b>eliminated</b> 35:13  <b>eliminating</b>  135:6  <b>Elimination</b> 1:8  2:6 5:19  <b>ELMO</b> 37:20  38:9  <b>emergency</b> 6:3  51:8 94:13,14  112:7 127:5,6  138:4,6,8  140:5,24  147:23 151:21  151:22 158:12  <b>emphasize</b> 48:13  69:24 74:25  <b>empirical</b> 85:18  108:10  <b>enabled</b> 133:4  <b>enabling</b> 133:15  <b>enacted</b> 122:2  131:25 160:10  <b>enacting</b> 94:14  <b>encounter</b> 145:2  <b>encourage</b>  144:19 153:10  <b>encouraging</b></p>	<p>151:14  <b>endangered</b>  95:18 150:24  <b>ended</b> 142:20  <b>energy</b> 94:1  <b>enforce</b> 139:15  <b>enforceable</b>  164:8 167:25  <b>enforcement</b>  62:7 140:12  <b>enforcing</b> 139:9  <b>engage</b> 93:5  <b>engaged</b> 79:10  79:13  <b>engineer</b> 109:24  <b>engineered</b>  78:10  <b>engineering</b> 43:1  110:17 112:14  112:20 113:13  158:10 164:2  164:21  <b>enhance</b> 112:12  <b>enhancement</b>  110:9 112:17  <b>enhancements</b>  112:25 113:8  <b>enormous</b>  122:12  <b>ensure</b> 22:23  113:21 140:7  157:24  <b>entered</b> 149:18  <b>entertain</b> 155:5  <b>entertainment</b>  154:1  <b>entirely</b> 93:19  <b>entities</b> 34:13  132:19 170:25  <b>entity</b> 172:20  <b>entrained</b> 11:7  36:19,21 37:1  39:6 45:23  56:5  <b>entrainment</b>  11:5 13:19  14:1 15:24</p>	<p>16:3,10,17  21:14 36:8,10  36:17,18,22  37:5 39:9 41:1  45:7 48:5,6  50:2,7 54:3  59:9 74:3,9,11  87:22 96:20  101:2 124:18  <b>environment</b>  10:24 11:8  13:6 42:3,4  50:3 88:2,16  88:23 92:15  96:6 97:13  110:16 111:3  111:24 115:3  121:21 146:14  146:17,20  <b>environmental</b>  12:10 13:23  14:19 16:7,16  19:16,22 20:8  32:25 37:14  42:25 46:16  87:25 95:13,20  113:10 115:2  121:4 124:25  153:6  <b>environmental...</b>  41:4 59:22  125:14 126:21  134:18 148:14  <b>environments</b>  42:14 136:18  <b>envision</b> 93:21  <b>EPA</b> 31:5  <b>epifauna</b> 38:19  <b>equal</b> 36:15  106:3,8  <b>equally</b> 19:14  157:15  <b>equipment</b>  100:1  <b>equivalent</b> 36:25  37:4 123:7  <b>errata</b> 141:24</p>	<p><b>essence</b> 71:1  112:21 117:12  <b>essential</b> 133:15  <b>essentially</b> 23:7  26:9,18 28:19  61:4,8 71:19  84:19 88:23  101:22,25  129:7 167:17  172:9,12,19  <b>established</b>  49:10 145:15  <b>establishing</b>  83:5 151:15  <b>establishment</b>  49:5  <b>Estero</b> 1:9 2:7  5:21 9:11 10:6  10:13 12:7,17  12:20 51:11  72:13  <b>estimate</b> 59:10  77:21 78:2  79:6 85:15  <b>estimated</b> 84:17  <b>estimates</b> 80:2  <b>estimating</b>  100:22  <b>estuarine</b> 14:7  41:21  <b>et</b> 43:15 54:18  107:19 108:24  110:13 128:8  <b>ETM/APF</b> 60:8  <b>evaluate</b> 23:7,8  78:1 94:24  <b>evaluated</b> 83:2  102:9 138:10  <b>evaluations</b>  95:23  <b>event</b> 5:13 39:25  <b>events</b> 29:21  40:19,21  <b>Everts</b> 4:10  137:11 140:15  140:16,16  142:10</p>
--	---	--	--	---





101:22	<b>fee</b> 96:21 97:4	14:18 23:15	127:2 131:11	144:22
<b>far</b> 17:12 54:7	<b>feed</b> 71:9	31:16 71:11,16	131:18 138:14	<b>focused</b> 19:13,14
66:19 80:10	<b>feel</b> 8:2 32:9,12	72:14	141:4 160:22	54:9 94:11
90:14 104:3	43:18 129:9	<b>Financial</b> 165:15	161:15 173:5	<b>focuses</b> 85:21
121:14 131:11	146:7 161:12	166:1	174:17	<b>folks</b> 7:19 33:24
160:2,23	170:3	<b>financing</b> 15:14	<b>firsthand</b> 151:10	47:1 166:20
<b>farfetched</b> 121:5	<b>feet</b> 10:17,20	164:24 165:3	<b>fish</b> 11:1,3 36:20	<b>follow</b> 170:22
<b>farther</b> 101:10	13:4 36:4,7	<b>find</b> 14:16 16:9	37:2,4 41:24	<b>followed</b> 153:19
101:12	83:9 84:4,20	26:1 38:16	89:22,25	<b>following</b> 9:21
<b>fashion</b> 103:16	84:22 85:8,13	49:25 50:5	<b>fisheries</b> 92:11	9:22 13:22
<b>fast</b> 35:8 65:13	85:18 102:8	82:11 97:23	92:20,22 94:23	49:18 92:1
66:20 121:1	133:24	108:13 168:9	150:10,20	147:9 171:3
<b>fatal</b> 135:11	<b>feign</b> 122:19	<b>finding</b> 12:1	<b>fishery</b> 49:4,11	<b>footage</b> 35:21
<b>fatally</b> 122:8	<b>fellow</b> 9:12	14:14,15,16	49:19 92:11	<b>forced</b> 34:16
<b>favor</b> 35:6	155:17	19:4,19 74:17	<b>fishing</b> 92:21	<b>forces</b> 60:18
<b>feasibility</b> 13:8	<b>felt</b> 96:24 119:24	139:16 161:20	<b>fit</b> 11:6 17:18	<b>foresight</b> 147:14
14:10 59:11	<b>female</b> 37:1	167:22	34:20	<b>forest</b> 136:24
79:13 82:3,10	<b>fewer</b> 84:25	<b>findings</b> 9:17	<b>fits</b> 29:12 161:8	<b>forests</b> 11:15
83:3 84:2 85:3	<b>fewest</b> 86:18	16:14 30:7,11	<b>five</b> 40:19 69:2	<b>forever</b> 160:11
85:10,15 95:2	108:15	58:6,18 63:20	80:9 92:9	<b>forget</b> 19:2
125:2,18	<b>fiction</b> 156:12	70:17 74:4,13	<b>five-year</b> 58:8	152:9 167:17
127:14 131:16	<b>field</b> 85:17	74:15 115:15	58:10 87:8	<b>forgo</b> 86:3
133:19 138:10	<b>figure</b> 83:15	115:18 119:16	<b>fix</b> 121:8,13,13	<b>form</b> 134:18
153:4 168:22	84:18 104:16	120:1 123:9	159:16	<b>formally</b> 64:16
172:20	<b>figured</b> 28:10	126:1 131:2	<b>flawed</b> 122:9	<b>former</b> 10:21
<b>feasible</b> 17:3	<b>figures</b> 34:2	139:17 140:6	141:20,23,25	142:15,18
21:13,23,25	<b>figuring</b> 29:20	141:20,21,24	<b>flaws</b> 135:11	150:2,3 153:23
22:25 23:4	48:11	142:1 152:1	<b>flesh</b> 156:22	<b>forms</b> 123:21,23
28:5 44:16	<b>fill</b> 104:16	153:1,11	164:13	130:24
46:9,25 47:5	<b>filling</b> 65:16	161:11 167:18	<b>fleshed</b> 156:10	<b>forth</b> 71:22
61:5 73:22	<b>filter</b> 42:24 45:6	<b>finds</b> 9:19	<b>flexibility</b> 34:8	78:23 79:21
78:1 79:16	71:9,13 81:4	<b>fine</b> 15:12	114:9 144:3	84:15 97:9
85:25 94:20	81:22 109:9	173:22	<b>flexible</b> 32:4,14	108:9 109:12
99:14 100:7,11	<b>filtered</b> 78:24	<b>finer</b> 168:16	143:20	116:5 129:11
118:3 122:22	<b>filtering</b> 78:13	<b>finished</b> 71:14	<b>floor</b> 2:15 11:10	173:19
123:2,6,12	<b>filters</b> 42:22	149:16	11:12 21:7,9	<b>fortunate</b> 68:24
124:1 127:25	71:10,11,16,22	<b>firm</b> 43:1 62:20	21:14,23 58:21	<b>forward</b> 26:5
128:13,17	80:23 99:20	157:24	60:6 168:11	28:11,23 48:15
130:18 131:19	109:10,12	<b>first</b> 9:23 10:4	<b>flow</b> 35:23 71:7	65:4 66:1,17
132:1 153:8	<b>filtration</b> 106:14	12:3,6 14:17	78:24 100:21	67:3,16,20
161:1,2,7,17	109:8	25:3 28:8 29:9	111:5 124:18	69:2 77:7
162:8 166:12	<b>final</b> 27:7 73:13	51:2 52:6,13	<b>flowing</b> 14:7	91:21 93:5
167:11 168:10	163:12,18	53:4 54:21	<b>flush</b> 71:15	94:12 96:23
168:25 172:21	<b>finalize</b> 171:16	56:20,24 64:9	<b>flyer</b> 6:16,25	97:21 102:21
<b>features</b> 71:5	<b>finalized</b> 32:4	71:13 82:21	8:10 17:15	115:4,17,22,22
<b>federal</b> 36:6	<b>finalizing</b> 32:15	84:2 102:20	50:25 52:2	116:4,10,23,24
139:6	<b>finally</b> 13:3	105:9 121:10	<b>focus</b> 94:3	117:8,14

125:10 135:11 137:2,7,22 140:5 154:7 156:9 157:11 157:17 170:8 <b>found</b> 13:9 36:22 50:20 56:1 95:12 111:22 124:13 124:23 127:25 128:13 135:11 136:1 <b>Foundation</b> 139:6 <b>four</b> 10:5 12:4 40:8,19 65:14 67:14,14,15 73:4 80:9 82:21 87:15 124:8 125:5 169:14 <b>four-year</b> 87:11 <b>fourth</b> 2:15 128:8 172:19 <b>frame</b> 58:2 79:21 116:19 163:2 164:13 167:2 <b>framework</b> 111:15 166:10 171:23 <b>frankly</b> 25:1 27:23 31:14 52:10 53:19 161:1 168:17 <b>free</b> 8:2 136:7 142:23 <b>frequently</b> 7:1 40:11 167:7 <b>fresh</b> 12:23 15:3 106:3,8 <b>friction</b> 110:23 <b>front</b> 6:8,25 75:3 <b>fruition</b> 95:19 <b>fulfill</b> 33:23 <b>full</b> 68:3 109:25 <b>full-scale</b> 134:17	<b>full-time</b> 105:21 <b>fully</b> 69:5,6 75:25 88:10 150:15 155:23 <b>functions</b> 116:6 <b>funding</b> 55:21 91:25 100:2 116:15,16 <b>further</b> 9:6 24:12 48:21 57:14,18 83:11 116:20 124:12 135:12 159:22 160:1 174:25 <b>Furthermore</b> 51:22 <b>future</b> 14:11 24:11,13 47:12 63:1 66:9,11 66:25 72:21 93:14 99:8 103:14 111:18 118:4 127:24 128:12 137:2 137:21 148:1 148:23 162:7 167:1 <b>fuzzy</b> 105:11 167:11	<b>gallonage</b> 23:23 56:11 <b>gallons</b> 16:6 23:18 34:25 36:1 53:11 80:3,14 103:21 104:22,23 106:4 146:8,12 <b>gap</b> 104:16 <b>gardener</b> 136:4 136:9 <b>Gardeners</b> 136:6 <b>gathering</b> 107:24 <b>Geever</b> 4:9 137:10 139:2,3 139:3 140:17 <b>general</b> 8:24 24:19 30:9 31:23 32:2 47:16,17 56:2 64:18 88:24 147:8 150:2 167:13 <b>generally</b> 24:5 31:25 61:18,18 71:13 78:8,16 80:17 89:13 102:1 <b>generate</b> 20:11 103:20 <b>generated</b> 82:12 <b>genesis</b> 26:9 <b>geology</b> 20:11,18 20:22 83:19 <b>gesture</b> 125:23 <b>getting</b> 49:13 69:1 79:16 94:2,11 102:7 102:21 156:8 174:13 <b>Gibraltar</b> 66:2 67:4,20,22 86:20,21 145:9 151:4 <b>give</b> 5:24 24:20	45:25 49:25 50:24 62:22 100:8 114:10 132:8 157:8 159:3 161:16 167:4 171:18 172:1 173:4,10 <b>given</b> 20:11 47:11 83:4 93:5 143:9,14 <b>giving</b> 9:9 67:5 112:19 157:2 166:21 173:18 <b>go</b> 5:17 24:13 27:24 33:10 42:21 44:9 47:1 57:17 58:14,16 61:8 62:16 65:14 80:10,21 82:17 85:12 86:3 94:12 96:4,9 98:22 111:4 112:2 114:15 115:17,21,22 116:4,23 117:8 117:14 119:8 121:7 122:1 129:17 131:22 137:24 138:16 139:18,24 141:14 152:24 154:7 155:18 156:12 158:6 159:15,22 161:7 162:14 168:21 171:20 171:22 174:22 <b>goals</b> 136:23 151:3 <b>goes</b> 21:9,19 46:12 102:8 <b>going</b> 8:19 14:11 21:20 22:2 23:6 25:25 27:2 30:6 32:10 33:9	40:25 45:22,23 47:2,3 48:15 48:21 50:9 51:12 52:3 54:11 58:2 59:5 61:10 62:6 64:23 65:4,14 67:15 69:17 82:4 87:13,14 92:3 92:5,6 93:22 97:21,23 99:20 100:12 102:10 106:24 107:10 107:20,21 108:19,24 110:4,12 111:17 112:6 118:3,12 119:15 120:25 121:2 129:5 132:6 134:7 139:12 140:4 143:18,24 146:9,12 154:2 156:3,5 157:11 157:12 158:14 159:15,17 162:5 163:8,25 165:24 166:17 166:19 167:5 169:12,14 170:16,21 173:15 174:10 174:13,14 <b>Goleta</b> 13:11 86:16 133:22 148:4,8 <b>good</b> 18:24 19:9 22:9 42:9 53:24 56:15 62:2 97:1 101:19 112:14 127:18 130:4 135:20,22 142:16 144:7 144:24 145:20
---	---	---	---	---

147:7 150:1 154:20 155:12 155:16 166:15 <b>good-faith</b> 158:3 163:23 <b>gotten</b> 7:11 105:18 <b>Govern's</b> 63:23 <b>Government</b> 7:17 62:12 <b>Governor</b> 170:24 <b>grandfather</b> 112:16 <b>grant</b> 9:12 156:2 171:5 <b>granted</b> 25:18 <b>gray</b> 67:4 <b>great</b> 11:3 69:6 97:19,22 102:18 136:12 136:13 164:15 174:20 <b>greater</b> 86:24 106:12 <b>green</b> 67:6 68:12 <b>grip</b> 137:21 <b>ground</b> 92:21 163:3 <b>grounds</b> 11:16 <b>groundwater</b> 66:3 67:6,23 67:24 68:4 69:4 73:9 82:24 86:17 151:16 <b>group</b> 16:14 89:24 140:17 <b>groups</b> 146:16 <b>growth</b> 87:1 <b>guarantee</b> 76:11 <b>guaranteed</b> 133:24 <b>guess</b> 19:6 20:1 58:18 91:16 105:20 111:8 <b>guidance</b> 97:1	162:13 <b>guideline</b> 97:2 <b>guidelines</b> 124:2 <b>guys</b> 33:16 119:5 162:14 <hr/> <b>H</b> <hr/> <b>habitat</b> 11:12,14 12:13 14:6 60:16,17 96:1 146:23 <b>habitats</b> 41:13 42:6 74:10 80:18 95:18 <b>Hagerty</b> 3:20 115:10,10 116:5,10 117:7 118:15,22 119:1,11 120:3 <b>HAGGERTY</b> 164:3 <b>Haggmark</b> 4:6 134:6 135:19 135:19 <b>half</b> 10:20 18:8 18:14,16,17 84:8 110:22 113:7 114:16 126:2 169:13 <b>hand</b> 91:13 121:3 <b>handed</b> 142:23 <b>handle</b> 89:5 <b>handout</b> 6:8 <b>happen</b> 31:17 32:5 77:9 101:7 117:2 140:9 169:12 <b>happened</b> 15:16 27:9 130:3 139:18,25 <b>happening</b> 54:16 <b>happens</b> 56:14 78:14 <b>happy</b> 8:18 138:3 164:5	<b>harbor</b> 10:12 80:16 <b>hard</b> 6:14 65:13 66:24 79:6 87:3 95:20 96:4 97:10 125:11 126:17 140:2 164:23 165:6 171:9,12 171:13 <b>harder</b> 47:6 <b>harm</b> 122:11 169:20 <b>harmful</b> 121:20 125:14 126:21 <b>Harris</b> 3:12 5:10 5:11 9:5,6 22:4 62:5 90:9 157:19 163:14 165:14 166:6 168:4 169:9,22 171:6,7 174:2 174:7,22 175:7 <b>Harris's</b> 162:25 170:21 <b>headed</b> 97:7 <b>heading</b> 51:1 <b>headlong</b> 121:24 <b>Heal</b> 149:18,19 <b>health</b> 136:15 145:2 146:17 147:17,19 <b>healthy</b> 126:15 146:13 <b>hear</b> 54:12 57:19 128:19 135:18 153:12 155:20 157:3 161:15 161:16,21 166:23 173:5,7 174:5,6 <b>heard</b> 17:11,13 25:15 34:10 44:20 50:12,18 72:2 87:16 88:18 112:1 118:22 128:19	139:19 143:3 155:10,21 156:24 157:4 159:12 172:8 174:15 <b>hearing</b> 6:10,23 6:24 23:17 26:11 27:16 74:22 82:2 111:13 118:7 162:15 173:24 <b>hearings</b> 125:6 <b>heating</b> 25:8 <b>heavily</b> 67:23 68:6 103:23 <b>heck</b> 161:21 <b>heightened</b> 164:8,18 <b>Helene</b> 3:23 62:21 74:20 <b>hello</b> 9:3 145:22 <b>help</b> 41:21 42:10 52:8,8 56:1 58:1 63:21 93:1 98:3 113:7,9 136:7 138:24 142:24 154:4 157:10 <b>helpful</b> 37:16 <b>helping</b> 97:5 <b>helps</b> 37:21 63:3 63:24 136:24 <b>heritage</b> 136:11 <b>hesitate</b> 155:8 <b>hiccup</b> 165:12 <b>high</b> 13:20 32:17 46:13 47:2 49:1 50:3 136:9 <b>higher</b> 21:21,22 22:2 49:20,23 65:23 <b>highlight</b> 72:1 82:17 108:21 <b>highly</b> 49:4,18 60:2 92:14 95:16 126:19	<b>hindsight</b> 59:14 <b>hire</b> 93:22 <b>historic</b> 103:7 136:17 <b>historically</b> 63:18 <b>history</b> 52:10 63:6 102:11 151:4 <b>hitting</b> 24:19 <b>hold</b> 48:17 54:11 57:18 144:16 <b>holding</b> 74:22 <b>holistic</b> 170:11 <b>home</b> 74:24 136:8 <b>honorable</b> 62:21 <b>hope</b> 76:10 98:1 104:13,18 128:4 137:6 174:9 <b>hopeful</b> 67:21 69:19,20 <b>hopefully</b> 55:23 96:9,9 135:13 <b>hoping</b> 65:12 97:20 <b>horizon</b> 87:6,9,9 <b>horizontal</b> 139:21 <b>horse</b> 100:15 <b>horticulture</b> 136:11 137:5 <b>hotels</b> 146:17 <b>hour</b> 62:2 158:20 174:9,9 175:5 <b>hours</b> 169:14 <b>huge</b> 63:9 86:14 92:21 139:16 <b>Hunter</b> 3:6 48:20,21 54:10 90:16,21 91:1 91:4,21 93:19 94:8 95:1,5 97:5 146:22 149:11,18
--	---	---	--	---

