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IN RE THE MEETING OF THE)
BAY-DELTA OVERSIGHT COUNCIL)

BDAC

ORIGINAL

TRANSCRIPT OF PROCEEDINGS
HOLIDAY INN OAKLAND/SAN FRANCISCO BAY BRIDGE
Emeryville, California

Wednesday, October 18, 1995 at 10:05 a.m.

REPORTED BY: SUSAN PORTALE, CSR NO. 4095

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1 COUNCIL MEMBERS:

2 MICHAEL MADIGAN, Chairman, California Water
3 Commission

4 LESTER SNOW, Executive Director

5 SUNNE McPEAK, Bay Area Economic Forum

6 ERIC HASSELTINE, Contra Costa Council

7 STEVE HALL, Association of California Water
8 Agencies

9 ALEX HILDEBRAND, South Delta Water Agency

10 TOM MADDOCK, California Chamber of Commerce

11 BOB RAAB, Save San Francisco Bay Association

12 RICHARD IZMIRIAN, California Sportfishing
13 Protection Alliance

14 DON BRANSFORD, Glenn-Colusa Irrigation District

15 ROGER STRELOW, Beveridge & Diamond

16 DAVID GUY, California Farm Bureau Federation

17 JUDITH REDMOND, Community Alliance with Family
18 Farmers

19 PIETRO PARRAVANO, Pacific Coast Federation of
20 Fishermen's Associations

21 ROGER THOMAS, Golden Gate Fishermen's
22 Association

23 LELAND LEHMAN, California Waterfowl Association

24 HARRISON (HAP) DUNNING, Bay Institute

25 ROBERTA BORGONOVO, League of Women Voters

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COUNCIL MEMBERS: (cont'd)

PAT McCARTY, Delta Protection Commission

TIB BELZA, Northern California Water Association

MARCIA SABLAN, Mayor of Firebaugh

ROGER PATTERSON, Designated Federal Official

MICHAEL MANTELL, Designated State Official

STU PYLE, Kern County Water Agency

MARY SELKIRK, East Bay Municipal Utility

District

ANN NOTTHOFF, Natural Resources Defense Council

TOM GRAFF, Environmental Defense Fund

JACK FOLEY, Metropolitan Water District of

Southern California

HOWARD FRICK, Arvin Edison Water Storage

District

RAY REMY, Los Angeles Chamber of Commerce

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1 (All parties present, the following proceedings were
2 had at 10:05 a.m.:)

3

4 CHAIRMAN MADIGAN: Good morning, Ladies
5 and Gentlemen.

6 The hour of ten o'clock having arrived, this is
7 the noticed October 18th meeting of the Bay-Delta Advisory
8 Council.

9 We are in beautiful downtown Emeryville, and as
10 we have many things on the Agenda today and a number of
11 things to discuss we are going to go ahead and get
12 underway.

13 My name is Mike Madigan for those of you in the
14 audience that I have not yet had the pleasure of meeting.

15 To my right is Sunne McPeak, Vice-Chairman of
16 this organization. To my left is Lester Snow, the
17 Executive Director of the CalFed process.

18 Item number one on the Agenda -- and I should
19 say to you that as each of these Agenda items comes up we
20 will provide any one of you in the audience who wishes to
21 comment on an item that opportunity.

22 We will also have an opportunity at the end of
23 the Agenda for general comment on items not otherwise
24 covered by this Agenda.

25 So welcome to all of you from the BDAC who are

1 already here.

2 Thank you very much for your prompt attendance.

3 We have a pretty good turnout this morning.

4 I understand that several of you have attended

5 either the second or the third of the Bay-Delta Workshops

6 and as we get to those items I would be very interested in

7 your own personal observations.

8 So when we get there, please, help us all by

9 sharing with us your own views and perspectives on what you

10 believe took place and what you learned and what we all

11 should know.

12 For those of you in the audience again it's

13 important to know that public meetings have begun. Perhaps

14 some of you may have attended the meeting in Stockton,

15 which was held in September.

16 Again, there were BDAC members in attendance at

17 that meeting and thank you very much for participating.

18 Lester, I understand the next one is the 25th

19 of this month here in Oakland for those of you who might

20 have the opportunity to attend, and we will provide more

21 information for that when we get there on the Agenda.

22 Okay. Let's see here.

23 We have some housekeeping items, which I'm

24 going to have to read.

25 Let me see what they are.

1 Placer Room just down the hall.

2 There is a restaurant here at the Holiday Inn

3 for those of you who are looking for a place to have some

4 lunch.

5 Again, as each individual item comes up we will

6 afford members of the Council the opportunity to comment,

7 argue, express concerns, hopes, aspirations, fears,

8 whatever, and we will also provide members of the public

9 those opportunities.

10 If you want to have public comment, please use

11 the sign up form that's available to you.

12 Finally, the next BDAC meeting is scheduled for

13 December 6th in Sacramento at the Beverly Garland, which is

14 where we were for our first meeting, and on February 15th

15 we will have a BDAC meeting in the Los Angeles area.

16 Lester says at the LA Airport Hilton, which is

17 certainly convenient to those of you who will be flying in.

18 He is working on a schedule for the remainder

19 of 1996 and that will be available to all of you as soon as

20 he gets it done.

21 I am asked to make a plea on behalf of the

22 CalFed Bay-Delta Program for those of you on the BDAC to

23 provide comments in writing on issues that are of concern

24 to you.

25 There have been a number of comments from a

1 You have folders in front of you with materials

2 for today's meeting. Those folders contain items marked

3 with the Agenda item appropriate to it.

4 The majority of the information that you have

5 in the folders are copies of overheads.

6 There is, however, some new information

7 included for the general public.

8 Copies of any of this material is available at

9 the registration table just outside the room. So if you're

10 wondering what members of the BDAC are looking at as they

11 root through their piles of stuff here, you have the

12 opportunity to do the same thing and it's available to you.

13 There is a schedule of opportunities for public

14 involvement through the end of this year also available at

15 the registration table and there is apparently a change in

16 the Public Workshop schedule so those of you who were

17 thinking of attending should check the date to make sure

18 you have the correct one.

19 Also, on the registration table is a public

20 input form for comments at this meeting and that's

21 important because we would like to have the correct

22 spelling of your name and your address for purposes of

23 revenge or whatever occurs to us.

24 Lunch will be served to the members of the

25 BDAC as a vehicle for keeping you all here in the

1 number of you who have been attending the Public Workshops

2 and meetings. That's terrific.

3 Please take the time to document those concerns

4 and, obviously, those of you who have been thinking about

5 attendance at those meetings you are most actively

6 encouraged to attend.

7 Okay. Item Number 2 on the Agenda is a "Review

8 of the CalFed Bay-Delta Program" -- let me stop.

9 Are there any questions by any members of the

10 BDAC on any of that sort of housekeeping?

11 (No response)

12 The Review "of the CalFed Bay-Delta Program

13 Process".

14 Lester, you are on. You are going to give the

15 overview and then we will move into specific briefings by

16 members of the staff.

17 EXECUTIVE DIRECTOR SNOW: Thank you,

18 Mr. Chair.

19 It is my promise to you, perhaps threat, that

20 every meeting we started off with a review of the overall

21 program and I want to do that today so I can make sure we

22 are all kind of keeping in track -- keeping on track in

23 terms of where we are, where we've been and where we think

24 we are headed.

25 Before I do that, let me just make a few

1 observations about feedback that we are getting.
 2 We not only are doing the public meetings and
 3 workshops but also do a fair amount of speaking out to
 4 small groups, large groups, what have you, to try to get a
 5 feel for people's interests and concerns and that sort of
 6 thing.

7 And there are some themes, I think, I'd like to
 8 share and maybe we'll get a chance at different points on
 9 the Agenda today to get into more detail on some of these
 10 themes.

11 The basic thing and, hopefully, you are getting
 12 the same type of feedback, is there is a great deal of hope
 13 and guarded optimism that, in fact, a process like this can
 14 move forward and address some of these issues that have
 15 been problems for a long time.

16 And so finding guarded optimism, certainly, I
 17 hope that we can address some of these difficult resource
 18 issues, but also at the same time some suspicion, some
 19 concerns that people have.

20 And so they are not willing to dump all of
 21 their trust into the process.

22 A real basic one that I run into frequently is
 23 that we are not going to do a legitimate analysis of all of
 24 the options.

25 All this is is a smoke screen for an isolated

1 doesn't help water supplies and maybe it doesn't even help
 2 the fish populations and so those are the kind of issues
 3 that I have observed out there.

4 And, again, people want us to succeed. They
 5 just have concerns, and I think we have to keep those
 6 concerns in mind as we try to move forward.

7 With that let me resort to my trusty overheads
 8 and kind of give a little bit of background here on the
 9 program.

10 I apologize for those of you who I am standing
 11 behind, but trust me, Stewart, I'm not doing anything
 12 sneaky over here.

13 That's right, you have hard copy in front of
 14 you there.

15 Again, I want to do two things here. I want to
 16 give a quick overview of the program.

17 A lot of this stuff is material you've seen
 18 before, but there are new people in the audience that
 19 haven't been here, and, again, I think it's important for
 20 us to understand where we've come from and where we are
 21 headed, and then I want to conclude with some of the more
 22 current thoughts in the program and try to set up some
 23 discussions that Dick Daniel and Steve Yaeger are going to
 24 provide on some of the specific problem issues.

25 Again, I think it's real important to remember

1 facility, and it's a theme I run into in a number of
 2 quarters.

3 However, even with that people want us to move
 4 forward. They want to participate. They want to try to
 5 get this job done.

6 The other theme that I run into is that people
 7 want the problem solved but they are concerned about
 8 affordability and they want to make sure that it's not too
 9 expensive to get the problem solved, and again that's a
 10 very common theme that I have run into.

11 Another concern is a little more focused.
 12 It kind of comes from the mountain county areas, area of
 13 origin, and they are concerned that we are going to fix the
 14 Bay-Delta problems only to limit their ability to develop
 15 in the future and limit their water supplies and they are
 16 very, very concerned about that.

17 And -- but with that they want to participate.
 18 They want to make sure we move forward. They just want to
 19 make sure that we address their issues.

20 Another one, and I think we'll get into this a
 21 little more substantively today, a concern that this kind
 22 of ecosystem approach, habitat approached is untried. I've
 23 had some refer to it as ecobabble.

24 And maybe we'll be able to define that term,
 25 but concern that we are going to fix the habitat but it

1 who we are working for.

2 CalFed is a consortium of five Federal and five
 3 State entities that have come together in a very unique
 4 situation to try to address the complicated and
 5 controversial at time issues, resource issues, of the
 6 Bay-Delta system.

7 CalFed as it's set up really has three basic
 8 functions; the Water Quality Standards for the estuary
 9 protection that have moved forward since the December
 10 accord, the CalFed OPS groups, which coordinates the
 11 operation of the two projects and tries to integrate water
 12 quality standards compliance with ESA compliance and deal
 13 with water supply and environmental issues in a coordinated
 14 fashion.

15 And the third function, of course, is the
 16 CalFed Bay-Delta Program or this effort.

17 As we move forward with the CalFed Bay-Delta
 18 Program there is kind of some basic guidance or basic
 19 principles that we are looking at.

20 One is that we need to have a lasting solution.

21 Again, the issue is that we are not trying to
 22 anticipate just the next drought and how we are going to
 23 get through it or we are not trying to simply deal with two
 24 of the most critical and dangerous species we have now in
 25 front of us but rather try to look at the long-term and

1 have a fix that lasts a long time from a lot of different
 2 perspectives.
 3 To do that it has to be comprehensive and our
 4 view is to be comprehensive it has to be collaborative.
 5 We've got to get people involved in the program from a lot
 6 of different perspectives.
 7 One of the issues that we have attempted to
 8 more formally integrate into the program, and you may
 9 recall, actually Judith Redmond in our last meeting kind of
 10 brought up this issue of "Make sure when you solve a
 11 problem with an action you just don't have an impact that
 12 creates another problem," such as using transfers to solve
 13 somebody's problem only to devastate a rural economy.
 14 This is the kind of thing that has come up with
 15 a lot of our workshops and meetings that we've had with
 16 people.
 17 We have to make sure that our program just
 18 doesn't solve the problems that we have in front of us, but
 19 rather doesn't create new problems. And so we have to
 20 identify those impacts, integrate them back into the
 21 program.
 22 In terms of our program elements we have a
 23 three phase planning program, which I'll go into a little
 24 more detail on.
 25 We are pursuing a financial strategy so we have

1 And, certainly, as we start moving down the
 2 road to propose solutions the recommendations from BDAC are
 3 going to be very important.
 4 The three phases of the program, the first
 5 phase, the one that we are in now, is problem definition,
 6 setting goals and objectives and developing a short list of
 7 alternatives to move into Phase 2, which is the Program
 8 Level EIR/EIS or the 1st Tier Environmental Document.
 9 That should result in a preferred alternative,
 10 which then would lead to Project Level Environmental
 11 Documentation or 2nd Tier Environmental Documentation.
 12 Just to kind of refresh on the level of detail
 13 issue of what you might expect in each of these phases, at
 14 the end of Phase 1 there could be a component of a
 15 recommendation -- or of an alternative that would say we
 16 need to restore shaded riverine habitat.
 17 By the end of Phase 2 we would hope that that
 18 is refined to the point of distorted riverine by seven to
 19 9,000 acres in the Central and Eastern Delta and by the
 20 time you are at the Project Level you have specified 9,000
 21 acres and you've specified the location of it. So that's
 22 kind of the progression of level of detail.
 23 Another example of level of detail, to make
 24 sure that we are matching our program expectations or, if
 25 need be, adjusting expectations, at this point in Phase 1

1 some reasonable assurance that we can afford to implement
 2 whatever we come up with and an aggressive Public Outreach
 3 Program, again, to try to maintain the collaborative nature
 4 of the program.
 5 In terms of the some of the public input we've
 6 talked about the CalFed Program direct relationship with
 7 the public in terms of workshops and public meetings, but
 8 also BDAC provides an important focus, an official place
 9 where the public can come, plug into, get on the Agendas
 10 of, and participate.
 11 Also, given the cross-section of BDAC itself
 12 you are kind of a safety net for us to make sure that we
 13 are listening to the right publics, we are getting the
 14 right message.
 15 If you start seeing that we are not addressing
 16 certain issues that you are aware of, then you need to help
 17 us redirect our Public Outreach Program so we are casting
 18 the net wider and getting more people involved.
 19 And, specifically, in terms of the role of BDAC
 20 we clearly have the function of advising CalFed on the
 21 problems and objectives, but also the public participation
 22 effort, the public outreach, is the point that I just
 23 mentioned, that you need to make sure as you look at the
 24 Public Workshop products that from your perspective and
 25 your constituency we are capturing issues in that process.

1 you might have an action category that is offstream
 2 storage.
 3 In fact, in your yellow handout in your -- was
 4 it yellow in the folder? Okay. I'm not sure we're
 5 consistent -- you have one in there that is offstream
 6 storage, and so at this part of Phase 1 we are talking
 7 about offstream storage and how it can fit into a strategy
 8 that solves some of the Delta problems.
 9 By the end of Phase 1 what you might
 10 have -- Jack, did you want to take over -- okay.
 11 We have done enough analysis so we've concluded
 12 we need north of Delta storage in the range of, just for
 13 example, 3,000 to five -- or excuse me -- say 300,000 to
 14 500,000 acre feet and that moves through Phase 2.
 15 Hopefully, we can conclude at the end of
 16 Phase 2 that it's north of Delta offstream storage. It's
 17 500,000 acre feet and you specified how you'll operate the
 18 reservoir.
 19 At the end of the Project Level Environmental
 20 Documentation you have designed and cited CalFed Reservoir,
 21 the specific location, the specific size, and specifically
 22 how it's operated and so again that's the kind of level of
 23 detail we are anticipating from the three phases.
 24 Phase 1, the track that we are on, is to be
 25 completed with that effort by mid-May of '96.

1 It's still an aggressive schedule but still a
 2 schedule, I believe, we can meet with the workshop process
 3 we have setup.
 4 This is the kind of schedule of input. We need
 5 to use a marker here, a fresh marker.
 6 And there is a couple things I want to indicate
 7 on here of the modifications that have been made. We added
 8 the public meetings, the evening public meetings, five in
 9 each month, September through January.
 10 We already had the first in Stockton, and since
 11 you last saw this we added the fifth in Fresno.
 12 Just last week at our workshop after discussion
 13 with the workshop participants we decided to combine the
 14 November, December workshops into a December 4th workshop.
 15 And it worked out well, both to accommodate the
 16 holiday season and that sort of thing, but also to combine
 17 the material and for us to get some product out that might
 18 help people come in prepared to really respond to some of
 19 our thoughts in the program, where we go from here.
 20 In terms of the Flow Chart that we used before,
 21 a six step program starting with problem definition and
 22 concluding with a short list of alternatives.
 23 We have gone through Steps 1 and 2 to prepare
 24 draft material on the problems and objectives.
 25 That effort, to some extent, you could say, has

1 word is that you want to use, with which you start pulling
 2 actions together or action strategies together to start
 3 forming preliminary alternatives, and this is what is
 4 taking up a lot of staff time currently, will be a critical
 5 feature of the next workshop, and Steve Yaeger will get
 6 into a little bit of this this afternoon in some of what
 7 our initial thinking is on this.
 8 In terms of a process schematic, how all this
 9 starts fitting together, we have the problem
 10 identification, which leads to developing objectives.
 11 Problems are problems with a cause. There is a
 12 cause that has led to that.
 13 Causes end up being quite related to actions.
 14 If you have a problem with certain fish
 15 specie's survival and a cause is they get sucked in by
 16 diversions, that an action can be screened diversions and
 17 so all that gets related.
 18 You have a process where you start looking at
 19 your actions and objectives and start forming alternatives.
 20 You evaluate alternatives for the impacts for
 21 relocations of problems and you compare them against
 22 performance measure yourself.
 23 This all becomes a very iterative process.
 24 It's not a once-through, and so this is the kind of thing
 25 that would probably get started with our next workshop and

1 yielded mission statements, solution principles and the
 2 basic four categories of problems.
 3 Perhaps one of the more important issues to
 4 know here is on the solution principles. Where we really
 5 now have six, we started off with four, we now have six
 6 principles that we are trying to use to guide how we
 7 address these problems and how we pull them together.
 8 The two that we added after the last BDAC
 9 discussion and after the two workshops was a solution
 10 principle that we want, strategies that reduce conflict
 11 between beneficial users, and we want strategies that do
 12 not redirect the impacts.
 13 And that's the same issue we talked about
 14 before.
 15 We don't want to solve a problem by simply
 16 relocating where the problem is.
 17 Step 3 in the process was largely the subject
 18 of our last workshop last week and that's the issue of
 19 actions and action categories, and so we are still in the
 20 face of making modification, refining the list of action
 21 categories, and integrating the comments we got at the
 22 workshop, and that's -- ends up being a very related
 23 process to developing what we call the solution strategies.
 24 And the solution strategies are basically the
 25 principles, themes, guidelines, framework, whatever the

1 goes on for two months, even to get to some solid
 2 preliminary.
 3 So, again, it's a very iterative process.
 4 The image again is to try to devise a strategy
 5 which addresses all of the basic problem areas and does it
 6 in a balanced fashion.
 7 And it's becoming more and more clear that we
 8 have to get these linked together because of some of the
 9 issues I identified earlier, the suspicion, the suspicion
 10 is that you set up a program but you only implement this
 11 one, and so there is a whole issue of linkage of tying
 12 these things together so everybody has assurance that their
 13 issues are going to get addressed and we can all move
 14 forward together.
 15 Let me switch gears just a little bit and try
 16 to set up the next discussion some.
 17 And this kind of gets into some of the topics
 18 of the workshop --
 19 MR. MADIGAN: Lester, let me stop you for
 20 just a second and see if there is anybody on the Council
 21 that has any questions about what you raised so far.
 22 This is not new information for you and Lester
 23 is making a point of repeating it so we all have some
 24 understanding of how this thing is going but I want to make
 25 sure that we are all comfortable. Okay.

1 Thank you.
 2 Tom.
 3 MR. GRAFF: I have a question.
 4 To the extent that some of the recommendations
 5 of the program and/or this Council might make would require
 6 legislative action at the State level, possibly even at the
 7 Federal level, where do you see that fitting in?
 8 EXECUTIVE DIRECTOR SNOW: We actually at
 9 this point have several action categories, and the names of
 10 them don't come to mind right now, that include what would
 11 be called institutional issues.
 12 And within that would be necessary legislation
 13 and so I think it is in the purview of the program that we
 14 look at, say, critical pieces of legislation that are
 15 necessary to implement some component of the program.
 16 So I guess I'm saying it's within the bounds of
 17 this effort to consider State and Federal legislation that
 18 may be necessary to implement a critical piece of the
 19 program.
 20 MR. GRAFF: Let me just take it one little
 21 step further.
 22 To the extent that this kind of gives the
 23 appearance of being at the end of the process a finished
 24 program, what my experience tells me is that legislatures
 25 and Congress don't like finished programs presented to them

1 loop.
 2 But I think we will want to prepare as complete
 3 a package as we can at the end of this as opposed to
 4 providing, you know, Congress three options to pick from,
 5 and I just think we need to keep the issue in front of us
 6 and be aware of it as we move along.
 7 Yeah. Tom.
 8 MR. MADDOCK: Is the Mission Statement
 9 now, is that finalized?
 10 I thought some of the material that was sent
 11 out sounded like it was still being iterated into the
 12 semantics and then some of the objectives under the four
 13 categories, and you and I have talked about a couple -- one
 14 of them there in particular.
 15 But, I mean, are those ready to be put to bed
 16 or is there more discussion on that or what?
 17 EXECUTIVE DIRECTOR SNOW: Later on the
 18 Agenda, I think actually under this Agenda item, we would
 19 like to have BDAC reconsider the Mission Statement after
 20 we've modified it from our workshop process so I'd like to
 21 try to put that to bed.
 22 And that is basically the Mission Statement.
 23 I'd also like people to be comfortable with the
 24 primary objectives.
 25 Now, in terms of the other kinds of objectives,

1 necessarily because they want to at least massage what's
 2 going on if not, you know, kind of repackage it.
 3 Is that a problem or do you foresee that as a
 4 problem?
 5 EXECUTIVE DIRECTOR SNOW: Well, I guess I
 6 was under the impression, Tom, that you could deliver
 7 Congress on a lot of these issues --
 8 MR. MADIGAN: what's your point, Tom?
 9 That the political process is a problem
 10 sometimes?
 11 Is that what you're saying to us?
 12 MR. GRAFF: I think we need to be thinking
 13 about that issue, whatever the recommendation --
 14 CHAIRMAN MADIGAN: It's an important flag
 15 to send up at this point. And to digress at the moment.
 16 This is something that may need to be a broader
 17 BDAC type of effort.
 18 But we are recognizing, not specifically the
 19 issue that you've raised, but elected officials care about
 20 this issue, and we need to more formally start briefing
 21 them and providing them information and so we are starting
 22 to prepare legislative briefing packets on this so they
 23 understand what's going on.
 24 As the program progresses we need to get more
 25 specific about specific issues to try to keep them in the

1 Tom, like some that you've raised about the hydraulic
 2 nature of the Delta and that sort of thing, I think there
 3 will be a chance on the immediate next item when we are
 4 talking about what are called the primary problem objective
 5 statements we'll get some chance to have a discussion on
 6 some of those kinds of issues and we can still integrate
 7 those into the problem objective statements.
 8 CHAIRMAN MADIGAN: Anybody else? Okay.
 9 Roger.
 10 MR. STRELOW: I just want to follow-up on
 11 Roger's point earlier. It probably would be helpful as
 12 early as feasible, and I suspect you have some pretty good
 13 ideas at this point.
 14 My impression has always been that any
 15 legislative pieces that may fit into the puzzle solution
 16 would be fairly limited; that is, that the vast majority of
 17 things that may need to be done could be done and probably
 18 would propose -- would be proposed to be done under
 19 existing authority.
 20 It would be helpful, I think, as early as
 21 possible for us to kind of understand from the staff's
 22 point of view where they think legislation may be necessary
 23 in critical areas.
 24 Because my sense is there might be fairly
 25 specific pieces that would be taken either at the Federal

1 -
- Call Susan Portale -

Have her make changes to the last
2 meeting minutes + send us corrected
pages.

1 or State levels from time to time but most likely not, you
2 know, an overall comprehensive program, which I think is
3 probably the right way to go, but it just would be helpful,
4 I think, as we envision how this political process plays
5 out.

6 Because the more that requires legislation,
7 obviously, the much more complicated it's going to get.

8 EXECUTIVE DIRECTOR SNOW: That's a good
9 point, and I think we can, by the next BDAC meeting,
10 highlight some areas where there may be legislative
11 involvement.

12 And just to add on a little bit, many people in
13 this room who have participated in discussions, you know,
14 over the last ten years about how you should approach
15 fixing the Delta, you often come to a point of what I
16 referred to earlier, linking all of these things together
17 and other people call it guarantees.

18 How do we know if we move forward with this
19 nice package that my side of the package doesn't get
20 dropped out, and people often at that point talk about some
21 legislation to help provide guarantees, contracts, and that
22 sort of thing so we know that sort of discussion is in our
23 future and there probably are some other areas also and
24 I'll make an effort of identifying as many of those areas
25 as we can for the next meeting so it's more clear to all of

1 objectives."

2 And in the final analysis we want to get all of
3 the problem areas together and try to focus in this
4 overlapping area and get actions that line up objectives.

5 And we want to try to stay -- speaking of
6 Congress, I guess -- stay away from what I call the
7 Congressional Christmas tree approach and you just add on
8 these single action things around the outer circle.

9 It's inefficient. It's expensive, and I think
10 we need to focus as closely into the win-win alternatives
11 as we can, and that's not easy all the time.

12 But this was a lot of the focus of our workshop
13 last week, to try to get some sense of the overlapping
14 areas with the different actions and kind of identify
15 those, and even in some cases identify high overlap and low
16 overlap on some of these.

17 With that -- any questions about that?

18 MS. MCPPEAK: Mike, may I ask a question?

19 On the problem areas, linkages, the
20 intersection of the circles -- I love the diagrams --
21 what's the time frame you are expecting the identification
22 of those problem area linkages, therefore, perhaps,
23 solution strategies?

24 Is where between now, the next meeting and
25 May, '96 do you think we'll get into this dialogue?

1 us where the legislature and Congress may be in our future.

2 As we got into discussion of action categories,
3 one of the issues that we raised was linkages, and we think
4 that's real important, and the ensuing discussion here is
5 going to focus a lot on the linkage kind of issue.

6 But if you just look at this ecosystem circle,
7 and if you pretend for a moment that the circle represents
8 all of the ecosystem problems, and I think we all
9 acknowledge that there's very different kinds of actions
10 that you can take to address the ecosystem problems.

11 If you have a problem of entrainment, you could
12 have an action that is "Stop all diversion of the system."

13 You can have an action that is "Restore some of
14 the habitat that's been lost over the last fifty years."

15 So there is a wide variety of actions that you
16 can take to address any individual problem.

17 And, again, what we are trying to focus on is
18 if your action is to "Stop all diversions from the system",
19 not only is it not complimentary to water supply but it's
20 antagonistic, and if your method of solving water supply
21 problems is to not worry about endangered species,
22 sacrifice them, then that's antagonistic to ecosystem.

23 And so the idea that we've set out is "Let's
24 try to identify as much of the overlap area as possible so
25 we can start developing actions that solve multiple

1 EXECUTIVE DIRECTOR SNOW: we will start
2 some of it today.

3 MS. MCPPEAK: Okay.

4 EXECUTIVE DIRECTOR SNOW: It will be a
5 major part of the December 4th workshop, and it will be a
6 major part of the December 6th BDAC meeting because we are
7 starting to get to that stage, and so I would hope at the
8 December 6th meeting we'd be able to talk about where we
9 think there is high overlap on these issues as well as talk
10 about solution strategies.

11 One thing I'll mention a little bit later
12 today, but I'll hit it now, we kind of have this hierarchy,
13 and it's maybe not intuitive, but there are actions, there
14 are action categories, and the action categories are kind
15 of the large groupings, and that's like offshore storage,
16 and then what also occurs to us is that you have kind of
17 bundled action categories, and that means you are looking
18 for other action categories that if you put them with
19 another one, you are starting to pick up more synergy in
20 terms of how many objectives you can address.

21 And then the process really is to take these
22 bundled action categories and using your strategy, what's
23 your strategy for solving the problem, you start forming
24 preliminary alternatives.

25 And so we would hope at the December 6th

1 Meeting, which perhaps we may conduct in a more workshop
2 fashion, we are working in that arena of bundled categories
3 and strategy and how do these fit together and where are
4 their synergistic benefits, where are their antagonistic
5 relationships.

6 One of the things that we found as we produced
7 the Problem Statements and the Objective Statements was
8 that they are kind of long lists, and if you were engaged
9 in the workshops, if you came perhaps to the BDAC meetings,
10 you sort of had a feel for it, but if you were a reader off
11 the street and you had to read through those statements or
12 if you had to look at those hierarchies that we produced,
13 it was not intuitively obvious what the problem was.

14 And so to try to bridge some of that gap we
15 produced what we called Primary Problem Objective
16 Statements, which I think we mailed to you in the first
17 mailing as a setup for this meeting and it was in the
18 packet this morning, also.

19 Is that correct?

20 MS. GROSS: I don't think they were in the
21 packet.

22 If anyone doesn't have them in the first
23 mailing they are in the --

24 EXECUTIVE DIRECTOR SNOW: They were in the
25 first mailing, and we have additional copies if you don't

1 little bit, is that we found because we are a planning
2 process, because we have so much time on our hands, we went
3 through so much detail and created so many different
4 versions of these Problem and Objective Statements that we
5 may have confused you and so we made an effort to
6 consolidate all of the different thoughts and prepare a
7 brief, perhaps concise paper that helps people understand
8 how we are re-inventing the wheel, re-describing the
9 problems and a little bit of insight into the linkages that
10 are associated with solving these problems.

11 CHAIRMAN MADIGAN: Dick, hang on just a
12 second.

13 Remember, that this meeting is being recorded
14 by our court reporter so if you have a question or
15 something, give me a chance to recognize you so that she
16 gets your name or identify yourself so that she can pick it
17 up. Good.

18 Thank you.

19 Go ahead.

20 MR. DANIEL: In our ecosystem quality
21 Primary Problem Objective Statement we very briefly
22 describe some of the very long chain of events which have
23 combined to grade the quantity, quality and productivity of
24 the ecosystem in the Central Valley vis-a-vis its aquatic
25 habitats in particular.

1 have it with you.

2 But these were two to three page narrative
3 descriptions to try to summarize what the problem is,
4 summarize what the objectives are -- they are in the
5 package, apparently -- and perhaps, more importantly, start
6 introducing the concepts of linkage, to try to get this
7 down to a level where people are starting to get a feel for
8 what the problems are.

9 And so I think it's important that we focus a
10 little bit of time this morning on this document because it
11 will be an important tool for us to communicate the
12 problems out to people and also to start up discussion
13 about the linkage.

14 And so at this point, with the Chair's
15 permission, let's go ahead and jump into that and hit the
16 one where we think we maybe have the most difficulty in
17 getting people to understand, like a habitat approach, an
18 ecosystem based approach, and so we are going to have Dick
19 Daniel start off with that one.

20 CHAIRMAN MADIGAN: Dick.

21 MS. BORGONOVO: Can you identify for us if
22 the little piece of paper we are pulling out is the Primary
23 Problem Objective Statements?

24 MR. DANIEL: Yes, it is.

25 And what Lester said, and I'll repeat it a

1 In the Delta the study decline can be seen in
2 the form of degraded aquatic habitats, reduced aerial
3 extent and quality of wetlands habitats and a decline in
4 the populations of several species which are native to the
5 Delta or are economically or environmentally important.

6 In order to deal with the conflict between
7 beneficial uses that this decline has caused we believe a
8 long-term solution must be based on restoration and perhaps
9 creation of habitat.

10 Now, a lot of people, and Lester repeated it
11 again today, have described some of this ecosystem quality
12 habitat based concept as ecobabble.

13 I sincerely hope that that's the last time that
14 phrase is used. I find it upsetting.

15 But a lot of people have been confused as to
16 what exactly we are talking about, and I'd like to go
17 through a process today, which is a little bit educational
18 and is my attempt to help you understand some of the
19 terminology and concepts that we are pursuing.

20 Habitat, a habitat is the combination of
21 physical, technical and biological elements necessary to
22 sustain an organism or a population of organisms.

23 If you look in a dictionary, you'll find out
24 that it very simply says "habitat is where the critters
25 live".

1 It's where an organism, be it a fish, a fowl,
 2 or a critter, feeds, finds shelter, rest, and where it
 3 reproduces.
 4 Habitat needs are quite different between
 5 different species. Habitat needs are different during the
 6 various life stages of an individual species, and every
 7 habitat has a carrying capacity.
 8 Carrying capacity is the number of organisms
 9 that a habitat can support over the short or the long-term.
 10 Carrying capacity can change on a fairly
 11 regular basis, and is limited in some ways.
 12 We describe carrying capacity as an element of
 13 habitat which controls the number of or the survival rate
 14 of the organism or a population of organisms.
 15 It might be space. It might be temperature.
 16 It might be food supply. It might be some kind of
 17 pollutant, but virtually every habitat has some measure
 18 that might be identifiable which limits the number of
 19 organisms that can occupy a given space that is described
 20 by that habitat.
 21 The process of manipulating limiting factors is
 22 what we commonly call the stuff of fisheries management and
 23 wildlife management or population management.
 24 Now, virtually every species that is of concern
 25 in the Delta and in the Sacramento/San Joaquin Valley

1 themselves out of house and home".
 2 That's one of the things that happens when this
 3 balance gets out of control.
 4 In addition to that, over and above this
 5 natural mortality that helps keep the populations of
 6 organisms in balance with their habitat we coined a term
 7 called additive mortality.
 8 Additive mortality are those factors which
 9 create mortality which is over and above the natural loss
 10 to the population and can affect a population stability
 11 over time.
 12 We, society, have conducted a number of
 13 activities which have been beneficial to society as a whole
 14 which has reduced the carrying capacity and has created
 15 additive mortality to the populations of fish and wildlife
 16 that are of concern in the Delta and in the Central Valley
 17 ecosystem.
 18 We've reduced the carrying capacity of the
 19 existing habitats.
 20 When additive mortality persists, populations
 21 decline, conflict is created, and the Endangered Species
 22 Act might be invoked as an example.
 23 In our program we intend to focus on the
 24 aquatic and wetland habitats and on specific management
 25 activities which will deal through a management or a

1 ecosystem is very fecund. They can produce a number of
 2 young.
 3 That's not uncommon with all animal. They can
 4 outstrip the capacity of there habitat to support them.
 5 They produce what I call genetic waste, numbers of young
 6 that exceed the capacity of the habitat to support them.
 7 This is a very natural process.
 8 The process is controlled by what we call
 9 compensatory mortality. The natural establishment of
 10 balance between the population of a particular organism or
 11 organisms and the ability of its habitat to support a given
 12 amount of life.
 13 Even human beings will one day run into a
 14 carrying capacity problem on the earth.
 15 So far the industrial revolution advances in
 16 agriculture have slowed that process down but we are
 17 creeping towards some sort of carrying capacity as far as
 18 the earth is concerned and we'll eventually have to come to
 19 grips with that.
 20 This is a natural process. I want to repeat
 21 that.
 22 It's a way that nature keeps the population of
 23 organisms in balance with the carrying capacity of its
 24 habitat.
 25 Perhaps you've heard the old phrase "eating

1 regulatory process with populations that are subject to
 2 considerable additive mortality and have declined to the
 3 point where conflicts between the various resource
 4 categories that we are pursuing have persisted.
 5 It is this additive mortality factor that we
 6 are going to try and deal with through the restoration of
 7 habitat.
 8 We believe by recreating or re-establishing
 9 habitat wherein our species of concern can find shelter,
 10 can take rests, can find food, and can reproduce in a more
 11 natural and productive way we can overcome a number of
 12 these man caused problems that have been creating the kinds
 13 of conflicts that we are trying to reserve -- resolve in a
 14 long-term solution.
 15 I'm going to leave it at that.
 16 I know that some of this stuff is confusing.
 17 I'd be more happy to entertain any questions that come up.
 18 CHAIRMAN MADIGAN: Questions?
 19 Alex.
 20 MR. HILDEBRAND: The thing that concerns
 21 me and we discussed it somewhat in the BDOC which preceded
 22 the BDAC is this question of the competition among species.
 23 Let me start with an analogy.
 24 Photosynthesis and other factors place pretty
 25 much of a limit on the extent -- on the amount of biomass

1 you can grow on an acre of ground.
 2 About half of the weeds in the Central Valley
 3 now are exotic species.
 4 If I grow a crop and I don't control the weeds,
 5 the weeds displace the biomass in the crop and I don't get
 6 as much of a crop because I am growing more weeds.
 7 Now, I think the same thing is happening in the
 8 Estuary.
 9 I have seen no analysis that indicates that the
 10 total aquatic biomass in the Estuary has decreased from
 11 what it was 40, 50 years ago but it has certainly been
 12 altered.
 13 We have about half of this fish species in the
 14 Delta are exotic fish species and this goes on down to the
 15 food chain.
 16 And so when you talk about improving the
 17 habitat for a given species, you are also improving it
 18 through these exotic species, and it isn't clear to me that
 19 we have enough understanding of this to predict that when
 20 we make an improvement in the habitat for one species that
 21 we are going to change the mix, and if we don't change the
 22 mix, we may not restore very much of that particular
 23 species. We may merely augment a little bit to the overall
 24 aquatic mass -- biomass in the Estuary.
 25 How do we address this?

1 Act.
 2 There is something magic about it but it is a
 3 very, very difficult thing to try and provide guarantees
 4 that if you do this, X will be the result. If you do that,
 5 Y will be the result.
 6 But we do know that there was a natural balance
 7 amongst the species.
 8 We do know that nature always seeks a balance
 9 and that we have the ability to try and manipulate that
 10 balance by modifying carrying capacity of certain target
 11 habitat, and that's the approach that we are trying to
 12 pursue.
 13 MR. HILDEBRAND: The problem is that
 14 insofar as we've modified the habitat by introducing exotic
 15 species which we can't control it raises a question of to
 16 what degree can we expect to go back and augment the
 17 populations of the species we prefer, and if we are very
 18 limited in our ability to do that, we shouldn't go to
 19 enormous lengths that will be unproductive in that regard.
 20 And I don't mean to imply that there is no
 21 potential there, but it may be limited, and I think we have
 22 to acknowledge that limitation in some way in deciding what
 23 to do about it.
 24 MR. DANIEL: I would agree with you. It
 25 is limited in terms of space available.

1 MR. DANIEL: Not entirely on fate,
 2 although I wish we could rely on that.
 3 In a natural system there is a constant process
 4 of succession where species composition change, some
 5 species go extinct, others colonize, and that's a very
 6 natural process that's been going on since life began.
 7 We've altered the system and we have created a
 8 situation where some of the species that we hold near and
 9 dear have been disadvantaged, either because of stresses
 10 associated with modifications to their habitat, perhaps
 11 stresses to the population associated with harvest, or
 12 something as straightforward as diversion of the young of a
 13 species out of the system such that they can't compete as a
 14 population.
 15 Unlike your farm we really don't have the
 16 option to go out and mechanically or chemically reduce the
 17 populations of the undesirable species to the advantage of
 18 those that we believe to be desirable, but we can go back
 19 in and take a hard look at how we've modified the habitat,
 20 how we've disadvantaged those species that we consider to
 21 be important, and we can try and restore habitat so that
 22 they can compete, so that they can produce healthy
 23 offspring, so that they can grow up and rear and become
 24 either the product that we try to harvest or the fish that
 25 we count in terms of take numbers in the Endangered Species

1 Certainly, it's limited in terms of dollars
 2 available, and one of the real important aspects of our
 3 program that Lester illustrated with his nuclear diagram
 4 is that we see quite a number of linkages between habitat
 5 restoration and the production of a more reliable and
 6 perhaps larger water supply available for export out of the
 7 Delta.
 8 We see linkages between improvements in water
 9 quality and restoration of a robust environment.
 10 There are linkages associated with rebuilding
 11 levees and providing more stable facilities in the Delta
 12 and the opportunity to recreate some of these shallow water
 13 habitats that appear to be lacking and are so desirable in
 14 terms of providing shelter and rearing capabilities within
 15 the Delta for juvenile fishes.
 16 So we are not really looking at a single
 17 purpose habitat restoration, but we do find that if we put
 18 some new nooks and crannies back into the Delta, if we mess
 19 it up a little bit instead of smoothing it out, which seems
 20 to be the process that we've gone through, if we change the
 21 mannings coefficient so it is nowhere near as efficient as
 22 it is now, the smoothness of the water conveyance facility,
 23 we think that we will give these fish a chance to recover,
 24 and if they can then out-compete the invaders, which is the
 25 way the process works, then we go back to a different

1 stable ecosystem that might be different from anything that
2 we've ever seen. Certainly, different than what we have
3 now but not necessarily something that we can predict.

4 CHAIRMAN MADIGAN: Sunne.
5 MS. MCPEAK: If Alex would be cooperative,
6 I'd actually like to ask you a couple of questions and try
7 to illustrate what I'm understanding this process to be.

8 A lot of substance is behind each of these
9 sheets of paper, and a lot of work has gone into it.

10 Although some of it is repeated at each
11 meeting, there is a lot that is implied if we sit here and
12 not question it, that we're they are agreeing to or
13 acquiescing to.

14 So, Alex, on the habitat discussion paper, I
15 have a two-part question for you.

16 Do you have any major problems with the
17 statement as it's been presented, and, if so, what?

18 And, secondly, how would you answer your own
19 question?

20 Because I know you have an answer.

21 MR. HILDEBRAND: Well, I don't have a
22 problem quite with what it says.

23 I'm apprehensive about what it doesn't say.

24 MS. MCPEAK: And what is that?

25 MR. HILDEBRAND: And that is to recognize

1 has been reduced.

2 Maybe it has, I don't know, but I don't see
3 anything to show that.

4 And as a farmer I can't help but look at the
5 analogy of the terrestrial plants and the competition there
6 and it makes me wonder.

7 We can see that better than we can see what's
8 under water, but I think the basic competition problem is
9 quite similar.

10 And even if you look at the ecological
11 consequences along where you can see it, the water
12 hyacinths come in, the Eurasian milfoil that comes in
13 that's displacing the habitat for frogs and turtles and
14 things that you can see, and we haven't been very
15 successful in doing anything about that.

16 So I don't want to be defeatist. I'm not
17 suggesting at all that we should do nothing.

18 I am only suggesting that in order to be
19 realistic we may have to give more thought to this
20 competition problem.

21 MR. DANIEL: One final comment on that.

22 I agree with you.

23 I really have no idea how to try and solve the
24 problem, but we have seen tremendous recovery of our
25 fisheries' populations this year.

1 more the problem of this competition of introduced species.

2 I don't quarrel with what Dick says about the
3 potential for making improvements, but I am apprehensive
4 that we may overestimate the potential for recovery of
5 native species in the absence of our ability to remove
6 exotic species.

7 And when you come down to what should we do to
8 fix the Delta, we shouldn't go out and spend vast sums of
9 money and the vast impacts on water supplies if the
10 potential benefit ecologically is not very great.

11 Now, I don't know the answer to how, but I
12 think that it is a serious problem and we are going to have
13 to face up to that.

14 We are going to have compromises. We are not
15 going to have a perfect solution, and we are not going to
16 shut down all the exports and neither are we going to fail
17 to try to restore the habitat.

18 But this overlap of what you can effectively do
19 with the resources we have of both water and money, I think
20 we have to be realistic about it.

21 And I don't know the answer to it but it
22 concerns me a little that we tend to brush this aside, this
23 competition question (indicating).

24 And, as I said in the beginning, I have yet to
25 see any analysis that says that the overall aquatic biomass

1 Those exotic species were out there last year
2 and the year before and the year before that, true, but I
3 think anybody who utilizes the fish that are produced in
4 and near the Delta, anybody who has to deal with the
5 Endangered Species Act, will tell you that in 1995 things
6 have been pretty darn good.

7 Now, what we have to figure out is in addition
8 to the enormous flows that we had what did those flows
9 cause, what were the habitats that were created or improved
10 that might have been limiting prior to 1995, and how can we
11 reproduce that at a cost that society can withstand?

12 MR. HILDEBRAND: There is no question that
13 this was a good year for fish but I'd rather not be flooded
14 every year.

15 CHAIRMAN MADIGAN: I have Steve and then I
16 have Hap. I have Roberta and Roger.
17 Steve.

18 MR. HALL: Thank you.

19 Sunne, were you done?

20 MS. MCPEAK: I think so.

21 MR. HALL: Okay.

22 Dick, this relates to Alex's question.

23 Is it fair to say that -- and I'm just trying
24 to put this in lay terms so I can understand it -- is it
25 fair to say that when species are in decline, it's because

1 the additive mortality, all of these things that add to
2 natural mortality, are greater than the capacity of that
3 species to reproduce at least on a short-term basis?

4 Is that --

5 MR. DANIEL: Yeah, that's a fair
6 characterization.

7 MR. HALL: IS that a simple equation of
8 how it works?

9 Do scientists know in this Estuary which
10 factors in additive mortality, whether it be introduced
11 species, fishing, diversions, habitat alteration, which
12 contributes how much to that difference between the
13 additive mortality and the species capacity to reproduce?

14 Do you know?

15 MR. DANIEL: I know that we don't know.

16 I know that we have the ability to try and sort
17 them out.

18 I know that we can analyze factors
19 independently, that we can do multiple regressions and
20 analyze them in groups.

21 I do know that the vast majority of the kind of
22 things that you are talking about with the exception of
23 harvest are not issues that you can experiment with very
24 readily.

25 And so what we are going to have to put

1 in the aquatic environment, we'll measure the benefits and
2 adjust accordingly.

3 MR. HALL: Okay. Last question.

4 Alex talked about the amount of biomass, and I
5 assume he was talking about both terrestrial and aquatic.

6 I have been told that in areas where the Asian
7 clam, *Potamo~~corbula~~ amurensis* is dominant in the Estuary,
8 that they can remove up to ninety percent of the
9 zooplankton in the water column, zooplankton which a lot of
10 fish at their early stages life stages feed on.

11 Is that a fair estimate?

12 MR. DANIEL: Yeah.

13 The Asian clam has replaced some other clams
14 that had been resident for a much longer period of time,
15 natives.

16 They are very efficient filter feeders, but
17 they don't take this biomass out of the system.

18 The only changes that have occurred in my mind
19 relative to biomass produced in the Delta ecosystem is that
20 we do, in fact, export some of it with the water that we
21 export out of the system for Southern California and other
22 areas.

23 But in terms of the productivity of the Delta
24 it is possible that less biomass is being produced because
25 there is less habitat, less opportunity for residence time

1 together is what we have been calling an Adaptive
2 Management Program where the scientists, the biologists get
3 together, collaborate to try and define these limiting
4 factors and attack them one by one by one and evaluate the
5 results.

6 Now, we don't have a lot of time to do that,
7 and so we won't design the perfect experiment in terms of
8 evaluating the relative benefits of various actions.

9 But we've got a pretty good idea of the kind of
10 things that we can look at and we'd look at history, how we
11 changed the system to disadvantage the species that we find
12 desirable.

13 MR. HALL: So in your mind before we
14 get -- we as a process, the CalFed process -- gets to the
15 point where we are recommending solutions for species
16 related problems, we will have not perfect knowledge but
17 enough information that we can make a judgment about how
18 much each one of those is going to contribute to the
19 population?

20 MR. DANIEL: Number one, I think we'll be
21 able to provide up a relative judgment as to how much
22 benefit will be derived from a given action, but probably
23 most importantly is that we will have a suite of
24 performance measures associated with that particular action
25 so that we can measure, to the extent that we possibly can

1 for phytoplankton and zooplankton in the Delta.

2 But by and large there is a balance there, and
3 that balance probably hasn't changed very much except for
4 the export of biological products at the pumps. It's
5 changed the form.

6 MR. HALL: I don't want to belabor this,
7 but I've got to ask you a follow-up question based on your
8 last answer.

9 If you've got an area of the Estuary that is
10 particularly productive as a nurturing area for young fish
11 and in that area you have a species that is competing for
12 the food supply and that competitor is stripping ninety
13 percent of the food supply, then although in the entire
14 Estuary you may have a balance, in the area where the young
15 fish mated don't you think that has an effect on their
16 population?

17 MR. DANIEL: Yes, most certainly.

18 If it's a change -- one of the things, Steve,
19 that hasn't been disclosed is that there has always been a
20 filter feeder, a clam niche in the Estuary.

21 What has happened is that the Asian clam has
22 come in and to some extent displaced those that had been
23 resident before the native species that were there before,
24 but that filter feeding process is going on.

25 Now, if the Asian clams as a function of their

1 invasion and their colonization can filter more
 2 phytoplankton and zooplankton out of the stem than the
 3 original assemblage then things are out of balance
 4 vis-a-vis food supplies for other organisms but it tends to
 5 come back into balance over time.

6 To date no one has been able to document
 7 whether or not the Asian clam, even though it may filter as
 8 much as ninety percent of the zooplankton and phytoplankton
 9 out of the system, nobody has been able to document
 10 starving juvenile fish.

11 Food supply does not appear to be limiting.
 12 MR. HALL: I'll quit.
 13 CHAIRMAN MADIGAN: I have Hap and then
 14 Roberta and then Roger.
 15 I got you, Mary.
 16 MR. DUNNING: Thank you.
 17 Dick, is it implied in what you said about
 18 habitat restoration and habitat creation that measures
 19 taken would be designed exclusively with native species in
 20 mind?
 21 CHAIRMAN MADIGAN: There are Fish and Game
 22 revenues at stake here, Dick, so . . .
 23 MR. DANIEL: Not exclusively, primarily.
 24 I don't think that shallow riverine habitat
 25 with a complex of junk in it that give juvenile fishes a

1 We are not looking for a single species set of
 2 programs.
 3 CHAIRMAN MADIGAN: Roberta.
 4 MS. BORGONOVO: I think a way to look at
 5 it is to ask yourself what would happen if the habitat
 6 weren't restored, and my understanding is that in cases of
 7 endangered species, plants or animals, if you don't have
 8 the habitat, there is absolutely no chance whatsoever, and
 9 so I think there must be examples, the Chesapeake Bay
 10 Project where they looked at a whole range of issues and
 11 they do have plants and animals coming back.
 12 You've talked before of the linkage to some of
 13 the other programs that have gone on.
 14 The San Francisco Estuary Project identified
 15 all of these issues that have come up today, but over and
 16 over again the loss of habitat is the key, and the change
 17 in the whole system of fresh water falling out and mixing
 18 with the salt water, that's the key.
 19 So what I hear her saying is we are trying to
 20 go back to protecting an Estuary ecosystem, and I think
 21 that if we take the approach that's been laid out, we will
 22 be able to find ways to do both.
 23 MR. DANIEL: Yes.
 24 I'm not trying to be humorous here, but
 25 recently a friend and a colleague, a professional

1 place to hide would disadvantage striped bass or provide an
 2 advantage for striped bass.
 3 It's a place to hide, a place to feed, a place
 4 to rest, and for some of the species that are native to the
 5 Delta it's a place to reproduce.
 6 I do believe that the absence of complex
 7 aquatic habitat has provided a greater opportunity for some
 8 of the non-native fishes like large mouth bass and the
 9 croppie and bluegill, American shad and striped bass, a
 10 greater opportunity to prey on our native species and
 11 putting that kind of cover back into the system may
 12 re-establish some new balance between those species that we
 13 imported, deliberately those that have colonized
 14 accidentally and those that we consider to be native to the
 15 system.
 16 So for quite a number of years there have been
 17 funds available for restoring striped bass habitat, and
 18 there have been very limited opportunities, very limited
 19 number of projects that have been discovered that would
 20 specifically advantage striped bass.
 21 So I don't think that after all of the years
 22 that the Bay-Delta Program and all of the efforts and all
 23 of the money that we are going to create some new ideas
 24 relative to striped bass, but rather dealing with the
 25 habitat in general is the approach that we are looking for.

1 consultant --
 2 CHAIRMAN MADIGAN: Is that one person or
 3 two?
 4 MR. DANIEL: It's the same person.
 5 What he said was "We don't need anymore
 6 habitat. We need more fish."
 7 Habitat is where they live. Habitat is where
 8 they feed. Habitat is where they hide and habitat is where
 9 they reproduce.
 10 And that's what our approach is all based on,
 11 and that's what we are going to try to do.
 12 A hatchery, a hatchery is a surrogate for
 13 habitat, not very good, but that's what a hatchery is.
 14 And decent habitat in the Delta that gives
 15 these fish a place to hide, a place to feed and a place to
 16 reproduce will help them deal with the stresses in the
 17 environment that we as a society can't live without.
 18 So that's the approach that we are pursuing.
 19 CHAIRMAN MADIGAN: I have Roger and then
 20 Sunne and Mary and then Richard and Alex.
 21 I understand this is going awhile, and we are
 22 going to run over into the lunch hour, but this is a very
 23 good conversation, and Sunne and I both agree that
 24 sacrificing a little of your lunch hour is worth it.
 25 MR. STRELOW: It's a great inhibitor on

1 any further talk here, but I agree. I think we are on to a
 2 very important issue.

3 I have a concern that I think is perhaps even
 4 more fundamental than the way Alex expressed it. It may be
 5 a base of the same one, but I think it's very important to
 6 kind of start out with as accurate a premise as we can.

7 And these concepts of compensive and additive
 8 mortality, especially insofar as they refer to a natural
 9 mortality which does not affect population stability over
 10 time, from what I understand, is misleading or inaccurate
 11 in a way that I think we ought to address.

12 And, that is, long before there was any human
 13 population on the earth or in this area specifically, there
 14 have been enormous changes in various populations, indeed
 15 in the Bay and the Delta itself.

16 I mean, the location, the nature of the
 17 habitat, much less of the species, because you have this
 18 phenomenon of natural selection, which has meant just
 19 enormous changes. Species have come and gone very rapidly.

20 Now, with humans in the equation, we are
 21 tending to increase the rate of species change and
 22 succession just at a faster pace than it's happened before,
 23 but we have a long ways to go before we'll catch up with
 24 what already happened before we were even here and so the
 25 notion that there is a natural rate which doesn't affect

1 becoming extinct because they couldn't cope with a certain
 2 sort of change that happened in terms of their habitat,
 3 their environment.

4 We have accelerated that, and in part I believe
 5 in the Delta ecosystem part of the problem is that we don't
 6 allow the habitat to change.

7 We've leveed it up. We've controlled the
 8 flows. We've taken the vast majority of the variety out of
 9 the system, and I think that that variety is one of the
 10 things that's key to the cyclic survival, the boom and bust
 11 population sort of things that we see in nature.

12 Another thing that we have done is that we have
 13 artificially held some species at levels that might be
 14 higher than the carrying capacity of the environment.

15 We've done that through hatcheries, for
 16 example.

17 MR. STRELOW: Well, I would just feel more
 18 comfortable with something that I think if these words are
 19 going to remain and be used, I would feel more comfortable
 20 with something that I think more accurately reflects
 21 what -- again, what you acknowledged.

22 MR. DANIEL: The concept that I was trying
 23 to get across with this compensatory mortality is the idea
 24 that any given species produces more offspring, except
 25 human beings, than the habitat can carry.

1 population stability, if I read these words literally, I
 2 think is just not the case.

3 In fact, something you said earlier, I think,
 4 in response to Alex really conceded that point, and so, you
 5 know, the unique thing about the human species is it's the
 6 first one that's ever cared about not unduly disadvantaging
 7 other species as it went about its own activities.

8 We've got that unique capacity, and even if the
 9 laws that apply to endangered species are modified somewhat
 10 in the coming years, as they may be, I think we are still
 11 going to have and, certainly, should have this concern that
 12 we do as little as possible to upset species preservation
 13 through our activities.

14 But I think our whole premise for acting and
 15 our whole view of how well we are doing or what realistic
 16 objectives are will be skewed if we don't recognize that in
 17 fact there has been an enormous amount of change in species
 18 extinctions over time that is going to continue sort of
 19 regardless and that that doesn't impinge on what we ought
 20 to be doing, but I think it's important that we recognize
 21 that in the premise of our activities.

22 MR. DANIEL: I agree with you and couldn't
 23 agree with you more.

24 There are -- there is the natural process of
 25 evolution. There is the natural process of species

1 And one of the consequences of that is if you
 2 improve the carrying capacity of the habitat, if you
 3 recreate the some of nooks and crannies, if you take the
 4 Asian clam out of the equation and produce more food these
 5 populations can bounce back very quickly because they have
 6 that innate capability.

7 CHAIRMAN MADIGAN: Sunne.

8 MS. MCPEAK: Roger, what is it that you
 9 wanted to modify the statement to say?

10 MR. STRELOW: Well, to me the statement
 11 that natural mortality does not effect population over time
 12 just is biologically inaccurate, that any -- a purely
 13 natural system, if you want to even define that as having
 14 no human presence or impact at all, the natural system is
 15 one in which species come and go with considerable rapidity
 16 and over, you know, the longer the time, the more of that
 17 change happens.

18 So it just is not an accurate premise to say
 19 that the natural condition is one of stability and that we
 20 are trying to somehow return to that.

21 I think it's more accurate to say we are
 22 committed as a society, certainly, as a country, in the
 23 State to having as little unnecessary human impact on
 24 accelerating species changeover and extinction as we can,
 25 but we ought not to kid ourselves in thinking that it

1 doesn't occur pretty rapidly and inevitably even without
2 our impacts, and I think it just puts what we are doing
3 here in a more realistic or accurate perspective is all I'm
4 saying.

5 CHAIRMAN MADIGAN: Lester.

6 EXECUTIVE DIRECTOR SNOW: If I could make
7 a comment.

8 We can try to maybe capture the essence of this
9 issue as we describe the paper, but I want to point out
10 something.

11 The difference between what we are talking
12 about in this situation we have now versus a natural
13 process is it might have taken a million years for a
14 species to go extinct, and we've been able in the
15 industrial age to accelerate that to a couple of years.

16 That's a significant difference that we have to
17 recognize and so I think we can capture some of the issues
18 that you've raised as long as we recognize that kind of
19 acceleration is probably not acceptable anywhere.

20 MR. STRELOW: Again, I'm certainly not
21 questioning the premise that we ought to try to do
22 everything we can and that our activities have indeed
23 accelerated what was happening even more, but let's be
24 accurate about what kind of natural activity occurs.

25 MR. DANIEL: I agree with your point and

1 Delta water transport systems to catastrophic failure."

2 That statement I both agree with, but you then
3 capture it differently in the Mission Statement diagram
4 where you talked about catastrophic inundation of Delta
5 islands.

6 My question to you is, as I understand those
7 statements, "catastrophic failure of the system" can be but
8 is larger than simply island inundation.

9 You can have disruption of a transfer
10 mechanism, a channel, a canal, a whole lot of things, pumps
11 going out or collapse of a reservoir, without it just being
12 the islands.

13 Is there a reason why this statement is more
14 limiting than what you have put up here?

15 EXECUTIVE DIRECTOR SNOW: No.

16 And, in fact, I believe on the detailed Problem
17 and Objective Statements related to vulnerability we draw
18 that out, if I remember right.

19 But whether we do or not, the way you have
20 stated it is correct, that the catastrophic failure of
21 levees and loss of islands isn't just the land use loss
22 that Alex would suffer.

23 It's the habitat that is in the area that's
24 lost immediately in the flood and then maybe lost
25 subsequently because you don't have levees.

1 it's well taken.

2 This is a conversation we had in a more
3 academic forum late last month.

4 They used a lot of words I can't pronounce so I
5 didn't use the same discussion.

6 CHAIRMAN MADIGAN: Sunne, back to you.

7 MS. McPEAK: I have a question for Lester.

8 The linkages discussion on the problem
9 statement I think is very good, and it begins to draw to
10 focus the intersection of the various components of the
11 Mission Statement, as I understand it.

12 May I ask, though, a question in terms of
13 slightly different terminology in the documents?

14 On the linkages section for habitat there is
15 discussion about improvement in levee maintenance and
16 stabilization and discussing how that could contribute to
17 habitat, all of which, I think, is put very well.

18 On the handout that we have that Dick's been
19 going through I think I may have gone slightly ahead to
20 look at what is the statement under "Water Supply
21 Reliability" but that's referenced in the Linkage
22 Statement, Lester.

23 And if you look at the bullet that says under
24 "Problems," the third bullet for Water Supply Reliability
25 "Supply uncertainty results from the vulnerability of the

1 It is water supply reliability and also can
2 have dramatic Water Quality.

3 And so, in fact, a problem with water
4 vulnerability can cut across all three of the other
5 categories.

6 MS. McPEAK: I would just suggest then in
7 order to make it more consistent from the linkage statement
8 in habitat to what you are now going to go to in water
9 supply reliability and back to this where you keep refining
10 what you did in the workshops, that we take the wording
11 under "vulnerability" and make it consistent with water?

12 CHAIRMAN MADIGAN: Mary.

13 MS. SELKIRK: I had a quick technical
14 question and then also a general comment.

15 Getting back to Alex's question about total
16 biomass decrease and the question as to whether over the
17 last 50 years there has been any measurable decline, could
18 you define for me and for other folks here perhaps, what
19 actually is compromised when you use the term "biomass"?

20 Does that include both aquatic, terrestrial
21 plant and animal species or plant alone?

22 And I'm curious about in what sense Alex was
23 meaning it.

24 MR. DANIEL: Normally when people are
25 using that term, it's associated with some kind of a

Page 61

1 qualifier.

2 Higher trophic level biomass might be salmon

3 and striped bass, a large amount of bass or sturgeon.

4 Lower trophic biomass might be the opossum

5 shrimp Neomysis.

6 Primary productivity biomass would be the

7 phytoplankton in the system.

8 I think what Lester -- or and Alex and Steve

9 were talking about in terms of this biomass concept was

10 that we are not sure that the total amount of organic

11 material life produced in the Delta has changed

12 dramatically over time, but we are quite certain that it

13 has been put into different forms, such as the Asian clam,

14 and we don't know for sure what that really means in terms

15 of the overall system.

16 It may take a million years before the effect

17 of the Asian clam in terms of biomass is balanced out and

18 fully stable or it may never become stable.

19 MS. SELKIRK: Thank you.

20 Following that, I had a general comment about

21 the premise of the, I think what we are all trying to get

22 our minds around, a win solution to the Bay-Delta problem

23 with that marvelous diagram that Lester had up there.

24 CHAIRMAN MADIGAN: It's not really

25 nuclear. It's sort of collegial.

Page 62

1 MS. SELKIRK: Right.

2 And I'm thinking as I'm listening to

3 everybody's comments on that that in some respect I think

4 that all of us are adopting in some way or another as a

5 premise to this whole process, that as Tom Zuckerman said

6 at the last Public Workshop "What's good for the goose is

7 good for the gander" and that ultimately in terms of the

8 kind of technical solutions that we are going to be faced

9 with recommending or not recommending or bundles of

10 actions, et cetera, that that, obviously, is going to

11 require some negotiation of agreed upon technical solutions

12 given that no one can reliably say that if you have a

13 particular isohaline standard, that this is going to

14 produce X number of fish in another five years -- because

15 for one thing we don't know how much it's going to rain, et

16 cetera, that it's clear that we -- that this process is

17 going to have to involve in the way that a lot of other

18 convened groups have, including the Estuary Project, coming

19 to some kind of agreement about what are acceptable

20 solutions given the limitations of money, science, politics

21 and all that.

22 What I'm thinking might be helpful to me and

23 maybe to other folks on the Council as we start to plunge

24 into these action categories and have to deal with specific

25 categories of solutions, would be -- and I don't know if

Page 63

1 there is a way that we can address this again in some more

2 depth in December or whether it might be useful for us to

3 have some kind of product out of the CalFed staff, some

4 kind of written document that would help us to have some

5 kind of shared understanding about exactly the kind of

6 premises we are trying to struggle with here and agree to

7 in terms of defining acceptable solutions for all

8 interested parties.

9 CHAIRMAN MADIGAN: Lester.

10 EXECUTIVE DIRECTOR SNOW: To some extent

11 what you're referring to is a -- I guess the word

12 "glossary" trivializes it too much, but to make sure we

13 have a common set of terms and what these mean and how they

14 affect the overall --

15 MS. SELKIRK: Yeah, to the extent that we

16 can address the central question, I think, that Alex

17 raised, which is, well, how do we know that when we do X,

18 Y, Z that it's going to have an affect that's cost

19 effective or that is in the public good and all of that?

20 A lot of that we all can accept may not be

21 known at this point but at some point we are clearly going

22 to have to have some discussion about the acceptable level

23 of risk or, you know --

24 EXECUTIVE DIRECTOR SNOW: Okay. Yeah.

25 I think that there is two ways that we can

Page 64

1 develop that, definitely for the December meeting.

2 One is to talk about -- initially you want to

3 address the worst problems first. I mean, so that's what

4 you start looking at, and then you kind of cluster actions

5 around that, and I think that will tell us something when

6 we go through that exercise.

7 And then I forgot the other one that I was

8 going to mention.

9 It was the best one, too, Mary.

10 CHAIRMAN MADIGAN: Always happens that

11 way.

12 EXECUTIVE DIRECTOR SNOW: I kind of lost

13 my train of thought on that.

14 CHAIRMAN MADIGAN: We'll get back to you,

15 Lester.

16 MS. SELKIRK: Well, you know --

17 CHAIRMAN MADIGAN: Richard.

18 A SPECTATOR: It's on an overhead

19 somewhere, Lester.

20 EXECUTIVE DIRECTOR SNOW: Right.

21 Thank you.

22 MR. DANIEL: If I could just add a little

23 bit.

24 CHAIRMAN MADIGAN: Sure.

25 Dick.

Page 65

1 MR. DANIEL: The whole concept of
 2 performance measures and risk analysis is going to be very,
 3 very key to our program, and it's not just the ecosystem
 4 quality restoration sorts of things that we are going to
 5 have to take risks with regard to.
 6 When and if we make decisions as to how strong
 7 we are going to rebuild the levees to, what standard to
 8 which we are going to, is it a 7.2 earthquake or a 6.8
 9 earthquake, is it a tougher levee if it's growing asparagus
 10 as opposed to barley. Those kinds of decisions are going
 11 to be all part of the process.
 12 I like asparagus. So that's going to be very
 13 key. We call it performance measures.
 14 We have a workshop on the 28th -- well, "we" --
 15 there is a workshop on the 28th here in Berkeley sponsored
 16 by EPA, the University and the Bay Institute where we are
 17 going to get into these indicators and performance measures
 18 questions.
 19 MS. SELKIRK: It might be useful, I know
 20 it would be for me and others on the Council, to get some
 21 of those materials ahead of time so we have some time to
 22 educate ourselves before we actually deal with them here.
 23 MR. DANIEL: Yeah, most certainly.
 24 CHAIRMAN MADIGAN: Lester.
 25 EXECUTIVE DIRECTOR SNOW: Yeah, the other

Page 66

1 point that leaped out of my mind for a moment is actually a
 2 pretty fundamental one to this program, and that's the
 3 issue of adaptive management.
 4 There is no way that we can sit here and even
 5 over the next two years define the absolute definitive fix
 6 for the ecosystem, and so we are going to have to come up
 7 with our best shot initially and set up a monitoring
 8 program and see if it responds the way we think it will,
 9 and if it doesn't there will be Plan B.
 10 So adaptive management is going to be a
 11 fundamental component of this program.
 12 Nobody, and I would venture to say even from
 13 the environmental community, is going to want to see a
 14 billion dollars poured into a habitat plan and you don't
 15 even know if it's going to work for the species that are
 16 most important.
 17 Because the cost issue there and so we've got
 18 to devise a plan where we take our best shot, monitor and
 19 be prepared financially and institutionally to implement
 20 the next phase if it doesn't work.
 21 CHAIRMAN MADIGAN: Richard.
 22 MR. IZMIRIAN: This goes way back to
 23 Dick's comment about striped bass habitat.
 24 As a long-time member of the Striped Bass
 25 Committee I have to say we have identified striped bass

Page 67

1 habitat, but that's in the form of flows, not in structure,
 2 and I think we have to remember that habitat is not just
 3 structure.
 4 CHAIRMAN MADIGAN: Alex.
 5 MR. HILDEBRAND: I earlier expressed
 6 concern that we might not be paying enough attention to the
 7 consequences of the competition from exotic species, but I
 8 also think we shouldn't give up too much on controlling
 9 those exotic species, and let me give you an example.
 10 In the rather large river oxbow back at my
 11 house we had beautiful habitat of all kind of species 20
 12 years ago.
 13 Now that oxbow is totally taken over by a
 14 mixture of water hyacinths and the Eurasian milfoil. It's
 15 just excluded everything else.
 16 It may be feasible and less expensive to get
 17 rid of those two exotic species in that oxbow and restore
 18 that shallow riverine habitat than to go out and create
 19 some new riverine habitat somewhere else, and none of this
 20 had anything to do with exports.
 21 MR. DANIEL: Yeah, that is -- that
 22 certainly should be part of the mix.
 23 There are efforts underway to try and remove
 24 particularly water hyacinth.
 25 I had the opportunity last weekend to spend

Page 68

1 some time with a friend who is an expert in that area, and
 2 basically he said that we are going to have to forego at
 3 least ten percent of the productivity of the Delta to water
 4 hyacinths because we can probably never get rid of it.
 5 MR. HILDEBRAND: Well, but you not only
 6 have to get control of hyacinths, which is doable and has
 7 been done to some extent in some places, but the minute you
 8 get rid of that then you have the Eurasian milfoil so
 9 you've got to be able to handle that, too.
 10 MR. DANIEL: Frankly, regulatory programs
 11 have been trying to protect us against the introduction of
 12 these nuisance species.
 13 They haven't been as effective as they should
 14 be, and it's quite possible that Sharon will be up here in
 15 a few years, because she is an expert on zebra mussels, and
 16 she'll be trying to tell you how to get rid of them.
 17 CHAIRMAN MADIGAN: Steve and then Roberta.
 18 MR. HALL: My comment on the discussion
 19 Draft goes directly to the point that Alex and Dick were
 20 just discussing.
 21 I think it ought to contain something on
 22 introduced species, and I think there is a perception that
 23 somebody representing the interests that I represent when
 24 you bring up the subject of introduced species, that it's a
 25 substitute for doing the other things to improve the

1 habitat.

2 It certainly is not -- we need to do

3 everything, but it's clear, although we can't quantify what

4 percentage of the problem introduced species are, it's

5 clear they are a significant problem.

6 It's also clear that there are some things that

7 can be done.

8 My association early last year began working

9 with the Department of Fish and Game on toughening up the

10 regulatory regime for ballast waters.

11 We haven't made much headway but there is

12 headway to be made, and it seems to me the CalFed Process

13 ought to be paying attention to it, ought to put it on its

14 screen as one of the things that we try to effect.

15 There is legislation moving through the

16 Congress today that would appropriate money for some

17 promising control measures for water hyacinth and hydrilla.

18 I'm not suggesting that we get involved in the

19 appropriations process this year, but it seems to me that's

20 something that we ought to take a look at.