157:3 170:1 <b>Huntington</b> 79:8 135:9 <b>hydraulic</b> 73:12 83:14 84:16 85:7,19 <b>hydraulics</b> 56:25 <b>hydrologic</b> 13:8 <b>hydrology</b> 135:4 <b>hypersaline</b> 71:17	94:23 95:9 113:6,10 124:25 140:12 153:6,9 164:1 165:16,19 166:2 170:1 <b>impacts</b> 10:24 11:1,8,10,15 12:10 13:19 25:20 39:5 48:11 60:7 61:11,14,19 73:9 95:8 96:20 97:25 121:20,22 <b>impinged</b> 39:6 45:23 <b>impingement</b> 11:1 13:5,17 13:25 16:18,21 35:13,19,20 40:25 45:7 74:2 107:19 108:20 110:8 <b>implement</b> 30:21 63:15,25 76:8 127:25 162:7 167:14 <b>implementation</b> 145:15 160:8 <b>implemented</b> 113:4 116:20 136:23 <b>implementing</b> 77:7 167:8 <b>implications</b> 121:16 <b>implicit</b> 55:7 170:11 <b>import</b> 67:8 <b>importance</b> 97:17 <b>important</b> 14:6 63:14 64:2,24 65:15 78:21 104:6 113:11 115:2,3 131:22	137:5 138:15 143:22 145:10 148:2 151:19 155:14 171:5 <b>importantly</b> 29:11 103:9 <b>impose</b> 21:21 161:13 169:5 <b>impossible</b> 60:14 130:1 <b>impression</b> 152:4 <b>improvement</b> 112:15 <b>improvements</b> 111:23 <b>inaccurate</b> 141:25 <b>inadequacy</b> 124:12 <b>inadequate</b> 126:21 <b>inappropriate</b> 123:6 <b>include</b> 26:21 48:5 63:19 71:24 92:7 119:15 120:3 125:18 159:17 160:5 <b>included</b> 10:6 19:15 72:6 89:25 103:25 104:2 107:6 114:21 120:5,8 139:7 142:18 143:15 147:3 <b>includes</b> 51:7 89:14 148:10 <b>including</b> 64:22 75:19 91:24 92:2 109:11 113:24 114:18 119:19 136:16 140:25 157:5 165:9 <b>inclusion</b> 120:6	<b>incoming</b> 108:23 <b>inconsistent</b> 119:13 <b>incorporate</b> 49:14 111:22 158:24 <b>incorrect</b> 60:24 <b>increase</b> 13:1 53:14 76:19 90:11 103:15 104:17 108:18 108:19 143:10 <b>increased</b> 69:3 143:5 <b>increases</b> 6:23 <b>increasing</b> 8:13 <b>increments</b> 58:10 <b>incurred</b> 80:20 <b>incurring</b> 10:9 <b>independent</b> 43:20 44:1,12 79:14 135:8 <b>index</b> 100:22 <b>indicate</b> 98:14 <b>indicated</b> 63:17 78:13 89:6 94:10 95:11 100:25 107:13 <b>individual</b> 24:19 124:8 <b>industrial</b> 10:25 11:7,25 25:7,8 43:22 <b>industries</b> 146:16 <b>industry</b> 31:20 <b>inevitable</b> 137:2 <b>inevitably</b> 167:12 <b>infauna</b> 38:19 <b>infeasible</b> 59:4 73:7 <b>inferred</b> 162:4 <b>infiltration</b> 20:9 20:16,22,25 21:7,15 42:15	42:19,20 43:10 73:6,21,24 78:5,7,22,25 101:17 102:14 129:18 <b>inform</b> 154:13 <b>information</b> 12:2 21:6 28:4 35:15 39:7 46:21 47:21 49:25 53:21 74:7 79:7 80:12 82:23 93:1 97:23 107:1,25 121:16 129:15 135:12 157:5 174:16 175:1 <b>infrastructure</b> 12:9 108:23 109:9 128:16 166:13 <b>initial</b> 20:3,7 31:10 <b>initially</b> 19:1,5 19:10 73:7 131:11 <b>initiate</b> 117:22 <b>initiating</b> 53:18 118:5 <b>input</b> 54:15 144:19 155:6 155:17 159:3 <b>inputs</b> 171:16 <b>insert</b> 118:9 119:8 <b>inservices</b> 146:6 <b>inshore</b> 41:8 <b>inside</b> 69:7 <b>insight</b> 135:14 <b>insignificant</b> 13:18,19 48:24 49:21,22 55:3 55:4 59:19,20 59:22,24 60:25 <b>insist</b> 141:6 <b>install</b> 102:5
<b>I</b>				
<b>I's</b> 165:1 <b>idea</b> 49:25 79:5 94:23 114:5 173:14 <b>ideally</b> 44:24 155:7 <b>ideas</b> 96:25 138:2 <b>identification</b> 41:12 89:22 <b>identified</b> 32:17 55:17 91:22,22 104:13 113:13 165:11 <b>identify</b> 112:5 148:7 <b>identifying</b> 39:8 49:3 <b>illness</b> 62:6 <b>illustrate</b> 70:8 <b>imagine</b> 117:22 <b>immeasurable</b> 136:15 <b>immediate</b> 109:8 <b>imminent</b> 33:6 <b>impact</b> 11:5 13:21 15:22,23 16:8,9 19:22 48:24 50:7,13 50:14 54:8 55:3,8,25 59:19,24 60:18 61:4 87:25				

110:19 169:1 172:22 <b>installation</b> 77:23 <b>installations</b> 25:7 <b>instance</b> 14:25 47:6 110:18 <b>insufficient</b> 56:11 <b>intake</b> 10:19,21 10:23 11:2,10 11:21,24 12:10 12:12,22 13:3 13:4,14,24 15:13 16:19 18:16,23 19:11 19:14,15,23 20:2,6 21:14 21:23 22:3 25:16 35:19,22 35:25 36:2,3 36:13,24 38:18 42:16,18 43:4 43:5,14 45:20 46:9,10 47:3,7 47:13 54:6,23 56:5 57:4 59:5 59:8,21,25 60:3,15 71:8,8 77:23 78:1,20 79:17 80:12,18 82:21 83:4,8 86:3 88:6 90:19 93:10 94:18 99:19,22 100:18,21 106:24 107:4 107:15 109:1 110:12,23 112:13 113:20 114:18 122:10 122:23 123:3 123:13,14,21 124:6,10 125:18 127:5 127:14 130:7	130:24 134:19 135:5 139:8,16 142:2 147:1 158:14,14 160:25 168:10 <b>intakes</b> 10:25 11:9 13:9,18 14:10 16:25 17:3 19:18 25:5 46:8 47:5 53:12 56:6 60:7 73:5,5 76:18 79:13 82:25 83:1 84:15 92:2 121:20 129:18 134:11 135:1 168:22 169:1 172:21,22 <b>intend</b> 51:23 112:2 <b>intended</b> 52:19 <b>intends</b> 127:8 <b>intent</b> 30:6 52:22 167:8 <b>intention</b> 94:9 127:15 <b>interest</b> 105:5 174:12 <b>interested</b> 80:22 92:17 95:5 <b>interesting</b> 66:4 118:21 136:2 <b>intermittent</b> 52:20 53:10 <b>intermittently</b> 52:19,23 <b>interpretation</b> 169:19 <b>interrupt</b> 59:19 152:6 <b>Interruption</b> 25:13 113:15 <b>intertidal</b> 14:6 41:21 42:6,10 <b>introduce</b> 5:10 5:11	<b>introduction</b> 5:16 55:6 <b>intrusion</b> 68:8 68:10 <b>invariably</b> 141:17 <b>invest</b> 15:7 <b>invested</b> 97:11 <b>investigating</b> 156:20 <b>investment</b> 75:17,21 76:4 76:8 81:24 105:21 152:19 <b>invited</b> 139:22 <b>invoke</b> 129:22 <b>involved</b> 83:4 85:4 153:13 171:13 <b>involvement</b> 64:20 <b>involving</b> 6:23 <b>irregardless</b> 93:8 <b>irrelevant</b> 99:24 126:14 <b>irrigation</b> 69:8 <b>Island</b> 146:2 <b>Islands</b> 49:8 92:20 <b>issue</b> 8:14 19:3 25:5 28:11,22 28:25 29:15 50:8,16,17 53:25 54:2 58:15,21 63:13 63:14 70:2,16 74:24 75:2 78:5 79:11 100:13 111:15 114:25 115:11 117:8 118:10 130:20 155:14 157:20 164:12 165:3,10 174:10 <b>issued</b> 19:5	26:22 50:19,21 72:12 139:11 155:23,23 171:1 <b>issues</b> 5:16 22:12 26:2 48:22 60:4 63:22 71:3 73:8 79:20,22,24 85:2 87:22 103:8 115:1 163:10 169:18 171:1,11 <b>item</b> 5:5,7,8,10 5:11,18 9:10 34:5 62:3,5,8 149:22 155:13 155:19 162:19 165:20 169:12 174:5,6 <b>items</b> 62:13 115:14,19 117:9 153:14 157:20 158:24 165:14 166:9	19:10,22 20:7 20:20 21:6,11 21:20 22:7,20 23:15 24:1,15 24:20 105:3,4 105:14,23 106:18,20 114:13,14 116:1,25 153:14 159:3 160:14,15 162:3 166:4,5 167:16 168:7 171:18 173:4 <b>joining</b> 31:5 <b>Jordan</b> 4:8,16 8:18,25 137:10 137:12,12 152:3,8 <b>Joshua</b> 4:6 135:19 <b>July</b> 82:8 <b>June</b> 70:21 98:16 118:25 <b>jurisdiction</b> 25:10 29:7 172:23 <b>jurisdictional</b> 54:13 <b>juvenile</b> 95:17
<hr/> <b>J</b> <hr/>				
<b>January</b> 1:17 2:17 5:1 87:16 117:20 <b>Japan</b> 43:10 73:25 134:23 <b>Jean-Pierre</b> 3:5 <b>Jeffrey</b> 3:8 <b>jeopardize</b> 163:8 <b>jewel</b> 97:15 <b>job</b> 1:24 54:20 <b>Joe</b> 3:22 4:9 7:23 57:16 62:19 71:2 95:22 101:8 137:10 139:2,3 140:17 141:21,23 <b>Joe's</b> 141:19 <b>Johnston</b> 3:10 17:8,9,24 18:5 18:10,19 19:1				
<hr/> <b>K</b> <hr/>				
<b>Karina</b> 3:9 <b>Kate</b> 4:15 150:2 <b>Kathleen</b> 3:7 <b>keep</b> 66:22 81:5 81:6 84:14 137:6 <b>Keepers</b> 140:3 <b>keeping</b> 75:23 <b>kelp</b> 11:14,15 <b>Ken</b> 3:12 <b>kept</b> 143:17 <b>key</b> 25:9 26:7 57:21 58:1 77:9 <b>killed</b> 11:7 33:21				

<b>kind</b> 29:4 31:8,9 31:11 38:6 39:11,16 40:20 42:2,5,13,18 44:1 47:8 48:12 55:8 58:1 60:13,22 71:1 81:18 96:15,25 98:1 98:10 99:6 131:10 143:17 152:8 156:2,11 160:5,7,8 167:12 169:5 174:16	155:13,25 156:1 157:6,15 160:23 161:4 162:9,16,18 163:9 164:5,9 166:14 168:8 170:19 173:7 174:19	32:7 34:15 54:5 58:16 138:13 156:4 166:8 167:11	<b>leaving</b> 170:19 <b>led</b> 140:20 147:15 152:17 153:20	60:3 61:9 74:18 81:4,23 97:25 122:11 122:23 123:3 123:13,22,24 130:25 145:8
<b>kinds</b> 73:5 91:4 91:11	<b>known</b> 49:1 82:3 98:18 135:12 150:3,4	<b>large</b> 16:5 45:11 67:25 78:16,19 131:7	<b>Ledbetter</b> 84:7 <b>left</b> 15:4,20 82:25 134:7	<b>lifetime</b> 37:2 145:9
<b>Kira</b> 4:4 120:20	<b>knowable</b> 31:18	<b>large-scale</b> 73:24 96:13	<b>legal</b> 33:5 122:14 126:25 140:7 156:12 162:23 164:15 171:15	<b>lifted</b> 127:7 <b>lightly</b> 77:10
<b>kitchen</b> 7:11	<b>knowledge</b> 40:3 82:10 109:24 121:19 134:10	<b>larger</b> 78:15 86:17 97:3 102:1	<b>legally</b> 118:12 160:5 161:8	<b>lights</b> 77:14 <b>limit</b> 174:8
<b>knew</b> 87:12 93:13,14 139:10,11,12	<b>known</b> 49:1 82:3 98:18 135:12 150:3,4	<b>largest</b> 35:3	<b>legislature</b> 25:17 31:23	<b>limitation</b> 25:6 106:1,9
<b>know</b> 18:19 19:18 20:24 21:20 22:1 29:12 31:4,15 31:17 32:5,8 33:16,16 35:14 37:21 38:21 41:12 44:18 45:12,21 51:20 56:12 57:20 68:25 69:15 74:4,8 81:12 85:25 86:1 90:21 91:8 92:10,17 95:8 95:15,16 97:18 100:11 103:7 104:22 109:21 110:3,12,20,23 111:23 112:19 113:5 117:4 122:15 125:24 130:3,8 132:7 139:13,15,24 140:2 145:6,6	<b>knows</b> 105:11 139:25	<b>larvaceans</b> 89:9 <b>larvae</b> 11:6 36:22 37:1,5 39:13 40:12 41:24,24 56:4 59:19 101:4	<b>lens</b> 28:5 96:7 119:14	<b>limitations</b> 106:16
	<b>L</b>	<b>larval</b> 48:8 49:1 49:21,23 50:1 89:25	<b>Leslie</b> 4:7 132:14 135:20 135:23	<b>limited</b> 12:10 64:6 69:11 109:24 133:20 143:12
	<b>La</b> 133:22	<b>lasting</b> 152:4	<b>less</b> 86:13	<b>line</b> 23:11 43:5 51:2,7 73:18 80:2 83:19 129:5,6
	<b>lacks</b> 9:16	<b>late</b> 64:7 70:5 86:20 100:10 149:3	<b>lesson</b> 141:5	<b>lines</b> 142:10 161:5 168:14
	<b>laid</b> 78:9 82:21 125:7	<b>latest</b> 10:5 72:22	<b>let's</b> 11:13 15:13 32:13 52:24 56:14 84:1 99:11 116:25 122:18 139:14 166:8,10	<b>list</b> 34:18,19 39:6 162:21
	<b>lake</b> 98:19,20,23 134:13 150:7 151:4 158:12	<b>law</b> 139:8,15,16	<b>letter</b> 147:9 149:7,8	<b>listening</b> 152:6 158:1
	<b>lamb</b> 122:7	<b>laws</b> 31:23	<b>letters</b> 149:12	<b>literature</b> 92:8
	<b>landscape</b> 81:7 104:5,6 135:25 136:14	<b>layer</b> 13:15 21:10	<b>level</b> 22:23 23:20 23:20 27:24 73:14,15 92:19 94:16 95:9 145:8 160:20 164:9,18	<b>litigation</b> 58:21
	<b>Langen</b> 3:18 5:23 9:8,8 15:9 15:17 16:2,24 17:6,19 18:1,7 18:13,24 19:9 19:15 20:4,16 20:25 21:9,18 22:9,24 23:25 28:13 30:13 35:17,24 36:9 36:12,19 37:7 37:10,18,23 38:12 39:9,12 41:4 43:20 54:19 56:9,19 56:23 57:14	<b>lead</b> 135:25 140:11	<b>levels</b> 16:3 46:16 47:2 61:3 72:4 147:23 148:12	<b>little</b> 8:12 9:1 34:7 35:10 48:21 61:1 67:5 72:3,25 78:4 97:6 103:5,23 106:5 106:23 107:21 109:24 114:10 132:4,11 142:21 143:6 153:12 154:5,6 159:22 162:18 162:23 163:2 165:21 169:7 171:19 172:6
	<b>langua</b> 27:20	<b>learn</b> 8:24 <b>learned</b> 91:7 141:5	<b>Liaison</b> 3:17	
		<b>learning</b> 103:3 152:7	<b>liberative</b> 138:17	
		<b>leave</b> 122:9	<b>life</b> 11:21 12:8 15:24 33:20 38:6,10 48:3	
		<b>leaves</b> 12:9		

<b>live</b> 42:7 128:4 136:13	93:17 118:2	98:22 99:8	<b>machine</b> 121:7 121:12 152:22	119:25 140:13
<b>lived</b> 145:7	<b>longest</b> 151:3	103:19 110:9	162:21	157:21 160:21
<b>livelihoods</b> 126:16	<b>look</b> 11:24 16:3 24:13 26:4	110:10 129:18	<b>mail</b> 6:22	166:11,12
<b>local</b> 14:6 64:6 133:3 140:25 170:25	27:24 29:9	135:10 152:19	<b>main</b> 11:1 26:12 47:24 130:20	171:23
<b>located</b> 12:12 54:6,7 73:20	36:8 41:9,11	156:14 158:4	<b>maintain</b> 71:16 81:3 148:7	<b>manner</b> 144:24 171:9
<b>location</b> 12:20 38:19 54:17	52:8 58:5,24	165:9 169:11	<b>maintained</b> 70:12 75:24	<b>map</b> 157:11
55:22 56:13	83:18,22 84:18	172:17	81:7,11 107:7	<b>March</b> 67:8 70:21 82:9
57:6,8,11	89:16 90:23	<b>looks</b> 32:8 38:8 41:1 69:3	113:22 118:17	93:12 98:16,19
83:16 85:3	94:18,19,21	100:14 124:16	<b>maintaining</b> 75:19 98:7	98:25 99:2
92:12	95:23 96:20,21	<b>loose</b> 172:2	151:14	154:22 158:7
<b>locations</b> 10:11 56:15,17,17	101:3 105:8,23	<b>Lori</b> 3:16 8:3 22:14 25:13	<b>maintenance</b> 54:23 55:1	159:1 163:7,25
57:9,12,15	109:22 112:3	<b>Los</b> 141:15	70:11 71:24	165:4,25
72:4 153:6	119:6 123:23	<b>loss</b> 37:14 38:6 38:10 42:8	80:20 81:10,14	169:24 170:16
<b>locked</b> 116:12	129:10 137:17	89:6	106:22,24	171:17
<b>Lodge</b> 4:11 142:13,15,16	140:2,10	<b>losses</b> 101:3 110:24	107:1,3,12,12	<b>Marin</b> 141:14
142:17	161:15	101:5	107:14,22	<b>marine</b> 10:24 11:8,21 12:8
<b>logical</b> 93:19	<b>looked</b> 8:23 11:21,23 12:15	<b>lot</b> 16:22 31:22 38:18 41:14	108:15 150:3,7	12:13 13:15
<b>long</b> 23:22 59:16 100:13 133:16	12:19 13:13	44:6 60:2	<b>major</b> 29:12 76:4 165:12	15:23 38:6,10
140:20 141:14	16:24 19:7,17	65:24 69:25	<b>making</b> 7:16 47:1 70:23	43:21 48:3
143:16 145:15	21:1 36:9,16	73:1 89:2	77:9 86:2	49:4,5,10 50:5
157:14 162:21	38:13 39:17	92:10 98:8	94:13 129:9	54:1 59:25
165:19,23	41:9 46:23	101:16 104:5	153:11 155:15	61:9 74:7,10
<b>long-standing</b> 92:23	55:19 57:14	110:4 112:8	160:21 163:3	74:18 88:2,3,4
<b>long-term</b> 9:24 10:1 29:13	58:11 82:9,11	125:16 127:1	164:6,7 168:5	88:23 95:17
30:10 63:16,25	85:7 96:7	139:19,23	174:15	96:6 97:12,16
64:15,16,18,21	103:12 113:2	140:4 155:21	<b>man</b> 145:7	97:17 110:16
70:4 71:21	115:7 129:16	157:4,5 159:6	<b>manage</b> 65:16 68:9 174:2	111:3 121:20
72:19,20,23	130:23,23	162:11 166:20	<b>managed</b> 150:22	122:11,23
75:17 76:6,8	145:20 160:19	169:14	<b>management</b> 33:4 125:14	123:3,13,15,21
76:10,13 77:7	<b>looking</b> 15:4 19:12 20:2	<b>love</b> 22:7	136:24	123:24 126:15
87:8 93:14	21:24 22:1	<b>low</b> 13:14 16:19 50:13	<b>manager</b> 139:4 147:8 150:2,4	130:24 146:2
102:25 103:3	29:15,16 34:19	<b>low-flow</b> 142:23	<b>managing</b> 65:17	146:13,17,20
136:21 144:25	37:5 38:22	<b>lower</b> 23:20 148:12 150:10	<b>mandate</b> 28:15	146:23,25
148:7,13	40:17 43:7	<b>lowest</b> 145:8	<b>mandatory</b> 103:16 114:21	<b>mark</b> 130:10
151:12,20	45:5 46:4	<b>lucky</b> 70:24	115:20,21,23	<b>market</b> 69:15
<b>longer</b> 81:3	49:16 55:5	<b>Luis</b> 66:8		<b>Master</b> 136:4,6
	56:15 57:2	<b>lunch</b> 61:25 62:9 62:15 106:23		<b>material</b> 71:6 114:4 120:10
	58:4 59:13			144:18
	69:2,9 75:9			<b>materials</b> 42:23 71:22 72:7
	82:2,18 83:7			73:12 78:11
	84:12,14 86:10			100:1 113:25
	93:15 94:23			<b>math</b> 18:8
	95:1 96:25			
	97:16 98:6,14			
		<b>M</b>		



109:19 <b>matrix</b> 43:4 <b>matter</b> 118:4 143:19 158:15 <b>maximize</b> 132:23 150:22 <b>maximizing</b> 140:25 <b>maximum</b> 80:13 <b>mayor</b> 3:23 62:21 74:19,21 94:10 118:23 142:15,18 145:4 162:4,15 <b>McGowan</b> 152:2 <b>mean</b> 20:14 41:3 86:10 93:20 162:21 171:7 <b>meaning</b> 11:22 <b>meaningful</b> 95:25 97:1 <b>meaningfully</b> 95:21 <b>means</b> 57:6 100:22 118:7 <b>meant</b> 172:13 <b>measure</b> 127:6 127:12 <b>measured</b> 146:25 <b>measures</b> 11:20 11:22 12:4 24:16 76:16 122:22 127:25 128:13 140:24 154:15,16,17 154:18 164:6 172:3 <b>mechanism</b> 35:14 <b>media</b> 71:10,16 78:10 109:9,9 <b>meet</b> 21:16 23:6 23:9,13 44:15 56:11 67:16 118:18 121:24 133:15,18	136:23 145:1 150:17 151:6 <b>meeting</b> 1:2 14:12 34:8 62:11 136:2 144:17 154:22 163:1,8 169:8 175:4,10 <b>meetings</b> 77:5 144:17,19,21 <b>Megan</b> 3:19 7:23 9:13 17:20 39:21 170:17 <b>member</b> 3:7,8,9 3:10,11 132:21 144:9 145:25 151:1 153:23 161:12 <b>members</b> 27:15 32:17 60:21 114:23 117:18 117:19 135:22 142:17 144:7 147:7 155:18 163:16 <b>membrane</b> 71:22 <b>membranes</b> 81:22 <b>memo</b> 73:13 82:20 83:9 <b>memorandum</b> 83:12,24 <b>memos</b> 73:4 <b>mention</b> 5:12 26:16 30:1 64:7 141:8 154:24 <b>mentioned</b> 8:20 16:20 19:16 20:5 49:13 72:22 75:18 76:2,13 82:22 88:8 89:21 101:8 102:13 104:19 109:2 109:11	<b>menu</b> 173:13 <b>mesh</b> 36:11,13 37:6 112:13 113:3 120:9 <b>met</b> 28:6 <b>meter</b> 89:9 <b>method</b> 101:6 <b>methodology</b> 60:8 89:3,19 89:20 90:22 91:10 101:2 <b>methods</b> 79:21 <b>Meyer</b> 6:1 9:10 9:16 27:10 <b>MGD</b> 18:8,14 106:17 <b>Michael</b> 3:10,13 4:13 142:14 145:21,22 <b>microphone</b> 24:20 53:25 <b>mike</b> 4:16 8:18 90:9 152:3 <b>mile</b> 10:20 56:20 56:24 <b>miles</b> 10:15 14:4 40:4 56:3 84:8 123:18 <b>milestones</b> 164:13 <b>millimeter</b> 37:6 107:20 108:14 108:14 110:6,7 112:14 <b>million</b> 15:10,14 23:18 34:25 35:25 36:1 59:11 70:10 75:22,23 80:3 80:14 98:15 99:9,11,16,18 99:24 100:17 100:18 102:5 103:24 113:7 114:16 126:8 146:8,11,12 152:18,19,21	159:14,18 <b>mimic</b> 113:19 <b>mind</b> 15:3 84:14 119:17 130:10 173:22 <b>minds</b> 98:9 <b>mindset</b> 45:5 <b>minimal</b> 16:15 16:16 59:9 <b>minimization</b> 124:18 125:1 159:10 <b>minimize</b> 11:21 13:15 61:6 122:23 123:2 123:12,21 124:10 130:7 165:16 166:2 <b>minimizing</b> 12:8 61:12 130:24 <b>minimum</b> 83:19 85:15 108:14 145:1 <b>minus</b> 16:17 <b>minute</b> 27:10 158:19 <b>minutes</b> 62:22 76:25 120:20 120:25 121:1 132:7 154:9 155:7,9 <b>Miracle</b> 93:12 98:19,25 99:2 <b>missed</b> 66:21 <b>missing</b> 80:24 111:8 155:25 <b>mission</b> 153:18 153:19,20 <b>missionaries</b> 64:10 <b>mistake</b> 121:8 121:13,14 139:17 <b>mistakes</b> 158:21 <b>mitigate</b> 42:13 55:24 60:6 61:19 113:9	130:8 <b>mitigating</b> 42:10 <b>mitigation</b> 11:23 12:5 13:16 22:25 23:5,10 28:6,18 32:12 41:3 42:2 44:16 45:13 47:24 48:12 55:14 60:10,13 60:19,22 61:9 61:11,13,17 91:25 95:5,7,9 95:12,13,20,24 96:18,21 118:19 122:22 123:19,20,25 123:25 124:1,2 124:4,10,23 126:22 127:23 129:8 130:4,5 130:10,19 156:21 159:13 159:15,17,19 159:20,21 <b>mixed</b> 12:23 <b>mode</b> 27:12 71:21 72:19 81:12 105:15 121:23 141:16 174:15 <b>models</b> 109:17 <b>modern</b> 143:9 <b>modification</b> 110:12 <b>modifications</b> 21:16 111:20 <b>modify</b> 128:16 <b>modifying</b> 111:11 <b>moment</b> 24:18 45:25 122:18 <b>Monaco</b> 3:22 7:23 57:16 62:19 71:2,4 78:7 79:4,6 80:4,7,10,17
--	--	---	---	--

82:1,15,20	<b>mortality</b> 11:21	74:20 115:10	<b>needed</b> 20:12	100:12
83:21 84:1,18	12:8 13:15	132:15 135:17	30:15 33:10	<b>news</b> 62:2
84:23 85:10,12	48:3 54:3 59:8	135:18,23	34:22 47:22	143:15
86:1 87:19,24	61:6,13 100:21	139:3 140:16	56:12 63:6	<b>nexus</b> 14:7 95:10
88:20 89:2,7	122:23 123:3	144:8 145:22	72:21 73:18	<b>nickel</b> 114:1
89:23 90:2,6	123:13,21	150:1	84:11 87:12	120:13
90:19,23 91:3	124:5,10 130:7	<b>names</b> 132:10	93:14 100:1	<b>nine</b> 56:21
91:15 93:2	130:24	<b>narrowly</b> 98:2	120:2 133:9	134:20 135:10
96:17 100:24	<b>Mosby</b> 4:14	<b>National</b> 1:7 2:5	143:21	<b>Nino</b> 39:25
101:12,19	147:6,7	5:19 49:9,10	<b>needs</b> 5:17 13:10	<b>non-committal</b>
102:12 105:22	<b>mothballed</b>	59:25 146:2	13:11 52:23	125:23
106:10,19	80:23 81:13	150:19	81:6 91:8	<b>non-detectable</b>
107:24 109:1	<b>motion</b> 57:20	<b>native</b> 78:11	112:5 133:2,15	16:15
109:23 110:14	93:25 94:5	<b>nature</b> 29:5	133:18 147:19	<b>non-existing</b>
110:25 113:11	117:18	34:23 35:1	150:23 156:1	169:3
113:17 120:11	<b>motions</b> 115:4	60:16	159:18	<b>nonexistent</b> 55:4
120:13,15	<b>move</b> 28:11,22	<b>near</b> 12:16 65:14	<b>negative</b> 96:10	<b>norm</b> 147:24
<b>Monday</b> 170:18	77:7 94:23	<b>necessarily</b>	146:19 163:25	<b>normal</b> 19:20
<b>money</b> 15:7	97:8 127:11	45:22 49:17	<b>negligible</b> 41:1	134:15 161:9
95:15 127:1	157:17 158:8	80:11 112:15	<b>negotiating</b>	<b>normally</b> 19:21
<b>Monica</b> 3:6	163:16 165:5	162:24 163:17	150:19	149:3
<b>Montecito</b> 13:12	<b>moved</b> 87:8	166:16	<b>net</b> 39:17 40:1	<b>northern</b> 92:13
86:17 133:22	<b>moves</b> 116:10	<b>necessary</b> 9:17	41:17	<b>note</b> 68:13 91:23
147:8,10,20	137:22	16:22 48:12	<b>Network</b> 137:13	113:11 175:3
148:4,8,20	<b>moving</b> 93:5	85:1 148:2	<b>never</b> 117:3	<b>noted</b> 48:23
<b>Monterey</b> 34:23	102:21 115:4	151:24	124:6 130:10	<b>notes</b> 8:2 35:9
43:7 59:2,24	118:4 135:11	<b>need</b> 11:20	<b>new</b> 8:19 11:20	90:2,5 134:7
92:22 101:15	137:2,7 154:7	24:13 26:1	12:11 17:4	<b>notice</b> 6:9,22,24
104:20 146:7	158:5 162:19	32:6 43:14,18	22:22 23:1,8	<b>noticed</b> 34:4
<b>month</b> 98:19	<b>MPA</b> 54:6,7,8	55:16,21 61:5	23:13 24:14	114:14 144:16
102:20	<b>MPAs</b> 54:4	62:1 66:7,9	25:6,9,23 26:3	<b>notion</b> 48:14
<b>monthly</b> 39:19	<b>multi-beach</b>	69:10 70:7	26:5,14,17,18	122:18
106:1,18	13:10	77:2,12 79:19	26:19 27:3	<b>notwithstandi...</b>
<b>months</b> 8:11	<b>multi-diffuser</b>	83:22 87:17	30:23 34:15	170:21
14:8 48:7	10:17	90:9 91:7	43:22 44:5,9	<b>novel</b> 167:15
98:21 99:3	<b>multipart</b> 127:2	95:12 100:9	47:20 48:16	<b>November</b>
105:16	128:9	109:6 111:20	53:5,17 58:15	117:21
<b>Moore</b> 3:17	<b>multiple</b> 153:3,3	111:21 112:12	58:25 59:16	<b>NPDES</b> 5:24
<b>morning</b> 22:9	153:6,7,7	119:21 125:25	69:4 83:5	9:15,16,21
34:10 72:3	<b>Municipal</b>	143:17 152:23	101:22 107:10	14:20 18:13
149:24 157:8	108:12 141:4	152:24,24	108:24 109:3	19:21 58:8
162:24 171:25	<b>museum-grade</b>	155:16,20	122:4 138:10	72:13,22 75:14
173:9,16,22	109:21	156:22 157:4	138:22 140:6	124:21
174:2,6,8,21		158:9 163:20	150:19 156:6	<b>number</b> 5:20,22
175:5	<b>N</b>	167:13 171:25	168:19 169:3,6	8:10 32:18
<b>morning's</b>	<b>N</b> 4:1	172:1,6 173:1	172:10,12,24	49:10 50:12
143:15	<b>name</b> 62:17	173:4 174:11	<b>newer</b> 14:1 21:1	67:25 88:13

92:16 97:3 98:22 106:2 167:17 171:10 <b>numbers</b> 17:11 17:18 89:8,11 141:25 <b>numerous</b> 32:23 140:18 160:23 162:3 <b>nursery</b> 95:16 <b>nutrients</b> 40:17	47:19 49:15 50:3 53:3,16 59:16 60:3,5 60:18,22 61:2 68:8 79:3 84:3 96:21 108:6 121:20 122:1 122:10 124:6 127:5 135:1,3 140:19 143:19 149:19,19 159:20 161:19 <b>oceanographic</b> 38:4 39:23 41:15 42:1,3 48:8 49:15 50:15 <b>October</b> 67:15 <b>odd</b> 29:1,15 <b>offence</b> 109:21 <b>offer</b> 28:13,14 41:2,3 42:6 96:17 127:1 153:13 <b>offered</b> 113:6 124:3 <b>offering</b> 40:24 <b>offers</b> 153:21 171:22 <b>offhand</b> 36:13 <b>office</b> 117:19 <b>Officer</b> 3:12,13 <b>offline</b> 81:8 <b>offset</b> 96:9,10 113:7 148:23 <b>offshore</b> 10:15 13:9 39:8 40:7 41:7,14,22 42:9 102:8 107:7,13 109:4 <b>offspring</b> 37:2 <b>Oh</b> 99:1 129:6 <b>Ojai</b> 141:5 <b>okay</b> 18:5 34:7 35:5 39:3 90:8 90:14,15 94:17 95:1 99:7	106:20 108:17 120:16 130:21 131:3 132:6 149:10 <b>Okun</b> 3:16 8:3 22:14 25:13 <b>old</b> 20:24 21:1 38:18 121:16 <b>older</b> 109:17 <b>Olson</b> 3:14 7:18 <b>onboard</b> 32:6 153:17 <b>once</b> 6:15 9:25 61:7 89:17 90:11 94:15 138:11 146:9 156:24 159:25 <b>one-day</b> 90:25 <b>one-millimeter</b> 108:3 110:19 114:16 <b>one-time</b> 88:10 161:10 <b>ones</b> 39:8 <b>online</b> 65:10 69:5 81:16 87:13 165:9 <b>onshore</b> 71:10 107:4 109:15 <b>open</b> 23:19 46:2 59:5,8 76:25 83:1,4 86:3 97:5 114:18 121:20 122:10 124:6 127:5 134:25 138:18 144:23 155:17 <b>open-ocean</b> 42:13 <b>open-water</b> 60:7 <b>opening</b> 17:16 108:3,16 111:1 111:4 <b>openings</b> 108:6 <b>operate</b> 51:23 52:22,24 70:20 96:14 125:20	138:7 145:23 152:21 <b>operated</b> 23:20 98:16 <b>operating</b> 27:6 33:12 53:15,16 102:6 127:8 <b>operation</b> 48:4 52:16,18 53:10 70:14 72:16 74:17 80:5 88:17 99:3 100:21,23 106:12 107:11 127:4 148:17 150:2,6 <b>operational</b> 55:25 81:5 90:12 152:17 <b>operations</b> 115:25 <b>operator</b> 47:20 48:1 145:24 <b>operators</b> 70:20 146:15 <b>opinion</b> 42:5 150:11,19 173:6 <b>opportunities</b> 141:7 <b>opportunity</b> 66:8 77:18 114:10 132:8 162:20 170:4 <b>opposed</b> 21:8 58:24 81:12 155:2 <b>opposite</b> 49:23 <b>optimal</b> 113:22 114:6 <b>option</b> 86:12 104:16 134:23 135:6 141:3 161:24 173:23 <b>options</b> 42:5 82:21 84:13 85:5 86:13	92:2 93:11,15 97:9 103:14 110:10 135:13 154:8,23 155:11 158:22 <b>orange</b> 68:15 <b>order</b> 1:10 2:8 5:21 14:20 24:15 30:21 33:11 66:6,16 71:16 75:25 81:14 103:7 105:9,24 114:22 116:2,6 116:16 117:14 119:17 125:2 144:4 153:10 157:17 170:24 171:2 <b>organisms</b> 11:13 123:16 146:25 <b>organizational</b> 169:8 <b>organizations</b> 146:14 <b>organize</b> 93:21 <b>orientation</b> 150:9 <b>original</b> 17:13 20:6 24:10 50:19,21 51:25 52:17 88:1 <b>originally</b> 17:19 18:2 24:9 33:18 52:15 53:23 57:2 <b>Ormond</b> 38:6,14 38:24 40:7 88:7 123:17 <b>osmosis</b> 18:17 <b>ostracods</b> 89:9 <b>outcome</b> 171:11 171:12 <b>outcrop</b> 47:7 <b>outdated</b> 126:20 <b>outdoor</b> 146:16 <b>outfall</b> 12:9,12
--	---	--	--	--