21 This is a significant piece of the puzzle.

22 I don't see it in the discussion Draft. I

23 think it ought to be there.

24 MR. DANIEL: I did put some material in

25 the discussion Draft relative to introduced species.

1 I think that Lester brought up an important

2 point.

3 Human beings have accelerated the extinction

4 rate a thousand to 10,000 times the normal extinction rate

5 and when we do know what that normal rate is, I don't think

6 humans understand that.

7 I think that one of the ways that we've tried

8 to move for consensus before is to agree on common goals,

9 and if you go back and undermine the one goal, the

10 ecological support of the ecosystem, then you lay the

11 groundwork for going in and underlying the other goals,

12 water reliability, levee stability and all of this.

13 I think that what's important to remember in

14 the -- this is the Estuary ecosystem, and fish, salmon, all

15 of those fish, came down from the north in the Ice Age, and

16 they need clear, cold water that goes from their mountain

17 habitat streams out through the Bay in order to survive.

18 So it's not that we can go back and restore

19 what was there a hundred years ago.

20 No one is talking about that, but there have

21 been healthy salmon fisheries for many years.

22 There have been healthy salmon fisheries and

23 striped bass fisheries in existence for more than a hundred

24 years, and we have a recovery this year.

25 So I think what we are all trying to do is to

1 And another way that you can see our efforts to

2 deal with this is that although we are avowing a habitat

3 based approach, in our primary problems we've identified

4 aquatic habitat, wetland habitat, and species of special

5 concern, and that was the only way in our planning process

6 we could have a box where we could fit in these non-habitat

7 measures that might be necessary, such as eradication

8 programs or control programs for water hyacinth, and if we

9 can conceive of something some special programs to deal

10 with other nuisance species in the animal kingdom, which

11 will be much tougher to deal with, but we are very

12 cognizant of that, but I just don't know how to do it.

13 And I'll tell you because you probably

14 remember, I'm the guy that put together the program that

15 went down in rotenone's, fish poisoned, the entire Tulare

16 Lake Basin.

17 I have had to deal with exotic species in the

18 fact.

19 MR. HALL: I do remember that, Dick. I

20 wasn't going to bring it up.

21 MR. DANIEL: It wasn't any fun.

22 CHAIRMAN MADIGAN: Roberta.

23 MS. BORGONOVO: I just think it's

24 important to go back to what Mary said about having papers

25 that help us understand the whole system.

1 find those ways that we can manage the system.

2 It would be best to perhaps just -- if you let

3 all the dams go, the fish would rebound, and they would be

4 able to compete with the introduced species.

5 We know that's not going to happen.

6 So I just want to make a plea for trying to

7 look at those common goals and then working within them and

8 understanding them.

9 CHAIRMAN MADIGAN: Thank you.

10 Lester.

11 That's it.

12 EXECUTIVE DIRECTOR SNOW: Yeah, we can

13 move on, I guess, to the "Water Supply" one.

14 CHAIRMAN MADIGAN: Thank you, Dick. Good

15 job.

16 And good thoughts all around. This was very,

17 very helpful.

18 EXECUTIVE DIRECTOR SNOW: As Steve is

19 moving up to the microphone I've got to make one last

20 comment on that.

21 The habitat side, often when we have a

22 discussion, we all think about how is it you decide how

23 much habitat or what type you add to the system.

24 One of the things that I want to point out is

25 that we are still losing habitat in the Delta and so there

1 is also an issue preserving what we have, and a lot of it
 2 is not anybody's fault so it is not going to be mitigated.
 3 Some of Alex's friends took me on a tour of
 4 Central and South Delta and they actually let me back from
 5 that, Alex, but one of the things they pointed out is that
 6 some of the channel islands are disappearing and it's not
 7 anybody's fault and the channel islands are very rich,
 8 productive habitat.
 9 And so some of what we've got to consider is
 10 just preserving what's there so it doesn't get worse.
 11 I want to make sure we understand it's not just
 12 deciding how many acres of X. It's also that we keep
 13 intact that which is existing in the Delta and Steve is
 14 going to cover water supply.
 15 CHAIRMAN MADIGAN: Mr. Yaeger.
 16 MR. YAEGER: I'm going to take a little
 17 less educational attack than Dick did and kind of return to
 18 the bullet sheets that you have in your packet which are in
 19 turn a further summary, attempted summary of the primary
 20 problem objective statements that are also in your packet.
 21 I have to say first that I've got to apologize
 22 for the wordiness of some of these bullet sheets.
 23 We've tried hard to boil them down further but
 24 there is a lot of material that needs to be put out there
 25 in order to have the statements as correct as possible.

1 I know Lester mentioned this a little bit
 2 earlier in his presentation, but we need to keep that in
 3 mind as we go through this.
 4 There are others out there in reviewing our
 5 objectives who feel that those objectives concentrate too
 6 much on the demand management side of the picture, and
 7 there's still others who feel that our objectives,
 8 especially in the vulnerability area, really focus too much
 9 on -- or lead you too much to actions that do not protect
 10 some of the land uses in the Delta islands sufficiently.
 11 So I guess my general observation is that all
 12 sides are a little bit uneasy with what we have on paper
 13 and so maybe we are in the right spot.
 14 But I think we need to talk about that some,
 15 too.
 16 Another observation is that I think we've come
 17 to the realization, and I hope the Council has, too, that
 18 as we look at the objectives we really need to keep the
 19 mindset that we are in a multi-objective problem solving
 20 process.
 21 I think it's clear that we can only be
 22 successful if we can address the multi-objectives, the
 23 multi-resource areas on a balanced and equitable fashion.
 24 Now, the multi-objective mindset leads us
 25 directly into the linkages between the actions and the

1 What I'd like to do is just walk through some
 2 of the bullets on those sheets, begin to kind of review
 3 again. These sheets are a real brief summarization of the
 4 full Problem Statements and Objective Statements that were
 5 presented at the workshops, reviewed at the workshops,
 6 modified, and then put together in your packets you
 7 received earlier.
 8 So while I don't want to spend a whole lot of
 9 time on dwelling on the problems and objectives I'd like to
 10 spend most of the time on the linkages.
 11 If you do have specific questions about some of
 12 the Problem Statements or Objective Statements, please,
 13 feel free to stop me, and we can examine those in as much
 14 detail as you want to as we go through the presentation.
 15 I want to make one general observation about
 16 some of the objectives that you see laid out in front of
 17 you.
 18 These observations come from the feedback we've
 19 gotten from our workshops and from feedback we've got from
 20 the State agency and Federal agency reviews.
 21 There are some in reviewing our objectives who
 22 feel that some of these objectives concentrate -- and I'm
 23 speaking mainly about the water supply objectives at this
 24 point and some of the vulnerability objectives -- that
 25 these objectives focus too much on an isolated facility.

1 objectives, and, as I said earlier, those linkages are what
 2 we want to spend the greatest amount of time on this
 3 morning talking about exploring that concept because we
 4 will be getting into the linkages between the actions in a
 5 lot of detail at the next Council meeting as we start
 6 talking about the bundles of actions that we are going to
 7 be putting together.
 8 With that foundation let's start first by
 9 looking at our summarization of some of the problems that
 10 have been identified with water supply reliability.
 11 I think the large set of Problem Statements
 12 that we came up with can be summarized by these three
 13 (indicating), I won't say brief statements, but at least
 14 summarized statements that conflicts have increased between
 15 uses of the Estuary's fresh water, which in turn have
 16 magnified the impacts of natural hydrologic fluctuations.
 17 Our second key problem area is that the
 18 disparity which results between the conflicts over the uses
 19 of the Estuary water has created economic uncertainty in
 20 the water service areas that are dependent upon water from
 21 the Bay-Delta system.
 22 And the third main problem statement is that
 23 supply uncertainty for all the service areas results from
 24 the uncertainty related to the vulnerability of the Delta
 25 transport system.

1 That is, the Delta levees and channels that
 2 provide the transport system to move water across the
 3 Delta.
 4 In response to those problems the Objective
 5 Statements that we have developed can be summarized by
 6 these main statements.
 7 That is, our objectives that will reduce the
 8 conflict between water supply and beneficial uses.
 9 The second main objective is to provide a
 10 better match between the quantity and timing of supply of
 11 system water and the quantity and timing of beneficial uses
 12 by addressing these four key areas; that is, addressing
 13 both the short and long-term planning horizons;
 14 By addressing both the demand and supply side
 15 of the picture for beneficial use;
 16 And by providing better flexibility for the
 17 water transport system;
 18 And providing more effective risk management
 19 for the water transport system in relationship to the
 20 catastrophic risk of failure.
 21 Now, some of the linkages between the actions
 22 that can be taken in each of the resource areas that we
 23 have identified as direct linkages with water supply
 24 reliability are shown in this summary sheet.
 25 There are a lot more linkages.

1 procedures could be developed on a multi-objective basis
 2 that would address both releases from the reservoirs
 3 upstream of the Delta, both in the Sacramento and the
 4 San Joaquin systems, which would provide water at critical
 5 times for fish species and consequently meld in
 6 opportunities for additional transfer of water across the
 7 Delta.
 8 Now, the related linkages that we've identified
 9 are what we call synergistic benefits for system aquatic
 10 habitats and for water quality that can be built into water
 11 management programs.
 12 And again this would involve multi-objective
 13 management of the timing of Delta inflows and outflows so
 14 that we are addressing not only water quality but we are
 15 addressing fishery's needs and also addressing water supply
 16 needs.
 17 And I think at certain periods of time that
 18 certainly the system vulnerability could be wrapped into
 19 that multi-objective function.
 20 Another synergistic benefit that we've
 21 identified could be obtained from multi-objective
 22 management of system demands and from water transport and
 23 system risk.
 24 Now, this is kind of a shorthand for developing
 25 a multi-objective function that takes into account the

1 As I think Sunne pointed out earlier, some of
 2 those are discussed in the Narrative Primary Problem
 3 Objective Statement that you have, but I wanted to use
 4 these as just examples of the kind of things we are
 5 thinking about as we are developing our actions and our
 6 bundles of actions.
 7 One of the linkages we have identified is the
 8 reliability of the water supply system can be improved by
 9 actions which recover and protect endangered species and
 10 their habitat and when those actions also can increase the
 11 opportunity to transport water through the Delta and create
 12 flexibility to more effectively use water supplies.
 13 An example of this kind of linkage could be
 14 actions that we've taken to increase the availability and
 15 the timing for releases of water into the North Delta
 16 through the Sacramento River.
 17 Specifically, offstream storage north of the
 18 Delta could be used both to address the issue of water for
 19 endangered species at critical periods of time in their
 20 life cycle and at other periods of time when it's not quite
 21 so critical for those species water from those facilities
 22 could be used to create opportunities to transport water
 23 across the Delta.
 24 An example of creating flexibility to more
 25 effectively use water supplies could be operational

1 timing and quantity needs or demands upon the system, both
 2 for fisheries and for export waters and in-Delta use, and,
 3 also, wraps in the efficient use of the transport function
 4 of the Delta and considers the risk factor to the system.
 5 That was kind of a very quick walk-through of
 6 the water supply reliability part of the program, but if we
 7 have specific questions right now, maybe this would be the
 8 best time --
 9 CHAIRMAN MADIGAN: Sunne and then Roberta.
 10 MS. MCPEAK: Actually, I think this is
 11 very well stated, and I had jumped ahead when I was looking
 12 at the linkages between habitat and water supply
 13 reliability.
 14 Conceptionally how it's presented I think is a
 15 very good approach to finding again the multiple win-win
 16 solution strategies in the intersection of those circles.
 17 I think it might come down to, however, do we
 18 have reliable data, scientific basis, for determining the
 19 timing and the flows when it will benefit most habitat,
 20 therefore, species, and out of the million pages or so of
 21 testimony submitted before the State Board I'm sure there
 22 was enough to debate.
 23 But do you have those documents or can you
 24 bring that kind of information out in summary form so that
 25 we can look at it?

1 That will be a very important underpinning, I
 2 think, of trying to come to resolution on the concept
 3 you've presented.
 4 MR. YAEGER: I don't think that we have at
 5 this point real definitive data that we can base that on.
 6 However, I do know that there are a lot of
 7 programs that are ongoing that are attempting to develop
 8 the real time monitoring data that would allow us to make
 9 at least judgments at this point and ultimately I hope will
 10 lead towards more definitive data that you can make hard
 11 decisions about.
 12 But, I don't know.
 13 Maybe Dick could speak to that in a little more
 14 detail if he's still in the room.
 15 CHAIRMAN MADIGAN: Lester.
 16 EXECUTIVE DIRECTOR SNOW: Yeah.
 17 If I could add, I think when it comes to, you
 18 know, several species, and in particular salmon, then you
 19 could probably workup a pretty -- get pretty good agreement
 20 on the timing of flows and when you should close certain
 21 diversions and when you need the flows to move them.
 22 But when you broaden that to kind of this
 23 ecosystem, that broader habitat, and when should have the
 24 certain level of flows for the maximum benefit, there is
 25 significantly less than broad agreement on that and, in

1 community, one of the issues I think that will also perhaps
 2 either challenge us or haunt us is the iterative approach,
 3 as you outlined, between performance standards and
 4 management.
 5 Because you'll end -- it is possible that we
 6 both need to and will have to come to agreement on
 7 performance standards, if you will, realizing that
 8 management towards those standards is iterative and at some
 9 point there may be a need to adjust performance standards
 10 based on the other limiting factors on management of the
 11 system.
 12 But that's also going to be a really maybe
 13 central discussion about how much trust do we have, is how
 14 do you deal with -- if you reach performance standards, you
 15 can't just throw them out next year but you also have to
 16 have some kind of agreement around if you can't meet them
 17 with this approach, then what do we do?
 18 So in that workshop maybe that also could get
 19 introduced and then get us as much information as soon as
 20 possible about what we do know on the flows and the timing.
 21 CHAIRMAN MADIGAN: Stu.
 22 MR. PYLE: Yes.
 23 Stu Pyle.
 24 I'm having -- I recognize what Sunne is saying
 25 and talking about wanting information on specific flows,

1 fact, Dick made reference to a workshop that is next
 2 weekend or something like that where there is an effort on
 3 a number of people's parts to bring together the scientific
 4 community to see if we can get closer to that issue.
 5 And we are trying to bring together the
 6 biologists and water managers even within the CalFed family
 7 to see what kind of agreement we can get on call it the
 8 design parameters of the operational parameters of when
 9 does the plow do the most good.
 10 And as I think you know even from the nature of
 11 your question that what we don't know about how the system
 12 works we can fill volumes with, and so we need to come up
 13 with some basic agreement and see how it works and be able
 14 to respond to inefficiencies subsequently.
 15 MS. MCPHEAK: And I do acknowledge that
 16 there is a lot we don't know and probably a lot more that I
 17 don't understand.
 18 I think, if I might build on what I understood
 19 Mary's suggestion to be earlier, that the sooner we see it
 20 and become familiar with it, even to the extent we
 21 understand what we don't have what we don't know, would get
 22 us to try and make some decisions, and that's going to be a
 23 fundamental, you know, underpinning of a decision about
 24 this kind of concept.
 25 When you have that workshop with the scientific

1 guarantees and so on and so forth, talking about the real
 2 operation of the Delta.
 3 And I have a problem reconciling what is set
 4 forth here with what we discuss about the real Delta, that
 5 when you look at the words on the paper, there at this
 6 point is no definition of, you know, the real Delta.
 7 You can't find in reading this, for instance,
 8 that there is a State Water Project. There is a Central
 9 Valley Water Project. There are reservoirs upstream.
 10 There are pumping plants at the south end of the Delta.
 11 There are channels. There are flow standards established
 12 and so on and so forth.
 13 And we have brought this down to the lowest
 14 common denominator of problems, but then once we start
 15 talking about it, even here in the group, we talk about a
 16 specific problem, about releases, about guarantees, about
 17 something.
 18 And I don't know exactly how you get from this
 19 step of the broad abstraction of the Delta to the specifics
 20 of dealing with actual actions if you are in terms of
 21 talking about habitat, if you are going to improve habitat,
 22 can you show us a map with some red lines or orange and
 23 green lines of where this is pretty good habitat, where
 24 this is utterly no good, where there's opportunities.
 25 I don't know how you move from the abstraction

1 to the analysis of the real Delta that's out there.
 2 MR. YAEGER: Maybe I could address that
 3 from just the program process standpoint, Stu.
 4 We have laid out a process that goes from
 5 problem to objective to performance measures, and we are
 6 doing a lot of work on the performance measures and trying
 7 to develop the functions that define those performance
 8 measures, and we are also identifying causes associated
 9 with each one of the problems that we've identified.
 10 As an example, if we are dealing with the
 11 abstract of the problem of conflict between beneficial
 12 uses, well, we have a whole list of causes, and I think,
 13 if I recall right, there's probably about 50 or 60 related
 14 to just this one abstract conflict problem, and things are
 15 identified -- causes are identified which relate to the ESA
 16 regulations associated with Delta smelt and ESA regulations
 17 associated with winter run salmon and the impacts that they
 18 have on the project pumping and so forth.
 19 And then those causes then are broken down into
 20 more specific sub-causes to a level of detail then that
 21 allow us to assign specific actions that address each one
 22 of those causes so that we identify a whole multitude of
 23 actions that can deal with the issue of restrictions on
 24 project pumping as a result of declines of Delta smelt.
 25 So we are taking it to a very finite level of

1 been discussing how do we work through a process based on a
 2 very thoughtful framework so I am struggling when I ask
 3 questions, like to Alex (indicating), what is your answer,
 4 or can we get this information out sooner rather than
 5 later, trying to figure out who we do that without cutting
 6 short the necessary steps, discussions, inclusion of the
 7 public and still get to alternatives by May, '96, and not
 8 feel like we've stalled out in the meantime.
 9 Do you have a proposal how we do that?
 10 MR. PYLE: What I would like to see is
 11 moving through this phase and assuming that as they say
 12 that they will bring us more detail, but I think as well
 13 this base material needs to set the format for the greater
 14 expansion of materials.
 15 As I say, I don't see anything in the base
 16 material which sets a base for the fact that the major item
 17 that we are dealing with are the State and Federal Water
 18 Projects and the export of water at certain levels and that
 19 these are related to the major problem that we are trying
 20 to solve and there are other problems within here which
 21 maybe are not going to be solvable by the CalFed Process
 22 and somehow we -- and I know their process is going to that
 23 because I we did it in the workshop last week.
 24 You begin to evaluate these problems, causes,
 25 objectives as to what's important and what can we do

1 detail.
 2 We haven't presented all of that detail to the
 3 Council because it constitutes several volumes of
 4 information.
 5 It's still in a fairly Draft form at this
 6 point, but I just want to assure you that we are really
 7 cutting it pretty fine when we get down to the action level
 8 and the action category level.
 9 MR. PYLE: My response would be that if
 10 that's so, that we should not dwell on specifics of the
 11 Delta when we are discussing these abstract statements of
 12 problems.
 13 We should simply say "Are these good
 14 representations of the general problem or are they bad
 15 representations of the problem" and then wait until we move
 16 along and get to those when we begin to start about
 17 specifics.
 18 I feel like the answer is telling me "Your
 19 plane has been delayed four hours so you just sit here in
 20 the station and wait until you can get on the airplane and
 21 go some place".
 22 MS. MCPEAK: Well, I think, Stewart, part
 23 of what I heard about four or five people say to me walking
 24 in today, how are we going to get to the real issue and
 25 we've got to move on, except that we -- Mike and I have

1 anything about and try to cut down to what is it, in fact,
 2 that we can deal with in this process and move ahead.
 3 So I'm looking for some speed up into this
 4 future analysis and not -- you know, recognizing that if we
 5 miss something in these statements, we can come back and
 6 change them when we find out that there is a glitch.
 7 MS. MCPEAK: Let me if I can, does it help
 8 at all if in the -- working on the fact we've got Primary
 9 Problem Objective Statements that in the problem that there
 10 is as much -- we want to keep them also succinct maybe with
 11 backup documentation but we start to have some
 12 quantification of the constraints?
 13 Does that help?
 14 It's probably not perfect but does that move
 15 towards what --
 16 MR. PYLE: I think that information
 17 leading towards quantification has to come into all of it,
 18 whether it's in constraints or simply the measures of the
 19 resource that we're dealing with, whether it's flows of
 20 water, miles of channel, et cetera, et cetera.
 21 MS. MCPEAK: Right.
 22 Maybe I'll ask if that could be done.
 23 These are good statements, just try to put that
 24 in, if there is any background, if we could.
 25 What is your thought on that?

1 EXECUTIVE DIRECTOR SNOW: Well, I just
 2 have two different thoughts.
 3 One is it would be relatively easy for us to
 4 put together a background information piece, which is in
 5 strategic planning you'd call it a situational analysis,
 6 what's out there, what's on the ground, how does the system
 7 work and that we can readily do.
 8 In fact, it probably would look very similar to
 9 the Water Education Foundation Delta issue I think we
 10 provided but we can even update that.
 11 However, on the process side we are trying to
 12 be very methodical of working from the very general to the
 13 detailed and provide a framework as we go and so we won't
 14 get to some of the real detail until we are well into
 15 Phase 2.
 16 I mean, if what you want to wrestle with is how
 17 do you fix the mortality -- the salmon and smelt mortality
 18 at the Cross Channel, we are not going to do that in
 19 Phase 1.
 20 We are going to have broad categories of
 21 actions that can address those issues, and we won't get
 22 into some of those issues until Phase 2 and in real detail
 23 at the Project Level.
 24 But I think it's real important that we get
 25 agreement on these generalized statements.

1 MR. PYLE: If I wait for the plane, it
 2 will eventually take off.
 3 EXECUTIVE DIRECTOR SNOW: That's correct.
 4 MS. McPEAK: So you are okay in the
 5 airport right now?
 6 MR. PYLE: I've been walking around the
 7 airport for a long time.
 8 EXECUTIVE DIRECTOR SNOW: But, Stu, if you
 9 could think of this as us checking the luggage for bombs
 10 before the airplane takes off.
 11 MS. McPEAK: Touche'.
 12 CHAIRMAN MADIGAN: I have Roberta, then
 13 Tom, then Alex.
 14 MS. BORGONOVO: This question may be
 15 answered this afternoon when we go to actions, but in the
 16 Objectives you talk about quantity, and there is a need for
 17 increased outflow of fresh water all the way out through
 18 the Bay, through the Golden Gate Bridge into the ocean, and
 19 we are all looking here, and you can see it moving right
 20 out there (indicating), the way it leads to at certain
 21 times.
 22 Is that going to be addressed in Actions, that
 23 specific need?
 24 I see the -- I see timing in there.
 25 I see management, but I just wondered if that

1 I don't think we can have a situation where we
 2 say, "Yeah, this is our ecosystem goal for now but when we
 3 get down line we might want to go back and change it or
 4 abandon it".
 5 We need to make commitments at these kind of
 6 broad levels and say, "Yeah, this is a good public policy
 7 way to proceed" and then we'll go through the detail and
 8 fill in the framework.
 9 And I think it's important -- some of the
 10 frustration that Stu is expressing we are finding in our
 11 workshops, too.
 12 People want to start talking about Red Bluff
 13 Diversion Dam, what are we going to do, and isolated
 14 facility, where does that fit in?
 15 We are trying to say we've got a process to
 16 work through. We need to get agreement at each these
 17 levels and we're eventually going to get to that kind of
 18 detail.
 19 MR. PYLE: But even here today when we
 20 start talking, we start talking about details.
 21 We are not talking about the process that you
 22 are bringing before us, and I think if we can stay on that
 23 track of staying with the format, we will get to what we
 24 want to get more rapidly.
 25 EXECUTIVE DIRECTOR SNOW: Right.

1 other aspect is going to turn up.
 2 MR. YAEGER: I think that the way that
 3 we've addressed that is on this second major objective
 4 "Providing a better match between quantity and timing of
 5 supply and beneficial uses," and we do include in the
 6 subject beneficial uses.
 7 Of course, the water supply is needed for
 8 ecosystem quality so it is part of the picture.
 9 MS. BORGONOVO: Thank you.
 10 CHAIRMAN MADIGAN: All right.
 11 Tom and then Alex and then Ann.
 12 MR. MADDOCK: In looking at the linkages
 13 here I suppose I -- I don't think that we really capture
 14 here the fact that what happens in the Delta is totally a
 15 function of the inflow to the Delta and what happens on all
 16 of the sources of inflow.
 17 And so I don't really -- I don't think the
 18 linkage here, as it is set out, properly deals with that,
 19 and I think that's an important issue, that the Delta
 20 itself doesn't have any water supply.
 21 I mean, the Delta itself has what flows into
 22 it, and it flows into it either regulated or unregulated,
 23 that is owned by somebody and that's what happens in the
 24 Delta, but I don't think that the linkage here -- the
 25 linkage statement fully grasped that position, and really

1 what happens in the Delta is that -- and it's in here a
 2 little bit -- is that it is a conveyance system or a
 3 transport system or something that is either efficient or
 4 inefficient to accomplish certain objectives.
 5 So at least when you're looking at the linkage
 6 here, it would seem to me that we ought to go back and
 7 really think through what is the linkage.
 8 And the linkage in the Delta, at least so far
 9 as the inflow is concerned, is not really as stated here.
 10 And then the other thing, back to some of the,
 11 like, the -- with the problems, like supply uncertainty
 12 results from vulnerability of the Delta water transport
 13 system, well, I can think of five other things that create
 14 uncertainty other than just the transport system
 15 vulnerability.
 16 So I presume that there is probably other
 17 things that will be added here, but -- and then finally I
 18 think we ought to realize here that there is another
 19 linkage going on here, and I know that this was in the
 20 information brought up in the workshop, about other
 21 programs, but we have the State Water Resources Control
 22 Board, of course, embarking on their own EIR to determine
 23 water rights and perhaps who should be responsible for the
 24 flows into the Delta to meet Water Quality Standards.
 25 And, I mean, I know Roger has already said it's

1 see, well, we got this whole list of things and some of
 2 them we can do something about and some of them we can do
 3 something about but the predictability of what happens is
 4 not very good.
 5 That's not to say don't do them or that maybe
 6 what you do is highly predictable and maybe you don't do
 7 that either.
 8 But I don't think we all have a good grasp of
 9 what I would call the variables that enter into this
 10 discussion, and I realize that you're trying to get a
 11 generic statement here of the linkages and the problems and
 12 then perhaps you move into that.
 13 But I think what we are all wrestling with here
 14 is that I have a hard time understanding some of these
 15 generic statements without understanding what these
 16 variables are.
 17 I mean, how can we do that?
 18 So I think we've got to get the variables on
 19 the table.
 20 CHAIRMAN MADIGAN: Sunne.
 21 MS. MCPPEAK: what are the variables?
 22 I agree with you, Tom.
 23 What would you put on the table and what would
 24 be those five other things that impact reliability that
 25 should be looked at?

1 all CVP so -- but and so now here is another program, but
 2 it goes back to my point here is that in the broader sense
 3 it relates to this inflow issue into the Delta and so I
 4 would hope that when we go down the line here and we look
 5 at these linkages, perhaps that could be expanded.
 6 And before I go here, I've got one other
 7 suggestion here, to come and maybe help with this issue of
 8 the level of detail we get into here in the process, but it
 9 would certainly seem to me at some point is that we are
 10 trying to -- what we are looking at here is, well, what are
 11 the impacts from this -- from variables, and some variables
 12 are relatively well -- you can predict them and some you
 13 can't predict so much and some you can't do very good. The
 14 science just isn't that strong.
 15 It's a little bit like trying to model our
 16 weather system or our climate, is it's not very good, but
 17 at least if we could understand what the variables are and
 18 then to identify the level of understanding or the ability
 19 of our science to predict those, it's a hundred percent or
 20 fifty percent or five percent.
 21 So at least as we move through the process here
 22 I think it would help all of us of trying to identify the
 23 variables that are a function of something.
 24 And so there might be a long list.
 25 But I think that would help us move and try to

1 MR. MADDOCK: Well, one of the questions
 2 is supply uncertainty results from vulnerability of the
 3 Delta transport system. I mean, there is no question about
 4 that, but supply uncertainty results from what?
 5 It results from inadequate size of reservoir
 6 storage.
 7 It results from the hydrological cycle. It
 8 results from diversion of flows for other purposes -- well,
 9 that's three of them.
 10 MR. YAEGER: As I mentioned earlier, Tom,
 11 we are at this point working on lining up that full list of
 12 causes and all of those things that you have brought up,
 13 but we are kind of terming causes in our process.
 14 So we are putting together those lists of
 15 things that cause the uncertainty that we are referring to
 16 here, and we'll be trying to put at least some bounds on
 17 the uncertainty associated with each one of those.
 18 Although, our initial cuts are -- show us that
 19 it's a pretty difficult task but we are headed down that
 20 way.
 21 MR. MADDOCK: But, see, for me, I don't
 22 want it implied, at least for me as one member, that the
 23 uncertainty results from this item here (indicating).
 24 I mean, it's not a complete statement so how
 25 can we say "Yeah, we ought to subscribe to this as a

1 group"?
2 Because I could tell you you've got one guy who
3 is going to not agree with that. But you still would have
4 a consensus, though.

5 MS. MCPeAK: Tom, you had something,
6 though -- in addition to these factors that would affect
7 reliability, you also had something else in mind or did
8 you, when you used the word "variable", and if you did,
9 give us an example of those variables you'd like to have
10 evaluated or flushed out with respect to information on how
11 predictable those variables are.

12 MR. MADDOCK: well, I think Dick discussed
13 those, and he covered them, but, you know -- well, let's
14 take the Asian clams and the impact on the food chain and
15 let's take whether flows really affect the Asian clam.

16 I mean, I don't know if they do or not. I
17 mean, is that a variable on the food chain?

18 So, I mean, it's that type of information, and
19 what I think we are all talking about, again, is that we
20 are trying to get these broad statements, and I agree with
21 Lester, is that you've got to kind of have a broad
22 statement, but we wrestle with the fact that, well, what
23 are really the variables that affect that statement?

24 So you have a hard time subscribing to the
25 statement so you can see what varies that statement.

1 already overcommitted and is having a more rapid decline in
2 percentage terms, at least than is the case in the
3 Sacramento system.

4 Now, if you -- when we talk about water supply
5 reliability, there is a tendency to think only in terms of
6 reliability for fish and reliability for exports, but we
7 need some reliability for the upstream people, too.

8 There has been a lot of talk about coming in,
9 for example, and buying agricultural water in the
10 tributaries and sluicing that down for fish in the spring.

11 But the inflow from the San Joaquin River into
12 the Delta in the summer is almost entirely return flows
13 from agricultural water use.

14 Now, if you let that water down in the spring
15 and it isn't used for agriculture, you'd dry the river up
16 in the summer.

17 And that's no kind of reliability for me or a
18 lot of other people when you do that.

19 So we've got to be sure that we don't
20 oversimplify this water supply reliability. We have got to
21 look at different components of it and be sure we are
22 addressing the linkages involved among those components.

23 CHAIRMAN MADIGAN: Ann.

24 MS. NOTTHOFF: One of the components that
25 I don't see discussed with enough detail is the role that

1 CHAIRMAN MADIGAN: Okay. I have Alex and
2 then Ann, then Mary.

3 MR. HILDEBRAND: I have two comments.

4 The first is quickly to remind you all that
5 we've said repeatedly that this is going to be an iterative
6 process, but you can't begin to iterate until you get down
7 to the far end a little bit and sample that and come back,
8 and so I think it is important to move along, as Stu was
9 saying, and begin to look at some of these things so we can
10 iterate.

11 But then to -- related to Tom's comment about
12 the inflow, first, I think you may not all be aware of the
13 fact that the statistics show that a declining percentage
14 of the unimpaired flow of the Central Valley is ever
15 entering into the Delta and this is due to increasing water
16 consumption in the watersheds before it ever gets down.

17 So then when we look at something long term, we
18 have to acknowledge that either our long-term plan has to
19 cope with this continuing decline or else we have to
20 develop some more water supply to offset it.

21 And then we have the business of the shift
22 that's mentioned in here about the timing of Delta inflows,
23 artificial shifting.

24 Let me illustrate the problem there with
25 respect to the San Joaquin River watershed, which is

1 pricing plays in the mismatch between supply and demand.

2 I'd also like to see a further discussion of
3 demand side management and what role that can play in
4 affecting water supply.

5 Where is that going to come in?

6 Where are we going to see more discussion on
7 that?

8 MR. YAEGER: I'm sorry, your first point
9 you said the role that --

10 MS. NOTTHOFF: The role that pricing plays
11 and the mismatch between supply and demand.

12 MR. YAEGER: Let me try and address the
13 second point first.

14 MS. NOTTHOFF: Okay.

15 MR. YAEGER: As far as the look at demand
16 side management, what we have laid out as far as the
17 objective is to provide this better match between quantity
18 and timing and in that considering these factors both the
19 supply side of the picture and the demand side.

20 The objectives do wrap in a look at the demand
21 management side of the program as well as the supply side
22 of the program, too.

23 The pricing issue, the way that we've proposed
24 to address this, and Lester can jump in here if I'm getting
25 it wrong, but what we are proposing to do is to look at a

1 range of demands on the system.
 2 There's been a lot of study done, a lot of
 3 information produced that I think we can use to at least
 4 identify a range that, hopefully, we can get support from
 5 the interest groups on as far as looking at a high and a
 6 low.

7 Within that range then what we expect to do is
 8 to take a look at the sensitivity of certain assumptions in
 9 relation to the alternatives that we develop.

10 I do sensitivity analysis, and I think that,
 11 certainly, the pricing issue is going to be one of those
 12 factors that we'll need to look at in relation to the
 13 alternatives, do some sensitivity analysis to see whether
 14 that particular issue really changes the outcome of the
 15 relative benefits of the alternatives once you're subjected
 16 to the sensitivity analysis.

17 So that's kind of our game plan at this point
 18 as far as dealing with the water pricing issue.

19 CHAIRMAN MADIGAN: The question was who is
 20 doing the work?

21 EXECUTIVE DIRECTOR SNOW: Specifically
 22 water pricing?

23 That's two issues.

24 I mean, basically the answer is our staff and
 25 consultants in both of those areas looking at the economic

1 than -- I think it also belongs in the statement of the
 2 problem, that pricing has produced problems.
 3 You are only looking at it as the solution end.
 4 It's not going to show up in the Problem
 5 statement?

6 EXECUTIVE DIRECTOR SNOW: NO.
 7 You could, as you just have, you could make an
 8 argument that it's a cause of the problem, but I guess what
 9 we would say, the way we've defined problem, how much you
 10 charge for it is not the problem.

11 It may have induced bad water management
 12 decisions. I think that's the point you are making so it
 13 could be a cause, but the way we've set this up it would
 14 not fit readily in as being defined as a problem.

15 CHAIRMAN MADIGAN: I have Mary and then
 16 Stu and then Steve.

17 MS. SELKIRK: I just had a quick comment
 18 in response to Tom over here.

19 I think probably because I was able to go to
 20 the Public Work -- not the Public Workshop -- well, the
 21 workshop on problem definition and objective delineation,
 22 there is such a tremendous amount of detail and puzzling
 23 and struggle over a fairly high level of detail with regard
 24 to each of these bullets here, much of which is reflected
 25 in the document "Problem And Objective Narratives" that I

1 models to make judgments about the actions and alternatives
 2 as well as pricing as a management tool is being developed
 3 by the consultants.

4 What I would add a little more specifically on
 5 Ann's question is that we are developing water pricing as
 6 an Action.

7 It's an Action category that fits into kind of
 8 the family of demand management and so we are developing
 9 that as a concept, and I think one of the things that Steve
 10 described is how one of the ways that we are going to look
 11 at the overall category of demand management.