12:22,25,25 13:12 20:2 38:18 83:6 <b>Outfitters</b> 146:15 <b>outgrow</b> 90:12 <b>outset</b> 72:5 <b>outside</b> 116:19 <b>overall</b> 11:24 38:17 <b>overlapping</b> 163:12 <b>overlook</b> 170:4 <b>overly</b> 135:4 <b>overnight</b> 162:20 <b>oversee</b> 25:19 <b>oversight</b> 16:13 144:12 152:16 153:2 <b>overstated</b> 148:12 <b>oversubscribed</b> 33:17 <b>overview</b> 5:24 9:20 <b>overwhelmingly</b> 64:13 76:3 <b>owner</b> 47:20,25	<b>panic</b> 121:23 141:16 <b>paper</b> 160:11 <b>paragraph</b> 51:22 52:13 <b>paragraphs</b> 153:1 160:19 <b>parameters</b> 157:16 <b>pardon</b> 91:22 <b>parks</b> 136:3,14 136:18 <b>parkways</b> 136:14 <b>parse</b> 100:4 <b>part</b> 7:1,6,16,25 10:1 14:5 26:20 30:9,9 33:18 37:12 45:11 46:22 48:23,25 50:23 51:9 52:3 63:16 64:6,12 64:14 65:22 67:19 70:8 72:7,20 75:20 76:15,20 89:23 96:20 100:4,9 105:18,19 107:2 109:16 112:20 114:1 115:15,25 116:14 119:1 119:19,20,25 120:5,6 131:21 138:8 144:25 145:10 157:21 164:7 170:23 <b>partial</b> 108:17 <b>participants</b> 133:20 <b>participated</b> 151:12 <b>participation</b> 148:9 <b>particular</b> 5:9 9:2 49:7 74:22	79:11,11,18 92:12 112:10 115:11 149:22 160:2 <b>particularly</b> 146:7 <b>parties</b> 174:4 <b>partners</b> 136:6 <b>parts</b> 12:10,12 87:17 109:17 <b>pass</b> 11:7 71:10 153:10 166:23 <b>passed</b> 117:18 139:14 <b>Patagonia</b> 140:22 <b>path</b> 131:11 <b>PATRON</b> 1:23 2:18 <b>Pedro</b> 92:22 <b>pelagic</b> 41:15 <b>people</b> 31:18 46:9 69:25 77:4 104:1 126:14 141:12 145:25 150:23 <b>percent</b> 36:23 60:6 64:14 67:11 68:13,23 75:8 89:11,24 89:24 102:15 102:16,17,19 102:21,22 103:4,6,15,20 134:13,14,15 143:1,7 148:12 <b>percentage</b> 41:7 101:3 106:15 <b>percentages</b> 39:8 90:4,6,7 91:11 <b>perception</b> 81:1 <b>perfect</b> 164:17 <b>perforated</b> 78:8 <b>perform</b> 57:7 114:6 116:3,6 117:13 128:8	<b>performance</b> 114:6 <b>performed</b> 57:11,13 73:3 115:24 <b>performing</b> 56:16 110:17 <b>period</b> 39:19 40:9 41:7 48:6 72:17 93:20 99:13 105:17 138:21 147:22 <b>periods</b> 148:19 <b>peripheral</b> 54:13 <b>perishable</b> 71:21 109:11 <b>permanent</b> 50:23 51:9,15 52:3,18 62:25 64:12 75:20 137:4 143:2,14 144:25 148:21 <b>permit</b> 1:8 2:6 5:20,24 9:15 9:16 10:3 11:19 18:2 19:12,13,19,21 20:3,5 29:22 29:24 30:2,13 30:14 50:19,20 50:21 51:12,25 52:17 54:23 58:25 72:11,13 72:23 75:14 106:9,16 107:2 107:11,14 110:1 111:25 118:9 119:4,10 119:20 120:1,5 120:8 124:14 124:15,21 125:7 126:13 126:13 127:4 127:14,19 131:15 135:24 137:20,22 138:5,6,9,13	139:11,17 141:7,10 142:7 148:21 152:1 152:17,17 154:14,19,25 155:22 156:2,4 157:21 158:7 158:13,16,19 158:25 160:17 160:18,19 161:5,10,20 162:2 164:8 165:25 167:7 167:20,21,25 168:2,3,5,6,13 172:9,11,16 <b>permittee</b> 167:14 <b>permits</b> 18:1,13 19:15,25 20:6 25:5 26:21 27:25 31:6 70:12,13 75:24 111:20 112:11 119:18 165:9 <b>permitted</b> 7:24 9:23 14:17 17:14,19,24,25 18:6 19:1,10 23:22 24:10 27:1,11 52:15 52:18 54:21 63:2 73:16 80:13 85:22 105:6,24 107:5 111:14,15,18 112:4 121:11 <b>permitting</b> 18:10 19:11,25 23:18 63:6,19 89:18 100:12 107:6 111:17 <b>persist</b> 67:17 <b>persists</b> 69:16 104:4 <b>person</b> 5:23 132:7 <b>perspective</b> 18:5
<b>P</b>				
<b>p.m</b> 175:10 <b>Pacific</b> 10:15 <b>Packard</b> 155:7 157:3 <b>page</b> 4:2 51:1 105:9 <b>pages</b> 125:9 <b>painful</b> 152:10 <b>pales</b> 125:10 <b>paltry</b> 125:9 <b>panel</b> 60:3 79:14 79:22,23 96:18 97:2 135:9 <b>panels</b> 46:22 47:11 95:22,23 96:19				

128:21 153:22 164:4,15 <b>perspectives</b> 157:5 170:9 <b>persuade</b> 8:25 <b>pertaining</b> 58:22 <b>Peter</b> 3:18 5:23 9:8 48:23 50:9 <b>phase</b> 106:11 <b>Phil</b> 3:24 22:10 46:3 168:16 <b>phone</b> 8:4 <b>physical</b> 126:7 <b>physically</b> 57:12 <b>phytoplankton</b> 146:19 <b>pick</b> 43:13 56:13 57:8 <b>picked</b> 130:18 144:2 <b>picture</b> 100:19 <b>piece</b> 79:7 100:5 128:9 155:25 156:1 <b>piecemeal</b> 129:2 <b>pieces</b> 111:22 <b>pill</b> 125:17 <b>pillars</b> 125:5 <b>pilot</b> 16:11 35:20 134:21 <b>pipe</b> 10:21,22 36:24 111:8,9 111:10 113:20 <b>pipeline</b> 83:5 146:8 <b>pipes</b> 11:10 12:11 42:22 68:17,21 78:8 <b>place</b> 45:20 71:19 72:19 73:25 74:18 83:17 97:11 118:16 136:13 146:10 174:17 <b>placed</b> 6:8 84:24 <b>placement</b> 84:11 <b>places</b> 46:4,5	136:19 <b>placing</b> 76:15 77:8 <b>plain</b> 153:23 <b>plan</b> 5:25 6:5 9:11 10:2 22:17,20 23:14 24:4,7,23 26:8 27:20 28:19,21 29:23 30:9,10 30:18,22 31:11 31:16 32:1,3 32:15 34:4 44:4 46:2,7 53:3,16 59:16 60:22 61:2 63:16,16,25 64:4,15,17,18 64:19,22 67:15 70:4 71:18,20 72:19 74:17 76:8,13 77:8 79:3 85:22 87:8,17 88:17 92:5 93:22 94:13,13,15 96:15,21 102:21,25 103:3 104:18 108:6,20,25 122:2 124:18 125:1 128:25 135:1 136:22 136:24 140:19 143:8 145:1,16 148:8,10 161:19 <b>planing</b> 65:3 <b>plankton</b> 13:21 15:23 38:14,15 39:13,14,16 40:5,12,18 41:6,15 45:21 88:9,15,22,24 88:25 89:1,22 90:21 123:17 123:24	<b>planned</b> 148:22 <b>planning</b> 17:15 30:14 33:1 51:10 65:1 67:2 69:20 75:3,19 76:4 76:12 87:8,9 87:18 102:22 137:2 148:1 151:11,13,20 <b>plans</b> 27:22 28:17 32:1 58:22 151:13 <b>plant</b> 7:3,4,24 10:6,11,14,22 12:21,24 16:5 16:25 17:12 35:18 42:19 49:10 51:1,3,4 51:6 54:16 65:9,10 70:11 70:13,14,20 71:5 72:6,14 72:16,20 73:16 75:1 76:13,15 80:22 81:3,17 81:20 84:15 87:12 89:17 90:13 93:4 94:12 98:15,24 99:3,10,13,25 104:17 105:6 105:15 106:15 107:12 108:21 111:14,15,18 111:20,24 122:3 124:14 125:20 126:6 126:11,19 127:5 134:2,17 137:1,4,7 144:2 146:4 151:21,24 156:18 159:14 160:11 165:8 <b>plant's</b> 121:10 <b>plants</b> 19:6,7	24:16 25:7 36:6 63:6 70:14 75:20 112:5 134:10 <b>play</b> 136:13,20 <b>plays</b> 64:3 <b>pleasant</b> 136:17 <b>please</b> 5:7,10 62:16 80:21 134:5 135:21 139:2 144:3 145:13 <b>pleasure</b> 31:6 <b>plot</b> 108:20,25 <b>plumbing</b> 143:10 <b>plus</b> 21:16 100:1 <b>podium</b> 152:5 <b>point</b> 13:11 15:12 24:2 27:7 32:10 45:25 47:1 51:16 52:24 54:1 58:12 61:15 67:5 69:25 71:1,20 74:1 75:4 77:24 82:12 91:17 92:13 93:3 94:6,11 94:15 96:17 98:21 99:6,15 101:19 102:10 104:12 108:24 111:8,12,13 113:17 117:6 126:7 127:9 129:9 131:7,10 134:22 139:7 152:9 156:8 160:22 163:4,5 164:15 172:1,2 <b>pointed</b> 103:11 <b>pointers</b> 43:19 <b>points</b> 24:19 116:11 152:13 <b>policies</b> 74:18	<b>policy</b> 6:5 17:2 21:19 36:5 45:18 47:10 63:1,4,17,18 63:22 70:5,16 75:1,15 76:24 93:18 96:15 103:6,10 104:10 111:16 121:4,21 122:3 122:7 124:2 126:24 131:24 156:3 163:17 <b>policy-making</b> 121:5 <b>Pollutant</b> 1:8 2:6 5:19 <b>populace</b> 67:10 <b>population</b> 49:15,22,23 50:1 64:14 87:1 90:12 103:22 143:5 143:11 <b>populations</b> 13:21 49:1,21 <b>Porter</b> 25:2 <b>portfolio</b> 29:13 34:3 50:23 52:4 75:18 134:2 148:3 <b>portion</b> 29:13 99:19 <b>portions</b> 81:3 108:21 <b>ports</b> 10:18 43:6 <b>posed</b> 159:11 <b>Poseidon</b> 124:17 137:15 <b>position</b> 61:10 119:2,5,6 133:1 134:18 134:19,25 156:7 160:21 <b>possibilities</b> 157:9 <b>possibility</b>
--	--	--	---	--

125:24 164:2 170:4 <b>possible</b> 23:2 31:22 66:19 70:6 112:24 154:8 156:25 157:18 160:18 161:16 169:25 <b>possibly</b> 143:14 171:6 <b>posted</b> 144:18 <b>postpone</b> 163:7 <b>posture</b> 28:9 <b>potable</b> 14:10 69:6 92:2 93:10 94:20 114:19 161:2 <b>potential</b> 6:23 49:19 50:7 55:14 73:9 91:8 95:2 107:22 108:19 135:14 161:14 167:20 <b>potentially</b> 17:16 20:17 34:21 76:9 85:16 99:9,22 107:9 126:12 <b>power</b> 16:5,25 19:6 25:7 36:6 89:17 108:23 <b>Powers</b> 3:19 7:23 9:13 17:20 39:21,21 40:10,14,16,23 41:3,9,14,23 42:12,17 44:21 55:15 170:17 <b>practical</b> 20:10 93:16 118:4 166:25 <b>practice</b> 112:14 <b>practices</b> 63:19 136:8 <b>preceded</b> 30:16 72:11	<b>precedent</b> 29:5 122:14 126:25 131:24 <b>precious</b> 127:1 136:25 <b>preexisting</b> 111:24 <b>prefer</b> 160:17 <b>preferable</b> 59:22 <b>preference</b> 46:13 59:21 164:19 <b>preferences</b> 46:7 <b>Preliminary</b> 82:8 <b>premise</b> 44:24 <b>prepare</b> 157:9 <b>prepared</b> 32:24 87:25 123:9 166:24 <b>preparing</b> 33:2 92:7 <b>present</b> 14:11 129:24 136:7 <b>present-day</b> 127:21 128:13 131:25 <b>presentation</b> 9:7 9:9,22 14:22 14:24,25 15:1 29:24 48:23 54:12 62:24 120:22 <b>presented</b> 74:13 76:23 85:4 90:7 119:14,17 <b>presenting</b> 62:18 <b>presents</b> 126:5 <b>preserve</b> 27:19 81:15 130:9 <b>preserved</b> 66:11 <b>preserving</b> 65:18 <b>President</b> 33:20 <b>pressure</b> 46:13 46:17 78:14,19 <b>presumably</b>	168:23 <b>presume</b> 130:2 <b>pretend</b> 122:15 122:18 130:2 131:22 139:18 139:24 <b>pretense</b> 126:20 <b>pretty</b> 33:6 39:22 40:1 60:14 62:3 66:20 74:8 87:11 102:18 103:2 112:22 <b>prevent</b> 151:23 158:4 <b>previous</b> 66:15 76:23 88:13 <b>previously</b> 88:12 148:24 <b>primarily</b> 25:16 41:20 147:21 150:6 <b>primary</b> 89:10 94:3 <b>prior</b> 33:10 44:14 53:18 72:5 86:3 132:22 <b>priority</b> 32:17 <b>probably</b> 19:17 28:9 39:6 41:24 117:7,15 130:18 <b>problem</b> 49:16 70:2 111:3 122:1 128:3 139:10 155:23 156:15 166:5 174:16 <b>problems</b> 108:15 108:22 135:2 141:10,17 142:6 <b>procedural</b> 5:16 8:2 28:9 <b>procedure</b> 19:20 40:1	<b>proceed</b> 9:4 114:11 128:4 154:24 164:1 <b>proceeding</b> 26:17 31:22 <b>proceedings</b> 1:15 2:14 25:13 113:15 <b>process</b> 8:22 11:7,8 23:7 49:3,18 58:11 65:8 76:15 79:9,25 89:18 92:7,24 97:21 100:6,12 106:14 112:6 113:12,24 117:22 132:11 137:7 138:18 140:1,8 142:8 165:5,7 174:17 <b>processes</b> 64:19 64:19 71:13 97:12 99:20 <b>processing</b> 25:8 <b>produce</b> 78:17 126:9,12 <b>produced</b> 18:11 18:12 71:15 106:3 <b>producing</b> 81:9 98:23 <b>production</b> 49:12 70:22 73:8,14,15 76:1,16 77:8 84:12 100:2 105:25 106:8,8 106:17 116:17 117:9 126:10 <b>productive</b> 49:4 49:19 60:2 95:16 <b>productivity</b> 13:20 83:23 <b>professional</b> 136:21	<b>program</b> 51:7 76:19 81:14 86:23 106:24 107:2,23 148:11 150:10 <b>programs</b> 139:4 146:16 <b>progress</b> 163:8 164:16 <b>project</b> 14:4 16:11,12 32:16 33:16,17,21 35:20,25 36:1 36:9,13 41:20 45:15 52:10 53:13 55:11,15 55:18,19,21,24 56:1 57:4 59:12,14 60:19 61:5,20 62:20 63:9 72:11 74:11 79:9,11 79:18 88:14 90:1 91:5 95:13,18 109:25 112:21 113:7 114:17 115:3,21 116:4 116:8,10 132:18,21,25 133:8,20 135:9 137:15,16 146:11 147:13 150:17 159:14 <b>project's</b> 124:23 <b>project-specific</b> 91:18 <b>projected</b> 121:25 <b>projecting</b> 48:3 <b>projector</b> 37:20 <b>projects</b> 13:23 14:19 32:16,19 55:16,19 95:21 96:12,13 134:22 136:1 146:6,8,10
---	---	---	--	---

<b>prolonged</b> 145:3	31:21 41:19	<b>provisions</b> 47:16	<b>push</b> 62:7 71:9	50:17,25 52:14
<b>promised</b> 152:6	46:6,9 59:25	119:4,18,20	87:9 174:11	53:1,24 54:12
<b>proper</b> 122:16	61:21 130:1	120:4 167:12	<b>pushing</b> 125:11	54:13 55:12
<b>properly</b> 118:17	157:21 161:2	<b>proximity</b> 101:9	<b>put</b> 9:24 10:1	56:8 57:22
139:11	166:22,23	<b>prudent</b> 134:3	15:15 16:20	58:3 59:2,6
<b>proponent</b> 53:13	174:22	<b>public</b> 1:2 4:2	19:19 21:7	64:11 81:19
<b>proponents</b> 44:9	<b>proposition</b>	6:9,22,24 15:1	23:19 24:3	87:19 90:10
61:5 108:8	147:3	32:25 37:21	37:9 38:9	96:5 99:8
<b>proposal</b> 17:5	<b>protect</b> 126:17	62:17 64:13,19	42:21,22,23	102:18 107:17
26:5,25 44:13	136:24	64:20 65:3	43:4 47:3,6	110:3 112:8
45:1 48:14	<b>protected</b> 36:14	79:7 81:1	59:25 60:15	113:21 114:20
52:8 108:2	49:5,10 54:1	96:12 117:24	63:12 64:12	115:12 116:25
140:22 164:22	56:4	120:24 125:6	69:23 70:25	120:9 130:10
168:18,20	<b>protecting</b> 54:9	136:7,25	71:20 80:19	162:14 166:25
<b>proposals</b> 70:19	<b>protection</b> 46:16	139:23 140:1,8	81:15 82:7	172:18 174:19
105:18 125:19	49:5 110:16	143:7 144:17	92:10 95:15	<b>questions</b> 5:14
140:18	111:3 136:18	144:19,19,23	97:20 100:18	5:15 7:2,3
<b>propose</b> 9:15	137:13 150:13	147:19 159:4	101:15,24	14:24 15:5
57:21 60:22	<b>protections</b>	159:12 173:24	108:20 114:16	17:10 22:6
77:15	21:15	174:14	125:10 129:11	39:3 40:12
<b>proposed</b> 13:16	<b>prove</b> 59:4	<b>pull</b> 68:6	138:18 139:17	43:2 48:19
16:12 17:1	<b>provide</b> 5:7	<b>pulled</b> 42:25	146:10 149:23	54:11,25 55:2
23:9,14 24:8	47:21 67:22	62:6	154:10 156:1	57:18,23 73:1
26:8,8,15,19	75:14 96:8	<b>pulling</b> 81:10	159:17 161:5	76:25 77:16,18
27:13,19 28:24	110:2,15	<b>pump</b> 71:9,17	162:2 165:3,9	90:8,16 97:24
29:10 36:5,13	113:18 136:15	81:10,11	168:5,12,16	106:21 114:9
43:12 44:4,5	136:17,19	<b>pumping</b> 158:12	<b>putting</b> 63:9	114:10 120:17
44:11 46:2	148:18,23	<b>pumps</b> 81:4,5	110:9 119:3	120:19,23
47:12,25 55:9	150:17 157:19	107:8 109:4,16		128:5,18,20,22
61:2,8 63:1,4	164:8	<b>purchase</b> 68:16	<b>Q</b>	129:4 139:19
63:20 71:23	<b>provided</b> 7:22	<b>purchased</b> 68:18	<b>quality</b> 1:4 2:2	153:13 162:21
105:23 114:14	21:15 38:3	<b>purchases</b>	3:3 22:11,16	162:22 163:6
120:11 121:13	55:24 71:6,6	104:11 133:14	31:1,25 32:18	169:15 171:16
122:15,20	82:7 87:24	133:16	74:10 88:3	<b>queue</b> 132:11
124:3,13 125:3	88:1,24 97:1	<b>pure</b> 139:25	136:1 147:11	<b>quick</b> 116:25
126:2 127:3	110:1	<b>purposes</b> 48:11	<b>quandary</b> 126:5	149:2 153:15
134:2 142:5	<b>provider</b> 91:1	<b>pursing</b> 131:8	<b>quantified</b> 89:7	<b>quickly</b> 32:20
144:4 155:11	<b>provides</b> 12:1	<b>pursuant</b> 62:12	<b>quantity</b> 126:9	70:23 127:11
158:23 160:23	124:15	144:12	<b>quarterly</b> 40:21	170:20
161:4 166:9	<b>providing</b> 29:4	<b>pursue</b> 48:21	<b>queried</b> 168:20	<b>quite</b> 136:2
<b>proposers</b>	135:13	104:11 144:1	<b>question</b> 9:14	155:13 169:18
105:19	<b>proving</b> 122:21	<b>pursued</b> 64:5	15:11,17,18	170:15
<b>proposes</b> 21:16	<b>provision</b> 47:17	131:19	18:4 20:1	
161:1	47:25,25 54:4	<b>pursuing</b> 64:3	21:23 22:19	<b>R</b>
<b>proposing</b> 13:24	119:12	131:4	29:19,20 31:10	<b>R3-2010-0011</b>
14:9 21:4	<b>provisional</b>	<b>pursuit</b> 125:12	31:14 38:1	1:10 2:8 5:22
26:12 28:15,16	161:6	148:13	42:17 45:2,24	<b>radar</b> 30:19