12 We'll look at varying the demand and seeing how
 13 sensitive certain Delta solutions are to the different
 14 levels of the demand, and I think we've been able to get
 15 some agreement that there is quite a number of things that
 16 need to be done in the Delta even if you vary export demand
 17 by two million acre feet.

18 There's still things you need to fix and so
 19 we'll look at other things to see how sensitive they are to
 20 demand in general and then the issue of where water pricing
 21 fits in specifically remains to be seen.

22 But it is a tool that is being developed in the
 23 list of Action categories.

24 MS. NOTTHOFF: So you see that more as a
 25 solution -- on the solution side of the equation rather

1 think we all got in some mailing in the last couple of
 2 weeks, that I can sit with some level of comfort and look
 3 at that, knowing that it reflects hundreds of hours of work
 4 and negotiation and debate, both on the part of the staff
 5 and also on lots of members of the public.

6 So I think we all probably have -- are building
 7 a library in our own home offices of this material.

8 But I think that if you take a look at the
 9 Narratives document, it will help flush out what's up there
 10 (indicating).

11 CHAIRMAN MADIGAN: All right. Thank you.
 12 Stu. Stu, you're on.

13 MR. PYLE: Yeah, Stu Pyle.

14 I'd like to present a contrary view on the
 15 subject of demand management, and I think you'll find some
 16 of us who would recommend that some of these actions on
 17 demand management be removed from the total list of actions
 18 as not being appropriate to the Cal-Fed mission.

19 Let me say first about those, I will say that
 20 they are extremely important items.

21 Particularly in aqua management programs and
 22 true -- the agency that I'm associated with, but in
 23 regard -- and I think that they need to be continually
 24 brought before the State in some format and worked on and
 25 ways found to make them more effective in the actual field,

1 but when it comes to this CalFed Process, I would say that
 2 they are not appropriate because we are dealing with the
 3 water supplies of this -- of the State Water Project and
 4 the Federal Central Valley Water Project and I'm concerned
 5 and can speak more specifically about the State Water
 6 Project but that supply out of the Delta is limited. It is
 7 supplemental in the service areas that it goes to.

8 It does not meet the demand by any means in
 9 those areas. Those areas of additional water supplies that
 10 they've developed locally, even within their region or from
 11 some other region and the supply from the Delta as being a
 12 supplemental supply, it's needed in nearly all years for
 13 effective water management and in drought years it
 14 certainly has been proven not to meet the needs of any of
 15 the service areas, and I think for those reasons that we
 16 are dealing with trying to make the export water supply
 17 from the Delta to be the most efficient and optimal given
 18 the conditions that are being imposed on it.

19 And this does not include trying to regulate
 20 demand or assuming by regulating demand within the service
 21 areas that you're then going to determine that there is a
 22 lower need of water export put on the Delta because
 23 whatever water can come out of the Delta is by no means
 24 going to meet either the present or the future demands of
 25 the service areas we are talking about.

1 scope, that the problems we are going to address here are
 2 either in or closely linked to the Bay-Delta.
 3 But that the range of solutions has to look at
 4 things outside the geographic scope of the Delta, and one
 5 of those is demand management, and we've made a lot of
 6 headway on demand management in both the agricultural and
 7 urban sectors.

8 The Urban Water Management Plan that was
 9 negotiated between urban and the environmental interests,
 10 the agricultural -- forgive me, Stu, I've forgotten the
 11 exact term that's being used --

12 MR. PYLE: Efficient water management
 13 practices.

14 MR. HALL: Thank you.

15 -- that's currently being negotiated between
 16 agricultural and departmental interests, I think those are
 17 two strong pieces of evidence, and clearly they ought to be
 18 a part of the record and whatever else we can do to build
 19 on that is an important part of the solution and can't be
 20 ignored.

21 One thing that is of concern to me, though, is
 22 that there does not appear to be a corollary effort in
 23 environmental water management, and that's not to say that
 24 water is being wasted for environmental purposes.

25 In fact, quite the opposite. I think water

1 MR. YAEGER: Well, I think the point's
 2 well taken, Stu.

3 Again, the way that we have set this up is that
 4 we would input the demand management as an Action
 5 addressing one of the causes between the -- of the
 6 disparity between water supply and water demand.

7 And, again, we would be looking within this
 8 range of demands that Lester described earlier, doing
 9 sensitivity analysis, to see whether that particular action
 10 really significantly impacts the decision you would make
 11 about alternatives that would be implemented.

12 So I think it's part of the picture that we
 13 have to examine.

14 We may well come to the conclusion that you
 15 gave us just now that regardless of what you assume as far
 16 as demand management there are certain key things that have
 17 to be done within the Delta to increase the flexibility of
 18 the transport system, but I think we need to go through
 19 that analysis. It needs to be documented and to be part of
 20 the mix.

21 CHAIRMAN MADIGAN: Steve and then Roberta.

22 MR. HALL: I guess I'm somewhere in
 23 between Stu.

24 And I frankly think the program has struck a
 25 pretty good balance in its discussion paper on geographic

1 dedicated to environmental purposes has gained a level of
 2 legitimacy that cannot be ignored.

3 We've decided as a society that we are going to
 4 use a significant share of the water in California for
 5 environmental purposes and there doesn't seem to be much
 6 disagreement about that.

7 There is disagreement over how much but
 8 certainly not any disagreement that it ought to be a
 9 significant share.

10 I'm concerned that there will be a backlash
 11 against the environmental use of water if we don't hold
 12 environmental managers of water to the same standards that
 13 we are holding ag and urban water managers to.

14 It's not the legitimacy of the use that's in
 15 question. It's simply how well are you managing the
 16 resource that you are a steward of?

17 Farmers are asked to do that. Urban water
 18 managers are asked to do that.

19 In both cases it's appropriate.

20 We have developed sets of standards for
 21 defining what is good use of water in those sectors. We
 22 ought to do the same for the environment.

23 CHAIRMAN MADIGAN: What would be an
 24 example?

25 MR. HALL: Well, for instance, how much

Page 109

1 water is required for a wetland in a given situation?
 2 Actually, in any sector you have two tiers.
 3 The first thing you do is you decide what is it
 4 appropriate to use the water for within that sector?
 5 You know, it's suggested that water not be used
 6 in some applications in both agricultural and urban uses
 7 and that's appropriate to do.
 8 And then once you've made those decisions you
 9 decide what is an appropriate level of water use efficiency
 10 within those uses.
 11 Once you've decided what crops you are going to
 12 grow or what kind of landscaping you are going to have, you
 13 decide what is an appropriate level of water use efficiency
 14 for those uses?
 15 The same ought to be done for the environment,
 16 not so that we can take some water back from the
 17 environment, just so we can put the resources to the best
 18 possible use.
 19 And I think that it should not be a central
 20 focus of the CalFed Process to do that any more than it
 21 should be a central focus of the CalFed to develop
 22 standards for urban or agricultural use.
 23 I do think, though, CalFed ought to urge those
 24 who are actively engaged in environmental water management
 25 to do that.

Page 110

1 Again, not to question the legitimacy of the
 2 use, just to make sure that we are getting the most bang
 3 for that acre foot of water.
 4 CHAIRMAN MADIGAN: Roberta.
 5 MS. BORGONOVO: I've been working in
 6 demand side management in both the urban and ag sector.
 7 I was part of the AB 3616 process and certainly
 8 in those arenas ag users said "Are urban areas doing
 9 everything they can to reclaim the water?"
 10 I live in San Francisco. That question was
 11 asked of me all of the time, what's San Francisco doing
 12 with that water that comes out of the Hetch Hetchy system,
 13 is it being reclaimed, is it being reused and so I think
 14 not to address demand side management I think would be very
 15 shortsighted for a long-term process.
 16 There is enough reclamation potential in the
 17 urban areas to really cut way back on the demand, and
 18 demand side management can result in the same sort of
 19 reliability that supply side can.
 20 I don't think it's understood. I don't think
 21 it's accepted by the traditional water managers in
 22 California, but I hope we are moving in a different
 23 direction.
 24 So I'd like to see it included, and I'd just
 25 like to say that demand side management has been taking

Page 111

1 place in the environmental side over the years when we've
 2 been taking water, diverting it out of the Delta for urban
 3 and ag use.
 4 We all depend on that water. So none of us are
 5 without blame. We are all using that water, but the water
 6 that has been a natural part of the system has been cut in
 7 about half no matter how you look at it.
 8 So I just like the fact that demand side
 9 management is in there and I think that it has to include
 10 all of these different elements including pricing that
 11 Annie brought up.
 12 CHAIRMAN MADIGAN: Steve.
 13 MR. YAEGER: (Shrugs shoulders)
 14 CHAIRMAN MADIGAN: Is that it? Okay.
 15 Lester, is there anything else on that item?
 16 We've gone long -- I'm sorry, Richard.
 17 MR. IZMIRIAN: Under "Linkages", the first
 18 bullet, it's limiting this question to endangered species.
 19 Is there a reason why there is that limitation
 20 on "Improve the actions which recover and protect
 21 endangered species and their habitat"?
 22 MR. YAEGER: Oh, I probably didn't make
 23 this clear enough earlier, but these linkages were simply
 24 examples of a much longer list that we are working on. So
 25 there are linkages that we've identified with water quality

Page 112

1 and with system vulnerability and all of the other resource
 2 areas.
 3 We simply presented these as probably the best
 4 examples of the kinds of linkages that we are going to be
 5 working up as we try and develop bundles of Actions.
 6 MR. IZMIRIAN: I just thought ecosystem
 7 health might be a better substitute for endangered species
 8 and their habitat.
 9 EXECUTIVE DIRECTOR SNOW: If I could add,
 10 I think that the reason we chose endangered species was
 11 because of the rigidity of the reliability issues and with
 12 endangered species you have a take limit and that afternoon
 13 somebody may tell you to shut off your diversion and that
 14 ended up kind of being the specific linkage, but you are
 15 absolutely right in a broader sense, that non-endangered
 16 species have a linked relationship with the reliability
 17 issue, and so I think we chose the more dramatic but we
 18 need to make sure that we explain the issue that you've
 19 raised.
 20 MR. IZMIRIAN: Thank you for that
 21 explanation.
 22 CHAIRMAN MADIGAN: Let's break for lunch.
 23 Let's try to be back by about ten after one.
 24 We still have quite a bit to cover.
 25 Thank you all for your help and participation

1 this morning.
 2
 3 (Whereupon the noon recess was taken at
 4 12:40 p.m., after which the following
 5 proceedings were had at 1:21 p.m.):
 6
 7 MR. MADIGAN: If we will all take our
 8 seats, the hour of 1:10 has slid by a bit here and we'll
 9 get started because much yet to cover this afternoon.
 10 The next item on the Agenda, under Agenda Item
 11 Number 2, is "Vulnerability".
 12 And my understanding is that Mr. Yaeger will be
 13 making this presentation.
 14 Steve.
 15 MR. YAEGER: I want to continue on with
 16 some of our bullet points on system vulnerability.
 17 Again, I'll walk-through the problems and then
 18 objectives and then try and concentrate a little bit on our
 19 examples of the linkage that we've developed.
 20 Just to refresh your memory again, the bullet
 21 problems that we've produced here are a summary of the much
 22 more detailed Problem Statements that were developed
 23 through the workshops.
 24 We've attempted to kind of capture the theme of
 25 all of those Problem Statements that have been developed,

1 result in loss of upstream water supplies in order to make
 2 releases from upstream reservoirs flush from the salinity
 3 back out of the Delta transfer channels.
 4 The fourth problem identified was the cost of
 5 maintaining and improving the levees is high and is
 6 exacerbated because of the complex array of local, State
 7 and Federal regulatory agencies who have authorities over
 8 levee construction and maintenance.
 9 The objectives that were developed in the
 10 workshops and by staff work after the workshops to address
 11 these problem areas can essentially be summarized as a main
 12 objective to reduce the conflict between the ecosystem,
 13 water supply and water quality functions of the levee and
 14 channel system by doing three particular things.
 15 One is implementing an integrated and
 16 comprehensive program, a program which provides planning
 17 and contingency funding for Delta levees and channels.
 18 The second part of that is to provide a stable
 19 and constant funding source for levee system maintenance
 20 and for flood contingency actions.
 21 The third part of that objective is to reduce
 22 the conflict between the protection of endangered species
 23 and their habitat and levee maintenance activities.
 24 I guess I should reinforce a point that,
 25 apparently, was not made well earlier.

1 but if you want more detail, in your packet is the more
 2 lengthy Problem Statements that will give you the fuller
 3 context.
 4 The problems that were identified through the
 5 workshops relating to vulnerability of the system levee and
 6 channel system were, number one, failure of the Delta
 7 levees can result in flooding of farmland on the islands
 8 and also result in loss of habitat as a result of flooding
 9 of islands.
 10 The second problem identified was the long-term
 11 loss of an island or a tract; that is, an island or tract
 12 that is flooded because of failure of the levees can lead
 13 to kind of a domino effect in which the open water
 14 increases wave action and subsequent erosion against levees
 15 of adjacent islands and tracts.
 16 The third problem identified was that flooding
 17 of key Delta islands can increase the potential for sea
 18 water intrusion further up the Delta.
 19 That is, rapid and catastrophic flooding of key
 20 Delta islands in the western Delta during particular
 21 periods of time in which flows are not high within the
 22 Delta can induce additional and rapid sea water intrusion
 23 further up in the Delta.
 24 This can result in the project pumps having to
 25 be shut down because of loss of water quality. It can also

1 That is, the linkage example that we've shown
 2 in your packet.
 3 And you see in the slide here, it's just one of
 4 many linkages that we are in the process of developing.
 5 Again, it's an example to kind of illustrate
 6 our thinking in bringing together the synergism between
 7 Actions in each of the resource areas.
 8 These particular linkage example we've
 9 identified would be the actions which benefit both the
 10 system vulnerability and the ecosystem can be achieved by
 11 doing three things.
 12 One is incorporating habitat protection
 13 elements in the levee stabilization actions.
 14 That is, as we are developing actions which
 15 would address stabilizing levees in for instance, the
 16 western Delta, that we would incorporate components such as
 17 water side berms, riparian habitat on the land side berms,
 18 and other kinds of elements of levee stabilization that
 19 would provide both levee stabilization and provide
 20 additional habitat for fish and wildlife.
 21 The second element would be that by
 22 incorporating levee stabilization actions and habitat
 23 elements we could produce the same kind of synergism.
 24 That is, as we prepare alternatives that
 25 include riparian habitat in certain parts of the Delta and

1 shaded riverine habitat, that we can also incorporate levee
2 stabilization actions within those habitat elements and, in
3 fact, would be well served to do so.

4 Because if you develop habitat and you don't
5 protect it and the levees are overtopped, you simply lose
6 the habitat that we've spent money to develop.

7 The third element is that by reducing land
8 surface subsidence immediately adjacent to the levees that
9 we are proposing to stabilize, we can affect both the levee
10 stabilization and provide some habitat enhancement.

11 There have been various proposals to help
12 stabilize subsidence on the land side of the levees by
13 creating shallow zones of wetlands, which would be parallel
14 to the toe of the levees and extend for some distance but
15 not the entire island, but some distance within the island
16 in order to stabilize the subsidence immediately adjacent
17 to the levees and where they address that problem of the
18 levees becoming unstable over time because of land use and
19 subsidence due to that land use.

20 That completes our example of the linkage
21 between levee stabilization actions and other resource
22 areas.

23 I guess I'd just throw it open for questions at
24 this point relating to either the problems, objectives and
25 or the linkages that we are looking at.

1 If you didn't have those place holders there,
2 you'd have greater volume of water of flows required in the
3 Estuary.

4 Now, I think that this whole approach is
5 recognizing the importance of the islands or the levees to
6 habitat to the whole system, but I raise it because at
7 times there has been a thought, well, just forget the
8 islands. Forget the levees. Go to an isolated transfer
9 mechanism as a way to get around seismic problems and
10 forgetting what role the islands play as place holders.

11 CHAIRMAN MADIGAN: Actually, you make an
12 interesting point, and in some ways it really isn't even
13 the flooding of the islands that's the big deal. It's the
14 breaching of the levees.

15 MS. McPEAK: And so in terms of linkage
16 back it isn't articulated here, Mike, from system
17 vulnerability to supply reliability assuming that, in fact,
18 we are committed to a healthy Estuarian system in the
19 Estuary, then the place holder function of the levees
20 becomes an important consideration and might be worth at
21 least noting here.

22 It's part of the hydrology, not just channel
23 capacity, but also the volume issue.

24 MR. YAEGER: Yeah, you're exactly right.
25 There is a real direct linkage between both

1 CHAIRMAN MADIGAN: Tom.

2 MR. MADDOCK: Steve, on your integrated
3 plan levees, I mean, I gather this is integrated with
4 respect to the stability issue which is structural, but
5 then you also have the hydraulic issue, whether it's got
6 enough flood capacity and whether it should be in this
7 channel or that channel.

8 Am I capturing what you're after there?

9 MR. YAEGER: Right.

10 The plan for levee stabilization would also
11 have to take into effect flood control and hydraulic
12 capacity issues as part of the planning process, you're
13 right.

14 MR. MADDOCK: Thank you.

15 CHAIRMAN MADIGAN: Anybody else?
16 Sunne.

17 MS. McPEAK: Perhaps, building on what Tom
18 said about hydraulic considerations, a linkage to supply
19 reliability is the corollary to the third bullet on the
20 first Problem Statement in that while flooding can increase
21 the potential for sea intrusion, what the maintenance
22 of -- at least the levees, whether or not the
23 islands -- but at least what the levees does is a place
24 holder so that in order to maintain an Estuary system it
25 actually requires less flow.

1 water supply reliability, ecosystem health and levee
2 stability in that particular arena and that's a very good
3 example.

4 CHAIRMAN MADIGAN: Roberta.

5 MS. BORGONOVO: Just by way of
6 clarification, in trying to understand the whole role that
7 the islands play, I think Sunne is making the point that if
8 you didn't have the islands, that you'd just need a lot
9 more fresh water to have the Estuary.

10 So when you're talking about flooding the
11 islands, you don't mean really opening them up.

12 You mean still maintaining the levees and then
13 allowing some water to come in and restore the habitat.

14 MS. McPEAK: For wetlands.

15 CHAIRMAN MADIGAN: Yeah, it's the levee
16 that serves the place holder function and in the island,
17 then you have options.

18 MS. BORGONOVO: Right.

19 Okay. Thank you.

20 CHAIRMAN MADIGAN: Thank you, Steve.
21 Lester.

22 EXECUTIVE DIRECTOR SNOW: The final
23 category is "Water Quality" and Dick Daniel will cover
24 that.

25 MR. DANIEL: We've gone through the same

1 process with water quality as we have with the other
2 resource categories, and very simply the problem centers
3 around the fact that we use water from the Delta, and it
4 has to have a certain quality for the various uses to which
5 it has been applied.

6 Very often the quality of the water in the
7 Delta is insufficient for direct use as drinking water. It
8 has to be treated.

9 That treatment frequently generates by-products
10 that are very difficult to deal with and very expensive and
11 so we are looking at opportunities to improve drinking
12 water quality.

13 The same is true as far as agriculture is
14 concerned, both agriculture in the Delta and agriculture
15 that is supported by exported water.

16 The principal concern here is salt. In some
17 cases it may take more water to grow a given crop because
18 the water is salty than it might otherwise and so that's a
19 problem that we need to look at, and it's an obvious
20 linkage.

21 In some cases there are industrial uses of
22 water in the Delta where the quality of the water brought
23 into the facility is such that under existing water quality
24 standards even though that the process has not changed the
25 quality of the water it can't be discharged, and we've

1 general public has no standard.

2 You can't make it too good from a drinking
3 water standpoint and so that creates a particular
4 challenge.

5 The linkages relative to water quality may be
6 less obvious than they are in some of the other areas.

7 I believe that there are some stand alone
8 objectives that might be associated with water quality
9 that's utilized in or outside of the Delta, but in terms of
10 pursuing some of these problems, trying to resolve them, we
11 can deal with some of the water quality problems by
12 modifying the quantity and timing of flow.

13 There are some obvious environmental benefits
14 associated with that.

15 The operation of upstream reservoirs could be
16 manipulated to facilitate access to water when salinity
17 intrusion is less and, therefore, the quality is better.

18 There is a potential for environmental benefits
19 associated with that.

20 In terms of water supply reliability, if we can
21 improve the quality of the water, water can be taken for
22 drinking water purposes, for example, during a longer
23 period of the year, and the environmental conditions,
24 again, go back to these concepts of if we can deal with
25 some of the other problems, perhaps exports need not be

1 heard about that.

2 Additionally, good quality water supports a
3 number of our new technologies, a number of our new
4 industries.

5 It's important to California's economic health
6 to continue to promote those businesses and so any
7 improvements could help it along those lines.

8 There is some concerned about pathogens in the
9 water in the Delta and that it might be affecting
10 recreational use.

11 One example is swimmer's itch and we talked a
12 little bit earlier -- actually we talked quite a bit today
13 about ecosystem quality, this whole concept of carrying
14 capacity, habitat, and there are chemical constituents in
15 the water in the Delta that does limit or may limit on a
16 seasonal basis the amount of productivity that can occur in
17 the Delta, and, here again, there is a desirability to
18 improve it from that standpoint.

19 This translates very simply into objectives,
20 and we've characterized this as good water quality.

21 There's some semantics involved in that.

22 "Adequate" brings with it the connotation that
23 we are pursuing only the existing standards.

24 That may be good enough in some cases, but in
25 most cases, particularly with regard to drinking water, the

1 constrained so much in our efforts to restore the
2 ecosystem.

3 That's what I have in terms of quick material
4 to try and deal with the Agenda.

5 Are there any questions?

6 CHAIRMAN MADIGAN: Alex.

7 MR. HILDEBRAND: I know your linkages
8 aren't supposed to be all inclusive here but a pretty
9 important one relative to the South Delta water quality and
10 inflow at the San Joaquin River is the fact that during the
11 low flow seasons almost all of the water quality problem in
12 the San Joaquin inflow is drainage from the west side CDP
13 service area within the San Joaquin River watershed, and it
14 relates also to the fact that that water comes down the
15 river, is sucked over the pumps and pumped right down the
16 Valley again with the same salt water. So that's a
17 particular area of linkage that we can't ignore.

18 MR. DANIEL: I agree with you, and most
19 certainly it's one of the obvious areas to look at, whether
20 it be improvements in the quality of water that is applied
21 in the west side of the San Joaquin Valley or that in
22 combination with some land retirement, that those are a
23 couple of the issues that we can deal with.

24 MR. HILDEBRAND: Drainage disposal of it,
25 not just land retirement.

1 MR. DANIEL: I agree with you there.
 2 CHAIRMAN MADIGAN: Anybody else?
 3 Lester.
 4 EXECUTIVE DIRECTOR SNOW: That's it on
 5 that item.
 6 CHAIRMAN MADIGAN: Let's move on.
 7 "Revisions To Geographic Scope".
 8 EXECUTIVE DIRECTOR SNOW: At our last
 9 meeting we had discussion about the geographic scope and
 10 actually got a high level of consensus on geographic scope
 11 and we've had some discussion since.
 12 We mailed out a memorandum to you in the
 13 packet, a memo dated October 5th, regarding geographic
 14 scope, and it has in it an updated version, and I guess
 15 we'd like to get a re-consensus on them on the changes that
 16 we made.
 17 And probably the best place to direct your
 18 attention is to the highlighted -- we did a strike at to
 19 make sure what changes we were making, and I'd like to
 20 address your attention to the third paragraph in the
 21 Introduction, the highlighted area.
 22 And those ended up being the two biggest
 23 concerns that came up. The first one was one that we
 24 addressed here at our last meeting and that is the
 25 relationship to the Bay and the way we had it structured,

1 And again we wanted to make sure we made clear
 2 in this scope that it's our intent to include those kinds
 3 of solution packages that might happen outside of the
 4 specific problem area.
 5 I guess the rest of the revisions kind of speak
 6 for themselves.
 7 And maybe at this point I just would be glad to
 8 respond to any comments or questions and again we'd be
 9 looking for BDAC consensus that these changes improved the
 10 mission.
 11 CHAIRMAN MADIGAN: Questions by
 12 members -- yeah, Tom.
 13 MR. GRAFF: I know this is coming up later
 14 in the Agenda but your shaded area on the solution set
 15 basically includes urban Southern California but not the
 16 agricultural areas in the southeast corner of the State and
 17 yet one of the major opportunities for alternative water
 18 supplies for urban Southern California is that other region
 19 within the State.
 20 Did you consciously exclude that from the
 21 picture?
 22 EXECUTIVE DIRECTOR SNOW: well, I think
 23 the conscious decision was to show the tributary watershed
 24 and the watershed in the areas served by any water out of
 25 the Delta, and if there was a thought process at that

1 there, in fact, was intended to be some linkage but people
 2 continued to express concern that that linkage may not be
 3 as clear as it needs to be made.
 4 And essentially we added specific language to
 5 make it clear that we are considering as one of the
 6 problems in this program the fresh water outflow
 7 requirements of the San Francisco Bay. That is something
 8 that needs to be addressed.
 9 However, we prefer to stick to the basic rule
 10 we established and, that is, unless the problem is directly
 11 caused by or closely linked to water management and water
 12 control in the Delta system, we would not address it.
 13 And how that relates to the Bay is again, the
 14 example would be copper issues in the South Bay then would
 15 not be subject to this program.
 16 But to reiterate what we intend to be declaring
 17 here is that the issue of outflow, fresh water outflow for
 18 the health of the Bay, is in the purview of the program.
 19 The other issue that came up and we addressed
 20 this to some extent this morning in our discussion, people
 21 wanted to make clear that if you have a water supply
 22 problem related to the Delta, that you are going to look at
 23 water management considerations in the service areas, such
 24 as south of the Delta, and we had some of that discussion
 25 this morning in terms of demand management.

1 point, it was not to start scaring people in Tahoe that
 2 we're going to look at their basin to solve the Delta
 3 problems.
 4 And I hadn't thought about the question as
 5 you've raised it.
 6 I guess what I would indicate is, in fact, that
 7 potential solution as proposed by San Diego County Water
 8 Authority is within even the scope as we've drawn it.
 9 MR. GRAFF: There are two partners to that
 10 deal.
 11 EXECUTIVE DIRECTOR SNOW: No, I
 12 understand.
 13 On the one hand, Tom, I think what we've been
 14 saying to people is if we can build a project in
 15 Albuquerque that solves the Bay-Delta problems, we should
 16 do it, and so I don't know whether that means we start not
 17 having this solution area definitively on a map. You raise
 18 a good point.
 19 CHAIRMAN MADIGAN: Lester was only kidding
 20 about Albuquerque in case there was anybody here.
 21 Okay. This is important because what,
 22 obviously, the intention of all of these items is to make
 23 sure that we're building incrementally here and keeping
 24 some sort of consensus reflected as we go, and Lester is
 25 asking if this is some sort of improvement on the previous

1 definition and if this aids in this process of consensus?
 2 Ann and then Bob.
 3 MS. NOTTHOFF: No, I think that the
 4 additions that are highlighted on the new geographic scope
 5 are improvements.
 6 Let me just see if I read it the way you intend
 7 it to be read.
 8 And, that is, does this mean then that flows
 9 needed to flush southern San Francisco Bay are, in fact,
 10 going to be included as factors in determining the
 11 solutions?
 12 EXECUTIVE DIRECTOR SNOW: The short answer
 13 I believe is yes and the way we are envisioning this right
 14 now, you've seen this diagram before, as you look at this
 15 system and try to figure out how it works, one of the
 16 outputs of this system are fresh water.
 17 There are a number of things that people have
 18 identified that fresh water do in this system.
 19 And there's habitat issues in San Pablo Bay and
 20 the specific issue that you raised is the what are often
 21 called the pulse flows and the periodic outflows that
 22 happen in San Francisco Bay.
 23 I don't see how we can avoid addressing that
 24 issue even if we wanted to. So I think it's out there,
 25 it's been raised.

1 implication of getting back in, as you've phrased it means
 2 we need then to take a look at all of the issues that
 3 affect the San Francisco Bay.
 4 What we are proposing is, you know, the problem
 5 area is the green area and we recognize we need to look at
 6 the outflow requirements for the health of the Bay.
 7 But if we were to pull this back in and the
 8 green area extends all the way out to Golden Gate, then we
 9 need to do incredibly detailed analysis on San Francisco
 10 Bay.
 11 We need to look at the proper discharge issues,
 12 and I'm proposing and strongly recommending that we cannot
 13 do that and there are other programs.
 14 There is the CCMP. They went through a four or
 15 five year effort.
 16 There is the Regional Board that's looking at
 17 those kinds of issues in the South Bay and so I'm trying to
 18 limit to the flows, and on the flow question that you
 19 raise I think we are going to have to address that issue as
 20 we go forward.
 21 MR. RAAB: I give up. Okay.
 22 It's not in Phase 1 so . . .
 23 EXECUTIVE DIRECTOR SNOW: The distinction
 24 that I'm drawing is that we will look at the outflow
 25 requirements, and the way I interpret what Bob was saying

1 USGS has done a lot of research on it.
 2 They've got papers out on the subject and so I
 3 think we need to try to handle that issue in some fashion.
 4 CHAIRMAN MADIGAN: Bob.
 5 MR. RAAB: Lester, if there were evidence
 6 that the San Francisco Bay ecosystem has deteriorated over
 7 a period of 30 to 40 years because there was an
 8 insufficient outflow of fresh water into this part of the
 9 Estuary, would that then in your mind qualify San Francisco
 10 Bay to be part of Phase 1 Problem Definition?
 11 EXECUTIVE DIRECTOR SNOW: So that we would
 12 have to look at all of the issues affecting San Francisco
 13 Bay?
 14 MR. RAAB: No, I didn't mean that.
 15 I meant specifically just the -- let's say the
 16 food web, the lower part of the food web, the little
 17 critters that exist on the bottom of the Bay, for example.
 18 EXECUTIVE DIRECTOR SNOW: I don't think
 19 I'm following the exact --
 20 MR. RAAB: Well, what I'm trying to say is
 21 that if a lack of fresh water flow over a period of time
 22 has affected the ecosystem in various ways, would that then
 23 qualify the Bay to get back in as a part of the Phase 1
 24 Problem Definition?
 25 EXECUTIVE DIRECTOR SNOW: Yeah, the

1 if we already know there is a relationship, then do we pull
 2 San Francisco Bay into our Problem Definition for Phase 1,
 3 and the answer is no, we do not want to do that because it
 4 requires a whole different level.
 5 It would double the scope and time and
 6 requirements of this whole effort double. And I know
 7 that's true. It could be more than that.
 8 MR. HALL: Lester, I just need a
 9 clarification based on this discussion.
 10 Are you saying that we are going to address
 11 flow related questions including those that pertain to the
 12 South Bay and to the Bay itself or are you saying that we
 13 are going to address the South Bay and we are going to
 14 solve the problems in the South Bay with flow?
 15 EXECUTIVE DIRECTOR SNOW: I was saying the
 16 former.
 17 MR. HALL: Okay. I just wanted to make
 18 sure.
 19 EXECUTIVE DIRECTOR SNOW: Okay.
 20 CHAIRMAN MADIGAN: Roberta.
 21 MS. BORGONOVO: Back to the same old
 22 question, perhaps if it were really clear the linkage
 23 between outflow and the geographical Problem Definition, it
 24 would be clearer.
 25 I mean, you show it on the other overhead where

1 the solution set shows that the outflow is extending all
2 the way out through the Golden Gate into the Farallons and
3 that -- the way you've outlined it here you are saying that
4 if flow related issues that come out of the Delta are
5 affecting South Bay or even oceangoing resources, they can
6 be addressed in the Problem Definition -- I mean, the
7 problem solutions?

8 EXECUTIVE DIRECTOR SNOW: I don't think I
9 would say it that way, but I don't know if I'm disagreeing
10 with you.

11 The way this would work, this larger area, if
12 you've identified a problem, you know, in the Delta, and
13 this larger map really is good for salmon in particular --

14 MS. BORGONOVO: Right.

15 EXECUTIVE DIRECTOR SNOW: -- that if you
16 have a salmon problem in this area, then you can study the
17 whole problem out into the harvest and all the way up into
18 the spawning above Red Bluff, and you can consider
19 solutions in that entire area and so that's really what we
20 are trying to get at there.

21 On the outflow issue, which I know is going to
22 be a difficult issue for us down the road, what we are
23 trying to work with people to get a handle on the
24 variability of outflow and what people seem to know or not
25 know about outflow and its effect on the system and look

1 so we'll to make that decision where a lot of the
2 additional outflow for the same rates against other action
3 categories we would have to address the same issue.

4 MS. BORGONOVO: But you will examine it?
5 EXECUTIVE DIRECTOR SNOW: (Affirmative
6 nod)

7 MS. BORGONOVO: Thank you.

8 CHAIRMAN MADIGAN: Sunne.

9 MS. McPEAK: In your proposal for how the
10 outflow issue is addressed and the amendment for the
11 Geographic Scope, which phase will you do the work in as
12 you propose to do it?

13 EXECUTIVE DIRECTOR SNOW: When we really
14 get into that kind of outflow analysis and the rest -- when
15 we really look at all these vectors, and I think we really
16 start doing that in Phase 2 -- I'm looking for our phase
17 people around here -- Steve, would you say that we get into
18 kind of looking at various outflows and inflows into the
19 system in kind of a lot of our Phase 2 analysis?

20 MR. YAEGER: Well, I think we are going to
21 have to look at it in a general sense during Phase 1, but
22 we'll get into the real detail analysis in Phase 2.

23 But I think from a conceptual standpoint it's
24 really going to need to be addressed in this initial phase.
25 My guess is that we will be getting to that

1 and see how that kind of requirement for output from this
2 system affects the kind of solutions that we look at.

3 And a best example, if we could solve all of
4 these problems by skimming the peaks off of every flow that
5 ever happens in the Delta, what does that mean to the Bay,
6 there is a whole group of people that would say that's very
7 detrimental to the Bay, and so we want to look at those
8 different types of trade-offs and the different types of
9 management opportunities we would have to fix this problem
10 and enhance and certainly not exacerbate the problems in
11 the Bay.

12 MS. BORGONOVO: Well, let me just ask
13 about a fifth time here.

14 I don't mean to be repetitive -- maybe I do
15 mean to be repetitive -- going back to the outflow if the
16 requirement for healthy salmon fisheries is linked to fresh
17 water outflow that goes out through the Gate, that is going
18 to be addressed?

19 EXECUTIVE DIRECTOR SNOW: If outflow all
20 the way through the system is an important factor in the
21 salmon issue, we have to address it.

22 How we address it remains to be seen.

23 We may say that the additional outflow is not
24 as effective at addressing the spawning issues as more
25 gravel spawning beds or better screening of diversions and

1 probably after the turn of the year here as we get into
2 looking in-depth and doing some analysis of alternatives
3 and so forth.

4 MS. McPEAK: Steve, I actually thought
5 that's what you were suggesting, and I'm trying to
6 understand the thrust of Bob's question as to however we
7 interpret what is now proposed in the Geographic Scope will
8 there be some discussion or analysis of that in Phase 1?

9 I'm hearing you say, yes, that it's not
10 something that will be set aside only for Phase 2.

11 MR. YAEGER: That's correct, but I don't
12 want to raise your expectation too high.

13 In Phase 1 it's liable to be an analysis that's
14 based mainly on professional judgment.

15 There may not be a lot of numerical analysis
16 during this initial phase.

17 I think only where we can identify existing
18 data that's available, existing models that we can use to
19 do analysis will we be able to really get to really numeric
20 analysis.

21 But we are just in the next week or so going to
22 be cranking up a part of the study that will be examining
23 what data bases are available, what modeling tools are
24 available to look at this whole range of impacts that we
25 need to look at.

1 So I would hope that we are going to be able to
 2 answer that question better in late December as to what
 3 level of analysis are we going to be able to do to in a lot
 4 of these arenas.

5 MS. McPEAK: Thank you.

6 CHAIRMAN MADIGAN: Richard.

7 MR. IZMIRIAN: Now, I understand the
 8 problem in drawing the downstream line, but I'd feel a
 9 little more comfortable if you could explain why San Pablo
 10 Bay isn't included in the problems -- in the problem
 11 identification area.

12 Because that contains a lot of same Estuarian
 13 functions as Suisun Bay.

14 Certainly, exotic species are there in critical
 15 numbers.

16 I guess -- if Suisun is there, why not
 17 San Pablo?

18 EXECUTIVE DIRECTOR SNOW: Gee, we had a
 19 number of discussions on the this. I'm not sure I can
 20 recall everything.

21 Maybe Dick wants to help out a little bit on
 22 it, and Dick says no.

23 The point you raised is a valid one, and we
 24 understand the linkage of the nutrient flow and fresh water
 25 issues of the flow into San Pablo and the value of the

1 You guys can decide which way to do it but the
 2 kind of argument you raised you can do anywhere around the
 3 green edge.

4 MR. YAEGER: I thought maybe I'd add that
 5 San Pablo Bay really has a whole myriad of problems that
 6 are distinctly different than with which you find in the
 7 problem area that we've laid out here.

8 There are some key problems that, as Lester
 9 stated, are directly linked to the Delta and from a process
 10 standpoint it's just more efficient to be able to deal with
 11 those that are directly linked than to have to
 12 systematically work through and eliminate all of those that
 13 are different problems than those we find in the rest of
 14 the study area.

15 So I think the direct link language takes care
 16 of the issue and does it in a more efficient way from a
 17 process standpoint.

18 MS. McPEAK: Steve, could you explain what
 19 the differences might be, like the difference in salt
 20 gradient and the ozone differences, if there are, between
 21 Suisun and San Pablo?

22 MR. YAEGER: For instance, on the salinity
 23 issue the salinity gradient through the Straits and
 24 Suisun Marsh is markedly different than you find in the
 25 San Pablo Bay.

1 habitat there.

2 In fact, if I remember correctly, we received
 3 specific comment from the Bay Institute saying that they
 4 are kind of comfortable with what we are doing but probably
 5 should include San Pablo, and I guess what we concluded is
 6 the way that we have this structured we are picking up any
 7 of those issues.

8 It's not, you know, leaving it like this means
 9 we are not going to address San Pablo. We've got the
 10 directly linkage language in here, which is what you guys
 11 resolved to do the last time.

12 And I guess I didn't want to get into, you
 13 know, adding a half inch on each side just to move a few
 14 more feet the system. We've got it linked in.

15 There is no way we can avoid a habitat issue
 16 here because of the direct linkage. This seems to work and
 17 it seems to cover all the problems that the people have.

18 MR. IZMIRIAN: Then why not include it as
 19 part of the problem identification problem?

20 EXECUTIVE DIRECTOR SNOW: Really, the only
 21 issue is you can say why not on all the sides of this, and
 22 if this works, if this definition works to define our
 23 problem areas and if we are catching the problems, the
 24 other side is why not go with this and make it work, and
 25 that's it.

1 It varies on a much wider scale, and it varies
 2 in response to a lot of different kinds of hydrologic
 3 cycles than you find in the variance in the salinity
 4 gradients in the San Pablo Bay and that's one example of
 5 the distinct difference that we find.

6 I think -- I don't want to put words in Dick's
 7 mouth, but I think that the fisheries issues are somewhat
 8 different.

9 MR. DANIEL: I think I can offer a bit of
 10 a fish example that I think works pretty well, although, I
 11 don't know exactly how much peer review its got.

12 It may turn out that one of the real problems
 13 we have for Delta smelt and splittail, two of the species
 14 of fish that either do or could constrain water exports
 15 from the Delta because of the Endangered Species Act, it
 16 could turn out that those fish would prefer to spawn in
 17 areas around San Pablo Bay in very wet years when the
 18 opportunity to recover the population as a function of flow
 19 is very high.

20 But I drove around part of San Pablo Bay just
 21 the other day and all of the little nooks and crannies, all
 22 of the marsh habitat, now grows hay and there really isn't
 23 much spawning habitat available to those fish to take
 24 advantage of in a year like 1995.

25 So if we are going to pursue resolution of the

1 conflict between several species of fish and other uses of
2 water in the Delta and ignore the availability of spawning
3 habitat in a very wet year, we missed the mark.

4 MS. McPEAK: Then may I ask Richard, do
5 you have other information that's different from what we
6 just heard that we should take into account?

7 MR. IZMIRIAN: No.

8 I think Dick just made a very good argument for
9 including San Pablo Bay.

10 What I'm really interested in is what are the
11 issues we're trying to avoid by not including San Pablo
12 Bay?

13 MR. YAEGER: Maybe we can throw some more
14 light on that.

15 I think Pete Chadwick has just raised some
16 issues to us that I think he could throw some light on
17 that.

18 Pete, if you --

19 MR. CHADWICK: My reasons for considering
20 this an acceptable decision are the management issues that
21 it does not get you into.

22 It seems to me if it's a water need related
23 issue in San Pablo Bay, it's in.

24 If it's a management need related to, let's
25 say, the -- all of that wetlands across the north side of

1 which is okay, except nobody really knows at just how much
2 water needs to flow past Carquinez Bridge into San Pablo
3 and San Francisco Bays in order to keep it -- something
4 like the Estuarian habitat should be.

5 And if there were some assurance that you could
6 give me, Lester, that no bad things will happen, like a
7 major diversion of water will happen until this -- until a
8 determination is made at some point as to what is the
9 minimal need for fresh water flow into San Francisco Bay
10 over a period of a year or maybe it has to be longer than
11 that, three or four years -- if you know, over a period of
12 three or four years how much water has to get in there,
13 that's what's bothering us.

14 EXECUTIVE DIRECTOR SNOW: Yeah.

15 I think the only specific assurance I can give
16 at this point is that the issue you raised has to be a part
17 of our investigation.

18 And the only thing I'd modify about the way you
19 phrased it is I don't think we would necessarily be looking
20 at the minimum flows to keep a healthy Bay but rather the
21 optimal and I think it varies.

22 I mean, it's the natural cycle varied that kept
23 San Francisco Bay healthy and so we need to look at that.

24 It has to be on the table, and it's become
25 clear to me from talking to you and others that are

1 San Pablo Bay that are -- that deal with various local land
2 use decisions as well as some land use decisions that are
3 being made at higher levels in local Government, if
4 you -- it gets you into a whole series of issues about
5 various industries on the south side that are peculiar to
6 those industries.

7 To me those are the issues that -- where you
8 can say, okay, let's draw a line and not get into that, and
9 the same thing around San Francisco Bay, that you
10 would -- as Lester made earlier, there is this much broader
11 set of issues that are not intrinsic to this water problem,
12 but I think the definition, if it's intrinsic to the water
13 supply problem, you know, we deal with it here.

14 CHAIRMAN MADIGAN: Bob.

15 MR. RAAB: One of the main reasons for
16 this desire on my part and others to see the San Francisco
17 Bay in the first phase is that we are feeling very
18 uncomfortable about things that might be going on right now
19 in this way.

20 The Delta Wetlands Project, for example, seems
21 to have a lot of good things about it.

22 Also, has an implicit premise that there is no
23 problem taking more water in the wintertime because it's
24 excess, excess flow, so they would capture it in Delta
25 islands and at least at a more proficuous time of the year,

1 familiar with the Bay that if we don't address the outflow,
2 we are going to have an awful lot of people that are not
3 going to go along with this program and so I think it's a
4 fact of life for us.

5 CHAIRMAN MADIGAN: Okay.

6 EXECUTIVE DIRECTOR SNOW: Is that tacit
7 support for the modifications?

8 CHAIRMAN MADIGAN: It's called an
9 acquiescence.

10 EXECUTIVE DIRECTOR SNOW: We are passing
11 around the oath statement now.

12 I'll move on to the Mission Statement and try
13 to be quick here.

14 I guess the first thing I would say about the
15 Mission Statement is that when I use the term "Mission" for
16 CalFed, I'm meaning all of these boxes.

17 I don't think that it's sufficient when we say
18 what the CalFed mission is to only look at the top Mission
19 Statement box, and we'll get to the Mission Statement
20 because I think it's important that you understand what's
21 happened in the workshops and modifications that we've
22 made.

23 But I think it's real important to look at the
24 solution principles, and you have this in hard copy in your
25 packet in a number of different places.

1 It's at the end of the Mission Statement memo
 2 as well as in the copy of the overheads.
 3 In the solution principles I think when we
 4 talked last, we had four in that category, that were
 5 affordable, equitable, implementable, durable, and through
 6 our discussions with the public we have added that
 7 solutions need to reduce conflict among the beneficial
 8 users, and there can be no redirected impacts, that you
 9 have to address anything that moves impacts to another
 10 location in the system, and we think that those types of
 11 principles guide everything that we do and so as we work
 12 through these primary objectives, you can come up with some
 13 real neat solutions but you have to test these.
 14 I mean, if it cost ten billion dollars, it's
 15 probably not affordable.
 16 If all you are doing is shifting the problems
 17 to the mountain counties or to the San Francisco Bay, given
 18 our last discussion, it's not going to work and so these
 19 principles are as important as the Mission Statement itself
 20 and so they kind of go hand-in-hand.
 21 And so I guess one of the things I'd like is to
 22 see if BDAC is comfortable saying to CalFed that this
 23 represents a reasonable CalFed mission as it exists here
 24 with the Mission Statement, the solution principles and the
 25 primary objectives.

1 of a vital ecosystem.
 2 And, of course, by focusing on it I don't want
 3 to diminish the second half of that, which is to improve
 4 water management for the beneficial uses of the Bay-Delta
 5 system.
 6 But I think we had a fair amount of support in
 7 the workshop for the rest of that, and most of the
 8 discussion focused on the use of the word restore.
 9 So with that overview I'm hoping we can get
 10 some consensus that this represents a good CalFed mission.
 11 CHAIRMAN MADIGAN: I have Eric, Alex and
 12 Hap.
 13 MR. HASSELTINE: Lester, when I read
 14 through the material that was sent to us, more or less
 15 setting forth the explanation that you just gave, it still
 16 struck me as being a little bit strange, and I don't really
 17 want to delve that deeply into semantics here, but when we
 18 just went through the objective statement for ecosystem
 19 quality, we used the word improve for the habitats and the
 20 ecological functions, and we used the word improve for
 21 water management in the Mission Statement, but again, you
 22 know, now it's restore in terms of the ecological health
 23 even though the ecological quality objective below that
 24 sort of feeds into that and we are using improved.
 25 And to me restored does mean that you are going

1 Now, having said that I want to highlight one
 2 specific issue that was not resolved in the workshop when
 3 we discussed this at workshop number two.
 4 I think we got basic support for the
 5 Mission Statement but there ended up being a fair amount of
 6 discomfort over the word restore.
 7 And I'll highlight that.
 8 What I want to point out is the way we have
 9 this worded, we're saying that the mission is to restore
 10 ecological health or restore the health of the system.
 11 The concern that came up was that people would
 12 misread restore to mean that you go back to some time
 13 300 years ago and you replicate exactly how many tule
 14 marshes there were back then.
 15 Now, those who kind of represented the
 16 environmental community even at the workshop indicated
 17 that's not what they were looking for. They were looking
 18 for restoration of the health.
 19 Some proposed alternative wording, such as
 20 re-establish ecological health so there wasn't any
 21 confusion about what restore meant.
 22 We chose to go ahead with this, draw this issue
 23 out for you so you understand we're proposing language that
 24 is restoring the health of the system, not going to some
 25 specific time in history, but rather restoring the health

1 back somehow and that you are trying to get to some
 2 precedent condition somehow.
 3 And, you know, I accept your explanation that,
 4 but I think it's still a little confusing, and I'm
 5 wondering if you really mean it to be synonymous with
 6 improvement to the extent that the improvement is undoing
 7 some degradation somewhere or whether or not there is
 8 actually somewhere some idea that there needs to be some
 9 specific definition or some quantitative definition of some
 10 conditions that you're trying to get to.
 11 EXECUTIVE DIRECTOR SNOW: Yeah.
 12 I'll try to address that a little bit and again
 13 Dick will probably want to add.
 14 But I do remember part of discussion that we
 15 had that was related to issues that you raised.
 16 If all you have in this overall mission, all of
 17 these things in combination, is improve aquatic and
 18 terrestrial habitats, if you're just improving the
 19 environment, the point was made then all you're committing
 20 to is going to an ecosystem that's terminal in five days to
 21 an ecosystem that's terminal in ten days.
 22 You've improved it but you still haven't made
 23 it a healthy ecosystem and so there's some balance where
 24 the specific primary objective is where we are going to
 25 improve those habitats but where we're headed is restoring

1 the health of the system.
 2 And that's where there is a little bit of a
 3 confusion. We are not saying that we are restoring the
 4 ecosystem as it was at one time but we are saying it was a
 5 healthier ecosystem at one time and we are going to restore
 6 a healthy ecosystem.
 7 And that's kind of the origin of some of that
 8 and it may not be totally satisfying.
 9 MR. HASSELTINE: So then we really are not
 10 asking for a definition of restore.
 11 We are asking for a definition of health?
 12 MS. McPEAK: Yes.
 13 MS. HASSELTINE: And healthy.
 14 EXECUTIVE DIRECTOR SNOW: Yes.
 15 And as we pursue performance measures that's
 16 what we are trying to do, is come up with as quantifiable
 17 as possible a definition of a healthy ecosystem.
 18 MR. DANIEL: Yeah, you hit it right on the
 19 head.
 20 Really what we are saying here is that an
 21 ecologically healthy ecosystem is one that has quite a bit
 22 of quality to it, and that in the pursuit of the quality
 23 aspect of things we are talking about the functions of the
 24 Delta, the biological or ecological functions of the Delta.
 25 So we are saying the same thing when we say

1 accelerates the mutual understanding of what we mean by
 2 some of these things when we begin to apply them.
 3 CHAIRMAN MADIGAN: Okay. Thank you.
 4 Hap.
 5 MR. DUNNING: Lester mentioned solution
 6 principles as well as the Mission Statement, is it in order
 7 water to say something about those?
 8 I certainly support the thrust of the new
 9 solution principle number six, but I think the wording is
 10 unfortunate.
 11 The other five solution principles all allow
 12 some wiggle room; affordable, equitable, implemental,
 13 durable, reduce conflicts.
 14 Number six says "no redirected impacts".
 15 You gave the example of water transfers.
 16 Are you really saying you can't have any water
 17 transfer solution if there is any kind of redirected
 18 impact?
 19 It may not be a matter of impoverishing a rural
 20 area experiences a transfer but there may be some
 21 quantifiable impacts.
 22 I think it would be better to say something
 23 like "minimize redirected impacts".
 24 EXECUTIVE DIRECTOR SNOW: we struggled
 25 with this. We wanted it to read like the others and we

1 ecological health and ecosystem quality.
 2 We are not putting an aerial or an acreage type
 3 number on it. We are talking about functions.
 4 CHAIRMAN MADIGAN: I have Alex, Hap, Stu,
 5 David, Roberta and Roger.
 6 Alex.
 7 MR. HILDEBRAND: I share the temptation to
 8 wordsmith here as others are experiencing, but I suggest
 9 that it's more productive rather than do a lot of
 10 wordsmithing to get on with this thing, accept the wording
 11 as it is and then rely on the iterative process we talked
 12 about to determine whether we need to come back to it
 13 later.
 14 We are not going to freeze this in concrete and
 15 I'm concerned about the slow pace here if we do a little
 16 less wordsmithing and we make a little more advance to the
 17 point where we can iterate.
 18 CHAIRMAN MADIGAN: I think the fear is
 19 that we make a little more haste and a little less
 20 agreement early on and we simply accelerate the process of
 21 disintegration.
 22 And we're trying to make sure that we have some
 23 sense of agreement as we go forward through this.
 24 MR. HILDEBRAND: I don't think it's a
 25 question of accelerating the disintegration. I think it

1 couldn't come up with something that was a one word.
 2 And the answer to your specific question is no,
 3 it should not be read so absolutely as it could be
 4 constructed as you indicated there.
 5 Minimize or manage or mitigate, I'm not sure,
 6 but it has to have that softer edge so you can make a
 7 decision because in the case of transfers you could go
 8 ahead and have the impact but you're setting up a whole
 9 program to take care of whatever that impact is and so that
 10 is a possibility.
 11 CHAIRMAN MADIGAN: A word, Hap?
 12 MR. DUNNING: Well, I suggest "minimize
 13 redirected impacts".
 14 MR. HALL: I'd support that.
 15 MS. BORGONOVO: Yeah, good.
 16 MR. HILDEBRAND: I take exception. I
 17 don't think that's good enough.
 18 You can say no significant or something like
 19 that, but I don't think minimizing it may not be very good.
 20 It depends on what that constitutes.
 21 EXECUTIVE DIRECTOR SNOW: Because we could
 22 all agree that taking out one particular farmer in South
 23 Delta would be a minimal impact?
 24 I understand your point.
 25 MR. HILDEBRAND: That's what I'm afraid

Page 153

1 of.

2 MS. MCPEAK: That's still significant.

3 MS. SELKIRK: "No significance".

4 EXECUTIVE DIRECTOR SNOW: significant?

5 MR. DUNNING: "No significance".

6 CHAIRMAN MADIGAN: All right. Let's try

7 that one for a bit and see how that works as we go through

8 the list.

9 Stu.

10 MR. PYLE: Yeah, back on the question of

11 restore an argument I lost once already, I think we need

12 some type of a side Bar on this to -- not a legal court, an

13 editorial type side Bar, but a little statement to indicate

14 what's intended by the use of the term "restore" because we

15 are not talking about the dictionary definition and somehow

16 we just have to straighten that out.

17 CHAIRMAN MADIGAN: Sunne.

18 MS. MCPEAK: I don't know if this would be

19 helpful, but the discussion that I heard earlier was to

20 agree we're really now talking about the word health and a

21 definition that will come from performance standards.

22 It may be worth putting an asterisk there on

23 the word "health" and putting down that this process will

24 address performance standards to define health.

25 That might help so we are not now debating

Page 154

1 restore but we are stipulating to the fact that there has

2 to be a description of health that everyone knows that's

3 explicit.

4 Second -- now, a question that I have, though,

5 after making that recommendation is on those four boxes at

6 the bottom, did our earlier discussion this morning,

7 Lester, conclude with you agreeing you were going to

8 broaden the language under vulnerability of Delta

9 functions?

10 EXECUTIVE DIRECTOR SNOW: I think that the

11 notes that I made would be that we would take the narrative

12 statement and expand that to include all those things that

13 came up, but not necessarily change this particular box.

14 MS. MCPEAK: Okay. Now, that -- okay.

15 Then I do have a problem.

16 EXECUTIVE DIRECTOR SNOW: Okay.

17 MS. MCPEAK: I don't know if anyone else

18 does.

19 I think that's too limiting, especially when

20 this is -- the Mission Statement that you have said goes as

21 a package, where the Delta functions is limited only to

22 island inundation, not the other, you know, susceptible

23 dysfunctioning or interruptions of the Delta.

24 Do you see what I mean?

25 EXECUTIVE DIRECTOR SNOW: We have even in

Page 155

1 this box water supply, infrastructure and ecosystem.

2 MS. MCPEAK: But from catastrophic -- in

3 the other linkage statements you have catastrophic,

4 disruption of the Delta or of the transfer

5 mechanisms -- and I can find the words -- right here it's

6 all those things from only catastrophic inundation of the

7 Delta islands not of the Delta system.

8 It's linking those things to only the Delta

9 islands as opposed to the transfer system that I thought is

10 too narrow here.

11 Let me get that other wording for you.

12 EXECUTIVE DIRECTOR SNOW: I guess I'm

13 reading this differently and so I'm trying to think it

14 through another way.

15 I think what we intended, Steve, was that the

16 failure of the levee system in resultant inundation of the

17 islands reeks havoc on land use, economic activity, water

18 supply, infrastructure and the ecosystem, all of those

19 other linked items.

20 Is that correct, Steve?

21 MR. YAEGER: That is correct.

22 I'm just wondering whether if we changed the

23 wording of the last two sentences in that box to read that

24 reducing the risks to all these things from catastrophic

25 breach of Delta levees, if that would satisfy your concern?

Page 156

1 MS. MCPEAK: Actually, I think that's too

2 narrow, too, Steve.

3 The wording that you had in this document, the

4 overheads that were put up, called a vulnerability of Delta

5 water transport system to catastrophic failure.

6 So it's the catastrophic disruption of the

7 Delta transport system as a whole.

8 It's the vulnerability not only of the levees,

9 not only of the islands but of the canals, of the channels,

10 of a pipeline.

11 I mean, it's that whole vulnerability that

12 should be reflected here if, in fact, this diagram is going

13 to become the visual of our Mission Statement.

14 And you called it in this other paper

15 (indicating), you called it Delta water transport system.

16 EXECUTIVE DIRECTOR SNOW: Uh-huh (yes).

17 I know that we have the things that you are

18 suggesting covered in all of the detailed stuff and I'm

19 just -- if I'm following your intent -- oh, gee, I don't

20 know.

21 I was going to say you could delete

22 catastrophic inundation and you're reducing the risk to all

23 those things from any type of natural disaster.

24 MR. HALL: Mr. Chairman, may I offer an

25 observation?

1 EXECUTIVE DIRECTOR SNOW: Yes.
 2 MR. HALL: I think part of the problem
 3 stems from the use of vulnerability because we all
 4 understand that the Delta is vulnerable from a variety of
 5 things, but in the -- in using it here it makes it sound
 6 like what the Delta is vulnerable to is a catastrophic
 7 inundation of the islands or a catastrophic breach of
 8 levees when it's vulnerable to lots of things.
 9 But if you -- but what I think you're trying to
 10 do is define one area that we need to fix.
 11 Just like we need to fix Water quality and
 12 water supply reliability and ecosystem health we need to
 13 fix the threats to a catastrophic impact from a sudden
 14 breach of levees.
 15 Am I right about that?
 16 MR. YAEGER: Yes.
 17 MR. HALL: But when you say vulnerability,
 18 it makes it sounds like the only vulnerable point we are
 19 trying to fix here is that catastrophic breach of the
 20 levee.
 21 So I don't know.
 22 Sunne, am I close to where you were?
 23 MS. MCPEAK: Maybe.
 24 But you're trying hard and I really appreciate
 25 that, Steve, yes. It feels good. You are attempt feels

1 levee and channel system protecting land uses, protecting
 2 ecosystem, protecting habitat, protecting water quality,
 3 and so the wording under the vulnerability primary
 4 objective I think needs to be broader than the specific
 5 wording under the water supply reliability objective.
 6 MS. MCPEAK: I'm just thick-headed.
 7 CHAIRMAN MADIGAN: Go ahead --
 8 MR. HASSELTINE: Well, interestingly
 9 enough, going back over this, under the system
 10 vulnerability sheets, what you put down as your objective
 11 there was to reduce the conflict between those other three
 12 objectives somehow.
 13 And how that then gets transferred into
 14 inundation of islands, I don't know, much less as to the
 15 whole water system, as Sunne is pointing out.
 16 MR. YAEGER: The objective word in there
 17 is to reduce the conflict between the ecosystem, water
 18 supply and water quality functions of the levee and channel
 19 system.
 20 MR. HASSELTINE: That's those three boxes.
 21 EXECUTIVE DIRECTOR SNOW: But it works
 22 both ways if I could add to it.
 23 This box over here on vulnerability has to do
 24 with the integrity of the levee and channel system in the
 25 Delta. That's what we are looking at.

1 good.
 2 I don't know. I guess I'm not understanding
 3 why the wording that you've used before or that you've used
 4 in another place is not what you intended here, and maybe
 5 that's why Steve was raising the question about just the
 6 breach of levees when we are trying to reduce the risk to
 7 the entire transport system.
 8 EXECUTIVE DIRECTOR SNOW: What was the
 9 language we used in the summary statements?
 10 MS. MCPEAK: The bullet actually read
 11 supply and -- it was related to supply reliability so the
 12 bullet read supply uncertainty results from the
 13 vulnerability of the Delta water transport system to
 14 catastrophic failure.
 15 Using that bullet it seemed to me that
 16 consistent wording would say "from catastrophic failure of
 17 the Delta water transport system".
 18 MR. YAEGER: But I think the wording that
 19 you are referring to, though, falls under the water supply
 20 reliability problems.
 21 MS. MCPEAK: It is.
 22 MR. YAEGER: And so it really focuses on a
 23 specific part of the vulnerability of the Delta functions
 24 and that is is the water transport system.
 25 There are many other functions of the Delta

1 And the negative interaction, and Alex can tell
 2 you this better than anybody, there are certain
 3 requirements that if a Reclamation District lets certain
 4 things grow on their levees and they go out and try to
 5 clear it away for levee maintenance they've got an ESA
 6 problem on their hands and they can't deal with it and so
 7 that's kind of the negative interaction that we need to
 8 reduce that conflict.
 9 Or on water quality you'll have the Regional
 10 Board say to Alex or somebody like him you cannot use the
 11 dredge material out of the channel to put on top of the
 12 levee because there may be something bad that leaches out
 13 of it and so those are the negative interactions with a
 14 conflict.
 15 However, by the same token if you don't do
 16 something about the channel and levee stability and you
 17 have failures, then you impact all of these boxes
 18 negatively.
 19 And so that's the synergistic relationship and
 20 so we try to capture that by listing those other things in
 21 terms of reducing the risk to all of those by making sure
 22 you've got a program that addresses levee and channel
 23 stability.
 24 MS. MCPEAK: I agree.
 25 I mean, I don't just -- I think that while

1 Steve was suggesting maybe the title was where we had a
 2 problem or I had a problem, I think your title is just
 3 fine, the vulnerability of the Delta function, and I think
 4 you are attempting to do the right thing.
 5 Let me just back off.
 6 MR. YAEGER: I guess the point -- Steve's
 7 point is well taken that perhaps the wording should be from
 8 catastrophic breaching of Delta levees.
 9 It would be more clear if we --
 10 MS. McPEAK: It would be because that is
 11 the issue, not just the inundation of the islands, right.
 12 So we are back to say Steve was right, huh?
 13 MR. HALL: You also ought to change the
 14 title to susceptibility of Bay-Delta system functions to
 15 catastrophic events, but I'll drop that.
 16 CHAIRMAN MADIGAN: David.
 17 MR. GUY: For the record I also don't
 18 really care for the term restore but like Alex I think it's
 19 more important to move on.
 20 With that said, though, despite that I do want
 21 to try a little wordsmithing, and I think this is important
 22 on the actual Mission Statement itself.
 23 I would propose that after a comprehensive plan
 24 that we put "that will" and get rid of the "to" and then
 25 also get rid of the "comma" and the other "to" right before

1 First of all, going back to restore, I think
 2 it's important to keep the memory intact of what's gone
 3 before, and "ecosystem quality", I do think, defines what
 4 we mean by restore. It says support sustainable
 5 populations of diverse and valuable plant and animal
 6 species.
 7 So I think that for the public we all need to
 8 remember that, that we really have gone back and defined
 9 it.
 10 I also wanted to just pick up on the words that
 11 Lester used in talking about the Delta functions.
 12 He said the integrity of the Delta levee and
 13 channel system as the title of that fourth box or the
 14 stability of the Delta levee and channel system.
 15 I'm just throwing that out. But I like the
 16 statement is way it is.
 17 I agree with Alex and the other people that
 18 have said let's move on.
 19 CHAIRMAN MADIGAN: Roger.
 20 MR. STRELOW: while agreeing we've got to
 21 move on, I did have some wording suggestion that I think
 22 addresses a number of these points.
 23 And that would be to say that the mission is to
 24 develop a long-term comprehensive water management program
 25 to achieve ecological health and an optimum balance of

1 improve, and the reason why I think it's time we actually
 2 do something on the ground rather than just having a plan,
 3 that we actually have a plan that will actually do this.
 4 Did you get that?
 5 EXECUTIVE DIRECTOR SNOW: Yeah, I
 6 understand.
 7 MR. GUY: I hate to wordsmith but I just
 8 think it's important that we have a real strong Mission
 9 Statement that says we are going to do it, we are not just
 10 going to talk about it, that it will actually accomplish
 11 that.
 12 Did you follow that, Mike?
 13 CHAIRMAN MADIGAN: I understand what
 14 you're saying.
 15 I was just playing around here with whether
 16 you'd kill yourself on this type of program, would restore
 17 the ecological health, the plan would be to restore the
 18 ecological health in some sense, I guess.
 19 EXECUTIVE DIRECTOR SNOW: "A comprehensive
 20 plan that will restore ecological health and improve water
 21 management for the beneficial uses of the Bay-Delta
 22 system".
 23 CHAIRMAN MADIGAN: Roberta.
 24 MS. BORGONOVO: I just wanted to offer a
 25 couple of comments.

1 beneficial uses of Bay-Delta water.
 2 And the reasons, very briefly, using the word
 3 "program" rather than "plan" I think gets to David's point,
 4 that what we don't want is something written on a shelf but
 5 to get right into -- to have a program that can be and will
 6 be implemented.
 7 The term "restore" really doesn't -- I mean, I
 8 think that that is a problem even if you don't assume that
 9 it's going to go exactly back to past conditions.
 10 The point is we want a healthy system even if
 11 it had never been healthy before. So simply to say
 12 "achieve ecological health" I think is clearer and more
 13 direct and also to "achieve an optimum balance of
 14 beneficial uses".
 15 Using the word "improve water management" I
 16 think is also too weak on that. We are not just interested
 17 in improvement.
 18 We want -- and I've always liked the word
 19 optimum because when you have a number of things to do, the
 20 concept of optimum is that it's the best you can do in a
 21 number of directions at once and that's certainly what
 22 we're aiming for.
 23 CHAIRMAN MADIGAN: Good word.
 24 Tom.
 25 Lester is in the process of accumulating a

1 bunch of notes right now and we are going to have to take a
2 look at this in a little bit.

3 MR. MADDOCK: I agree with Alex that we
4 are reducing ourselves here down to semantics, but it seems
5 to me that we are going to have a lot of side bars in the
6 future about what is restore and what is improve, and it
7 seems to me that we might be talking about avoiding that if
8 the language would be something like has been proposed
9 here, is that what we want to do is provide, provide or
10 achieve, a healthy ecological system and to provide the
11 capability for efficient water management or rather than
12 saying "improve the water management" because -- and I'll
13 predict that there will be future side bars coming back and
14 saying, well, what is the improvement and so, you
15 know -- and I realize if you say you want to have an
16 efficient water management system we are going to sit here
17 and debate what the hell is an effective water management
18 system.

19 That would be my thoughts on it but it seems to
20 fall in line with some of the other thoughts on it, too.

21 CHAIRMAN MADIGAN: Judith.

22 MS. REDMOND: I wanted to go back to the
23 discussion about the solution principles and just put my
24 two cents in is that when we initially brought that issue
25 up of the impacts on fishing in rural communities, we

1 them, to mitigate them, to have linkages, as there are in
2 some of the other solutions.

3 So I think it might be worthwhile to really
4 define what we mean by equitable and affordable and
5 reducing conflicts and, you know, redirected impacts. It
6 might be worth a little discussion.

7 CHAIRMAN MADIGAN: MRI's, Mitigated
8 Redirected Impacts.

9 Okay. You have a lot of suggestions, Lester,
10 for clarifying and enhancing this but I didn't hear much in
11 the way of disagreement with what it was that you were
12 trying to say here or where it was that you were going.

13 Maybe what we have today is some general
14 recognition that this is pretty much the Mission Statement
15 but, Lester, I would think that may be you'd want to take a
16 look at all of these comments and bring this back one more
17 time and revisit it for the group, if that sounds like a
18 reasonable thing to do, unless there is something here who
19 has real heartburn with the direction this thing is going
20 in right now.

21 EXECUTIVE DIRECTOR SNOW: Over here
22 (indicating).

23 CHAIRMAN MADIGAN: Yeah, besides you.

24 MR. HALL: I move we revisit the Mission
25 Statement at every meeting.

1 considered that problem. It has existed a long time and I
2 had imagined it as a problem area.

3 Not imagining it as a solution area we saw it
4 as a basic problem of the way water management takes place.

5 So seeing it in the solution principles
6 certainly makes sense. We don't want additional redirected
7 impacts.

8 But I think putting it there implies that we
9 don't want -- it simply implies that we don't want any
10 additional new redirected impacts because of changes in the
11 plan, you know. If we have a new plan and it makes changes
12 in water management, we don't want to create new impacts.

13 I think the point that I want to is that
14 changing that statement to say we don't want any new
15 significant redirected impacts really softens it a little
16 bit too much.

17 I think that we might need a little discussion
18 piece just on what are some of these solution principles
19 involve.

20 You know, there has been these discussion
21 pieces on each of the problem areas, water quality,
22 ecosystem quality, et cetera, and I think there may be a
23 need to flush out some of the solution principles as well
24 because if there are redirected impacts, even if they
25 aren't significant, there may be the opportunity to address

1 EXECUTIVE DIRECTOR SNOW: I'll take one
2 shot at seeing if we can draw this to a close.

3 CHAIRMAN MADIGAN: All right. Okay.

4 EXECUTIVE DIRECTOR SNOW: First,
5 on -- Judith made an excellent point about coming up with
6 some descriptions for future discussions about what do
7 those terms mean.

8 We often write around the description of
9 affordable and equitable and I think that we will do that.

10 What I would focus on, though, is kind of two
11 versions of a potential rewrite and if you remember David
12 Guy's rewrite, we could accommodate that immediately.

13 Roger brought up one that was more involved of
14 a rewrite and used the word "optimal" and we found that
15 "optimal" means a lot of different things and it can mean
16 that you reduce somebody's availability or you reduce
17 something. It doesn't necessarily indicate a vector that
18 everybody is improving.

19 An optimal allocation would mean that you are
20 not going to give water to Delta agriculture and so it
21 introduces a whole different thought and so what I suggest,
22 if people were comfortable with David's, maybe we can kind
23 of agree on that one.