<b>rain</b> 70:24 76:11 87:14 143:12 143:13 <b>rainfall</b> 104:14 <b>rains</b> 9:25 72:17 125:16 <b>raise</b> 50:25 <b>raised</b> 48:22 49:16 <b>raising</b> 51:17 <b>ran</b> 145:18 <b>range</b> 23:22 85:4 85:13 86:4 92:1 108:5 <b>ratchet</b> 25:22 <b>rate</b> 6:23 78:24 83:9 113:22 <b>rates</b> 106:13 <b>rationing</b> 104:8 <b>Ray</b> 4:5 132:13 132:15 <b>reach</b> 27:18 <b>reached</b> 147:23 <b>reaction</b> 38:11 114:21 <b>reactivate</b> 10:7 27:14,22 30:4 <b>reactivated</b> 51:6 <b>reactivating</b> 127:11 <b>reactivation</b> 28:12 112:10 118:19 151:24 <b>read</b> 7:12,14 26:12 37:15,18 39:22 46:1 47:15 82:6 149:6 164:10 <b>reading</b> 7:14 17:15 20:20 38:3 61:4 83:17 <b>reads</b> 51:2 <b>ready</b> 9:7 70:7 94:7,11 <b>Reagan</b> 33:20 <b>real</b> 57:21	124:16 <b>realities</b> 60:23 <b>reality</b> 141:13 <b>realize</b> 55:3 <b>realized</b> 30:21 <b>really</b> 8:15 9:2 20:2 24:22 26:16 29:9 30:19 32:12 34:21 35:8 42:1 57:10 63:10 64:23 66:22 69:11,17 69:17,22 70:3 70:16,23 74:24 77:11 78:6 79:6 85:20 86:10,12,19,22 87:3,5,9 95:11 97:10,22 102:12 104:5 105:11 111:16 118:9 125:16 129:20 147:2 150:17 151:24 152:10 155:24 156:23 157:20 160:22 161:17 161:19 165:11 165:12 <b>realm</b> 162:17 <b>reason</b> 12:19 24:24 46:18 58:24 92:23 103:11 107:17 108:4 109:16 153:24 <b>reasonable</b> 93:19 128:2 140:10 163:18 <b>reasonably</b> 125:17 <b>reasons</b> 47:6 58:19 96:2,23 98:22 <b>rebates</b> 142:22 <b>Rebecca</b> 3:21	8:11 62:17 80:19 86:6 <b>recall</b> 57:14 <b>receipt</b> 6:17 <b>received</b> 6:11,22 7:8 107:1 <b>receiving</b> 70:19 <b>recess</b> 62:15 132:5 <b>recognize</b> 28:16 46:19 112:21 113:5 121:23 129:21 155:15 <b>recognized</b> 72:21 148:1 <b>recognizing</b> 148:22 <b>recommend</b> 60:8 154:19 165:24 <b>recommendati...</b> 14:20 59:8 75:13 96:23 115:16 145:14 146:5 155:8 156:23 160:9 <b>recommendati...</b> 147:3 156:25 160:10 <b>recommended</b> 70:15 83:11,24 84:6 <b>recommending</b> 142:11 <b>reconcile</b> 156:16 <b>reconfirming</b> 73:11 <b>reconnected</b> 25:14 <b>reconvene</b> 57:23 132:4 <b>reconvened</b> 46:23 <b>reconvey</b> 175:4 <b>record</b> 7:6,17,21 7:25 8:1,3 27:25 37:16,18	53:22 62:10 72:7 87:16 105:5,11 134:8 147:12 149:5 149:13,13 171:2 <b>records</b> 7:16 90:24 143:17 <b>recoup</b> 81:23 <b>recourse</b> 117:6 117:12 <b>recovery</b> 42:5 55:19 106:13 <b>recreate</b> 42:4 136:19 <b>Recreation</b> 136:4 <b>recycled</b> 8:14 65:4,6 69:5,5 75:11,12 131:8 140:25 171:2 <b>recycling</b> 151:15 <b>Redmond</b> 4:4 120:20,25 121:3 128:10 128:17 129:14 129:25 130:14 130:19,22 131:7,20 144:20 <b>reduce</b> 16:21 78:19 107:20 110:21 111:7 132:6 136:10 142:24 <b>reduced</b> 68:1 143:1 <b>reducing</b> 110:5 112:13 113:10 <b>reduction</b> 13:25 143:2,2 <b>reef</b> 60:15,15 <b>Rees</b> 4:15 149:16,23 150:2 151:18 <b>reference</b> 88:13 107:1	<b>referenced</b> 20:8 82:20 91:16 108:12 <b>referencing</b> 90:25 <b>referring</b> 51:4 59:15 90:19 <b>refers</b> 51:21 74:7 <b>reflected</b> 76:17 120:4 <b>reflects</b> 54:5 <b>reform</b> 157:12 <b>refresher</b> 77:16 <b>refuge</b> 41:24 <b>refurbishing</b> 71:24 <b>refurbishment</b> 77:23 <b>regard</b> 51:14 116:15 117:11 119:22 164:6 <b>regarding</b> 5:14 9:10 29:21,24 62:12 <b>regardless</b> 111:5 <b>regards</b> 50:18 55:11 116:18 119:21 <b>region</b> 34:22 38:20 55:17 153:17 <b>region's</b> 29:13 <b>regional</b> 1:4 2:2 14:12 24:5 25:18,21 26:23 28:1,3,15,16 30:20 35:1 47:17,22 48:1 48:2 51:2,19 53:6,7 62:24 63:8,12 72:12 100:25 124:13 124:17 125:1,4 125:8 147:11 148:5,16,18,18 150:1 151:25
--	--	---	--	---



158:11 168:18 168:21,23 169:2 <b>regs</b> 139:7,12 <b>regular</b> 107:22 144:16,18 <b>regulate</b> 25:19 <b>regulations</b> 169:24 <b>regulatory</b> 75:16 <b>rehabilitation</b> 151:16 <b>reinforce</b> 96:11 <b>reinstalled</b> 116:15 <b>reiterate</b> 50:10 <b>reject</b> 127:3 <b>rejected</b> 123:1 <b>related</b> 49:1 73:1 88:3,5,21 <b>relates</b> 24:4 88:4 <b>relating</b> 54:13 <b>relation</b> 124:4 <b>relatively</b> 13:20 16:3 <b>relax</b> 136:19 <b>Release</b> 150:4 <b>relevant</b> 115:15 119:11 120:1 <b>reliability</b> 34:23 144:2 <b>reliable</b> 147:18 148:14 <b>reliance</b> 69:3 141:20 <b>reliant</b> 70:6 <b>relied</b> 38:5,21 66:15 <b>relief</b> 72:18 <b>rely</b> 66:22 91:9 147:21 <b>relying</b> 47:10 50:11 91:6 104:7 <b>remaining</b> 61:9 61:14 78:5 108:18	<b>remains</b> 96:16 <b>remind</b> 22:4 <b>remove</b> 71:13 113:25 <b>removed</b> 71:23 107:7 109:2,12 <b>renewable</b> 161:10,20 <b>renewal</b> 10:6 29:24 58:8,9 72:22 <b>renewals</b> 10:3,5 29:22 <b>renewed</b> 58:9 72:14 103:4 <b>reopen</b> 15:8 99:10,13 160:11 <b>reopener</b> 138:7 <b>reopening</b> 15:15 23:16 173:19 <b>reoperated</b> 99:4 <b>repair</b> 70:11 71:23 107:14 <b>repeat</b> 6:13 56:22 81:19 <b>replace</b> 61:9 69:6 <b>replaced</b> 81:24 109:3,7,10,13 142:23 <b>replacing</b> 65:9 81:11 <b>report</b> 15:21 34:19 39:1 48:1,5 62:7 82:8,9 87:25 116:19 117:14 118:24 123:5 143:15 <b>reported</b> 1:22 2:18 91:12 104:21 <b>reporter</b> 2:19 35:7 66:21 <b>reporting</b> 28:20 <b>reports</b> 20:8,20	85:6 <b>represent</b> 103:19 <b>representing</b> 170:8 173:6 <b>represents</b> 65:21 92:21 <b>request</b> 91:5 125:19 131:21 154:4 163:19 171:15 <b>requested</b> 127:10,10 133:10 <b>requesting</b> 120:20 128:11 162:25 <b>requests</b> 148:20 <b>require</b> 17:2 25:23 27:4 44:5,6 46:1,4 47:19 48:15 53:17 61:10 78:16 108:22 112:25 116:3,9 123:4,11 126:18 127:17 128:12 130:5 138:8 162:22 167:1 168:18 169:18 <b>required</b> 17:5 46:5 47:9 49:24 54:23 66:5 71:15 79:18 101:13 111:2,2 115:24 118:24 123:7 123:19 124:8 124:11,17,20 124:22 127:23 137:17 139:15 154:17 159:10 168:11 169:1 <b>requirement</b> 17:4 118:18 127:19 131:16	138:12 157:25 168:3,5 169:5 <b>requirements</b> 1:7 2:5 5:19 32:7 44:9 116:13,20,21 116:22 119:19 124:19 143:9 145:2 164:11 172:11 <b>requires</b> 38:9 61:12 122:24 123:20 139:16 159:7,8 162:6 167:8 <b>requiring</b> 44:23 46:11 107:22 127:24 135:5 167:23 <b>rescinded</b> 127:6 <b>research</b> 92:10 94:5 134:10 135:12 <b>Reservoir</b> 66:8 67:4 145:8,9 151:4 <b>resident</b> 6:19 134:9 136:5 152:12 153:22 <b>residents</b> 64:1 75:17 77:12 136:10 <b>resolution</b> 27:19 153:11 166:16 166:23 <b>resolutions</b> 116:8 <b>resolve</b> 28:22 63:22 69:21 70:16 141:11 166:19 171:1 <b>resort</b> 75:2,3 76:14 104:24 104:25 131:12 145:6 <b>resorting</b> 142:7 <b>resource</b> 59:10	69:6 136:25 143:18,18 <b>resources</b> 33:22 50:5 59:3 63:9 64:7 94:1 97:17,18 98:7 126:15 140:25 150:15 <b>respect</b> 7:21 107:25 173:6 <b>respected</b> 112:22 <b>respond</b> 30:17 50:9,10 65:19 171:7 <b>responded</b> 67:10 142:20 <b>response</b> 51:17 51:17,22 52:14 105:7 125:9 127:12 128:19 128:23 129:1 132:9 140:16 159:4 174:14 <b>responses</b> 33:2,3 33:5 52:9 129:2 <b>responsibility</b> 60:9 127:17 <b>responsible</b> 132:17 150:6,9 150:13,18 <b>responsiveness</b> 125:4 <b>rest</b> 23:4 62:2 89:10 141:13 <b>restarting</b> 137:7 <b>restoration</b> 55:15 56:1 95:20 124:22 136:1 <b>restore</b> 56:1 <b>restored</b> 56:5 <b>restrict</b> 173:24 <b>restrictive</b> 135:5 <b>result</b> 31:15 65:8 84:9 88:5,16
--	--	---	---	---

96:1 123:15 135:6 151:3 167:9 172:19 175:2 <b>resulted</b> 83:13 143:2 <b>resulting</b> 48:3 <b>results</b> 38:25 39:4 76:9 89:3 89:5,7 162:7 167:15 <b>retired</b> 135:25 <b>retroactive</b> 121:15 122:9 122:17 <b>return</b> 94:9 95:4 <b>returning</b> 94:22 <b>reuse</b> 14:11 76:19 92:2 93:11 94:20 114:19 161:2 <b>reverse</b> 18:17 <b>review</b> 7:19 33:5 49:9 55:16 70:19 79:14 92:8 156:19 162:23 <b>reviewed</b> 38:12 82:13 140:21 <b>revise</b> 158:6,19 <b>revised</b> 105:9 142:1 <b>revisions</b> 124:20 <b>revisit</b> 166:22 <b>revisited</b> 166:12 <b>rewrite</b> 171:21 172:15 <b>rich</b> 50:3 92:14 136:11 <b>rid</b> 31:12 <b>right</b> 5:7 48:18 52:11,12 53:21 59:18 65:10,14 68:8 69:10 77:18 79:7,17 82:14 83:17 85:22 95:11	96:13 100:16 109:19 119:8 125:25 129:4 130:9,16,22 141:21 152:9 156:19 166:24 172:5,17 173:8 <b>rights</b> 6:10 68:20 150:14 150:14 <b>risk</b> 165:3 <b>River</b> 33:19,20 150:8,10 <b>RO</b> 18:20 71:11 109:11 <b>road</b> 21:19 141:17 162:6 166:13,21 167:1 <b>Robert</b> 132:14 134:5,6,8 <b>Robertson</b> 6:13 <b>robust</b> 55:13 <b>rocky</b> 11:13 12:14 47:7 <b>role</b> 62:23 64:3 <b>roll</b> 91:21 <b>room</b> 157:23 <b>rotated</b> 81:5 <b>rough</b> 106:2 <b>roughly</b> 40:23 106:3 137:14 <b>routine</b> 70:10 80:19 <b>rug</b> 122:8 <b>Ruiz</b> 4:12 142:14 144:6,7 144:8 145:18 151:9 <b>rule</b> 18:24 61:21 <b>rule-making</b> 31:22 <b>rules</b> 17:1 32:1 36:6 <b>ruling</b> 163:12 <b>run</b> 77:5 100:1 165:23	<b>running</b> 105:15 105:16,20 152:20 172:5 <b>rush</b> 158:18 <b>rushing</b> 65:11 121:24 <b>Russel</b> 4:12 142:14 144:6,8 <hr/> <b>S</b> <b>S</b> 3:8 <b>Sacramento</b> 33:20 <b>sacrificial</b> 122:7 <b>safe</b> 8:9 136:19 <b>safety</b> 145:2 147:19 <b>sake</b> 117:1 <b>sampling</b> 40:19 <b>San</b> 66:8 92:22 124:13,17 125:4,8 159:10 <b>sanctuaries</b> 146:23 <b>Sanctuary</b> 49:9 60:1 146:3 <b>sand</b> 21:10 43:6 129:19 <b>sandy</b> 11:12 12:12 36:20 47:7 60:16,16 80:15,18 <b>Santa</b> 1:3,9,16 2:1,7,16 3:23 5:1,20,25 6:10 6:19 7:1 10:12 10:16 16:11,12 23:3 26:10 27:21 30:4,8 33:8,24 34:14 34:21 35:18,25 36:1,3,9,15 40:6 49:7,17 55:17 62:18 64:5,8 68:3 74:21,21,23 86:15 92:12,22	96:14 97:14 98:5 102:11 103:2,23 114:3 116:7 120:21 121:9,23 122:1 122:3,6,11 125:11,17 126:4,6,15,16 126:17 128:3 132:19,20,22 133:21,22 134:3,9,12 136:3,5,5,6,11 137:25 139:10 140:21 141:3,6 141:14 142:18 143:22 144:8 144:10 145:23 146:1,23 147:13,18 148:15 150:8 150:10 151:1 152:13 154:16 163:9 165:17 <b>sat</b> 7:11 <b>satisfactory</b> 131:17 <b>satisfied</b> 31:18 74:6 91:7 <b>satisfy</b> 45:15 <b>save</b> 66:24 <b>saved</b> 67:20 <b>saves</b> 104:22 <b>saving</b> 67:7 136:8 <b>saw</b> 38:25 49:3 75:23 91:11 <b>saying</b> 42:8 61:7 77:6 93:2 105:8 111:8 115:1 116:2 130:6 131:1 137:24 154:16 166:16 168:7 169:3,4 172:12 <b>says</b> 17:15 26:20 37:12 43:20	47:17 51:5,7 115:9 116:15 122:25 131:19 161:6 175:7 <b>scale</b> 20:17 55:21,23 80:11 <b>scaled</b> 36:25 <b>scenarios</b> 145:11 <b>schedule</b> 32:21 70:18 <b>schematic</b> 10:10 71:5 <b>Schneider</b> 3:23 62:21 74:20,20 77:4 93:7,24 98:8 99:17 100:17 114:23 117:17 118:11 <b>school</b> 146:16 <b>science</b> 79:14 <b>scientific</b> 16:6 91:9 124:1 134:16 135:8 <b>scope</b> 35:1 <b>scramble</b> 121:24 155:3 <b>screen</b> 11:6 13:14,18 35:14 37:9 54:17 60:6 107:20 108:1,19,20 110:4,5,10,10 110:15,20 114:3,16 120:11 <b>screened</b> 123:14 <b>screens</b> 11:2 13:24 14:2 16:20,24 17:3 28:17 91:24 107:8,9 109:2 109:5 116:13 118:16,16 <b>sea</b> 9:12 21:9 97:25 168:11 <b>seabed</b> 78:10,17 79:19 114:19
---	--	---	--	--

160:25 <b>seabeds</b> 78:13 78:14 <b>seasonal</b> 39:24 40:15 88:11 <b>seat</b> 117:23 <b>seawater</b> 10:25 10:25 11:25 12:23 25:8,17 43:23 68:8 139:6 146:9 <b>second</b> 13:4 36:4 36:7 50:16 51:7 71:10 85:6 92:3 125:22 127:13 172:25 <b>Secondly</b> 173:10 <b>seconds</b> 77:2 <b>section</b> 7:17 9:17 11:18 19:20 24:11,25 25:3 26:23,24 30:22 43:19 44:19 45:9 51:5 58:15 61:12 115:16 119:13 121:9 122:5 123:4 124:19 125:6 130:6 138:10,22 167:17 <b>sections</b> 46:1 <b>secure</b> 69:13 81:7 <b>secured</b> 69:12 131:15 <b>securing</b> 131:6 <b>security</b> 148:23 <b>SED</b> 33:6 <b>see</b> 16:16 17:24 19:11,12 20:7 27:18 29:4 30:8 31:23 35:8 38:3,25 45:14 47:1 50:2,11 56:14	57:20 65:5,21 66:4,13 67:2,7 67:12,17 69:2 69:11 70:22 73:13 75:9 84:1 90:14 97:20 100:7 118:4 131:18 131:20,25 133:19 138:21 142:21 146:18 153:21,23 157:9 159:19 160:20 166:16 171:18,20 173:18 <b>seeing</b> 8:13 31:7 50:19 59:6 <b>seeking</b> 30:4,7 107:13 <b>seen</b> 75:21 106:25 121:5 141:13 146:6 <b>sense</b> 26:13 29:2 29:7 78:18 83:22 100:16 106:7,13 130:17 141:9,9 166:17 167:4 168:1,1 174:5 <b>sensitive</b> 12:13 156:7 <b>sentence</b> 66:21 <b>separate</b> 8:17 74:16 125:5 167:21 <b>separately</b> 124:20 <b>septic</b> 57:7 <b>sequence</b> 86:2 <b>series</b> 42:22 43:7 57:23 73:3,10 78:8 <b>serious</b> 77:10 115:4 <b>seriously</b> 75:9 115:7 141:3	<b>serve</b> 95:16 109:6 <b>served</b> 132:21 141:2,4 151:8 <b>service</b> 91:1 150:20 <b>services</b> 92:18 <b>session</b> 62:1,8,12 <b>sessions</b> 165:19 <b>set</b> 46:6 116:5 126:18,24 129:1 149:19 <b>setting</b> 37:25 62:23 <b>settle</b> 142:6 <b>seven</b> 114:23 117:17 135:10 <b>severe</b> 67:3 103:8 150:18 <b>severely</b> 103:17 151:5 <b>shade</b> 136:18 <b>shallow</b> 73:6,18 82:5,18 83:10 84:4 102:14 129:19 <b>shaped</b> 64:8 <b>share</b> 10:14 126:1 128:21 133:24 170:3 <b>sharing</b> 104:25 148:16 <b>Shawn</b> 3:20 115:10 <b>she'll</b> 170:19 <b>sheet</b> 141:24 <b>sheets</b> 14:21 <b>Sheila</b> 4:11 142:13,17 <b>shifting</b> 50:22 <b>shocked</b> 153:12 <b>shore</b> 73:19 101:9 <b>shoreline</b> 84:8 84:21,22 <b>short</b> 24:7 81:23 132:3	<b>short-term</b> 157:14 <b>shortage</b> 69:14 69:21 76:6 103:13 151:23 171:1 <b>shortages</b> 148:19 <b>shortcuts</b> 157:18 <b>shortest</b> 83:18 <b>shortfalls</b> 121:25 <b>Shorthand</b> 2:19 <b>shot</b> 161:10 <b>show</b> 46:15 51:25 99:14 127:18 134:19 146:5 <b>showed</b> 16:14 35:20 84:10 103:12 143:8 163:23 <b>showerheads</b> 142:23 <b>showing</b> 59:7 <b>shown</b> 20:5 75:7 162:8 <b>shows</b> 50:13 71:7 161:7 <b>sic</b> 93:8 <b>side</b> 6:25 16:16 96:24 157:23 <b>Sierra</b> 134:14 <b>significance</b> 61:3 142:3 <b>significant</b> 15:14 15:23 16:19 34:21 50:2,7 61:11,19 75:21 89:6 99:19 107:19 117:16 123:15 124:24 153:5 164:9 <b>significantly</b> 111:6 <b>similar</b> 34:13 38:15 40:5	89:19 101:23 104:20,21 107:8 <b>similarly</b> 24:16 103:25 133:7 <b>simply</b> 47:10 126:1 171:21 <b>simultaneously</b> 118:14 <b>single</b> 31:20,20 <b>sit</b> 171:20 <b>site</b> 11:22 12:4,6 12:15 22:24 23:4,10 28:5 38:13,23 44:2 44:16 45:12 55:13 56:13,17 60:25 61:6 81:7 88:9 99:20 122:21 123:2 124:9 125:3 127:22 130:17 132:1 <b>site-specific</b> 38:9 91:17,19 135:4 <b>sited</b> 125:9 <b>sites</b> 12:15 55:14 122:25 130:13 <b>siting</b> 19:12,13 129:8 130:12 130:21 159:7,9 <b>sitting</b> 156:14 <b>situation</b> 21:13 24:24 29:15 31:4 46:18 47:8,9 60:24 69:22,23 112:23 126:4 155:22 163:23 <b>six</b> 69:17 87:10 125:9 142:19 <b>six-year</b> 87:9 <b>size</b> 11:6 20:18 21:4 36:11 104:17 110:5 111:1,9,9 112:13
---	---	---	---	--

<b>sizeable</b> 43:11	140:3 154:10	<b>speaker</b> 5:6,7,9 120:20 142:13	<b>sped</b> 87:5	152:14,15,15
<b>sized</b> 113:20	<b>solutions</b> 113:1	<b>speaker's</b> 135:17	<b>spelled</b> 19:21	153:11 154:20
<b>sizes</b> 108:11	<b>somebody</b> 19:6 46:14 66:10	<b>speakers</b> 77:16 158:2	<b>spend</b> 14:3 59:10 64:23 72:25 99:11,15 154:20 162:11	155:5,21
<b>slant</b> 43:8 59:4 59:11 101:16 101:20,23 102:2,5 134:22	<b>someplace</b> 42:4	<b>speaking</b> 8:21 31:25 35:8 66:20 78:8,16 118:14 135:18	<b>spending</b> 99:9 102:5 126:8	156:23 157:1,4 157:7 158:6,24 159:4,11 160:4 162:20,25
<b>slants</b> 108:13	<b>somewhat</b> 44:22 54:13 68:1 166:10 171:23	<b>speaks</b> 38:23 105:10,24 111:13	<b>spent</b> 70:10 140:18	163:15 164:5 166:18 167:5 168:1 169:18 170:17 171:8,8 171:15,19
<b>slide</b> 35:12 37:10 64:23 72:1,25 73:13 84:10	<b>soon</b> 65:16 125:16 127:6	<b>special</b> 63:7	<b>spilling</b> 98:20	172:1,5 173:1 173:11,20,21 174:19
<b>slides</b> 15:21 86:6	<b>sooner</b> 87:17	<b>species</b> 14:6 36:20,21 39:6 39:8 40:5 41:8 41:11,13,15,21 41:21,22,23 42:1,7,9,11 45:20 60:15 95:10,17 150:24,24	<b>spin</b> 168:17	<b>staff's</b> 38:11 106:2 145:14
<b>slightly</b> 168:16	<b>sorry</b> 30:25 48:2 59:18 81:19 99:1 149:16,23 151:18	<b>species-by-spe...</b> 101:4	<b>spoken</b> 8:9	<b>stage</b> 67:9,11 94:8 138:4
<b>slipshod</b> 126:24	<b>sort</b> 29:12,14 34:20 35:1 66:17 103:15 159:18,20 161:10 163:21 167:24	<b>specific</b> 11:18 15:3 32:2 38:23 49:14 54:4 56:17 60:25 86:1 88:9 91:5 97:24 108:1 117:11 173:25	<b>spot-market</b> 70:1	<b>stakeholder</b> 97:12
<b>sliver</b> 65:5	<b>sound</b> 43:8 148:14 155:12	<b>specifically</b> 22:19 88:21 159:5	<b>spring</b> 32:22 127:16	<b>stakeholders</b> 170:2,8,11 171:11
<b>slot</b> 11:6 108:3 108:16 111:1,4	<b>sounds</b> 118:13	<b>specification</b> 106:12	<b>square</b> 42:21 43:3	<b>standard</b> 21:2 21:21,22 22:2 40:1,1 63:20 109:20 123:16
<b>slot-sized</b> 108:5	<b>source</b> 17:23 36:23 38:3 56:2 84:25 101:13 143:13 143:19,21	<b>specifications</b> 114:6	<b>squishy</b> 126:3	<b>standards</b> 21:17 23:10,13 45:12 45:16 128:7 129:24 160:12
<b>Slough</b> 14:4 55:11,18 115:3 138:17	<b>sources</b> 91:16 133:3 143:11 148:25 150:16 151:5,19	<b>specimen</b> 136:17	<b>stack</b> 149:17	<b>standby</b> 27:12 72:19 81:12
<b>slow</b> 13:4	<b>south</b> 96:11 123:18 131:8 147:14 148:15 150:8,9	<b>speculate</b> 80:1 156:12	<b>staff</b> 3:18 5:23 7:14 9:7,9 14:25 15:21 16:2 19:17 20:1,8,20 22:5 27:17,18,24 29:23 30:20 31:5,7,12 32:11,18,21 34:18 38:4 39:1,5 43:18 47:18 48:14 51:18,19,20,24 52:7 55:17 63:8,8 70:15 72:18 74:13 75:12 76:18,21 87:16 93:3 94:1 95:14 96:22 98:9 100:25 105:6 108:4,7 118:6 121:7 123:4 124:3 125:23 127:20 128:19 128:23 129:1	<b>started</b> 30:12 92:18 99:3,12 102:6 118:2 139:5
<b>slower</b> 36:5	<b>sound</b> 43:8 148:14 155:12	<b>speculation</b> 139:25	<b>spring</b> 32:22 127:16	
<b>slowly</b> 35:10 48:2	<b>sounds</b> 118:13		<b>square</b> 42:21 43:3	
<b>small</b> 16:3,10 46:20 67:18,21 110:17 112:24 170:23	<b>source</b> 17:23 36:23 38:3 56:2 84:25 101:13 143:13 143:19,21		<b>squishy</b> 126:3	
<b>small-scale</b> 134:21	<b>sources</b> 91:16 133:3 143:11 148:25 150:16 151:5,19		<b>stack</b> 149:17	
<b>smaller</b> 11:5 34:23 80:6 110:9 111:4 113:8	<b>south</b> 96:11 123:18 131:8 147:14 148:15 150:8,9		<b>staff</b> 3:18 5:23 7:14 9:7,9 14:25 15:21 16:2 19:17 20:1,8,20 22:5 27:17,18,24 29:23 30:20 31:5,7,12 32:11,18,21 34:18 38:4 39:1,5 43:18 47:18 48:14 51:18,19,20,24 52:7 55:17 63:8,8 70:15 72:18 74:13 75:12 76:18,21 87:16 93:3 94:1 95:14 96:22 98:9 100:25 105:6 108:4,7 118:6 121:7 123:4 124:3 125:23 127:20 128:19 128:23 129:1	
<b>smallest</b> 108:16	<b>southern</b> 40:8 55:18 86:15 92:14		<b>spring</b> 32:22 127:16	
<b>Snowpack</b> 134:14	<b>space</b> 98:19		<b>square</b> 42:21 43:3	
<b>social</b> 79:24	<b>speak</b> 35:10,16 41:5 48:2 114:24 121:1 132:8 134:11 144:9 149:21		<b>squishy</b> 126:3	
<b>sold</b> 80:23,24 81:22			<b>stack</b> 149:17	
<b>solely</b> 104:7			<b>staff</b> 3:18 5:23 7:14 9:7,9 14:25 15:21 16:2 19:17 20:1,8,20 22:5 27:17,18,24 29:23 30:20 31:5,7,12 32:11,18,21 34:18 38:4 39:1,5 43:18 47:18 48:14 51:18,19,20,24 52:7 55:17 63:8,8 70:15 72:18 74:13 75:12 76:18,21 87:16 93:3 94:1 95:14 96:22 98:9 100:25 105:6 108:4,7 118:6 121:7 123:4 124:3 125:23 127:20 128:19 128:23 129:1	
<b>soliciting</b> 108:8			<b>stack</b> 149:17	
<b>solid</b> 163:3			<b>staff</b> 3:18 5:23 7:14 9:7,9 14:25 15:21 16:2 19:17 20:1,8,20 22:5 27:17,18,24 29:23 30:20 31:5,7,12 32:11,18,21 34:18 38:4 39:1,5 43:18 47:18 48:14 51:18,19,20,24 52:7 55:17 63:8,8 70:15 72:18 74:13 75:12 76:18,21 87:16 93:3 94:1 95:14 96:22 98:9 100:25 105:6 108:4,7 118:6 121:7 123:4 124:3 125:23 127:20 128:19 128:23 129:1	
<b>solids</b> 71:14			<b>stack</b> 149:17	
<b>solution</b> 127:2 128:3,9 139:13			<b>staff</b> 3:18 5:23 7:14 9:7,9 14:25 15:21 16:2 19:17 20:1,8,20 22:5 27:17,18,24 29:23 30:20 31:5,7,12 32:11,18,21 34:18 38:4 39:1,5 43:18 47:18 48:14 51:18,19,20,24 52:7 55:17 63:8,8 70:15 72:18 74:13 75:12 76:18,21 87:16 93:3 94:1 95:14 96:22 98:9 100:25 105:6 108:4,7 118:6 121:7 123:4 124:3 125:23 127:20 128:19 128:23 129:1	

<b>starting</b> 5:5 109:1 117:22 138:19 <b>starts</b> 67:14 71:7 <b>state</b> 2:20 3:17 3:24 5:12 6:4 9:12 17:2 21:19,20 22:1 22:1,5,10,11 22:17,21 23:6 24:15,23 26:8 26:10 27:8,15 28:20,23 31:1 31:7,12,16,21 32:4,14,17 33:15,16 39:21 45:17 47:18,19 51:20 53:2 55:5 59:2,9,17 61:21 62:24 63:3,8,12,17 66:3,4,5 67:6,7 67:8 68:12,17 69:12,15 72:8 76:23 79:3 86:22 87:17 92:11 96:19,22 102:23 103:10 108:4,7 110:1 111:17 121:21 122:6,13 126:5 126:18 132:18 132:21,23,25 133:1,8 134:10 134:13,25 139:12 141:13 143:9 148:6 150:14 152:14 152:16 154:15 154:18 156:2 158:18 163:6 163:12,16 164:24 165:2 166:2 168:2,19 169:21 170:15 170:25 <b>State's</b> 50:4	75:14 151:16 <b>stated</b> 58:19 <b>statement</b> 17:24 25:4 49:2 52:2 62:10 87:20 <b>statements</b> 128:23,24 <b>states</b> 135:1 <b>statewide</b> 36:5 92:19 147:24 171:2 <b>station</b> 71:17 <b>stations</b> 40:8 <b>statistics</b> 79:16 <b>status</b> 32:23 63:2 112:11 <b>statute</b> 29:6 37:9 38:8,23 43:16 61:4 87:20 129:8,13,22 <b>statutes</b> 25:1 <b>stay</b> 121:1 <b>Stearns</b> 10:12 57:16 <b>Steelhead</b> 150:11 <b>step</b> 131:18 165:2 172:19 <b>stepped</b> 136:22 <b>steps</b> 97:9 132:22 <b>Steven</b> 3:17 <b>Stokes</b> 4:5 132:13,15,15 <b>stood</b> 27:9 <b>stop</b> 77:3 140:4 <b>stopped</b> 99:4 <b>stops</b> 65:16 <b>storage</b> 9:25,25 71:21 <b>store</b> 66:8 133:1 133:4 <b>stored</b> 133:11 <b>stormwater</b> 131:9 <b>straits</b> 104:21 <b>strapped</b> 46:21	<b>strategize</b> 154:5 <b>strategy</b> 93:22 <b>street</b> 2:15 10:13 <b>streets</b> 136:14 <b>stressed</b> 63:10 <b>stretches</b> 92:21 <b>stricter</b> 140:24 <b>stronger</b> 166:9 <b>strongly</b> 142:5 144:19 158:23 <b>structure</b> 13:3 54:24 126:7 158:14 <b>structures</b> 12:14 12:22 54:6 71:8,8 107:15 <b>struggle</b> 55:3 <b>struggled</b> 96:4 <b>struggling</b> 55:9 60:11 96:3 <b>stuck</b> 122:10 <b>studied</b> 32:9 <b>studies</b> 13:8 16:6 16:8 17:13 32:11 33:14 34:16 35:17,19 35:21 37:13 38:4,14 39:4 40:11,16 43:20 44:12,21,23,25 45:2,3,12 46:1 46:4,5,11,15 47:2,14,16,21 48:9,17,18 49:14,24 50:5 50:11 56:19,23 57:14 59:7,7 72:6,10 73:10 73:16 74:3,6 74:12 78:1 79:8,12,14 82:5,15 84:1 87:21 88:14 89:14,15,18 90:17,18,20 92:5,6,16,25 93:6,9,23	94:21 99:8,12 99:14 100:7,20 100:24 101:2,2 114:2 116:18 117:3,7,11,13 118:1,3,5,20 118:21,22,23 119:6,21 123:9 128:8,15 129:15 137:17 138:15,19 140:11,11 153:3 158:2 159:25,25 160:2,6,7,8,9 160:10 168:9,9 <b>study</b> 14:9 16:10 16:14 36:17 37:5 38:5,7,9 38:25 39:9,11 39:16,22,23 40:6,16,22 44:1,10,14 45:8,21 47:4 47:24 48:6,6 48:10 50:4,13 50:14 56:13,15 56:20,24 57:4 59:11 76:18 84:2 85:10,15 88:10,18 89:3 90:25 91:6,14 91:16,19 108:11 110:18 114:2,3,18 123:17 131:17 138:10,22 160:24 161:1,7 162:6,7 165:8 167:2,8,9,14 167:15 168:22 171:24 172:20 <b>studying</b> 161:3 <b>stuff</b> 161:8 167:1 171:3 <b>subdivision</b> 44:8 44:19 48:15	<b>subject</b> 47:22 68:7 116:11 <b>subjects</b> 144:15 <b>submissions</b> 149:3 <b>submit</b> 48:1 105:20 124:18 134:8 149:20 <b>submitted</b> 72:8 109:25 147:9 164:22 <b>subsea</b> 11:10 21:7 <b>subsection</b> 37:8 37:9,17 43:17 45:19 74:7 87:21 <b>subsequent</b> 57:3 83:11 <b>subsequently</b> 72:14 <b>subsides</b> 138:8 138:11 <b>substantial</b> 65:22,25 67:12 72:1 86:22 95:24 108:13 111:19 151:23 <b>substantially</b> 33:4 66:14 86:16 97:3 <b>substitute</b> 141:20 <b>subsurface</b> 13:8 14:10 15:13 17:3 23:3 42:16,18 43:4 46:7,8,10,24 47:3,5,7,13 55:5 59:21 60:5 73:2,4,5,6 76:18 77:22 78:1,4,7 79:2 79:13 82:25 83:8 90:19 92:2 93:10 94:18 95:2
--	--	---	---	---

99:9,23 101:8 110:11,13 125:18 127:14 129:18 131:16 134:10,24 135:2,5,10 137:17 138:9 138:19,22 147:1 164:12 169:1 172:20 172:21,22 <b>success</b> 148:11 <b>successes</b> 137:1 <b>successful</b> 86:22 133:12 <b>sucked</b> 146:9 <b>sucks</b> 21:10 <b>sue</b> 122:2 <b>sued</b> 19:6 <b>sufficient</b> 80:15 87:21 119:7 133:17 150:17 <b>sufficiently</b> 54:7 <b>suggest</b> 171:6 174:7 <b>suggested</b> 119:9 149:6 160:18 162:4 169:22 172:15 <b>suggesting</b> 45:11 112:18 <b>suggestion</b> 162:25 <b>suggests</b> 74:5 <b>suitable</b> 20:19 57:5 78:11 <b>Sulnick</b> 132:14 134:5,6,8 <b>summary</b> 87:24 90:3 125:5 157:7 <b>summation</b> 155:8 <b>summer</b> 26:11 27:9 33:8 70:22 135:13 <b>superior</b> 129:10	129:17 134:18 134:23 147:2 168:10 <b>supplement</b> 7:22 14:21 133:11 133:16 <b>supplemental</b> 133:14 150:16 <b>supplies</b> 33:23 65:16,18 67:22 86:14 132:23 133:10 147:24 148:16 <b>supply</b> 10:2 20:17 29:13 30:10 33:13 34:2,22 35:2 51:9 63:25 64:4,12,15,16 64:19,21,22 65:1,4,22 66:2 66:3,6,11 67:19 68:4,9 68:10 69:14,18 69:20 70:4,5,9 70:19 72:20,24 75:18,20 76:13 77:8,13 86:7 86:20 87:5,8 96:16 98:22 100:9 102:25 103:3,8 121:25 134:1 136:22 145:1,5,10,16 147:18,20 148:3,7,8,10 148:22,23,25 150:21 151:10 151:13,13,20 151:21,22 171:1 <b>supply-and-de...</b> 125:14 <b>support</b> 35:15 44:8 45:1 53:22 55:16 56:1 63:3 64:1	75:12 76:4 80:12 146:5 147:2,12 158:15 161:23 <b>supported</b> 64:13 74:13,15 76:2 104:7 158:11 <b>supportive</b> 63:1 <b>supports</b> 74:4 134:17,23 150:15 <b>supposed</b> 25:5 33:19 36:3 82:2,4 <b>supposedly</b> 155:23 <b>sure</b> 21:12 24:20 35:9 51:18 68:19 87:24 113:16 138:16 141:12 152:5 152:10 156:18 161:12,23 163:3,11 165:1 170:15 <b>surface</b> 41:18 66:2 99:23 101:24 102:1 108:18 111:1 147:21 <b>Surfrider</b> 139:4 139:5 <b>Surfriders</b> 125:8 <b>survey</b> 88:22 <b>Susan</b> 4:8 137:10,12 <b>suspect</b> 44:20 92:15 158:14 <b>suspended</b> 71:14 <b>sustain</b> 137:4 <b>sustaining</b> 97:17 <b>swallow</b> 125:16 <b>sweep</b> 122:8 <b>swim</b> 11:3 <b>sympathetic</b> 27:16 138:2,24 <b>system</b> 1:8 2:6	5:20 12:16 13:1,14 43:21 50:15 55:1 56:6 79:2 113:25 144:13 147:1 150:7 151:14,15 <b>systems</b> 11:11 18:20 57:7 74:7 <hr/> <b>T</b> <b>T's</b> 165:1 <b>table</b> 7:11 80:19 174:11 <b>tail</b> 172:11 <b>take</b> 24:18 26:1 26:2 41:24 45:20 57:1,22 61:13,25 62:22 63:7 64:1 66:5 74:24 75:9,25 81:8 82:5 88:10 92:3 94:2,16,24 100:7,13 110:18 118:8 120:23 132:3 140:3 141:18 145:13,24 154:19 157:18 158:24 162:12 165:8 171:16 172:18 <b>taken</b> 2:14 18:16 29:9 39:13 53:12 78:20 97:10 101:5,6 129:16 132:22 <b>takes</b> 16:5 32:14 121:6 <b>talk</b> 53:11 71:3 146:4 155:7 <b>talked</b> 19:23 27:23 56:9 100:21 159:23 <b>talking</b> 19:12	23:16 24:25 25:16 26:17 37:22 51:12 78:18 80:8 94:4 105:12 109:19 113:19 131:11 134:21 141:7 146:11 153:4 159:21 160:7 162:11 167:20 <b>Tamarin</b> 3:15 22:14 <b>Tammie</b> 3:14 <b>tangent</b> 172:6 <b>Tecalote</b> 150:8 <b>technical</b> 14:23 16:13 42:17 71:3 73:4 79:12 82:20 83:2,9,12,24 135:8,24 <b>technically</b> 73:22 79:15 162:8 168:10 <b>techniques</b> 153:7 <b>technologies</b> 25:23 43:13 46:6,24,24 55:5,7 72:4 110:13 139:8 153:7 <b>technology</b> 11:23 12:5 13:7,12,13,15 14:1 16:25 18:21,22 20:13 20:19,24 21:1 21:2 22:24 23:5,10 25:20 28:6 37:23 44:16 46:14 55:8 58:12 59:4,11 60:5 61:6 65:6 71:25 73:23
---	---	---	---	--