24 CHAIRMAN MADIGAN: Why don't you tell us
25 what it was again.

1 EXECUTIVE DIRECTOR SNOW: That was
 2 long-term comprehensive plan that will restore ecological
 3 health and improve water management for beneficial uses.
 4 MR. GUY: You only need "and will" once.
 5 MS. BORGONOVO: I really like the idea of
 6 achieve, but I couldn't go back and rewrite the work
 7 "achieve." Someone else had made that suggestion but if we
 8 said to develop and implement a long-term comprehensive
 9 plan that to me moves toward achievement which isn't just
 10 the plan on a shelf.
 11 So it's one more word in there with David
 12 Guy's.
 13 But I would go with David Guy's if it moves us
 14 forward.
 15 Forget "implement", even though that's
 16 important. I'm assuming we are going to implement it.
 17 EXECUTIVE DIRECTOR SNOW: Is there a
 18 consensus on that?
 19 CHAIRMAN MADIGAN: Once, twice, okay.
 20 Bring it back.
 21 Thank you.
 22 Thank you all very much for your participation
 23 in this.
 24 Let me open this matter up to public comment.
 25 I have not received any slips in that

1 The fact is we had a healthy functioning
 2 ecosystem at one point. We had services that as human
 3 consumers in various ways that we relied on from that
 4 ecosystem, and I think the point is to ensure that we have
 5 functions that allow for a self-sustaining diverse
 6 ecosystem and one that provides a certain level of services
 7 to us.
 8 That is not the same as reconstruct.
 9 I think that Lester was very eloquent in
 10 pointing out the differences, and I would strongly support
 11 retaining the restoration language, although I agree that
 12 the level of restoration is something that is going to take
 13 a lot of discussion in the future.
 14 In terms of the Geographic Scope, we've
 15 indicated in the past that while we think it's somewhat
 16 arbitrary to draw a line between a problem and solution
 17 area that in order to keep things manageable, we are
 18 amenable to the idea of having a somewhat truncated problem
 19 area.
 20 As long as the linkages are correct we think
 21 that that revised Geographic Scope seems to address that
 22 and certainly the things that you said today, Lester, seem
 23 to be reassuring as far as assuring that the linkages to
 24 flows downstream to the problem area are addressed.
 25 I would say that we would feel more comfortable

1 regard -- aha, I could have guessed.
 2 GARY BOBKER: You can pick somebody else
 3 first.
 4 I just have proven unable to resist the sound
 5 of my own voice but I found that there are others who are
 6 able to do that so . . .
 7 Gary Bobker with the Bay Institute and
 8 Environmental Water Caucus.
 9 I guess I'll work backwards on the items that
 10 we dealt with on the Agenda.
 11 But first I want to say that -- I want to
 12 congratulate Lester and his staff on doing, I think,
 13 overall a pretty good job of dealing with a pretty
 14 complicated issue, which is not only complex in terms of
 15 the all of the factors that you deal with but can perhaps
 16 be justifiably organized any number of different ways, and
 17 there is a certain amount of arbitrariness to the format
 18 that you put these -- the various ways of wrestling with
 19 scope, problem, et cetera, and I think that they've tried
 20 to do and succeeded in large part to do a good job on that.
 21 On the issue of the Mission Statement, as
 22 you've heard me say before, we are strong supporters of the
 23 idea "restore". I want to make that point again.
 24 "Improvement" is really not a sufficient goal
 25 in terms of the ecosystem.

1 if San Pablo Bay were included because of the strong
 2 overlap with the same Estuarian functions that Suisun Bay
 3 has.
 4 We've made that point before. Enough said
 5 about that.
 6 Another thing that I think would increase the
 7 comfort level of those of us who are concerned about the
 8 linkages between the upstream and downstream areas in terms
 9 of flow is how these linkages are spelled out in the
 10 problem narratives.
 11 And I think that that's an area for improvement
 12 in the Problem Statements right now, is that there are some
 13 areas in which the linkages to flow and salinity regimes in
 14 Suisun Bay or Suisun and Pablo Bay are spelled out, some
 15 other areas in which they are not.
 16 What I would suggest is that in the Problem
 17 Statements we make it a little bit more explicit that we
 18 are, in fact, talking about flow and salinity issues that
 19 relate to the areas to San Pablo Bay, to Central Bay, to
 20 stratification events in South Bay, et cetera.
 21 And I think that would go a long way to
 22 ensuring that the linkages are identified and acted on in
 23 the future and giving us greater confidence that that will
 24 continue to be dealt with.
 25 I think that there has been an overall issue

1 about the Geographic Scope that spills over into the
2 Problem Statements and that is the confusion again the use
3 of the word Delta and the definition of the problem area,
4 which includes both the Delta, Suisun Bay and the other
5 areas to which these linkages have been identified.

6 The Problem Statement for ecosystem quality
7 tends to use Delta habitat for everything, and while it's
8 true that for some of the problems identified only applied
9 to Delta habitat others, in fact, apply to the Delta, the
10 upper Bay or to the whole Bay, I think that it's important
11 for clarity of thinking that that be corrected throughout
12 the ecosystem quality Problem Statements.

13 In terms of the -- some of the other issues on
14 the ecosystem quality Problem Statement in general I think
15 there have been a number of improvements made in those
16 Problem Statements.

17 We are especially happy to see the solution of
18 improving ecological functions which sort of informs why we
19 are doing habitat restoration. We think it's very
20 appropriate for that to be in there.

21 What we'd like to see in there is -- right now
22 it's in the introductory narratives. We'd like to see that
23 integrated into the discussion of each of the problems
24 under ecosystem quality.

25 I think that's also something that's an issue

1 It's a question of how are we going to improve
2 the environment and restore the Bay-Delta health when we
3 don't really know whether we can control exotic species,
4 how we can return things to a pre-exotic species ecosystem.

5 What I wanted to emphasize was that the issue
6 of the exotic species is not just one of control.

7 It's also increasing the ability of the
8 Bay-Delta ecosystem to resist introductions of exotic
9 species and to minimize the impacts of exotic species when
10 we find them.

11 Particularly we are talking about, for
12 instance, Potamocorbula.

13 It's true the filter feeding that's going on in
14 Suisun Bay and other areas could be having a major impact
15 if there is increases in the total feeding but at the same
16 time you are also talking about a system where the
17 contribution of food sources, the contribution toward
18 productivity from upstream has also been lessened because
19 of the alteration in timing in amount of flows from Delta
20 inflow.

21 So you've got to look at it as both
22 repairing -- and this gets back to ecosystem health --
23 repairing those functions that allow the system to deal
24 with exotic species on its own as well as going in and
25 trying to do to the extent possible repair work on the

1 for the water supply Problem Statements and this was
2 discussed earlier by some of the BDAC members.

3 The only aversions had an emphasis that seemed
4 to focus on quantity and timing of supplies for export and
5 now in the general discussions I think that's been
6 correctly globalized as it were to be a mismatch between
7 supply and demand or supply and use that includes both how
8 water is removed or transferred through the Delta as well
9 as how water is managed in the areas of origin and in the
10 areas of use.

11 Again, a much better discussion of this in the
12 introductory narratives but I'm not sure that it's been
13 integrated into the way that each of the problem, the
14 sub-problem statements when you get into detail, A-1, A-2,
15 A-3, I'm not sure that that's been integrated well, and I'm
16 not -- like Alex, I think this is an iterative process.

17 I'm not going to spend time suggesting how you
18 should change that but I think that it's something again
19 for clarity of direction in the future needs to be improved
20 a little bit more.

21 I want to make one final point and that was
22 getting back to hours ago when people were discussing
23 exotic species and a number of people have raised the issue
24 that exotic species are a major factor. They change the
25 community structure and the Bay-Delta ecosystem.

1 exotic species invasions that have already occurred.

2 This might seem a little bit -- a little
3 detailed for the conversation we are having here, but I
4 think it's important because it's not just a question of,
5 again, you know, the problems are here and we can't go
6 back, but, in fact, looking at it in a more global
7 like -- more global like an ecosystem health light and that
8 is whenever possible improving functions that allow the
9 system to return to some state of self-sustainability.

10 In any case those are my comments.

11 Thank you, Mr. Chairman.

12 CHAIRMAN MADIGAN: Thank you, Mr. Bobker.

13 Anybody else?

14 All right. Nicely done.

15 That was a long but fruitful discussion, I
16 think, on the last Agenda item.

17 Agenda Item Number 3, and it is my intention,
18 by the way, to try to wrap this up around four o'clock this
19 afternoon because I've got to catch a plane and I know
20 others of you have schedules to maintain.

21 Item Number 3 is the Current Program
22 Activities.

23 Mr. Snow.

24 EXECUTIVE DIRECTOR SNOW: I will start
25 with 3.a.. but I will be quite brief on this and turn it

1 over to Dick to talk about the workshop.
 2 Basically, you have in your packet today
 3 (indicating) a yellow handout. That is, kind of the first
 4 compilation of what we call Action categories. It is
 5 Draft. It is a working document.
 6 This is the same exact document we used last
 7 week in the workshop so it is incomplete and, in fact, we
 8 got a lot of input last Thursday that will help us improve
 9 this.
 10 There are descriptions that are yet to be
 11 developed such as water pricing as an example.
 12 By the way, the code on the first several
 13 sheets is where there is an asterisk, then some description
 14 has been included in the packet.
 15 Where there is no asterisk that is yet to be
 16 developed and we are working on it. So it's a work in
 17 progress but it's an important kind of development tool for
 18 us as we move forward on Action categories.
 19 With that I'll turn it over to Dick to describe
 20 the workshop process.
 21 MR. DANIEL: Very quickly, when we look at
 22 these Action categories, it's part of this longer
 23 term -- longer term -- it's part of next month's process
 24 where we start bundling them together, apply the solution
 25 principles to concept of multiple objectives and start

1 What their charge was was, first of all, to
 2 add, eliminate or consolidate the Action categories that
 3 they found that we had described them inadequately.
 4 If they found that we could combine two or if
 5 they found one that we missed, we were looking for that.
 6 Then we asked them to go ahead and take a hard
 7 look at multiple objectives, could you use one of these
 8 tools to pursue one of the fourteen main objectives that we
 9 have in our program broken up into water supply, water
 10 quality, system vulnerability and ecosystem quality.
 11 It was the first opportunity we gave people to
 12 start building conceptual alternatives or pieces of
 13 alternatives and see how they might work in terms of
 14 pursuit of multiple benefits.
 15 Here is an example of the kind of product we
 16 got in the tool that we used to pursue this discussion.
 17 Here is one of the artificial groupings, Action
 18 categories to reduce entrainment effects of diversions.
 19 Down this side are the list of tools that we
 20 have that are described in your yellow packet.
 21 Across this axis are the fourteen major
 22 objectives that we have dealing with the various resource
 23 issues, and what we asked people to do was to discuss,
 24 debate and evaluate opportunities to, for example, use fish
 25 grains to reduce water supply of certainty.

1 developing solution strategies which in future workshops
 2 then start to become our preliminary alternatives.
 3 We've had two workshops since we last met.
 4 The workshop in September focused on sort of
 5 reporting and refining the Problem Statements and objective
 6 statements not too dissimilar from the conversation we've
 7 had here.
 8 Then in October, on October 12th, we got into a
 9 very active workshop that centered around this concept of
 10 Action categories that you have examples of in your yellow
 11 packet.
 12 These Action categories are groupings of
 13 similar actions that could be taken to solve or contribute
 14 to solutions of problems in the Bay-Delta system.
 15 Frankly, they are the tools that we are looking
 16 toward to solve -- to work toward solving the problems.
 17 I think in your packet there are a total of
 18 55 Action categories described.
 19 They are arbitrarily broken up -- or not
 20 totally arbitrarily -- but they've been broken up into
 21 eight groupings and this is what we brought to the workshop
 22 on October 12th.
 23 At that workshop we had four different groups.
 24 Each group took a look at two of those eight
 25 groupings that I showed you just a minute ago.

1 As you can see here, this particular break out
 2 group and I wasn't a part of this one, concluded that you
 3 could use fish grains to reduce the uncertainty associated
 4 with water supply as it is exported from the Delta.
 5 In some other examples it was shown that
 6 installation of fish barriers that altered fish movement
 7 could have a positive effect when you are dealing with
 8 water supply uncertainty, could have either a positive or a
 9 negative effect when you're dealing with aquatic habitat
 10 depending on where you put them, how you operated them,
 11 those sorts of questions, and that relative to a number
 12 of -- relative to all of these water quality issues there
 13 was a need for it to be linked with some other facility or
 14 some other action or some other tools, we might say.
 15 And I don't want to diminish all of the work
 16 that was done and recorded on these charts but what we did
 17 during these workshop break out sessions is that we had a
 18 recorder in the group taking copious notes and we had a
 19 tape recorder going, in addition to the facilitators taking
 20 notes on the standard sticky sheet big paper, and we had an
 21 enormous amount of discussion, a tremendous amount of
 22 debate and an awful lot of insight was provided to us.
 23 This was a very productive workshop. It was
 24 quite rigorous, almost exhaustive.
 25 I certainly went home tired that night.

1 Some of the observations, very valuable
 2 discussions, the kinds of things that we really want to
 3 accomplish in our workshops.
 4 A lot of the input helped us refine these
 5 Action categories.
 6 We hadn't had time since last week to redraft
 7 this yellow paper that you have here but we got a lot of
 8 suggestions as to how we might do that and we'd encourage
 9 you to provide any suggestions that you might have as well.
 10 People started to think about the idea of
 11 dealing with one category of solution and how that might
 12 solve a multitude of problems, how you might start putting
 13 packages together which provide all of these multiple
 14 benefits.
 15 Quite frankly, also provide multiple funding
 16 sources. It was very productive. People enjoyed doing
 17 that and we got an awful lot of input.
 18 There were some similar findings that were
 19 generated between the groups.
 20 As I said, we had four different break out
 21 sessions. People were sort of isolated during the day.
 22 People suggested to us repeatedly that we could
 23 do a better job in terms of defining these categories. We
 24 are looking for that kind of input.
 25 We found that there are a number of Action

1 to our workshop and your Chairman has suggested that you
 2 make a few comments and I would appreciate that as well.
 3 CHAIRMAN MADIGAN: Let me do just that and
 4 ask those of you who attended if you have comments on the
 5 workshop or on the presentation that Dick has made to this
 6 point.
 7 Stu.
 8 MR. PYLE: Stu Pyle.
 9 I thought the workshops were pretty good, were
 10 very good.
 11 The one problem that I think that I had as an
 12 attendee of the workshop is having the break out groups and
 13 then you were limited to one or in my case I went to one
 14 group in the morning and one group in the afternoon.
 15 But, on the other hand, there were eight of
 16 those half groups and I only got two of them. So from my
 17 standpoint I felt like I missed participation from Lester
 18 and Dick and the other facilitator's standpoint.
 19 Maybe it was all right because they were using
 20 us as a resource so maybe you got the input back in that
 21 suited your purpose. So I think there is little dichotomy
 22 that it's good for you but it's not that good for those of
 23 us that attended.
 24 But I felt that there was a really good
 25 development of ideas, participation, goals, subjects, and

1 categories, a number of these tools that we can use to
 2 achieve multiple benefit.
 3 We found that as we go ahead and refine this
 4 product, that it will be very important to describe the
 5 linkages.
 6 Additional storage north of the Delta provides
 7 perhaps its greatest benefit relative to water supply if
 8 there is additional storage south of the Delta as well.
 9 The consumptive use programs in the Sacramento
 10 Valley to spread out or increase water supply may not work
 11 if the conflict over transport of water out of the Delta
 12 remain.
 13 Those kind of linkages are very important, we
 14 found that additionally we are going to have to start
 15 getting to the process where we describe how a particular
 16 tool will be used.
 17 If that tool is ground water management, we are
 18 going to have to start putting side boards around how this
 19 ground water management might take place, establish some
 20 principles relative to safe yield or a reliable annual
 21 replacement of ground water and how that fits into the mix.
 22 The same is true with the operation of a
 23 reservoir, operation of fish streams or any of the other
 24 tools that we described.
 25 Now, I know a number of you were able to come

1 the thing moved along all right. People tried to make good
 2 use of the time.
 3 CHAIRMAN MADIGAN: Thank you.
 4 MS. SELKIRK: I would agree.
 5 I think the level of discussion, I think,
 6 achieved what some of the Council members have been asking
 7 for here today, which is, well, let's start talking turkey
 8 here, and I went to two workshops that in an interesting
 9 way, I think, addressed all of the objectives from two
 10 different directions, water supply reliability, which is
 11 one break out session in the morning, and demand management
 12 in the afternoon.
 13 I think it also in each of those sessions in my
 14 view the absolute essential need to find a way to address
 15 supply and demand was really illuminated through the
 16 discussions that emerged in both of those workshops.
 17 I, unfortunately, had to leave in the middle of
 18 the reporting of the break out session so I don't
 19 know -- I'm assuming we'll get some kind of documentation,
 20 but I think by and large that kind of model for -- that I
 21 think might work actually for the Council as well was a
 22 really helpful one because the people really got to sink
 23 their teeth into, well, what are we going to do.
 24 CHAIRMAN MADIGAN: Thank you.
 25 MR. REMY: I don't want to sound like a

1 broken record. Lester knows what I'm going to say.
 2 I look at the list of the workshops and we are
 3 going south. We're going south to Fresno. We've got one
 4 in Costa Mesa which is not exactly the heartland of
 5 Southern California, and I just think that we've got to
 6 have a strong outreach to reach the 16 million people who
 7 live in the southern part of the state on this issue and so
 8 I really once again will encourage that we think in terms
 9 of the fact that there are people who use water south of
 10 the Tehachapes and we need to hear from them and make it a
 11 variable and easy for them to have access to these
 12 deliberations.

13 And the last point probably comes up under the
 14 financial package. As I read that it looks to me like we
 15 are looking at methods and means by which we can raise
 16 money to meet some of the necessary problems that are
 17 raised, and I think that's fine. I have no problem with
 18 that.

19 I think we also need to look at the financial
 20 impacts on some of these alternatives on people who are
 21 going to have to pay a price and what that means to the
 22 overall economic thrust of our state.

23 It doesn't mean we are not to do it. I'm fully
 24 in favor of getting that on the table but indeed if there
 25 are serious consequences of meeting certain needs and

1 EXECUTIVE DIRECTOR SNOW: (Affirmative
 2 nod)
 3 MR. RAAB: -- that these people that I
 4 listened in the two break out groups that I went to were
 5 very informative.

6 And I agree with the gentleman over here -- I
 7 can't quite see your name --

8 CHAIRMAN MADIGAN: Ray Remy.

9 MR. RAAB: Ray Remy, okay.

10 Ray, I agree with you.

11 I don't know how else you can do it, but it's
 12 frustrating to go to one or two sessions when you'd like to
 13 be at three or four and maybe something like this could be
 14 done for BDAC members at some later date where we might all
 15 break out and discuss the same issue for an hour and then
 16 we all break out and discuss a second issue for an hour or
 17 two or whatever.

18 It might be worth a retreat or something
 19 because I thought that it was so valuable.

20 CHAIRMAN MADIGAN: it wasn't Ray.

21 It was Stu, but we were close.

22 MR. RAAB: I can't see. I go to see the
 23 eye doctor next week.

24 The only slight downside was last week when
 25 things weren't quite staying on schedule and Lester

1 objectives that have an economic impact on people who are
 2 poor, people who are a small business or whatever, we need
 3 to understand that in the equation as we make those
 4 choices.

5 And I'm not quite sure I see that within the
 6 financial package or any other place.

7 I see it in terms of water supply and
 8 reliability but there is a cost to meet everybody's
 9 objectives.

10 I think somehow we have to factor that into our
 11 decisions because sooner or later it will come back to
 12 haunt us.

13 CHAIRMAN MADIGAN: Thank you.
 14 Bob.

15 MR. RAAB: I've been to all three
 16 workshops and I've been very much impressed with the
 17 organization of them and the usefulness to me of developing
 18 a process in the way that people like me who are not
 19 full-time people on these issues can get up to speed or at
 20 least start to get up to speed on the vast array of highly
 21 technical and arcane issues.

22 The quality of the discussions I thought was
 23 just excellent. The people involved were mostly
 24 professionals, I assume.

25 Is that reasonable to assume, Lester --

1 threatened to take away our three o'clock chocolate chip
 2 cookie break if we didn't get back on time.

3 EXECUTIVE DIRECTOR SNOW: It worked, Bob.

4 CHAIRMAN MADIGAN: He's like that. He
 5 does that kind of stuff. You should know.

6 Okay. Good.

7 Thank you for that. Thank you very much.

8 Alex, sorry, okay, and Ann. Excuse me.

9 MR. HILDEBRAND: I had some attendance.

10 I was able to get to one of the public meetings
 11 and one of the workshops. I agree. I think that they were
 12 beneficial.

13 Both the staff did a good job and the comments
 14 were impressive and the quality of the discussion so I
 15 don't have much to add to what's been said other than to
 16 say I think that something has to be done.

17 I recognize that it's an enormous burden on the
 18 staff. I don't think it can be avoided.

19 My only concern is whether it leaves them
 20 enough time to give us the background of BDAC itself.

21 When you get around to these yellow sheets I do
 22 have one brief comment I'd like to make but I don't know
 23 whether you want that now or later.

24 CHAIRMAN MADIGAN: Now is fine.

25 MR. HILDEBRAND: Well, on page 1 under

1 restoration of Delta shallow water habitat under
2 description, it starts out by saying shallow water tidal
3 habitat in the Delta has declined drastically over time
4 because of, and then it lists a number of things but it
5 does not list the impact of the exotic aquatic plants.

6 And then down later on on the same thing where
7 it talks about options it doesn't list the option of
8 controlling these exotic aquatic plants, and there is also
9 the problem maintaining hydraulic continuity between the
10 back waters and adjacent channels.

11 The connections tend to silt up during high
12 flows and they aren't all being maintained. A lot of them
13 are not.

14 In my own District we have a situation where
15 for about the last 60 years we've gone in periodically and
16 done a little dragline work to maintain the continuity
17 between the backwater and the river but all of a sudden
18 that became illegal and we realized we might get thrown in
19 jail so we applied for a Corps permit to continue to do
20 what we've been doing, and it took us four years and a lot
21 of money and the final intervention by me with Colonel
22 Reece to get him to come down and get a look at it before
23 we could get a permit and then it's only good for a short
24 time.

25 A lot of these things are going to stay closed

1 have an opportunity to see where the gaps are there or how
2 we might fill that in.

3 There are lots of different urban and rural
4 constituencies receiving these notifications just so that
5 we could help bring some of our knowledge to what the
6 constituencies are out there to make sure we are getting
7 everybody.

8 MR. DANIEL: I'd like to respond just a
9 little.

10 CHAIRMAN MADIGAN: Dick.

11 MR. DANIEL: It's important to me because
12 I handle the workshops to distinguish between the Public
13 Workshops, which are, in fact, on average attended by about
14 a hundred very technically equipped professionals, most of
15 whom are located in Sacramento or nearby, and the public
16 meetings, which is part of our outreach program that Judy
17 is going to talk about right now.

18 CHAIRMAN MADIGAN: Ray, you no doubt are
19 offering your offices both literally and figuratively to
20 make this thing go.

21 Go ahead, Judy.

22 MS. KELLY: Ann, I appreciate your offer.

23 We actually have been outreaching a lot to the
24 environmental groups and I'll call you this afternoon or on
25 Friday morning to get whatever lists you have.

1 if it's that difficult to be doing what we ought to be
2 doing on a regular basis.

3 So I think we need to address that problem.

4 CHAIRMAN MADIGAN: Ann.

5 MS. NOTTHOFF: I want to go back to the
6 Public Workshops and I want to echo Ray's entreaty to get a
7 broader coverage of this issue in Southern California.

8 I think we really need to -- if we are going to
9 have a plan that will be implemented and I think we
10 really -- we need to keep the political feasibility of this
11 in front of us at all times and without a good Southern
12 California buy-in we don't have that political feasibility.

13 So I really want to encourage you to explore
14 all opportunities to get better coverage down there.

15 And I -- you know, one thought is maybe the
16 Santa Monica Restoration Project people could help your
17 staff put together a Public Workshop or in NRDC we have an
18 office in Southern California.

19 I'd be willing to offer some help in trying to
20 put that together if that's one of the blocks that's
21 preventing you from doing that.

22 Then the other thing I would like to have a
23 chance to see what the lists, the source of the lists are
24 that you're using to get the Public Workshop notices out
25 like the one that is coming up in Oakland just so that we

1 For the Oakland mailing, for example, I mailed
2 5,000 mailers both from a list that we had developed
3 internally and from the San Francisco Estuary Project list.

4 So I feel pretty comfortable about that mailing
5 in particular but I could definitely use some help in the
6 Southern California and Redding areas and I've asked Ray
7 already for some help. I will be coming to you as well.

8 So thank you.

9 CHAIRMAN MADIGAN: Stu.

10 MR. PYLE: Are we talking about the public
11 outreach activities now?

12 CHAIRMAN MADIGAN: We've been talking
13 about the workshop but we are transitioning, I guess, to
14 the public outreach so, sure, if you have a question, go
15 ahead.

16 MR. PYLE: In line with the other comments
17 just made about assisting in public outreach in Southern
18 California, Southern California Water Committee, which the
19 chairperson or the person who heads it up is Shawn
20 Anderson, and she may or may not be here, but that group is
21 very interested in assisting to get this information out
22 before people in Southern California.

23 They would like to be an assistant in the
24 meeting that will be held at Costa Mesa.

25 And if I could make a comment about the public

1 meeting that I went to in Stockton.
 2 It had a format similar to the last workshop
 3 where the CalFed people gave some discussions and there
 4 were one or two inputs by local people.
 5 Then it broke up into what they call break out
 6 groups into four corners of the room where the people could
 7 then -- were being asked to go into these four corners of
 8 the room and to then let the CalFed staff know what their
 9 concerns were.
 10 And that may be all right for people who are
 11 well-versed in the water field, but I would not recommend
 12 that in an area such as Costa Mesa where the people are not
 13 that involved in the water activities and in that location
 14 I think the purpose of the program should be more pointed
 15 towards getting information out, involving those people in
 16 some type -- if you want to involve them in participation,
 17 but involve them in the activity where they are not left in
 18 a room to wander around by themselves, talk to their
 19 friends, leave, whatever, which is what seemed to happen at
 20 the Stockton meeting.
 21 I got to visit with people I haven't seen since
 22 the Peripheral Canal days, you know.
 23 But what I'm saying is for Southern California
 24 I don't think a repeat of that same format would be
 25 effective.

1 Thank you.
 2 CHAIRMAN MADIGAN: Thank you.
 3 Lester.
 4 Was there anybody in the audience who wanted to
 5 comment on this last item or not?
 6 Go ahead.
 7 Do you want to take a couple of items out of
 8 order?
 9 EXECUTIVE DIRECTOR SNOW: Yeah.
 10 If we could, perhaps, move at least temporarily
 11 to item 5 and we have discussed in a number of fashions the
 12 issue of finance and economics and we will get to that, but
 13 I think also we mentioned at our last BDAC Meeting that
 14 there had been a collaborative effort to look at financing
 15 water infrastructure and there was some interest in
 16 following up on that outside activity and Fred Cannon of
 17 Bank Of America has agreed to come and talk to us today on
 18 those collaborative efforts that he's involved with on
 19 financing.
 20 CHAIRMAN MADIGAN: Mr. Cannon, welcome.
 21 MR. CANNON: Thank you.
 22 It's a pleasure to be here today.
 23 And, first of all, I'd like to applaud the
 24 CalFed Process on behalf of the California business
 25 round-table.

1 CHAIRMAN MADIGAN: Okay. Thank you.
 2 If that pretty well wraps the current program
 3 activities, Lester, let me ask, again, if there is anybody
 4 in the audience who -- why do you have your hand up, Steve?
 5 Oh, Pat. I'm sorry. Excuse me.
 6 MR. MCCARTY: I just had a comment along
 7 the line of Stu's.
 8 I attended Stockton and had an opportunity to
 9 attend the workshop in Sacramento, and they are two
 10 different distinct things.
 11 One is extremely highly structured, very
 12 technical. The other was very loose, and it seemed to me
 13 that on the public meeting side we need to add a little
 14 more structure and try and hook the people in so that we
 15 can get some comments from the public that will help the
 16 highly technical side.
 17 Perhaps a little less structure on the workshop
 18 side because it seemed to be very, very deliberate, very
 19 methodical, and so I think it shut off some thinking
 20 perhaps that might otherwise have taken place in that
 21 workshop environment.
 22 And there wasn't an opportunity for people
 23 to -- who are not skilled or are not informed, don't have
 24 the background, to come up and air a comment or a concern
 25 if we continue to use the format that we used in Stockton.

1 It's a critical issue both for all us
 2 Californians and most especially for the economic health of
 3 our state.
 4 I'd also like to take the opportunity to talk
 5 about a process many of you on the -- on BDAC are familiar
 6 with and that is our joint effort between the California
 7 business round-table, the California Chamber of Commerce,
 8 the California Farm Bureau and the California
 9 Manufacturer's Association to work on two studies relative
 10 to water in California trying to add a business
 11 perspectives.
 12 The two studies are -- one is on financing
 13 water and drainage infrastructure in California and one is
 14 on improving the rules around water marketing in
 15 California.
 16 I'd like to spend a few minutes talking about
 17 the process that we've undergone on water finance, but
 18 preface that to say that we have yet to have any
 19 conclusions on that process.
 20 I'd like to say our conclusion is that once you
 21 have a Mission Statement, the financing will come but I do
 22 think that's probably a little bit optimistic.
 23 CHAIRMAN MADIGAN: The financing or the
 24 Mission Statement?
 25 MR. CANNON: I won't touch that one.

1 Beginning late last year we had agreement
2 between the four business organizations and us, some of who
3 are represented here, to work on these two important
4 issues.

5 Regarding water finance what we have done is we
6 have contracted with a group of academics primarily at the
7 University of California to work on a paper to look at
8 financial alternatives for financing water infrastructure
9 in the State given the challenges we had financing every
10 type of infrastructure in California today.

11 The process up to this point was that we
12 drafted essentially discussion items and were happy to have
13 four statewide organizations to have focus groups on water
14 finance for us.

15 Those four groups were the Bay Area Economic
16 Forum, the Southern California Water Committee, the
17 Northern California Water Association and the Tulare Lake
18 Basin Water Storage Districts, and the approach was to try
19 to get perspectives from the various constituencies
20 throughout California looking at these critical issues.

21 We conducted those focus groups during the
22 summer and after the focus groups we have sent the academic
23 groups back to draft findings.

24 At each of the focus group sessions the focus
25 group participants agreed to meet with us a second time

1 fairly broad benefit among many different groups, and the
2 third would be public goods, which are improvements that
3 are done for the public as a whole.

4 In each case we have fairly tried and true
5 methods of financing the benefits of the projects based on
6 those issues, but in each case in our focus groups I think
7 we found very tremendous challenges in order in those
8 financing each type.

9 And let me just mention those.

10 In terms of private goods historically when
11 water has been contracted, that is, contracts would be
12 essentially sold for some price, the revenues that would
13 stream from the sale of those contracts could then be
14 capitalized and produce revenue bonds that could finance
15 the appropriate infrastructure.

16 The challenge I think in the Bay-Delta and much
17 of the infrastructure we need in California is that there
18 is going to be, at least as far as my understanding, is
19 very few new contracts for net new sales of water, which
20 will greatly limit the ability to finance a project such as
21 the Bay-Delta through that traditional approach.

22 The second approach is what we can call or
23 define as common goods, such as recreational use and
24 perhaps improve reliability of water deliveries.

25 And generally common goods are financed through

1 after we have our initial findings.

2 Those initial findings are due out if we make
3 our deadline on November 1st and we hope to have those
4 follow-up focus group meetings to get further input during
5 November and early December and with some luck early in the
6 first quarter of 1996 we should have papers on both issues
7 and particularly the water finance, ready for more broad
8 distribution and discussion.

9 In terms of finance I think that we are looking
10 at the Bay-Delta in particular because as far as my
11 understanding is is that we can also look in many ways at
12 the Bay-Delta infrastructure needs as a model for many of
13 the challenges that we have in finance as we look at water
14 infrastructure in the future.

15 In general, if we look at the methods of
16 finance of public infrastructure, in the past and currently
17 in the present, the construct that we are using is to say
18 that essentially we have three types of goods that can be
19 produced by infrastructure investments.

20 The first are what one might call private goods
21 and that is some kind of contractual delivery of water to
22 individuals.

23 The second is what might be called for better
24 terms a common good.

25 That is, it's a good that can be produced for a

1 user fees, such as the highway gasoline tax.

2 The challenge, of course, with user fees
3 primarily is definability. And we find throughout the
4 State there was general interest in looking at some kind of
5 user fee, for lack of a better word, a tax on water,
6 however, in each constituent group there is a tremendous
7 amount of contentiousness around defining who is getting
8 the benefits and what type of user fee would be
9 appropriate, although we do get a general view that people
10 are willing to look at some type of user fees if the
11 benefits to those individuals can be fairly well defined.

12 The third issue, what can be defined as the
13 public goods benefits, the challenges in general, public
14 goods are financed through general tax revenue underwritten
15 by general obligation bonds.

16 The challenge of course, is that during the
17 1990's is that general obligation bonds have proven in
18 California to be very difficult to pass.

19 That's not to say they aren't appropriate and
20 can be passed given the right public policy contacts but we
21 have to recognize the difficulty in passing them.

22 This is especially important regarding the
23 Bay-Delta because if we think about the common good issue
24 that -- for user fees are appropriate but defining what is
25 appropriate is good.

Page 201

1 There is a tendency on Public Works projects to
 2 move towards GO bonds.
 3 In other words, people can't agree on what the
 4 fee should be, how much they should individually pay, there
 5 is a tendency always to migrate and say, well, those are
 6 all public goods. We'll finance them generally through
 7 general obligation bonds.
 8 I hope this construct leads us to suggest that
 9 its critically important that financing be integrated with
 10 project design throughout the process because if it's not
 11 integrated directly wit project design, at the end
 12 financing will be much more difficult in this day and age,
 13 especially given the challenges that we are going to have
 14 passing general obligation funds -- bonds.
 15 Finally, a couple of final comments.
 16 We are also looking at the opportunities for
 17 matching funds, such as Federal grants, perhaps even some
 18 creative things like some new lottery, and some other
 19 creative type approaches and also looking at privatization
 20 of the benefits that might come from change in the pricing
 21 structures.
 22 Finally I am pleased to say that we are working
 23 very closely with Zach in terms of trying to make sure that
 24 our process is integrated with the Bay-Delta Process and
 25 hopefully by early 1996 we'll be able to provide you with a

Page 202

1 report and some input.
 2 CHAIRMAN MADIGAN: Thank you, Mr. Cannon.
 3 Thanks for your interest and your commitment to
 4 the process and the solution finding.
 5 Thank you very much.
 6 Are there questions anybody?
 7 Bob.
 8 MR. RAAB: I'm going to make two points.
 9 One is that, going back to what you said, it
 10 sounds to me like it's just as important as the financing
 11 instruments is an authority of some kind that would be able
 12 to issue a general obligation bond, and the other is that
 13 along those lines is the California Public Utilities
 14 Commission used to have an action, I don't know if they
 15 have it anymore, is that he who benefits pays the cost, and
 16 it seems that everybody who uses water in California that
 17 comes from the Delta, municipal, agricultural, domestic,
 18 whatever, has an obligation to pay some of the costs that
 19 accrues from using that water and the problems it creates
 20 in the Delta.
 21 I'm even wondering if there is any thought
 22 that's been given to the fact that water is a utility and
 23 maybe it should be treated like other utilities, like
 24 electricity, for example, we pay.
 25 In effect, we pay for all of the energy

Page 203

1 conservation programs that at least the private utility
 2 companies had to do and probably, as far as I know, the
 3 SMUDS and others.
 4 Any comment you might have on that?
 5 MR. CANNON: Two comments.
 6 First of all, the issue that you raised
 7 initially about the type of institutions necessary for
 8 moving whatever finance structure is going to be part of
 9 the work that we are doing.
 10 We do have an institutional section. I didn't
 11 mean that to avoid that. It's part of the greater paper.
 12 In terms of the issue relative to those who
 13 benefit pays I think that's a key component that in general
 14 I think that I would agree with you as an economist.
 15 I think the challenge again is defining those
 16 benefits. There is also a challenge, I think, in water
 17 today of the willingness to pay and the ability to pay
 18 issue.
 19 Especially in some of the agricultural
 20 communities the concept that you would have, you know,
 21 equal costs for one acre foot of water, one price
 22 throughout California raises a concern by the agricultural
 23 community in our focus groups about an ability to pay such
 24 a fee. So that's a key issue.
 25 Conversely when we were in the Bay Area, there

Page 204

1 was a tremendous amount of concern about any inequity that
 2 would result by differential pricing and generally voicing
 3 concern against such a focus on ability to pay.
 4 So I think that the comments you made are very,
 5 very valid and we are going to try to incorporate them to
 6 the best extent possible.
 7 CHAIRMAN MADIGAN: Okay. Again -- okay.
 8 Mary, sure.
 9 MS. SELKIRK: I just had one
 10 question -- oh, I have two actually but I think you've
 11 answered the first.
 12 Our experience at one local water district here
 13 is that the more people are educated about the utility of a
 14 program that's set before them, the more likely they are,
 15 obviously, to support it.
 16 In this case East Bay Mud did an enormous
 17 amount of community outreach to educate the rate payers
 18 about the seismic retrofit program, which is going to cost
 19 upwards of two hundred million dollars, which is no mean
 20 amount of money, but interestingly in the process of
 21 education what we discovered is when members of the public
 22 were actually asked to look at a ten versus a fifteen year
 23 implementation schedule, which in supporting a ten-year
 24 implementation schedule they are actually incurring a
 25 greater financial commitment on their own part, we found

1 that folks were actually interested in doing it faster
2 rather than slower even though the staff had recommended
3 slower.