101:20,21,22	<b>terms</b> 7:14 8:13	134:4 135:16	49:20,22 50:9	45:6,7 54:5
108:2 109:3,20	24:4 25:1,3	137:8,9 139:1	52:11 53:20,20	93:14 95:6
109:22 110:14	26:7,9 27:21	139:3 140:14	53:21 57:16	96:11 172:7
110:20 111:22	28:17,17 31:17	140:15 142:11	58:19 59:23	<b>thinks</b> 121:7
113:24 121:19	33:17 35:1	142:12,16	60:24 61:24	<b>third</b> 91:25 92:3
122:11,22	39:7 45:18	144:5,6 145:17	63:23 64:2	92:4 127:20
123:8,12 124:9	48:10 53:21	147:3,5 148:25	69:24 74:5,24	138:15
125:3 126:21	54:2,16 60:9	149:1,10,24	81:13 82:1	<b>Thomas</b> 3:13
127:22 129:8	61:3 72:10	152:1,2 153:25	85:11 86:9	<b>Thomasberg</b> 3:7
130:12,19,22	75:23 85:4	154:2,3 155:4	90:14 93:2	90:10
132:1 135:1	88:15 89:6,7	160:15 175:9	95:14 96:2,8	<b>thorough</b> 22:22
138:1 139:19	89:12 94:5	<b>Thanks</b> 153:25	97:6,15 98:5,8	23:12 127:21
156:20 158:4	96:18 97:6,25	<b>thing</b> 15:20 31:7	100:4 102:20	174:14
159:9	99:25 106:15	46:12 60:2,12	104:7 105:5	<b>thought</b> 7:4,12
<b>technology-wise</b>	108:1,2,9,10	69:24 86:11	111:12,12	39:15 80:22
58:14	110:16 111:1	113:11 121:12	112:8,22 113:5	87:20 93:25
<b>telephone</b> 22:14	123:8 129:16	125:25 129:25	113:11 114:3	97:1 100:6
<b>tell</b> 8:19 23:12	130:12 131:5	130:9 131:22	114:25 115:6,7	103:5 110:4
27:12 31:19	150:11 156:19	140:2,10	117:7 118:15	149:16,17,24
52:21 53:2	166:18 167:23	153:11 156:10	119:11,12	<b>thoughtful</b>
90:4 92:4	171:23 172:7	157:6 164:4	120:3,6 124:14	136:21
93:24 99:7	<b>test</b> 83:19 84:6	167:13	128:2 129:2,11	<b>threads</b> 166:7
134:20 162:13	<b>tested</b> 56:18	<b>things</b> 5:12 6:14	130:9,19 131:3	<b>threatened</b>
<b>telling</b> 145:6	73:24 84:8	15:3 28:15	131:7,9,21	147:21
<b>tells</b> 45:22	<b>testimony</b> 136:9	29:8 44:10	137:20,22	<b>three</b> 39:23
<b>temporary</b>	159:6	50:25 56:4	140:2 142:24	44:11 46:4,22
50:21 51:3,4,8	<b>testing</b> 73:11	60:11 82:24	146:21,22	66:13 67:1
51:13,24 52:1	82:8 83:11,12	88:11 91:11	149:11 152:22	73:5,10 91:22
52:15,16,20	83:23,25 84:6	94:17 96:3,4	153:14 155:11	91:23 114:15
127:4 156:2	85:18,19 102:7	107:10,16	155:13,14	114:17 115:14
161:6 166:11	108:11	112:3 113:23	156:8,11,22	115:19 116:9
<b>ten</b> 14:4 34:18	<b>tests</b> 56:9 57:7	114:15 115:22	157:4,12,19,20	124:21 132:10
56:3 151:9	57:11,12 73:3	116:9 118:8	157:23 158:1,2	153:13 154:15
156:9 175:4	73:4 108:9	136:12 139:22	158:4,8,17,23	154:18 158:24
<b>ten-minute</b>	<b>texting</b> 113:16	140:4 155:21	159:16,22	159:22 160:19
132:3	<b>thank</b> 6:7 14:22	156:17 159:16	161:24 162:25	164:6 166:9
<b>tend</b> 165:19	15:6 17:7,9	172:6	163:3,18,20,23	171:21 172:3
<b>tendency</b> 35:7	22:9 29:18,19	<b>think</b> 8:14 15:2	164:10,13,14	172:11,13
<b>Tenera</b> 16:13	31:2 35:5,11	17:14,16,20	164:21 166:14	<b>three-eighths</b>
35:18	48:19,20 54:10	18:4 21:11	167:23 168:15	112:13
<b>tenuous</b> 126:20	61:23 62:13,14	23:2,11,15	168:17,20	<b>three-year</b> 40:9
<b>term</b> 93:18	74:20,22 76:24	28:9 30:19	169:15,20,24	40:22 41:7
133:16 145:4	77:4,20 97:5	31:6 33:7	170:1,13 172:3	48:10 87:10
157:14 170:10	98:10,13 105:4	34:10,11 37:11	172:6 173:4	88:18 99:13
170:11	106:20 114:8	38:16 41:23,25	174:1	<b>threshold</b>
<b>terminology</b>	120:16,18	42:1 44:18,20	<b>thinking</b> 7:13	162:16
81:12	128:4,5 132:2	45:4,11,13,15	25:20 43:5	<b>thrive</b> 11:14

<b>through-screen</b> 113:21	138:21 140:23 143:9 145:19	127:23 128:11 130:25 132:1	<b>tourism</b> 98:5 104:20 143:22	<b>true</b> 15:25 19:8 172:16
<b>throw</b> 41:17 160:1	151:10,11 152:22,24	144:9 150:25 152:13 153:9	146:1,13	<b>try</b> 32:1 65:2 66:18 68:4
<b>thumb</b> 18:24	153:2,25 154:5	155:1 157:5,10	<b>tourist-depen...</b> 103:24	87:4,9 94:19 97:8 159:16
<b>Thursday</b> 1:17 2:17 5:1	154:6,20 155:5	159:23 164:20	<b>tourists</b> 143:24	164:16 165:24 166:2 171:9
<b>tied</b> 146:14	155:10,13,15	168:20,21	<b>tours</b> 145:25	174:8
<b>tight</b> 132:7 164:20	156:9,12,22	170:2,8 171:12	<b>tow</b> 41:16,17 90:21	<b>trying</b> 19:2 31:8 32:20 35:8
<b>tighter</b> 110:10	157:1,6,12	173:11,11	<b>towing</b> 45:21	38:22 40:17 42:3 52:10
<b>time</b> 5:6 6:6 8:6 8:14 13:14	159:16 160:6,9	<b>today's</b> 109:20 136:2 160:12	<b>town</b> 145:24	59:18 61:11,15 63:15 66:22
15:4 19:5,17	162:11,21	175:3	<b>tows</b> 39:14,17,18 39:23 40:2	78:18 91:17 111:14,21
20:21 26:1	163:2 164:13	<b>toilet</b> 142:22	41:6 89:1	122:8,17 130:16,25
27:2,6,15,22	165:10,18	<b>token</b> 125:22	<b>trains</b> 71:12	131:22 155:3 158:19 163:21
28:6 30:19	166:18 167:6	<b>told</b> 19:2 41:2 59:3 137:17	<b>transcript</b> 1:15 2:14 149:11,14	163:22 165:21 169:16
32:14 33:7,10	171:2 174:2,19	138:14	<b>transect</b> 40:7	<b>tunnel</b> 67:4 150:8
39:20 44:22	175:6	<b>Tom</b> 4:14 147:6	<b>transmissivity</b> 78:11	<b>turn</b> 6:6 31:21 71:2 74:19
52:9 53:14	<b>time-consuming</b> 112:25	<b>tomorrow</b> 62:7 154:11 157:8	<b>transmit</b> 163:16	77:14 126:8 130:2 156:17
58:5,8,12	<b>timeline</b> 9:21 33:13 158:5	161:16 162:13	<b>transparent</b> 138:18	<b>turns</b> 18:9
60:20 61:24	<b>timelines</b> 29:21 72:10	162:19,24	<b>trapped</b> 11:2,3	<b>tweak</b> 166:8
62:4 63:7,16	<b>timely</b> 171:9	164:16,20	<b>trash</b> 160:1	<b>two</b> 6:14 22:13 46:5 50:24
64:2,23 67:11	<b>times</b> 31:23 50:12 118:17	165:20,22	<b>travel</b> 157:6	66:3 69:16 71:13 74:16
68:3 70:3,17	153:20 158:17	166:22,23	<b>travelers</b> 147:16	82:25 84:1,8 88:2 99:12
71:1 72:17,20	<b>timing</b> 32:3 65:11 93:16	169:12,17	<b>treasures</b> 137:6	102:6,13 103:19 114:16
73:1,16,23	100:13 163:10	171:15 172:1	<b>treat</b> 27:2,3	117:9,9 119:18 126:1 132:7,10
76:6,7,24 77:5	164:14,20	173:9,11,16,18	<b>treated</b> 156:5	135:11,13 138:14 160:22
78:2 79:21	169:23	173:21,21	<b>treating</b> 132:17	164:3 166:6,19
80:2,12 82:23	<b>tiny</b> 65:5	174:2,4,21,23	<b>treatment</b> 1:9 2:7 5:21,25	<b>two-page</b> 6:25
83:1,4,18	<b>TM3</b> 82:8	175:4	9:11 10:11,14	<b>type</b> 20:19 21:1 25:10 41:15
84:14 89:20	<b>today</b> 5:13 7:21 8:21 9:14	<b>tonight</b> 165:25	10:22 12:21	
93:4 94:1,2	10:23 11:19	<b>tool</b> 42:9 65:2	72:13	
96:5,7 97:9	13:23 14:20	<b>top</b> 42:24 68:23 103:13	<b>tree-lined</b> 136:14	
98:9 99:13	28:3 31:18	<b>topic</b> 5:9 14:23 55:1 57:19	<b>trees</b> 136:16,17 136:25 143:23	
100:6,6,8,10	44:23 45:14	<b>tossed</b> 17:11	<b>tremendous</b> 75:5 97:11	
101:21 102:10	48:18 52:21	<b>total</b> 18:15 101:4 133:21	<b>tried</b> 165:6 171:12	
102:12 104:12	53:5,6 54:9	<b>totally</b> 31:14 80:22 173:20	<b>tries</b> 45:10	
104:15 107:5	58:24 59:6	173:22	<b>triggers</b> 24:14	
107:16 111:21	61:12 62:19	<b>touch</b> 70:18	<b>Trout</b> 150:12	
111:25 112:4	70:15 71:19	<b>touched</b> 106:22		
112:21 113:23	74:14 101:3	<b>touches</b> 7:4		
116:5,19 121:6	109:21 111:16	<b>tour</b> 145:23		
121:7,12 127:1	121:17 122:19			
129:11,17				
130:15 131:23				
132:6 137:8				



44:21 50:14 53:9 79:1 92:5 94:21 156:20 <b>types</b> 12:4 16:8 38:15 44:23 45:2 107:16 134:20 153:7 167:12 <b>typically</b> 66:4 91:12 95:7	64:3 97:12,18 103:20 104:3 108:22 116:1 125:11 130:17 131:12 138:1 157:16 158:8 160:21 166:15 <b>understanding</b> 17:25 23:25 49:18 54:24 64:2,24 95:6 97:16 98:4 102:4 108:10 112:3 <b>understood</b> 94:3 <b>undertake</b> 98:2 <b>undertaken</b> 44:25 <b>undertaking</b> 91:24 <b>underway</b> 94:16 95:18 <b>underwent</b> 49:8 <b>unfortunate</b> 65:11 <b>unfortunately</b> 65:13 68:7 121:13 <b>unintended</b> 163:11 <b>unique</b> 25:1 29:7 31:3 63:15 103:23 126:4 <b>unprecedented</b> 28:10 31:4 87:5 <b>unreasonable</b> 159:17 <b>unreliability</b> 148:24 <b>unring</b> 97:10 118:1 <b>unusual</b> 28:8,9 29:1 87:11 129:25 163:23 <b>up-shore</b> 10:20 <b>upcoming</b>	161:19 <b>update</b> 64:18 <b>updated</b> 87:7 109:16 <b>updating</b> 63:18 71:24 <b>upgrade</b> 77:23 108:2 <b>upgraded</b> 109:15 <b>upgrades</b> 108:22 <b>upgrading</b> 91:24 <b>upholding</b> 148:15 <b>urban</b> 136:24 <b>urge</b> 76:22 127:2 127:13 142:5 143:25 144:3 151:25 <b>urgencies</b> 157:13 <b>urgency</b> 141:9,9 155:15 170:3 <b>usage</b> 90:11 136:10 <b>use</b> 8:13 12:21 21:13 25:7 35:13 43:13,19 45:11 46:14 57:9 60:5 61:5 65:2 66:24 67:1 68:4 69:7 70:5 75:2 76:5 76:7,18 103:21 106:1 111:7 123:12 124:5 126:20 132:23 133:5 142:22 142:25 143:1,9 148:22 170:10 <b>useful</b> 24:3 69:8 <b>users</b> 68:1 <b>uses</b> 10:25 <b>usually</b> 77:4 <b>utilization</b> 106:14 <b>utilize</b> 133:3	<b>V</b>	<b>v</b> 125:8 <b>valid</b> 134:23 164:25 165:10 <b>value</b> 49:11 92:11,11,20 98:4 113:13 122:12 146:22 148:15 <b>valued</b> 49:19 <b>valves</b> 99:22 109:14 <b>VAN</b> 18:24 <b>variability</b> 39:25 86:14 <b>variables</b> 109:19 <b>variation</b> 48:8 88:11 <b>variety</b> 19:24 84:14 96:22 <b>various</b> 29:21 56:15,16 108:11 114:9 116:10 122:25 <b>vary</b> 40:12 84:24 <b>vegetation</b> 11:16 <b>velocities</b> 36:2 <b>velocity</b> 11:2 13:14 16:19 36:3 108:18 110:7,22 111:5 111:7 113:10 113:22 <b>Ventura</b> 38:24 140:22 <b>venture</b> 20:4 <b>versus</b> 26:17 41:8 61:21 93:17 110:10 <b>vertical</b> 101:23 <b>vessels</b> 81:4 <b>vested</b> 152:17,17 <b>viability</b> 98:6 135:3 <b>vibrant</b> 147:15 <b>Vice</b> 3:6	<b>vicinity</b> 80:17 <b>Vicky</b> 48:13 <b>Victoria</b> 3:25 22:15 27:18 30:25 52:7 <b>view</b> 44:18 49:17 116:2,21 164:15 172:22 <b>viewed</b> 138:5 <b>viewing</b> 53:20 53:22 <b>views</b> 138:6 <b>vintage</b> 145:20 <b>virtually</b> 13:5 67:4 130:1 <b>Visit</b> 146:1 <b>visitors</b> 34:25 64:1 103:24 <b>visualize</b> 42:20 <b>vital</b> 77:6 146:24 148:14 <b>vitality</b> 145:10 <b>vogue</b> 61:16 <b>voice</b> 147:12 <b>volume</b> 18:14,16 40:18 41:11 84:12 101:4,5 <b>volumes</b> 78:17 142:2 153:3 <b>volumetric</b> 16:4 40:1 41:10 88:8 100:25 <b>voluntarily</b> 40:24 127:18 <b>voluntary</b> 154:16 159:23 <b>volunteer</b> 119:8 <b>volunteered</b> 115:14 <b>volunteering</b> 13:22 14:3 17:6 <b>volunteers</b> 14:18 <b>von</b> 3:18 5:23 9:8,8 15:9,17 16:2,24 17:6 17:19 18:1,7
<b>U</b>					
<b>UCCE</b> 136:4 <b>UCSB</b> 14:5 56:3 90:22 92:15 <b>ultimately</b> 23:6 113:9 158:20 169:20 <b>unable</b> 150:17 <b>unacceptable</b> 142:7 <b>unanimously</b> 76:17 125:21 <b>unavoidable</b> 13:18 <b>unaware</b> 165:11 <b>unbreak</b> 117:5 <b>uncertainty</b> 27:14 <b>unclear</b> 159:13 <b>uncomfortable</b> 169:11 <b>unconventional</b> 73:23 <b>underestimated</b> 142:3 <b>undergoing</b> 33:4 <b>undermining</b> 140:1 <b>underneath</b> 42:23 <b>undersea</b> 21:14 21:23 <b>understand</b> 16:18 21:22 29:1,3 40:17 52:10 57:10,13					

18:13 19:9	155:12 156:17	11:18 12:16,17	103:21 104:12	171:2
20:4,16,25	156:18 157:16	12:23 13:9,10	106:3,8 108:12	<b>watering</b> 81:6
21:9,18 22:9	157:18 158:18	17:1 18:11,12	109:4 110:23	<b>watershed</b>
22:24 23:25	162:10,12,14	18:17 19:21	111:2 115:15	114:17
28:13 30:13	166:17 167:19	20:11,18 21:3	115:24 119:2	<b>wave</b> 78:23
35:17,24 36:9	170:3,4,6	22:11,11,16	119:12 121:9	<b>way</b> 8:25 13:4
36:12,19 37:7	171:19 172:5	24:11,24 25:1	121:25,25	26:1 28:10
37:10,18,23	173:12,12	26:23,23,24	122:9,19,24	31:8 32:12
38:12 39:9,12	174:3	28:2,20 29:13	123:7,20	43:4 46:19
41:4 43:20	<b>wanted</b> 6:17 9:3	30:10,21,25	124:11 126:9	48:18 50:10
54:19 56:9,19	35:14 38:10	31:7,25 32:18	127:23 129:21	53:20 63:21
56:23 57:14	42:20 54:1	33:12,13,15,17	130:15 131:6,9	80:11 81:15
<b>vote</b> 64:12 115:8	62:22 77:5	34:2,22 35:1	131:23 132:16	95:8 103:20
158:25 161:13	83:18 93:9	36:6,23 39:21	132:17,18,18	105:14 111:18
174:23	95:25 152:4	41:17 42:25	132:21,23,25	111:23 115:20
<b>voted</b> 64:14	170:13	43:14 47:18,22	133:1,3,5,8,10	119:13,14
125:21	<b>wants</b> 10:7	48:1,2 50:23	133:11,14,15	126:3 129:12
<b>voters</b> 76:2	46:14 48:13	51:9,20 52:3	133:17,19	142:6 154:10
	117:24 122:6	52:23 53:8,15	134:1,12,25	156:24 157:17
	156:18	56:2 59:3,3,9	135:25 136:8	160:20 163:8
<b>W</b>	<b>warmest</b> 143:16	63:25 64:4,6,8	136:10,21	163:24 169:2,4
<b>wait</b> 15:19 27:10	<b>wasn't</b> 13:9	64:12,15,16,18	139:4,7,14	170:5 172:22
<b>waiting</b> 164:22	14:14 15:22	64:21 65:1,3,5	140:25 141:1,5	175:1
165:3	19:20 30:6,12	65:7,16,18,19	141:21 142:21	<b>ways</b> 50:20
<b>walk</b> 71:4	30:20 32:12	65:24 66:2,3,4	142:25 143:1,8	168:10
<b>walking</b> 136:17	130:14,14	66:5,7,11,14	143:10,11,12	<b>we'll</b> 57:23 62:8
<b>wall</b> 156:11	139:11 166:22	66:15,18,23	143:17 144:10	76:25 106:12
<b>want</b> 5:12 6:7,16	174:17	67:1,2,5,6,7,14	144:11,13	111:21 115:9
7:13 8:10 22:4	<b>waste</b> 1:7 2:5	67:18,19,21	145:1,5,10,16	129:1 132:3,14
22:5 24:2,22	5:18 9:11	68:12,12,14,15	145:18 146:12	132:14 142:14
29:3 38:2 46:3	25:11,17,19,21	68:17,18,22	146:25 147:8	152:4 159:2
48:15 50:10	25:24,25	69:4,5,5,6,12	147:10,11,18	163:1 169:17
51:16 52:20	<b>wastewater</b> 1:9	69:15,18,20,21	147:20,20,21	<b>we're</b> 10:8,23
60:21 61:8	2:7 5:21,25	70:1,9,19 71:9	147:23 148:3,4	11:19 24:19,25
63:7 64:1,7	8:14 10:6,11	71:14 72:20,23	148:6,7,8,10	25:16,25 26:10
67:24 69:24	10:13,22 12:7	74:9 75:5,8,11	148:12,16,16	27:2 28:16
70:8 72:1,25	12:20,24 26:2	75:12,18 76:13	148:19,20,22	29:5,6,15,15
74:24 77:3	51:11 72:13	76:19 77:7,12	148:23,25	29:16 32:6,20
80:1 87:13	144:13	78:12,17,19	150:7,14,14,15	33:2,5 37:22
94:17,18,19	<b>watched</b> 146:21	81:9,21 84:25	150:16,17,21	37:23 41:2
96:10 105:11	<b>watching</b> 146:15	86:7,14,20,22	150:23 151:5,6	43:4 44:12
105:19,20	<b>water</b> 1:4 2:2 3:3	87:5 88:3	151:8,10,11,13	46:10 47:10
117:25 118:11	3:24,25 5:13	90:11 98:22,23	151:13,14,15	50:11 51:12
119:5,10 122:1	5:14 6:4,10,20	100:2,3,9	151:19 152:14	58:2,5 59:6,13
122:7 131:18	6:21,23 8:20	101:6,13,25	153:23 156:3	61:2,4,10,10
137:19,20,22	9:9,11,12,17	102:7 103:8,13	156:13 159:8	61:11,15,21
138:24 141:19	10:2,17,21		165:17 170:25	64:3 65:17
154:13,24				

67:2,14,15	<b>week</b> 6:11,18 7:9	46:3 55:6	142:12,17	167:2 171:10
69:20 70:23	7:10 8:17	59:23 61:23	144:6 145:17	<b>works</b> 62:18
76:12,16,24	<b>weeks</b> 7:11,15	78:13 170:13	145:20 147:5	101:23
77:9 78:17	102:6	170:15 171:8	149:1,6,9,15	<b>workshops</b>
80:8 82:2,4	<b>weighing</b> 157:1	<b>wide</b> 110:19	149:21 151:17	32:23 136:7,9
86:10 87:15	<b>welcome</b> 74:21	<b>willing</b> 118:8	152:2 154:2	<b>world</b> 73:25
91:7 96:11	144:8	138:25 161:15	155:4,10 159:2	134:17 147:17
102:21,22	<b>well-written</b>	164:14	160:14 162:18	<b>worried</b> 104:4
103:23 105:11	154:20	<b>willingness</b>	163:20 166:4	165:12
110:14 111:10	<b>wells</b> 13:10 20:9	120:19	168:15 169:7	<b>worse</b> 59:13
111:14,15	21:2,3,4 42:19	<b>winter</b> 14:7	169:11 170:10	121:14
118:2 119:15	43:8,9 56:16	<b>wire</b> 13:24 16:20	171:5,14	<b>worst</b> 83:17,18
131:10 132:6	56:21,25 57:1	16:24 17:2	173:18 174:1	<b>worst-case</b> 83:16
138:1,3,24,25	73:6,6,7,17,19	108:3 113:3	174:25 175:9	<b>worth</b> 44:14
141:7 143:14	83:10 84:5,10	<b>wiring</b> 109:5,5	<b>WON</b> 19:15	114:25 115:6
156:11 158:14	84:20,23 85:1	<b>Wiscom</b> 4:7	<b>wondering</b> 30:2	153:1
159:15,21	85:24,25 86:3	132:14 135:20	30:10 90:22	<b>wouldn't</b> 20:22
160:7 161:9,18	86:21 99:14	135:22,23	<b>word</b> 50:12	39:3 41:20
162:5,10 163:3	101:13,16,20	<b>wish</b> 8:18 76:10	<b>words</b> 45:19	57:1,5 80:10
163:22 165:12	102:14,14	<b>withdrawals</b>	119:5 152:8	<b>wrap</b> 120:17
166:17,19,20	129:19 134:22	139:6 154:3	<b>work</b> 16:14	128:25 142:9
166:20 167:2,5	139:21 151:16	<b>withdrew</b>	28:14 30:13	151:17
167:16,19	<b>went</b> 39:16 65:7	137:16	31:9 38:12,18	<b>wrapped</b> 171:4
170:1 171:3	77:22 98:20	<b>witnessed</b>	38:19 47:10	174:13
172:9,12	116:24 129:6,7	151:10	52:7 57:9 63:7	<b>write</b> 31:23
173:14 174:13	<b>weren't</b> 19:7	<b>Wolff</b> 3:5 5:5	63:11,11 66:24	<b>writing</b> 31:20
174:14,22	45:6 89:16	8:3,8 9:4,7,8	91:4 97:20	170:17
<b>we've</b> 29:9 31:4	95:24 120:1	14:22 17:8	98:2 104:1	<b>written</b> 115:19
31:6,18 32:23	129:17 153:1	29:18 31:2	111:14 115:9,9	116:2 117:1
32:24 51:24	<b>west</b> 14:4,5	35:6 37:25	126:17 127:20	119:14 160:17
61:7 65:5,24	108:12 114:2	48:20 54:10,25	136:13 138:25	<b>wrong</b> 156:8
75:3 81:2,14	<b>wet</b> 141:2	56:8,22 57:6	158:10 163:9	<b>wrote</b> 46:19
87:3 91:7 94:4	<b>wetland</b> 41:25	57:18 61:23	164:2,5 165:6	<b>Wyels</b> 3:24 22:6
94:10,13 95:3	55:18 136:1	62:14,16 66:20	165:15 166:1	22:9,10 24:2
102:19 104:3	<b>wetlands</b> 42:5	77:2,14 98:12	166:20 169:22	24:18,22 25:15
107:3,18 112:2	56:2 124:22	105:3 106:21	170:25 171:13	31:3,14 34:10
115:1 131:13	<b>whale</b> 146:15	107:17 108:17	<b>worked</b> 87:3	34:17 35:4
141:13 155:21	<b>Wharf</b> 10:12	109:18 110:3	108:4 139:6	44:4 45:10,25
157:22 165:6	57:16	110:17 111:6	140:17 167:13	47:15 49:13
166:6 168:17	<b>whatsoever</b>	112:12 113:16	168:24 171:8	50:17 52:6
171:8	124:4	114:8 120:17	<b>working</b> 9:12	58:4,19 59:12
<b>weather</b> 67:17	<b>white</b> 36:20 37:1	121:2 128:5,21	22:17 33:5	61:1,23 79:2
141:3	103:12	128:25 129:6	43:1 62:19,25	115:12 168:15
<b>website</b> 98:14	<b>Whitney</b> 3:25	132:3,6 134:4	134:9 135:9	168:16,16
144:18	22:15 30:17,25	135:16,20	137:13 139:7	172:8,13
<b>wedge</b> 13:24	32:16 34:6	137:9 139:2	140:19 154:20	
17:2 108:3	42:18 43:7	140:15 142:9	164:23,23	
				<b>X</b>

<b>X</b> 4:1	137:14,23	155:20 171:25	<b>12</b> 18:8,14 40:21	<b>16</b> 145:24
<hr/> <b>Y</b> <hr/>	139:8,10	173:1,16	62:8 105:16	<b>16,000</b> 86:24
<b>Y</b> 110:20 112:19	140:19 142:19	174:24 175:6	<b>12-and-a-half-...</b>	143:4
<b>Yeah</b> 18:7 42:12	144:23 145:24	<hr/> <b>Z</b> <hr/>	105:25	<b>1700s</b> 64:10
45:15 98:13	151:9 152:16	<b>zero</b> 126:10	<b>12.5</b> 106:17	<b>17th</b> 7:23
120:12	156:9,14	159:15,21	<b>120</b> 4:4	<b>18</b> 102:17,20
<b>year</b> 8:19 18:9	<b>Yellow</b> 67:6	<b>zooplankton</b>	<b>13</b> 62:13 132:18	146:7
18:18 23:17	<b>yield</b> 56:10	39:23 40:3	<b>13142.5</b> 61:18	<b>1900s</b> 13:17
33:12 39:19	84:19,24,25	89:10 146:18	<b>13142.5(b)</b> 11:18	<b>1948</b> 40:10
40:12,13,19,20	<b>yielded</b> 85:17	<hr/> <b>0</b> <hr/>	14:13 24:14,25	<b>1980s</b> 64:7 86:19
40:12,13,19,20	<b>yields</b> 102:2	<b>01</b> 82:9	26:3 28:7 53:8	86:20,23
65:11,14,15,17	<b>Ynez</b> 150:8,10	<b>04</b> 34:25	53:18 74:4	148:13
65:22,23 66:3	<b>young</b> 3:8 6:12	<b>06</b> 36:23	121:9 122:5	<b>1981</b> 142:18
66:7,13,13,23	6:13,19 7:10	<hr/> <b>1</b> <hr/>	123:4 124:8,16	<b>1982</b> 39:24
66:24 67:1,9	8:6,9 31:2,3	<b>1</b> 13:4 36:4,12	124:19 125:6	40:10
67:13,14,14,15	32:3 34:4,7,13	67:15 89:11,24	127:21 128:14	<b>1984</b> 39:24
68:13 69:2,17	35:3,5,12,22	<b>1-millimeter</b>	130:6 131:25	<b>1988</b> 83:8
70:25 73:14,17	36:8,11,16	36:14	138:11,22	<b>1989</b> 75:12 82:7
76:17 86:5	37:4,8,11,17	<b>1,000</b> 102:8	159:5 161:21	82:21 83:12
87:10,12,15	37:20 38:2,21	<b>1,500</b> 133:7	174:18	<b>1990</b> 14:16
99:3 103:24	39:11,15 40:9	<b>1.65</b> 10:15	<b>13142.5(d)</b> 74:5	15:22 84:3
105:7,13 106:5	40:11,15,20,24	<b>10</b> 62:5 103:4	<b>13142.57(b)</b> 9:18	85:10
106:17 117:20	41:6,11,19	146:11	<b>13142.59(b)</b>	<b>1990s</b> 9:24 12:3
117:23 132:24	42:8,15 43:3	<b>10,000</b> 17:13,20	24:11	13:7 17:20
133:6,21,23,25	43:16,25 45:4	17:25 18:3,6,9	<b>131425(b)</b> 19:4	18:4 53:23
143:3,16	45:17 47:12	18:18 23:21	<b>132</b> 4:5	148:4
145:12 152:21	48:19,22 49:16	85:22,24 86:4	<b>134</b> 4:6	<b>1991</b> 10:4 14:17
<b>year's</b> 44:14	50:10 58:1	105:8,13 106:4	<b>135</b> 4:7	37:23 38:13
66:15	59:1 60:13	106:4,16	<b>137</b> 4:8	51:3 52:16
<b>year-long</b> 16:14	77:19,20,25	126:12 145:25	<b>13834</b> 1:23 2:18	58:13,16,24
<b>Yearly</b> 36:22	79:1,5 80:3,5,8	<b>10,000-acre</b>	<b>139</b> 4:9	64:11 72:12
<b>years</b> 16:1 18:2	80:15,19 81:17	73:17	<b>14</b> 62:13	75:22 82:9
32:13 39:2,24	81:20 82:1,17	<b>10,000-gallon</b>	<b>14,000</b> 86:25	88:1,21 89:14
44:11 45:5	83:16,25 84:16	105:24	133:23 143:5	98:25 99:2
46:23 56:10	85:6,11,20	<b>10,000-gallons...</b>	<b>140</b> 4:10	119:14 121:8
58:5 59:14	86:6,10 87:19	105:10	<b>142</b> 4:11	122:16,20,23
65:19 66:9,25	88:18,25 89:5	<b>100</b> 57:1 60:6	<b>144</b> 4:12	123:1,5,9
67:20 68:5,10	89:21 90:1,4,8	73:17 84:10,20	<b>145</b> 4:13	130:2,14
69:9,12,16	118:7,13,21	84:20,22	<b>147</b> 4:14	137:20 141:10
70:10 80:21	119:1,24 120:9	<b>105</b> 2:15	<b>149</b> 4:15	144:1 152:25
88:14 92:9	120:12,14,16	<b>11:09</b> 2:17 5:2	<b>15</b> 68:13 70:9	<b>1992</b> 9:25 72:16
102:6,10 117:3	129:5,7,15	<b>110</b> 85:8,17	103:6	98:17 99:1
119:6 120:2	130:8,17,21	<b>11126E2A</b> 62:12	<b>15,000</b> 133:20,24	159:14
121:5,16,17	131:3,15 132:2	<b>1143050</b> 7:18	<b>150</b> 80:3 89:9	<b>1993</b> 142:18
123:18 124:21	135:17,20		<b>152</b> 4:16	<b>1994</b> 38:13
126:2,11 129:9	142:15,16		<b>154-million-ga...</b>	64:15
132:23 133:8	145:7 152:5		79:17	<b>1996</b> 10:1 52:17

58:13 72:18 <b>1997</b> 148:6	<b>2014</b> 27:9 133:6 133:10,16 136:24 139:5 143:16	<b>316(b)</b> 17:1 36:6 <b>32</b> 102:21 <b>36</b> 48:6 <b>3947WQSLO</b> 1:25	<b>84-gallon</b> 104:19 <b>88</b> 38:5 <b>89</b> 38:5
<hr/> <b>2</b> <hr/>	<b>2015</b> 1:17 2:17 5:1 133:10,16	<hr/> <b>4</b> <hr/>	<hr/> <b>9</b> <hr/>
<b>2</b> 67:9,11 82:20 83:9 <b>2-millimeter</b> 36:12 <b>2,000</b> 143:3 <b>2,600</b> 133:5,11 <b>2.3</b> 75:23 <b>2.4</b> 16:6 <b>20</b> 15:10,14 16:1 32:13 36:1 39:2 45:5 58:5 59:14 67:11 68:23 75:8 76:25 80:21 84:3 85:13 102:10,15,16 102:19,22 103:15,20 119:6 120:2 129:9 137:14 137:23 139:8 143:7 144:23 146:11 148:12 152:16	<b>2016</b> 70:22 151:23 <b>2017</b> 14:9 15:13 15:16 100:8 114:17 116:19 118:25 151:23 <b>2020</b> 138:23 <b>22</b> 121:4 <b>23</b> 154:9 <b>236-page</b> 125:4 <b>24</b> 80:13 121:16 121:17 156:14 <b>24/7</b> 96:14 105:16 <b>25</b> 80:14 103:20 126:11 <b>25,000</b> 104:1 <b>28</b> 107:20 <b>29</b> 1:17 2:17 5:1 <b>290</b> 146:8	<b>4</b> 51:17 <b>4:00</b> 132:4 <b>40</b> 40:4 80:8 99:11,15 123:18 137:23 159:18 <b>40-acre</b> 79:19 <b>45</b> 143:1 <b>46</b> 134:15	<b>9</b> 5:5,7,8,18 9:10 35:12 51:18,22 52:14 149:23 <b>9:00</b> 175:7,8 <b>90</b> 156:3 <b>90s</b> 18:21 28:2,4 29:16 44:20,25 45:14 54:21 61:17,17,20 87:22 174:17 <b>91</b> 20:9 82:3 139:15,17 140:9 <b>92</b> 72:14 <b>98</b> 134:13 <b>980</b> 89:9 <b>99</b> 72:14
<b>20-feet-per-day</b> 83:14 <b>20-year</b> 49:9 <b>20-year-old</b> 109:20 126:13 <b>200</b> 57:1 73:17 83:9 84:4,10 84:20 85:13,23 <b>2000</b> 139:4 <b>2000s</b> 19:7 <b>2001</b> 58:13 <b>2004</b> 72:14 <b>2009</b> 165:7 <b>2010</b> 10:5 29:25 30:7 72:15,22 <b>2011</b> 64:21 72:23 103:5 143:8 <b>2013</b> 133:2,5,12	<hr/> <b>3</b> <hr/>	<hr/> <b>5</b> <hr/>	
	<b>3</b> 83:12 138:4 <b>3,000</b> 133:24 <b>3,000-plus</b> 57:2 <b>3,100</b> 133:12 <b>3,125</b> 17:16 23:17 86:9 100:3 <b>3,300</b> 132:24 <b>3,500</b> 73:14 84:11,19 85:21 86:8 <b>3,500-acre-feet</b> 85:23 <b>30</b> 10:20 99:11 99:18,24 100:17 118:25 137:23 159:18 <b>30-plus</b> 123:18 <b>31</b> 82:8	<b>5</b> 36:6 59:11 103:24 <b>5:00</b> 169:9 175:4 <b>5:15</b> 175:10 <b>50</b> 84:20,22 89:9 137:23 <b>500</b> 68:14 <b>55.4</b> 124:22 <b>58</b> 104:22	
	<hr/> <b>6</b> <hr/>	<hr/> <b>7</b> <hr/>	
	<b>6</b> 10:17 <b>60-port</b> 13:1	<b>7</b> 35:25 <b>7-0</b> 117:18 <b>7-million-gall...</b> 35:19 <b>7,500</b> 17:14,17 17:25 18:2 23:21 105:7 <b>70</b> 10:16 104:23 134:14 <b>77</b> 139:14	
	<hr/> <b>8</b> <hr/>	<hr/> <b>8</b> <hr/>	
	<b>80</b> 64:13 <b>800</b> 102:8 <b>84</b> 103:18		