4 I think there is probably some applicability
5 here even though this is clearly a much more huge and
6 complex undertaking.

7 So what I'm suggesting is that as we look at
8 financial strategies, we also think very carefully about
9 how the development of that strategy has to include -- or
10 should include really active public participation.

11 Because I think that will also inform
12 ultimately policy decisions that are made by how you might
13 partially propose funding through service -- you know,
14 surcharges or assessed value taxes or whatever.

15 MR. CANNON: I think one of the clearer
16 issues has to be that people, if they are convinced that
17 it's a necessity, they will pay for it but people do need
18 that kind of an outreach before there is a willingness or
19 an ability to pay.

20 CHAIRMAN MADIGAN: Jack and then Sunne.

21 MR. FOLEY: I just had a question.

22 Have you looked at the feasibility of using
23 State revolving funds that are appropriate under the Clean
24 Water Act from the Federal Government?

25 Is this a feasible source revenue?

1 either through a revenue bond or some other way?

2 MR. FOLEY: I'm not sure I understand the
3 question.

4 MS. MCPEAK: Does it help you if the State
5 puts up a portion of the money and says we'll match --
6 we'll partner will local districts.

7 CHAIRMAN MADIGAN: So you'd like money
8 from someplace else?

9 That will be okay.

10 MS. MCPEAK: Well, I hoped that would be
11 the answer but I didn't want to --

12 MR. HALL: All those in favor say "Aye".

13 MS. MCPEAK: But it goes to the way the
14 papers are coming out, we're sort of either/or and I really
15 wanted to encourage the combination of the funding sources
16 because I think that has some potential and maybe makes
17 that more palatable and what is early '96 in your book?

18 MR. CANNON: Well, let me comment on the
19 first one first.

20 And, that is, that when I was trying to lay out
21 the construct of the three different type of goods and the
22 appropriate financing, I hope I was implying that one would
23 want to mix those depending on essentially what are the key
24 components towards getting towards that nice mix of funding
25 will be agreement across a broad range of constituents that

1 MR. CANNON: I think it's potentially a
2 partially feasible source.

3 We do have comments regarding the funding along
4 those lines and I'm not prepared to really address it but
5 it is an issue.

6 CHAIRMAN MADIGAN: Thank you very much,
7 Mr. Cannon, I appreciate it.

8 Excuse me, Sunne.

9 MS. MCPEAK: Fred, I think as you might
10 recall from one of the focus groups that I had the
11 opportunity to participate in, I think that probably
12 financing is going to end up being a combination of sources
13 to make it both you share the pain and share the gain and
14 more acceptable to the public.

15 So, for example, a State obligation bond
16 combined with local revenue bonds and also user fees is
17 probably, I would suggest, really needs to be looked at,
18 but having said that I have a question for Mary and Jack
19 from a water district perspective.

20 Does it make any difference to you managing a
21 water district needing to expand infrastructure if the
22 State has a source of financing, however that is
23 accomplished, that is available on a matching basis or some
24 partnership basis with a local district if a local district
25 doesn't wish to take advantage of it and you get authority

1 they agree that that is appropriate financing mechanisms.

2 So I think that is exactly what the direction
3 we are looking for.

4 The final report's got to be done no later than
5 the end of the first quarter 1996.

6 My big boss at Bank of America is not going to
7 be around much longer and he's not going to let me do
8 anything else until they are done.

9 MS. MCPEAK: Got it. I understand.

10 CHAIRMAN MADIGAN: Ray and then Stu.

11 MR. REMY: Ray, is there any impact in the
12 recent Supreme Court decision in Santa Clara?

13 MR. CANNON: I hope not.

14 Maybe you could expound on it, Ray, and give me
15 your thoughts.

16 MR. REMY: Even to the extent that cities
17 are beginning to question whether you could raise business
18 license taxes without no opinion.

19 So I think it has some fairly broad
20 implications for any source of financing that it imposes a
21 new tax. It isn't subject to --

22 MR. CANNON: Yeah, I guess my own view is
23 that in most vehicles that we look at, especially for large
24 scale Water Projects, I guess our underlying assumption is
25 there at least some component is likely to go to the vote

1 of the people in some way or form, but I think at the very
 2 least they are making the broadest consensus to achieve
 3 these things. Even with consensus it's very difficult to
 4 pass when you go to a vote of the people.
 5 CHAIRMAN MADIGAN: Stu.
 6 MR. PYLE: Fred, does your study on both
 7 of these go to cost allocation as to allocating costs for
 8 between water user benefits and say public good benefits
 9 MR. CANNON: We will address that. That
 10 is a key component because, as I was addressing now, one of
 11 the things that it's going to be impossible for the finance
 12 group to do is to talk about a single project and how those
 13 should be broken up, public good versus common good and
 14 other financing vehicles. Rather we will suggest that as
 15 part of the process that we determine what you do.
 16 And again that's why it's so important to get
 17 those cost allocations or benefit allocations that you are
 18 suggesting determined as you work through your process
 19 because if those are explicit, it's going to make financing
 20 a great deal easier than waiting until the end of those.
 21 CHAIRMAN MADIGAN: Thank you very much.
 22 Steve, do you want to set up our December
 23 meeting here?
 24 EXECUTIVE DIRECTOR SNOW: I think we will
 25 try to do a brief presentation under "4.a.", which is the

1 strategy is and I think that you'll find most of that
 2 material in your packet if you want to review that over the
 3 next few days.
 4 If you have questions, give me a call about
 5 that.
 6 The one thing I just wanted to leave as a
 7 teaser here is that the real concept of our strategy is to
 8 deal with this area of common conflict between the resource
 9 areas and develop strategies that if you look at this vin
 10 diagram and instead of reading this as problem areas read
 11 this as common synergism for benefits, that we'd also been
 12 dealing with strategies that would bring us into this area
 13 of common synergistic benefits as we've already identified
 14 bundles of categories that we can put together into
 15 alternatives.
 16 So I'll just leave that with you as a teaser.
 17 Come back to the next meeting and we'll give
 18 you a more detailed walk-through of the strategies and the
 19 way that we are bundling alternatives.
 20 CHAIRMAN MADIGAN: Okay.
 21 David.
 22 MR. GUY: I'm a little concerned, you have
 23 the workshop scheduled two days before the meeting and,
 24 unfortunately, I already know I'm not going to be able to
 25 make the workshop.

1 "Development Of Solution Strategies And Alternative
 2 Packages" because I think if we just approach the issue a
 3 little bit that will help set up a bit of the December
 4 discussion of how we moved from Actions to Action
 5 categories to bundles to potentially alternative packages
 6 and so I think Steve can give us just a real quick
 7 orientation on that.
 8 MR. DUNNING: Before that starts, are we
 9 going to come back to "5.c."?
 10 EXECUTIVE DIRECTOR SNOW: Yes, sir, we
 11 are.
 12 MR. DUNNING: Thank you.
 13 MR. YAEGER: I'll try and be real brief
 14 here because there are some other important things we need
 15 to get through, but I just want to set up your next meeting
 16 and let you know what areas we are going to be working on
 17 in the next 60 days.
 18 We've completed a lot of work products in the
 19 first three steps of the program so far.
 20 We have developed a Draft solution strategy
 21 that deals with -- presents the procedures for putting
 22 together alternatives and we'll be working down those paths
 23 over the next 60 days.
 24 We had a much longer presentation to give you
 25 that gives you a sense of what the framework of that

1 Is there any we can avoid kind of re-inventing
 2 the whole process of the workshop?
 3 Or how do you envision that working, Lester?
 4 EXECUTIVE DIRECTOR SNOW: I think at this
 5 point we'll be able to bring the -- you will have as BDAC
 6 the material for the workshop well ahead of time and as
 7 well as the BDAC package, and I think we will be able to
 8 bring two days later into that some sense of how this
 9 started to fit together and so I think we'll be able to
 10 build on it without BDAC having to go through the exact
 11 same exercise. So that's our thinking at this point.
 12 MR. GUY: You'll have something written at
 13 the meeting, at the BDAC Meeting?
 14 EXECUTIVE DIRECTOR SNOW: AS much as we
 15 can. We may have to explain more orally how certain things
 16 fit together and what the packages look like, but what we
 17 may be able to do is come out of the workshop and have some
 18 overheads that say that, you know, the workshop group put
 19 these ten Action categories together because they thought
 20 they addressed these objectives and that might help us then
 21 move down the road in the BDAC setting.
 22 CHAIRMAN MADIGAN: okay. I'm going to
 23 continue to take things a little bit out of order, Lester,
 24 and go ahead to item 5.d., which is the San Diego Imperial
 25 Irrigation District MOU.

1 Tom Graff asked if we could get a brief update
2 on this as it has relevance to the Bay-Delta solution
3 finding process.

4 Tom has to leave at four o'clock, as do I, and
5 I'm going to go ahead and introduce it a little bit because
6 I've had some involvement in this matter.

7 As most of you know by now the Board of
8 Directors of the Imperial Irrigation District and in
9 Imperial County established a Water Marketing Committee
10 several months ago whose purpose was to explore the
11 question of the value of IID agricultural water in a market
12 kind of setting, and that committee made contact with
13 several potentially interested groups of people, one of
14 whom happened to be the San Diego County Water Authority.

15 The San Diego Water Authority in return
16 expressed an interest in the purchase of IID water in some
17 guise or other and the two of those entities then executed
18 a Memorandum Of Understanding, of which you have a copy,
19 that really is little more than an outline of how they
20 would like to proceed toward agreement on some sort of more
21 specific water program.

22 The discussions have centered around a couple
23 of things, I guess it's fair to say, and they have more
24 recently become very involved with the Metropolitan Water
25 District of Southern California, who is the almost

1 Colorado River Aqueduct to carry it on a sort of a surplus
2 basis some conversations regarding what other kinds of
3 facilities might be appropriate to deliver this water or
4 some portion of this water into San Diego County.

5 It has been a very cautious process, I think,
6 by the IID Board of Directors because there are, obviously,
7 great fears in the Valley about everything from the sort of
8 Owens Valley Syndrome to the notion that fallowed fields
9 aren't much help to a county whose economy is in great
10 difficulty today to what replaces the economic use of that
11 water for agricultural purposes.

12 It has had the support of some of the farming
13 and agricultural community, and I think most particularly
14 an organization called Western Farms, which is a subsidiary
15 of and wholly owned subsidiary of the Bass family interests
16 in Fort Worth, Texas and the Bass family has had some
17 considerable involvement in encouraging the IID Board to
18 move forward with this, but if there is a deal at the end
19 of this MOU, the deal is between the Board of the Imperial
20 Irrigation District; that is, that entity and the Board of
21 the San Diego County Water Authority or some other entity
22 in some California and/or San Diego.

23 It's not between farmers and the County Water
24 Authority or MWD or some other member agency of MWD.
25 The amounts of water that are being discussed

1 exclusive provider of water to San Diego County averaging
2 on a year-to-year basis something on the order of ninety
3 percent of the water utilized in San Diego County.

4 And MWD for its part, and Jack Foley is
5 certainly far more competent than me to speak to the
6 matter, has done a couple of things indicating support for
7 not just the Water Authority but anybody's ability to
8 provide for their own water, but also indicating that it's
9 very important to them that they participate in the process
10 because there are obvious implications, financial and
11 otherwise, for the MWD to the extent that one of its member
12 agencies, particularly, that member agency that is the
13 largest user of MWD water taking itself off of the system
14 to some degree or other.

15 The conversations have been at this point
16 around the notion of utilizing excess capacity when it
17 occurs in the Colorado River Aqueduct owned by the
18 Metropolitan Water District.

19 And I say "when it occurs" because the
20 Metropolitan Water District has for some time had a very
21 aggressive water program of keeping the aqueduct full with
22 water above and beyond Mets current entitlement to
23 Colorado River water and to the extent that this deal goes
24 forward and is for a large amount of water and that large
25 amount of water in the long term exceeds the ability of the

1 are in the hundreds of thousands of acre feet annually
2 ultimately so it's a large deal.

3 There have been expressions of interest from
4 places like the Southern Nevada Water Agency as well for
5 this water if the labyrinth of legal obstacles can be
6 worked through that would permit the interstate transfer of
7 this water.

8 It is a long ways from being done but it has at
9 this exact moment, I believe, the goodwill of both the IID
10 Board and the Water Authority Board and I think the very
11 great interest of the MWD Board.

12 I don't know that there is a great deal more in
13 the way of detail that's useful right now because I think
14 the situation simply isn't far enough along to know for
15 sure much more than that, but I'd be happy to answer
16 whatever questions I can.

17 I know Jack has a great deal of interest from
18 the perspective of his chairmanship of MWD and Lester has a
19 great deal of knowledge about this as well.

20 MR. FOLEY: I think you said it all, Mike.

21 CHAIRMAN MADIGAN: Tom.

22 MR. GRAFF: I just have a comment from the
23 point of view of the Bay-Delta Estuary.

24 I think there are two major components of this
25 that are particularly interesting from a Bay-Delta

1 perspective.

2 First, to the extent this deal firms up the

3 ability of some one or more entities in Southern California

4 to keep the Colorado River Aqueduct full, that is a direct

5 benefit to the Estuary and to others who want to export

6 water from the Estuary in the San Joaquin Valley.

7 Second, and even more promising, if down the

8 line or as part of this agreement an additional conveyance

9 facility becomes a viable project from the Colorado to one

10 or more entities in Southern California, one could imagine

11 water in excess of the capacity of the Colorado River

12 Aqueduct being delivered to Southern California from upper

13 Colorado, in which case there would be even a greater

14 ability to relieve pressure on the Estuary from demands

15 south of the Tehachapes.

16 So I think, as I indicated in my note to you,

17 Mike, asking that this be put on the Agenda, there is a

18 real Bay-Delta implication or a set of Bay-Delta

19 implications here.

20 And then there are also in terms of the

21 presentation we just had from Frank Cannon, there are some

22 very important and big financial questions.

23 I know this is one that's going to be difficult

24 for MWD to the extent that MWD really has a financial

25 choice between the big facility like the

1 Zach kind of not only talk about the kind of rough draft

2 paper we sent out that's kind of an inventory of financial

3 mechanisms but also kind of talk about the Process and even

4 the relationship with the effort you just heard about from

5 Fred Cannon.

6 So, Zach, do you want to walk us through this.

7 ZACHARY MCREYNOLDS: Thank you, Lester.

8 Let's take a moment to just remind ourselves of

9 where this fits in, although it's probably unnecessary.

10 We sort of come in here under the solution

11 principles box under affordable and equitable that I think

12 you can sort of loosely translate as finance of economics,

13 and that's how this general subject ties into the big

14 picture.

15 As you remember, at your last meeting I gave

16 you a brief overview of a three part financial process, the

17 first step of which was to come up with essentially a

18 laundry list of financial alternatives.

19 That's basically what you've got in your

20 packets. That's that 12 or 13 page financial overview.

21 It lets a number of revenue sources and a

22 number of financial techniques that you can use to

23 accelerate that revenue to build things faster than you

24 would if you just waited for the revenue to come in.

25 The next stage that you'll see over the next

1 Metagoney (phonetic) which might be oriented in part to

2 storing Bay-Delta exported water in addition to Colorado

3 River water versus a pipeline that would presumably enable

4 it only to deliver Colorado River water there are Bay-Delta

5 implications as well as financial implications to that.

6 CHAIRMAN MADIGAN: Yeah, I agree.

7 I think that the potential of this is

8 significant for all of us and it bears watching as it

9 develops.

10 Okay. That really is about it for now, but

11 we'll stay tuned.

12 Lester, do you want to move into the Bay-Delta

13 Financial Strategy?

14 EXECUTIVE DIRECTOR SNOW: We certainly

15 would like to, and I guess I want to see if BDAC would like

16 to hear about some additional financing issues at this

17 point before I ask Zach to launch into this.

18 I assume that we should go ahead with this?

19 CHAIRMAN MADIGAN: We should go ahead with

20 it.

21 If I get up at four o'clock it won't be for

22 lack of interest.

23 It will be because I have a meeting in

24 San Diego at 6:45.

25 EXECUTIVE DIRECTOR SNOW: I'd like to have

1 couple of months is a detailed analysis of what was really

2 only a brief description of each of these alternatives in

3 the Draft that you've seen so far and eventually we will be

4 linking those financial alternatives and financing

5 techniques to the specific actions that we come up with as

6 part of the overall process.

7 So that means that what I'm doing is sort of on

8 a collision course with what you've been watching all day

9 and here is where the two collide.

10 Literally superimposing that three part process

11 onto the infamous series of boxes, by the time we get to

12 here, which you can't read but I can, "Evaluate And Refine

13 Alternatives", we've got to have the financial economic

14 pieces of this ready to go so that we can do this.

15 We can evaluate and refine these alternatives,

16 not just based on how they affect the four big problem

17 areas, but what they mean in terms of economic impacts and

18 what they mean in terms of financial reality, whether or

19 not you can actually pay for these things.

20 And I'll make a point which I'll repeat later.

21 What I hope to get, what we hope to get by

22 giving you this copy of this paper this early on, are two

23 things -- I don't know, I hope you can read that. The next

24 time I'll use a lighter font there.

25 There's two things. In the paper that was

1 handed out there is a little short section a couple
 2 paragraphs long called "Financial Principles".
 3 Those are pretty key. That's what we are going
 4 to be building the rest of the financial picture on top of.
 5 That's the foundation.
 6 It basically says, I think, two things.
 7 One, that to the extent that you can attract
 8 benefits, then those are the people that ought to be
 9 paying.
 10 Now, Fred's already discussed how tough that's
 11 going to be, but that, you know, the implication is that
 12 that's going to be a hard principle to implement but that
 13 doesn't mean that it's not a good principle.
 14 So I'd like it if you could when you look at
 15 that paper, to look at those financial principles and see
 16 if they make sense, and if not, I think it's probably
 17 worthy of some discussion and some advice and guidance as
 18 to what sorts of principles we should be using so that we
 19 don't go too far down the road the wrong direction.
 20 The second thing is that in my laundry list I'm
 21 sure that I've been working with a number of people that
 22 I'm sure we haven't thought of everything, and to the
 23 extent that anybody who sees this paper can add to that
 24 list, more power to you and, please, get in touch with me,
 25 get in touch with Lester or Sharon, who are your primary

1 with us on each step as we come up with the rest of this
 2 process.
 3 Where we are in that part one box, that first
 4 box, as you know, the Draft options list, what I've been
 5 calling the laundry list, has been distributed.
 6 If anybody didn't get it and you want it, give
 7 me your fax number and I'll fax it to you.
 8 I know all of the BDAC members got it because
 9 it was part of your packet. I think there's copies out
 10 front but if someone else wants it, I will be glad to send
 11 it out.
 12 We will await the financial business
 13 round-table results but we will not wait our process until
 14 they are complete.
 15 I intend to work with them parallel that we can
 16 keep going and try to get as much good information as they
 17 have into what the CalFed Process is doing without waiting
 18 until they are finally complete.
 19 The next step, which I hope will take place
 20 over the next several weeks, is to try to flush out this
 21 list, to try to expand this list of options by having a
 22 couple of small brain storming sessions.
 23 This is just to try to make sure that we
 24 thought of everything possible. We really don't want to be
 25 in the situation down the road where somebody says, you

1 contacts, and let me know if you think that there is
 2 something that ought to be on that list that hasn't been
 3 thought of yet because the idea is to try to get that list
 4 to be as comprehensive as possible.
 5 It's important to note how we are coordinating
 6 with other things that are going on.
 7 You just heard how we are coordinating with the
 8 business round-table process.
 9 I really see their discussion and analysis
 10 feeding into our financial options list and really for the
 11 options they end up discussing in detail, which so far has
 12 been two, we'll be able to use a lot of that in this
 13 detailed analysis section.
 14 What you have seen in their papers if you've
 15 ever seen them is what you should see for all of the
 16 options in our second phase so we'll be able to borrow some
 17 of their work and not renew it.
 18 The State Controllers have also put together a
 19 finance group, which I expect to be involved in all three
 20 phases of this. They've seen this paper. They are helping
 21 add to it.
 22 In fact, I got some comments from one of the
 23 Chairs -- co-Chairs of that this morning adding to that
 24 laundry list already, which I thought was great.
 25 They are also going to be reviewing and working

1 know, why didn't you try to think of more innovative
 2 things, why didn't you try to be creative here?
 3 That's what I want to try to accomplish with
 4 this step, is to get as many creative minds as possible
 5 working on this on the front end.
 6 In the fine tradition of CalFed overheads here
 7 is the part two preview.
 8 You'll be getting a detailed description of
 9 options that will talk about the funding potential; i.e.,
 10 how many dollars can you get out of these options, what has
 11 to be done to put them in place, and then a connection
 12 between the various revenue alternatives and action types.
 13 And that's a pretty important step.
 14 That's sort of what Fred was talking about when
 15 he was talking about his private goods, common goods and
 16 public goods.
 17 I know you can't read that and that's only
 18 partially accidental. You have copies of this, I think, in
 19 front of you.
 20 These three categories here are basically the
 21 same categories as Fred mentioned.
 22 They are just called different things because
 23 we didn't talk about this before I did this overhead, but
 24 essentially I called them direct benefits, collateral
 25 benefits and broad general benefits. It's the same

1 concepts.

2 It's different levels of benefit

3 identifiability, if you will, and the closer you can

4 identify who benefits from some of our actions the more you

5 want those particular people to pay for it so if you take

6 out across the top all of the different revenue sources,

7 each one of these different revenue sources it's like

8 different levels of zoom lenses.

9 General Obligation Bonds gets everybody in the

10 whole state. Some of these revenue sources only affect

11 really a very small number of people so depending on how

12 close you can attach the benefits then you can pick from

13 this list which revenue source is the most appropriate to

14 get that group of people so that when you end up with a

15 group of Actions, you say, okay, I've got Action A, what

16 have you talked about is appropriate for funding that and

17 then you can pull some of these revenue sources in.

18 So we'll be connecting the revenue sources and

19 the really associated financing funding borrowing

20 techniques with our various Action types.

21 I just want to reiterate just to be redundant

22 the things that I could really use help on are to make sure

23 that we are going in the right direction on those financial

24 principles to begin with and making sure that I haven't

25 left things off the laundry list that other people can

1 So noted. I may talk to you about that

2 further.

3 MS. MCPEAK: Are there other questions of

4 Zach?

5 What about the two principles that are

6 articulated?

7 Does anyone want to add a third or fourth?

8 The first being that to the extent an Action

9 creates a benefit that it be quantifiable so looking at in

10 this case revenue associated with benefit, you've got both

11 revenue and financing mechanisms and the second being that

12 the financial structure should create linkage between

13 different parts of the long-term solution.

14 So encourage the linking of those solutions in

15 the strategies?

16 ZACHARY MCREYNOLDS: I might add that one

17 of the things that's crossed my mind about the first

18 principle is that -- I mean, beyond the fact that it's

19 going to be hard to determine exactly whose benefiting and

20 how much, let's suppose we come up with some other revenue

21 sources that aren't really directly attributable to users

22 or the general public.

23 Let's take, for example, the comment that Fred

24 made about a new lottery. Something that's really

25 voluntary.

1 think of.

2 I'll be glad to answer any other questions that

3 you might have.

4 MS. MCPEAK: Are there questions?

5 Hap.

6 MR. DUNNING: One thing I didn't find in

7 the list with regard to revenues would be a water diversion

8 tax.

9 That would amount to a severance tax that's

10 something used in a lot of other natural resource areas,

11 frequently used for oil and gas and in California for

12 timber. For the past 20 years we've had and I would

13 suggest that that be looked into with some seriousness.

14 ZACHARY MCREYNOLDS: Did you call that an

15 excise tax?

16 What would you call it?

17 MR. DUNNING: In this context a water

18 diversion tax.

19 It's a form of a severance tax.

20 ZACHARY MCREYNOLDS: Have you seen the B

21 Of A study?

22 MR. DUNNING: No.

23 ZACHARY MCREYNOLDS: I think there are

24 some subtle differences though between that and what he's

25 talking about.

1 Let's suppose you got some revenue from that

2 type of a source.

3 Would you use that to offset the amount of

4 broad general revenue that you needed or would you use that

5 to relieve the burdens on specific users or would you

6 allocate it somehow pro rata?

7 I don't know but that's the kind of principle

8 that we are going to confront at some point.

9 MS. MCPEAK: Roberta.

10 MS. BORGONOVO: Just going back to the

11 comment about how important it is to have a broad

12 understanding of the need for financing, I would hope that

13 as soon as we are far enough along to put it into a

14 Public Workshop or a public meeting we would begin to do

15 that.

16 MS. MCPEAK: And also using your

17 principle, Zach, the perhaps linking of or coordination of

18 several revenue sources would get at your three levels of

19 benefit as the same comment I made to Fred.

20 I think that that needs to be looked at and

21 maybe the feasibility of that explored in your paper.

22 ZACHARY MCREYNOLDS: Yeah, I would expect

23 that to be the case.

24 For any one action if you identify that it hits

25 a number of these levels of benefits then I think implied

1 in that is that you are going to have a number of different
2 revenue sources all contributing to the same actions or
3 bundle of actions.

4 MS. MCPEAK: When do you expect to put
5 this into a workshop or have it back here in a forum for
6 more discussion and policy decisions?

7 ZACHARY MCREYNOLDS: I think the next part
8 of the three part process you need to have your next Draft
9 of that probably by your next meeting.

10 MS. MCPEAK: Good, December 6th. Okay.

11 ZACHARY MCREYNOLDS: That's kind of my
12 thinking about the timing.

13 MS. MCPEAK: Great.

14 Realizing that we are now coming up on the four
15 o'clock deadline, Lester, we probably should try to finish
16 up here.

17 Is there anything else that you want to take up
18 under "Other"?

19 EXECUTIVE DIRECTOR SNOW: No, there is
20 really nothing that we need to address.

21 I would just ask that BDAC members please
22 review this first Draft of the related programs report.
23 This will become very important to us in the future.

24 These are linkages to existing programs or
25 overlaps and it's stuff that we discussed previously, and

1 STATE OF CALIFORNIA }
2 COUNTY OF SAN JOAQUIN } ss.

3 I, SUSAN PORTALE, Certified Shorthand
4 Reporter of the State of California, do hereby certify:

5 That on the 18th day of October, 1995, at
6 the hour of 10:05 a.m., I took down in shorthand notes the
7 said witness' testimony and the proceedings had at the time
8 of the giving of such testimony; that I thereafter
9 transcribed my shorthand notes of such testimony by
10 computer-aided transcription, the above and foregoing being
11 a full, true and correct transcription thereof, and a full,
12 true and correct transcript of all proceedings had and
13 testimony given.

14
15
16
17
18 Certified Shorthand Reporter in and for the
19 County of San Joaquin, State of California

20
21 * QUALITY COMPUTERIZED TRANSCRIPTION *
22 * -by- *
23 * PORTALE & ASSOCIATES DEPOSITION REPORTERS *
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* (209) 462-3377 *
* SUSAN PORTALE, CSR NO. 4095 *

1 if you could look at it and from your own previous you know
2 of ones that are missing or improperly described, we would
3 like to know that, you will see it again.

4 MS. MCPEAK: Is there anything else that
5 anyone around the table wishes to bring up?

6 As you know, there is this is the time for
7 Public Comment.

8 The one individual who did sign up is
9 Mr. Petry, as I see him -- or do not see him, seeing that
10 he is not here, then that concludes also the Public
11 Comment period.

12 And I believe we are hereby adjourned until
13 10 a.m. on December 6th in Sacramento.

14 Thank you all.

15 EXECUTIVE DIRECTOR SNOW: Thank you.

16
17 (Whereupon the BDAC Meeting adjourned at 4:05 p.m.)

18
19 ---oOo---

'96 [4] 16:25 27:25	16:17	acceptable [6] 57:19	212:19 224:12 225:15	116:15 117:17 125:20
87:7 207:17	55 [1] 178:18	62:19 63:7 63:22	225:20 227:8 228:24	126:12 131:19 132:10
-by [1] 231:21	5th [1] 125:13	141:20 206:14	actions [49] 18:19	132:13 134:21 134:22
05 [4] 1:14 4:2	6 [1] 218:24	accepted [1] 110:21	19:2 19:13 19:19	135:3 138:9 144:1
230:17 231:6	6.8 [1] 65:8	access [2] 123:16	26:9 26:15 26:25	145:9 148:12 153:24
1 [17] 15:14 15:25	60 [4] 85:13 189:15	185:11	27:4 27:14 28:13	166:25 171:21 184:14
16:6 16:9 16:24	210:17 210:23	accidental [1] 224:18	46:8 62:10 64:4	190:3 206:4 209:9
17:23 89:19 113:5	6th [6] 7:13 28:6	accidentally [1]	75:9 75:25 76:4	229:20
113:8 130:10 130:23	28:8 28:25 229:10	50:14	76:6 77:21 78:5	addressed [13] 20:13
131:22 132:2 135:21	230:13	accommodate [2]	78:6 78:9 78:10	91:22 92:3 125:24
136:8 136:13 188:25	7.2 [1] 65:8	17:15 168:12	78:14 84:20 85:21	126:8 126:19 133:6
10 [5] 1:14 4:2	9,000 [2] 15:19	accomplish [4] 93:4	85:23 89:21 91:15	134:18 135:10 135:24
113:8 230:13 231:6	15:20	162:10 181:3 224:3	91:22 102:1 104:16	171:24 184:9 212:20
10,000 [1] 71:4	95202 [2] 1:24	accomplished [1]	104:17 111:20 112:5	addresses [3] 20:5
12 [2] 113:4 219:20	231:23	206:23	115:20 116:7 116:9	160:22 163:22
12th [2] 178:8 178:22	A-1 [1] 174:14	accord [1] 12:10	116:13 116:14 116:22	addressing [12] 14:15
13 [1] 219:20	A-2 [1] 174:14	accordingly [1] 47:2	117:2 117:21 178:13	77:12 77:12 77:14
15th [1] 7:14	A-3 [1] 174:15	account [2] 79:25	210:4 220:5 225:4	79:14 79:15 79:15
16 [1] 185:6	a.m. [3] 1:14 230:13	141:6	225:15 229:2 229:3	99:22 106:5 129:23
18 [1] 1:14	231:6	accrues [1] 202:19	active [2] 178:9	134:24 209:10
18th [2] 4:7 231:5	a.m. [1] 4:2	accumulating [1]	205:10	Adequate [1] 122:22
1990's [1] 200:17	AB [1] 110:7	164:25	actively [2] 8:5	adjacent [4] 114:15
1995 [5] 1:14 44:5	abandon [1] 90:4	accurate [5] 53:6	109:24	117:8 117:16 189:10
44:10 140:24 231:5	ability [17] 10:14	56:18 56:21 57:3	activities [11] 35:13	adjourned [2] 230:12
1996 [4] 7:19 198:6	34:11 39:9 39:18	57:24	35:25 54:7 54:13	230:17
201:25 208:5	42:5 45:16 94:18	accurately [1] 55:20	54:21 57:22 115:23	adjust [2] 47:2
1st [2] 15:8 198:3	175:7 199:20 203:17	achieve [8] 163:25	176:22 192:11 193:13	83:9
2 [13] 8:7 15:7	203:23 204:3 205:19	164:12 164:13 165:10	194:3	adjusting [1] 15:25
15:17 16:14 16:16	214:7 214:25 217:3	169:6 169:7 182:2	activity [4] 57:24	adopting [1] 62:4
17:23 89:15 89:22	217:14	209:2	155:17 193:17 195:16	advance [1] 150:16
113:11 135:16 135:19	able [28] 10:24 28:8	achieved [2] 116:10	actual [3] 84:20	advances [1] 34:15
135:22 136:10	46:21 49:6 49:9	184:6	104:25 161:22	advantage [5] 38:17
20 [2] 67:11 226:12	51:22 57:14 68:9	achievement [1]	adaptive [3] 46:1	50:2 50:20 140:24
209 [2] 1:25 231:23	72:4 82:13 102:14	169:9	66:3 66:10	206:25
21 [1] 113:5	103:19 136:19 137:1	acknowledge [4]	add [19] 25:12 27:7	advice [1] 221:17
211 [2] 1:24 231:22	137:3 139:10 170:6	26:9 39:22 82:15	45:1 64:22 72:23	advising [1] 14:20
25th [1] 5:18	182:25 188:10 201:25	98:18	81:17 102:4 112:9	Advisory [1] 4:7
28th [2] 65:14 65:15	202:11 211:24 212:5	acknowledged [1]	139:4 148:13 159:22	Aerial [2] 32:2
2nd [1] 15:11	212:7 212:9 212:17	55:21	179:2 188:15 194:13	150:2
3 [3] 18:17 176:17	222:12 222:16	acquiescence [1]	196:10 221:23 222:21	150:2
176:21	above [5] 35:4	144:9	227:7 227:16	150:2
3,000 [1] 16:13	35:9 133:18 214:22	acquiescing [1] 41:13	added [6] 17:7	affect [12] 35:10
3.a [1] 176:25	231:10	acre [7] 16:14 16:17	17:11 18:8 93:17	53:9 53:25 63:14
30 [1] 130:7	absence [2] 42:5	37:1 102:17 110:3	126:4 145:6	63:18 97:6 97:15
300 [1] 146:13	50:6	203:21 216:1	adding [2] 138:13	97:23 117:9 131:3
300,000 [1] 16:13	absolute [2] 66:5	acreage [1] 150:2	222:23	220:16 225:10
3616 [1] 110:7	184:14	acres [3] 15:19 15:21	addition [5] 35:4	affected [1] 130:22
4 [1] 230:17	absolutely [3] 51:8	73:12	44:7 97:6 180:19	affecting [4] 100:4
4.a [1] 209:25	112:15 152:3	Act [5] 35:22 39:1	218:2	122:9 130:12 133:5
40 [3] 37:11 113:4	abstract [3] 85:11	44:5 140:15 205:24	additional [13] 29:25	affects [1] 134:2
130:7	abstraction [2] 84:19	acted [1] 172:22	79:6 105:9 114:22	afford [2] 7:6
4095 [2] 1:20 231:24	84:25	acting [1] 54:14	116:20 134:23 135:2	14:1
45 [1] 218:24	academic [2] 58:3	action [49] 13:11	166:6 166:10 182:6	affordability [1]
462-3377 [2] 1:25	197:22	16:1 18:19 18:20	182:8 217:8 218:16	10:8
231:23	academics [1] 197:6	19:2 19:16 21:6	additionally [2]	affordable [6] 145:5
4th [2] 17:14 28:5	accelerate [3] 57:15	21:9 26:2 26:12	122:2 182:14	145:15 151:12 167:4
5 [1] 195:11	150:20 219:23	26:13 26:18 27:8	additions [1] 129:4	168:9 219:11
5,000 [1] 192:2	accelerated [3] 55:4	28:14 28:14 28:17	additive [10] 35:7	afraid [1] 152:25
5.c [1] 210:9	57:23 71:3	28:18 28:22 46:22	35:8 35:15 35:20	afternoon [8] 19:6
5.d [1] 212:24	accelerates [1] 151:1	46:24 62:24 86:7	36:2 36:5 45:1	91:15 112:12 113:9
50 [3] 37:11 60:17	accelerating [2] 56:24	86:8 102:6 102:7	45:10 45:13 53:7	176:19 183:14 184:12
85:13	150:25	102:23 106:4 106:9	address [47] 6:22	191:24
500,000 [2] 16:14	acceleration [1] 57:19	114:14 135:2 177:4	9:14 9:17 10:19	ag [4] 108:13 110:6
	accept [3] 63:20	177:18 177:22 178:10	12:4 18:7 26:10	110:8 111:3
	148:3 150:10	178:12 178:18 179:2	26:16 28:20 37:25	again [49] 5:12
		179:17 180:14 181:5	53:11 63:1 63:16	5:16 7:5 10:9
		181:25 202:14 210:4	64:3 75:22 78:18	11:4 11:15 11:19
			79:2 85:2 85:21	11:25 12:21 14:3
			89:21 100:12 100:24	16:22 20:3 20:4
			107:1 110:14 115:10	

26:17 32:11 51:16	146:22 152:8 159:7	164:18 201:5	appearance [1] 21:23	76:23 77:12 77:22
55:21 57:20 63:1	179:6 182:3 191:21	amenable [1] 171:18	applaud [1] 195:23	101:25 105:7 105:9
74:3 79:12 80:15	192:15 195:6 212:6	amendment [1] 135:10	applicability [1] 205:4	105:9 105:15 105:21
97:19 106:3 106:7	212:24 213:5 218:18	America [2] 195:17	applications [1] 109:6	105:25 110:8 110:17
110:1 113:17 113:20		208:6	applied [4] 121:5	112:2 115:11 116:7
116:5 122:17 123:24	aids [1] 129:1	American [1] 50:9	124:20 173:8 189:19	117:22 123:6 124:19
124:16 126:13 127:1	aiming [1] 164:22	among [4] 36:22	apply [4] 54:9	126:23 127:16 127:24
127:8 147:21 148:12	air [1] 194:24	99:22 145:7 199:1	151:2 173:9 177:24	138:23 140:17 166:21
168:25 170:23 173:2	airplane [2] 86:20	amongst [1] 39:7	appreciate [4] 157:24	172:8 172:13 172:15
174:11 174:18 176:5	91:10	amount [24] 9:3	183:2 191:22 206:7	172:19 173:5 174:9
185:8 194:3 203:15	airport [3] 7:16	34:12 36:25 47:4	apprehensive [2] 41:23 42:3	174:10 175:14 192:6
204:7 209:16 230:3	91:5 91:7	54:17 61:3 61:10	approach [19] 10:22	210:16 211:9 211:10
against [6] 19:21	Albuquerque [2] 128:15 128:20	76:2 103:22 122:16	25:14 27:7 30:17	220:17 226:10
68:11 108:11 114:14	Alex [30] 2:9	146:5 147:6 170:17	30:18 39:11 50:25	arena [2] 120:2
135:2 204:3	36:19 41:5 41:14	175:19 180:21 180:21	51:21 52:10 52:18	arenas [2] 137:4
age [3] 57:15 71:15	47:4 52:20 53:4	200:7 204:1 204:17	70:3 80:15 83:2	argue [1] 7:7
201:12	54:4 59:22 60:22	204:20 214:24 214:25	83:17 119:4 197:18	argument [4] 103:8
agencies [3] 2:8	61:8 63:16 67:4	226:9 228:3	199:21 199:22 210:2	139:2 141:8 153:11
115:7 214:12	68:19 73:5 87:3	amounts [1] 215:25	approached [1] 10:22	array [2] 115:6 186:20
agency [8] 2:9	91:13 92:11 98:1	amurensis [1] 47:7	approaches [1] 201:19	arrived [1] 4:6
3:7 74:20 74:20	124:6 147:11 150:4	analogy [2] 36:23	appropriate [21] 6:3 69:16 104:18	articulated [2] 119:16
104:22 214:12 215:24	150:6 160:1 160:10	43:5	63 69:16 104:18	227:6
216:4	161:18 163:17 165:3	analysis [28] 9:23	105:2 108:19 109:4	artificial [2] 98:23
Agenda [19] 4:10	174:16 188:8	16:11 27:2 37:9	109:7 109:9 109:13	179:17
4:18 4:19 4:23	Alex's [3] 44:22	42:25 65:2 85:1	173:20 199:15 200:9	artificially [1] 55:13
4:24 5:21 6:3	60:15 73:3	88:4 89:5 101:10	200:19 200:24 200:25	Arvin [1] 3:14
8:7 9:9 23:18	Alliance [2] 2:13	101:13 101:16 106:9	205:23 207:22 208:1	Asian [10] 47:6
23:18 113:10 113:10	2:17	106:19 131:9 135:14	215:3 225:13 225:16	47:13 48:21 48:25
124:4 127:14 170:10	allocate [1] 228:6	135:19 135:22 136:2	appropriations [1] 69:19	49:7 56:4 61:13
176:16 176:17 217:17	allocating [1] 209:7	136:8 136:13 136:15	aqua [1] 104:21	61:17 97:14 97:15
Agendas [1] 14:9	allocation [2] 168:19	136:19 136:20 137:3	aquatic [16] 31:24	aside [2] 42:22 136:10
aggressive [3] 14:2	209:7	220:1 222:9 222:13	32:2 35:24 37:10	asparagus [2] 65:9
17:1 214:21	allocations [2] 209:17	analyze [2] 45:18	37:24 42:25 47:1	65:12
ago [7] 37:11 67:12	209:17	45:20	47:5 50:7 60:20	aspect [2] 92:1
71:19 146:13 174:22	allow [7] 55:6	Anderson [1] 192:20	70:4 79:9 148:17	149:23
178:25 213:10	81:8 85:21 151:11	Angeles [2] 3:16	180:9 189:5 189:8	aspects [1] 40:2
agree [30] 39:24	171:5 175:23 176:8	7:15	aqueduct [5] 214:17	aspirations [1] 7:7
43:22 52:23 53:1	allowing [1] 120:13	animal [4] 34:3	214:21 215:1 217:4	assemblage [1] 49:3
54:22 54:23 57:25	almost [4] 99:12	60:21 70:10 163:5	217:12	assessed [1] 205:14
59:2 63:6 71:8	124:11 180:24 213:25	animals [2] 51:7	arbitrarily [2] 178:19	assign [1] 85:21
95:22 97:3 97:20	alone [2] 60:21	51:11	178:20	assistant [1] 192:23
124:18 125:1 152:22	123:7	Ann [8] 3:10 92:11	arbitrariness [1] 170:17	assisting [2] 192:17
153:20 160:24 163:17	along [12] 23:6	98:2 99:23 129:2	arbitrary [1] 171:16	associated [17] 31:10
165:3 168:23 171:11	43:11 86:16 98:8	188:8 190:4 191:22	arcane [1] 186:21	38:10 38:11 40:10
184:4 187:6 187:10	122:7 144:3 184:1	Ann's [1] 102:5	area [44] 2:5 7:15	46:24 60:25 85:8
188:11 201:3 203:14	194:6 202:13 206:3	Annie [1] 111:11	10:12 26:24 27:4	85:16 85:17 96:17
208:1 218:6	216:14 228:13	annual [1] 182:20	27:22 48:9 48:10	104:22 123:8 123:14
agreed [3] 62:11	alteration [2] 45:11	annually [1] 216:1	48:11 48:14 53:13	123:19 180:3 225:19
195:17 197:25	175:19	answer [15] 41:18	59:23 68:1 75:8	227:10
agreeing [3] 41:12	altered [3] 37:12	41:20 42:11 42:21	76:17 124:13 124:17	ASSOCIATES [2] 1:23 231:22
154:7 163:20	38:7 180:6	48:8 86:18 87:3	125:21 127:4 127:14	association [8] 2:7
agreement [16] 62:19	alternative [6] 15:9	101:24 129:12 132:3	128:17 131:5 131:5	2:11 2:22 2:23
81:19 81:25 82:7	15:15 127:17 146:19	137:2 152:2 207:11	131:8 133:11 133:16	3:3 69:8 196:9
82:13 83:6 83:16	210:1 210:5	216:15 226:2	133:19 137:11 139:7	197:17
89:25 90:16 102:15	alternatives [29] 15:7 17:22 19:3	answered [2] 91:15	139:14 151:20 157:10	Associations [1] 2:20
150:20 150:23 197:1	19:19 19:20 27:10	204:11	166:2 166:3 171:17	assume [6] 47:5
207:25 213:20 217:8	28:24 87:7 101:9	antagonistic [3] 26:20 26:22 29:4	171:19 171:24 172:11	106:15 164:8 186:24
agricultural [14] 99:9 99:13 107:6	101:13 101:15 102:1	anticipate [1] 12:22	173:3 193:12 197:15	186:25 218:18
107:10 107:16 109:6	106:11 116:24 136:2	anticipating [1] 16:23	203:25 211:8 211:12	assuming [5] 87:11
109:22 127:16 202:17	178:2 179:12 179:13	anybody's [3] 73:2	areas [51] 10:12	105:20 119:17 169:16
203:19 203:22 213:11	185:20 197:8 210:22	73:7 214:7	20:5 24:23 25:10	184:19
215:11 215:13	211:15 211:19 219:18	apologize [2] 11:10	25:23 25:24 27:3	assumption [1] 208:24
agriculture [6] 34:16	220:2 220:4 220:13	73:21	27:14 27:19 47:6	
99:15 121:13 121:14	220:15 224:12	appear [3] 40:13	47:22 75:23 76:20	
121:14 168:20	always [6] 24:14	49:11 107:22		
aha [1] 170:1	39:8 48:19 64:10			
ahead [20] 4:11				
30:15 31:19 58:19				
65:21 80:11 88:2				

assumptions [1] 101:8	awful [3] 144:2 180:22 181:17	133:5 134:5 134:7 134:11 137:10 137:13	beings [3] 34:13 55:25 71:3	biggest [1] 125:22
assurance [4] 14:1 20:12 143:5 143:15	awhile [1] 52:21	138:3 139:5 139:25 140:4 140:17 140:20	belabor [1] 48:6	billion [2] 66:14 145:14
assure [1] 86:6	axis [1] 179:21	141:9 141:12 141:23 142:1 142:9 142:17	belongs [1] 103:1	biological [3] 32:21 48:4 149:24
assuring [1] 171:23	Aye [1] 207:12	143:9 143:20 143:23 144:1 145:17 170:7	below [1] 147:23	biologically [1] 56:12
asterisk [3] 153:22 177:13 177:15	B [2] 66:9 226:20	172:1 172:2 172:14 172:14 172:19 172:19	BELZA [1] 3:3	biologists [2] 46:2 82:6
attach [1] 225:12	background [5] 11:8 88:24 89:4 188:20 194:24	172:20 173:4 173:10 173:10 175:14 197:15 203:25 204:16	beneficial [16] 18:11 32:7 35:13 77:8 77:11 77:15 85:11 92:5 92:6 145:7 147:4 162:21 164:1 164:14 169:3 188:12	biomass [16] 36:25 37:5 37:10 37:24 42:25 47:4 47:17 47:19 47:24 60:16 60:19 61:2 61:4 61:6 61:9 61:17
attack [2] 46:4 73:17	backlash [1] 108:10	Bay-Delta [37] 1:4 4:7 5:5 7:22 8:8 8:12 10:14 12:6 12:16 12:17 50:22 61:22 76:21 107:2 128:15 147:4 161:14 162:21 164:1 174:25 175:2 175:8 178:14 198:10 198:12 199:16 199:21 200:23 201:24 213:2 216:23 216:25 217:18 217:18 218:2 218:4 218:12	benefit [16] 42:10 46:22 79:20 80:19 81:24 116:9 182:2 182:7 199:1 203:13 209:17 217:5 225:2 227:9 227:10 228:19	bit [39] 11:8 19:6 20:15 25:12 28:11 30:10 31:1 31:9 32:17 37:23 40:19 64:23 75:1 75:12 93:2 94:15 98:7 112:24 113:8 113:18 122:12 122:12 137:21 140:9 147:16 148:12 149:2 149:21 153:7 165:2 166:16 172:17 174:20 176:2 196:22 210:3 210:3 212:23 213:5
attempt [2] 32:18 157:25	backup [1] 88:11	Bays [1] 143:3	benefiting [1] 227:19	blame [1] 111:5
attempted [3] 13:7 73:19 113:24	backwards [1] 170:9	BDAC [35] 4:25 5:16 6:10 6:25 7:12 7:15 7:22 8:10 14:8 14:11 14:19 15:2 18:8 22:17 23:19 25:9 28:6 29:9 36:22 127:9 145:22 174:2 187:14 188:20 195:13 196:5 212:5 212:7 212:10 212:13 212:21 218:15 223:8 229:21 230:17	benefits [27] 29:4 46:8 47:1 79:9 101:15 123:13 123:18 179:14 181:14 199:5 200:8 200:11 200:13 201:20 202:15 203:16 209:8 209:8 211:11 211:13 221:8 224:24 224:25 224:25 225:4 225:12 228:25	blocks [1] 190:20
attending [2] 6:17 8:1	backward [1] 189:17	BDAC [35] 4:25 5:16 6:10 6:25 7:12 7:15 7:22 8:10 14:8 14:11 14:19 15:2 18:8 22:17 23:19 25:9 28:6 29:9 36:22 127:9 145:22 174:2 187:14 188:20 195:13 196:5 212:5 212:7 212:10 212:13 212:21 218:15 223:8 229:21 230:17	benefiting [1] 227:19	bluegill [1] 50:9
attempting [2] 81:7 161:4	bad [4] 86:14 103:11 143:6 160:12	Bays [1] 143:3	benefits [27] 29:4 46:8 47:1 79:9 101:15 123:13 123:18 179:14 181:14 199:5 200:8 200:11 200:13 201:20 202:15 203:16 209:8 209:8 211:11 211:13 221:8 224:24 224:25 224:25 225:4 225:12 228:25	Bluff [2] 90:12 133:18
attend [3] 5:20 8:6 194:9	balance [17] 34:10 34:23 35:3 35:6 39:6 39:8 39:10 48:2 48:3 48:14 49:3 49:5 50:12 106:25 148:23 163:25 164:13	BDAC [35] 4:25 5:16 6:10 6:25 7:12 7:15 7:22 8:10 14:8 14:11 14:19 15:2 18:8 22:17 23:19 25:9 28:6 29:9 36:22 127:9 145:22 174:2 187:14 188:20 195:13 196:5 212:5 212:7 212:10 212:13 212:21 218:15 223:8 229:21 230:17	benefiting [1] 227:19	Board [12] 80:21 93:22 131:16 160:10 213:7 215:6 215:17 215:19 215:20 216:10 216:10 216:11
attendance [4] 5:2 5:16 8:5 188:9	balanced [3] 20:6 61:17 75:23	BDAC [35] 4:25 5:16 6:10 6:25 7:12 7:15 7:22 8:10 14:8 14:11 14:19 15:2 18:8 22:17 23:19 25:9 28:6 29:9 36:22 127:9 145:22 174:2 187:14 188:20 195:13 196:5 212:5 212:7 212:10 212:13 212:21 218:15 223:8 229:21 230:17	benefiting [1] 227:19	boards [1] 182:18
attended [6] 5:4 5:14 183:4 183:23 191:13 194:8	ballast [1] 69:10	BDAC [35] 4:25 5:16 6:10 6:25 7:12 7:15 7:22 8:10 14:8 14:11 14:19 15:2 18:8 22:17 23:19 25:9 28:6 29:9 36:22 127:9 145:22 174:2 187:14 188:20 195:13 196:5 212:5 212:7 212:10 212:13 212:21 218:15 223:8 229:21 230:17	benefiting [1] 227:19	Bob [8] 2:11 129:2 130:4 131:25 142:14 186:14 188:3 202:7
attende [1] 183:12	bang [1] 110:2	BDAC [35] 4:25 5:16 6:10 6:25 7:12 7:15 7:22 8:10 14:8 14:11 14:19 15:2 18:8 22:17 23:19 25:9 28:6 29:9 36:22 127:9 145:22 174:2 187:14 188:20 195:13 196:5 212:5 212:7 212:10 212:13 212:21 218:15 223:8 229:21 230:17	benefiting [1] 227:19	Bob's [1] 136:6
attending [2] 6:17 8:1	Bank [2] 195:17 208:6	BDAC [35] 4:25 5:16 6:10 6:25 7:12 7:15 7:22 8:10 14:8 14:11 14:19 15:2 18:8 22:17 23:19 25:9 28:6 29:9 36:22 127:9 145:22 174:2 187:14 188:20 195:13 196:5 212:5 212:7 212:10 212:13 212:21 218:15 223:8 229:21 230:17	benefiting [1] 227:19	Bobker [3] 170:2 170:7 176:12
attention [4] 67:6 69:13 125:18 125:20	Bar [2] 153:12 153:13	BDAC [35] 4:25 5:16 6:10 6:25 7:12 7:15 7:22 8:10 14:8 14:11 14:19 15:2 18:8 22:17 23:19 25:9 28:6 29:9 36:22 127:9 145:22 174:2 187:14 188:20 195:13 196:5 212:5 212:7 212:10 212:13 212:21 218:15 223:8 229:21 230:17	benefiting [1] 227:19	boil [1] 73:23
attract [1] 221:7	barley [1] 65:10	BDAC [35] 4:25 5:16 6:10 6:25 7:12 7:15 7:22 8:10 14:8 14:11 14:19 15:2 18:8 22:17 23:19 25:9 28:6 29:9 36:22 127:9 145:22 174:2 187:14 188:20 195:13 196:5 212:5 212:7 212:10 212:13 212:21 218:15 223:8 229:21 230:17	benefiting [1] 227:19	bombs [1] 91:9
attributable [1] 227:21	barriers [1] 180:6	BDAC [35] 4:25 5:16 6:10 6:25 7:12 7:15 7:22 8:10 14:8 14:11 14:19 15:2 18:8 22:17 23:19 25:9 28:6 29:9 36:22 127:9 145:22 174:2 187:14 188:20 195:13 196:5 212:5 212:7 212:10 212:13 212:21 218:15 223:8 229:21 230:17	benefiting [1] 227:19	bond [3] 202:12 206:15 207:1
audience [6] 4:14 4:20 5:12 11:18 194:4 195:4	bars [2] 165:5 165:13	BDAC [35] 4:25 5:16 6:10 6:25 7:12 7:15 7:22 8:10 14:8 14:11 14:19 15:2 18:8 22:17 23:19 25:9 28:6 29:9 36:22 127:9 145:22 174:2 187:14 188:20 195:13 196:5 212:5 212:7 212:10 212:13 212:21 218:15 223:8 229:21 230:17	benefiting [1] 227:19	bonds [8] 199:14 200:15 200:17 201:2 201:7 201:14 206:16 225:9
augment [2] 37:23 39:16	base [5] 53:5 81:5 87:13 87:15 87:16	BDAC [35] 4:25 5:16 6:10 6:25 7:12 7:15 7:22 8:10 14:8 14:11 14:19 15:2 18:8 22:17 23:19 25:9 28:6 29:9 36:22 127:9 145:22 174:2 187:14 188:20 195:13 196:5 212:5 212:7 212:10 212:13 212:21 218:15 223:8 229:21 230:17	benefiting [1] 227:19	book [1] 207:17
authorities [1] 115:7	based [12] 30:18 32:8 32:12 48:7 52:10 70:3 83:10 87:1 132:9 136:14 199:5 220:16	BDAC [35] 4:25 5:16 6:10 6:25 7:12 7:15 7:22 8:10 14:8 14:11 14:19 15:2 18:8 22:17 23:19 25:9 28:6 29:9 36:22 127:9 145:22 174:2 187:14 188:20 195:13 196:5 212:5 212:7 212:10 212:13 212:21 218:15 223:8 229:21 230:17	benefiting [1] 227:19	boom [1] 55:10
authority [10] 24:19 128:8 202:11 206:25 213:14 213:15 214:7 215:21 215:24 216:10	basin [3] 70:16 128:2 197:18	BDAC [35] 4:25 5:16 6:10 6:25 7:12 7:15 7:22 8:10 14:8 14:11 14:19 15:2 18:8 22:17 23:19 25:9 28:6 29:9 36:22 127:9 145:22 174:2 187:14 188:20 195:13 196:5 212:5 212:7 212:10 212:13 212:21 218:15 223:8 229:21 230:17	benefiting [1] 227:19	BORGONOVO [18] 2:25 30:21 51:4 70:23 91:14 92:9 110:5 120:5 120:18 132:21 133:14 134:12 135:4 135:7 152:15 162:24 169:5 228:10
availability [3] 78:14 141:2 168:16	basis [10] 33:11 45:3 79:1 80:18 122:16 190:2 206:23 206:24 214:2 215:2	BDAC [35] 4:25 5:16 6:10 6:25 7:12 7:15 7:22 8:10 14:8 14:11 14:19 15:2 18:8 22:17 23:19 25:9 28:6 29:9 36:22 127:9 145:22 174:2 187:14 188:20 195:13 196:5 212:5 212:7 212:10 212:13 212:21 218:15 223:8 229:21 230:17	benefiting [1] 227:19	borrow [1] 222:16
available [14] 6:8 6:12 6:14 7:11 7:19 39:25 40:2 40:6 50:17 136:18 136:23 136:24 140:23 206:23	basis [10] 33:11 45:3 79:1 80:18 122:16 190:2 206:23 206:24 214:2 215:2	BDAC [35] 4:25 5:16 6:10 6:25 7:12 7:15 7:22 8:10 14:8 14:11 14:19 15:2 18:8 22:17 23:19 25:9 28:6 29:9 36:22 127:9 145:22 174:2 187:14 188:20 195:13 196:5 212:5 212:7 212:10 212:13 212:21 218:15 223:8 229:21 230:17	benefiting [1] 227:19	borrowing [1] 225:19
Avenue [2] 1:24 231:22	bass [15] 50:1 50:2 50:8 50:9 50:17 50:20 50:24 61:3 61:3 66:23 66:24 66:25 71:23 215:15 215:16	BDAC [35] 4:25 5:16 6:10 6:25 7:12 7:15 7:22 8:10 14:8 14:11 14:19 15:2 18:8 22:17 23:19 25:9 28:6 29:9 36:22 127:9 145:22 174:2 187:14 188:20 195:13 196:5 212:5 212:7 212:10 212:13 212:21 218:15 223:8 229:21 230:17	benefiting [1] 227:19	boss [1] 208:6
average [1] 191:13	Bay [70] 1:11 2:5 2:11 2:24 3:8 51:9 53:15 65:16 71:17 91:18 125:25 126:7 126:13 126:14 126:18 129:9 129:19 129:22 130:6 130:10 130:13 130:17 130:23 131:3 131:6 131:10 131:17 132:2 132:12 132:12 132:13 132:14	BDAC [35] 4:25 5:16 6:10 6:25 7:12 7:15 7:22 8:10 14:8 14:11 14:19 15:2 18:8 22:17 23:19 25:9 28:6 29:9 36:22 127:9 145:22 174:2 187:14 188:20 195:13 196:5 212:5 212:7 212:10 212:13 212:21 218:15 223:8 229:21 230:17	benefiting [1] 227:19	bothering [1] 143:13
averaging [1] 214:1	Bay [70] 1:11 2:5 2:11 2:24 3:8 51:9 53:15 65:16 71:17 91:18 125:25 126:7 126:13 126:14 126:18 129:9 129:19 129:22 130:6 130:10 130:13 130:17 130:23 131:3 131:6 131:10 131:17 132:2 132:12 132:12 132:13 132:14	BDAC [35] 4:25 5:16 6:10 6:25 7:12 7:15 7:22 8:10 14:8 14:11 14:19 15:2 18:8 22:17 23:19 25:9 28:6 29:9 36:22 127:9 145:22 174:2 187:14 188:20 195:13 196:5 212:5 212:7 212:10 212:13 212:21 218:15 223:8 229:21 230:17	benefiting [1] 227:19	bottom [2] 130:17
aversions [1] 174:3	Bay [70] 1:11 2:5 2:11 2:24 3:8 51:9 53:15 65:16 71:17 91:18 125:25 126:7 126:13 126:14 126:18 129:9 129:19 129:22 130:6 130:10 130:13 130:17 130:23 131:3 131:6 131:10 131:17 132:2 132:12 132:12 132:13 132:14	BDAC [35] 4:25 5:16 6:10 6:25 7:12 7:15 7:22 8:10 14:8 14:11 14:19 15:2 18:8 22:17 23:19 25:9 28:6 29:9 36:22 127:9 145:22 174:2 187:14 188:20 195:13 196:5 212:5 212:7 212:10 212:13 212:21 218:15 223:8 229:21 230:17	benefiting [1] 227:19	
avoid [5] 129:23 138:15 141:11 203:11 212:1	Bay [70] 1:11 2:5 2:11 2:24 3:8 51:9 53:15 65:16 71:17 91:18 125:25 126:7 126:13 126:14 126:18 129:9 129:19 129:22 130:6 130:10 130:13 130:17 130:23 131:3 131:6 131:10 131:17 132:2 132:12 132:12 132:13 132:14	BDAC [35] 4:25 5:16 6:10 6:25 7:12 7:15 7:22 8:10 14:8 14:11 14:19 15:2 18:8 22:17 23:19 25:9 28:6 29:9 36:22 127:9 145:22 174:2 187:14 188:20 195:13 196:5 212:5 212:7 212:10 212:13 212:21 218:15 223:8 229:21 230:17	benefiting [1] 227:19	
avoided [1] 188:18	Bay [70] 1:11 2:5 2:11 2:24 3:8 51:9 53:15 65:16 71:17 91:18 125:25 126:7 126:13 126:14 126:18 129:9 129:19 129:22 130:6 130:10 130:13 130:17 130:23 131:3 131:6 131:10 131:17 132:2 132:12 132:12 132:13 132:14	BDAC [35] 4:25 5:16 6:10 6:25 7:12 7:15 7:22 8:10 14:8 14:11 14:19 15:2 18:8 22:17 23:19 25:9 28:6 29:9 36:22 127:9 145:22 174:2 187:14 188:20 195:13 196:5 212:5 212:7 212:10 212:13 212:21 218:15 223:8 229:21 230:17	benefiting [1] 227:19	
avoiding [1] 165:7	Bay [70] 1:11 2:5 2:11 2:24 3:8 51:9 53:15 65:16 71:17 91:18 125:25 126:7 126:13 126:14 126:18 129:9 129:19 129:22 130:6 130:10 130:13 130:17 130:23 131:3 131:6 131:10 131:17 132:2 132:12 132:12 132:13 132:14	BDAC [35] 4:25 5:16 6:10 6:25 7:12 7:15 7:22 8:10 14:8 14:11 14:19 15:2 18:8 22:17 23:19 25:9 28:6 29:9 36:22 127:9 145:22 174:2 187:14 188:20		

154:6	118:17 128:23 179:12	221:4	canals [1] 156:9	224:20 224:21	95:20 98:1 99:23
bounce [1] 56:5	built [1] 79:10	bullet [11] 58:23	Cannon [15] 195:16	category [7] 16:1	101:19 103:15 104:11
bounds [2] 21:16	58:24 73:18 73:22	111:18 113:16 113:20	195:20 195:21 196:25	86:8 102:7 102:11	106:21 108:23 110:4
96:16	bullet [11] 58:23	118:19 158:10 158:12	202:2 203:5 205:15	120:23 145:4 181:11	111:12 111:14 112:22
box [10] 70:6 144:19	158:15	bullets [2] 74:2	206:1 206:7 207:18	Caucus [1] 170:8	118:1 118:15 119:11
154:13 155:1 155:23	bullet [2] 103:24	103:24	208:13 208:22 209:9	caused [3] 32:7	120:4 120:15 120:20
159:23 163:13 219:11	bunch [1] 165:1	bundle [1] 229:3	217:21 219:5	36:12 126:11	124:6 125:2 125:6
223:3 223:4	bundled [3] 28:17	28:22 29:2	cannot [3] 108:2	causes [10] 19:13	127:11 128:19 130:4
boxes [5] 144:16	28:22 29:2	bundles [6] 62:9	131:12 160:10	85:8 85:12 85:15	132:20 135:8 137:6
154:5 159:20 160:17	bunch [1] 165:1	76:6 78:6 112:5	capabilities [1] 40:14	85:19 85:22 87:24	142:14 144:5 144:8
220:11	bundle [1] 229:3	210:5 211:14	capability [2] 56:6	96:12 96:13 106:5	147:11 150:4 150:18
brain [1] 223:22	bundling [2] 177:24	211:19	165:11	cautious [1] 215:5	151:3 152:11 153:6
BRANSFORD [1] 2:14	burden [1] 188:17	burden [1] 188:17	capacity [23] 33:7	CCMP [1] 131:14	153:17 156:24 159:7
breach [5] 155:25	burdens [1] 228:5	Bureau [2] 2:16	33:8 33:10 33:12	CDP [1] 124:12	161:16 162:13 162:23
157:7 157:14 157:19	business [9] 98:21	196:8	34:4 34:6 34:14	centered [2] 178:9	163:19 164:23 165:21
158:6	186:2 195:24 196:7	196:10 197:2 208:17	34:17 34:23 35:14	213:22	167:7 167:23 168:3
breaching [2] 119:14	196:10 197:2 208:17	222:8 223:12	35:18 39:10 45:2	centers [1] 121:2	168:24 169:19 176:11
161:8	businesses [1] 122:6	bust [1] 55:10	45:13 54:8 55:14	central [13] 15:19	176:12 183:1 183:3
break [12] 112:22	buy-in [1] 190:12	buying [1] 99:9	56:2 118:6 118:12	31:24 35:16 37:2	184:3 184:24 186:13
180:1 180:17 181:20	buying [1] 99:9	by-products [1] 121:9	119:23 122:14 214:16	63:16 73:4 83:13	187:8 187:20 188:4
183:12 184:11 184:18	Cal-Fed [1] 104:18	CalFed [31] 4:17	217:11	84:8 98:14 105:4	188:24 190:4 191:10
187:4 187:15 187:16	7:22 8:8 8:12	12:2 12:7 12:10	capitalized [1] 199:14	109:19 109:21 172:19	191:18 192:9 192:12
188:2 193:5	12:16 12:17 14:6	14:20 16:20 46:14	capture [7] 57:8	cents [1] 165:24	194:1 195:2 204:7
bridge [4] 1:11	63:3 69:12 82:6	87:21 105:1 109:20	57:17 59:3 92:13	certain [22] 14:16	205:20 206:6 207:7
29:14 91:18 143:2	87:21 105:1 109:20	109:21 109:23 144:16	113:24 142:24 160:20	19:14 39:10 55:1	208:10 209:5 209:21
brief [10] 31:7	109:21 109:23 144:16	144:18 145:22 145:23	capturing [2] 14:25	61:12 79:17 81:20	211:20 212:22 216:21
74:3 76:13 176:25	144:18 145:22 145:23	147:10 193:3 193:8	118:8	81:24 87:18 91:20	chairmanship [1] 216:18
188:22 209:25 210:13	193:3 193:8	195:24 223:17 224:6	care [4] 22:19 139:15	93:4 101:8 102:13	chairperson [1] 192:19
213:1 219:16 220:2	California [52] 1:12	1:24 2:2 2:7	152:9 161:18	106:16 116:25 121:4	Chairs [1] 222:23
briefing [2] 22:20	1:24 2:2 2:7	2:10 2:12 2:16	cared [1] 54:6	160:2 160:3 170:17	challenge [7] 83:2
22:22	2:23 3:3 3:13	47:21 108:4 110:22	carefully [1] 205:8	171:6 185:25 212:15	123:4 199:16 200:2
briefings [1] 8:15	127:15 127:18 185:5	127:15 127:18 185:5	Carquinez [1] 143:2	certainly [29] 7:17	200:16 203:15 203:16
briefly [2] 31:21	190:7 190:12 190:18	192:6 192:18 192:18	carry [2] 55:25 215:1	9:16 15:1 37:11	challenges [5] 197:9
164:2	192:22 193:23 195:24	192:6 192:18 192:18	carry [13] 33:7	40:1 41:2 48:17	198:13 199:7 200:13
bring [13] 68:24	196:6 196:7 196:8	196:8 196:10 196:13	33:8 33:10 33:12	54:11 56:22 57:20	201:13
70:20 80:24 82:3	196:6 196:7 196:8	196:8 196:10 196:13	34:14 34:17 34:23	65:23 67:22 69:2	Chamber [3] 2:10
82:5 87:12 167:16	196:8 196:10 196:13	196:15 197:7 197:10	35:14 35:18 39:10	79:18 94:9 101:11	3:16 196:7
169:20 191:5 211:12	196:15 197:7 197:10	199:17 200:18 202:13	55:14 56:2 122:13	105:14 108:8 110:7	chance [7] 9:8
212:5 212:8 230:5	199:17 200:18 202:13	202:16 203:22 213:25	case [12] 54:2 99:2	124:19 134:10 137:14	24:3 24:5 31:15
bringing [2] 90:22	202:16 203:22 213:25	215:22 217:3 217:10	128:20 152:7 176:10	151:8 164:21 166:6	40:23 51:8 190:23
116:6	217:12 226:11 231:1	231:4 231:18 231:23	183:13 199:4 199:6	171:22 180:25 214:5	change [20] 6:15
brings [1] 122:22	California's [1] 122:5	Californians [1] 196:2	204:16 217:13 227:10	218:14	33:10 37:21 37:21
brings [1] 122:22	Californians [1] 196:2	canal [2] 59:10	228:23	certainty [1] 179:25	38:4 40:20 48:18
broad [13] 81:25	canal [2] 59:10	193:22	cases [7] 27:15 51:6	Certified [2] 231:3	51:16 53:21 54:17
84:19 89:20 90:6	California [52] 1:12	1:24 2:2 2:7	108:19 121:17 121:21	231:17	55:2 55:6 56:17
97:20 97:21 198:7	1:24 2:2 2:7	2:10 2:12 2:16	122:24 122:25	certify [1] 231:4	88:6 90:3 154:13
199:1 207:25 208:19	2:10 2:12 2:16	2:23 3:3 3:13	casting [1] 14:17	cetera [7] 62:10	161:13 174:18 174:24
224:25 228:4 228:11	47:21 108:4 110:22	127:15 127:18 185:5	catastrophic [21] 59:1 59:4 59:7	62:16 88:20 88:20	201:20
broaden [2] 81:22	127:15 127:18 185:5	190:7 190:12 190:18	59:20 77:20 114:19	166:22 170:19 172:20	changed [6] 46:11
154:8	190:7 190:12 190:18	192:6 192:18 192:18	155:2 155:3 155:6	Chadwick [2] 141:15	48:3 48:5 61:11
broader [7] 22:16	192:6 192:18 192:18	192:22 193:23 195:24	155:24 156:5 156:6	chain [4] 31:22	121:24 155:22
81:23 94:2 112:15	192:22 193:23 195:24	196:6 196:7 196:8	156:22 157:6 157:7	37:15 97:14 97:17	changcover [1] 56:24
142:10 159:4 190:7	196:6 196:7 196:8	196:8 196:10 196:13	157:13 157:19 158:14	Chair [1] 8:18	changes [9] 47:18
broadest [1] 209:2	196:8 196:10 196:13	196:15 197:7 197:10	158:16 161:8 161:15	Chair's [1] 30:14	53:14 53:19 101:14
broke [1] 193:5	196:15 197:7 197:10	199:17 200:18 202:13	catch [2] 53:23 176:19	Chairman [120] 2:2	125:15 125:19 127:9
broken [6] 85:19	199:17 200:18 202:13	202:16 203:22 213:25	catching [1] 138:23	4:4 22:14 24:8	166:10 166:11
178:19 178:20 179:9	202:16 203:22 213:25	215:22 217:3 217:10	categories [36] 18:2	30:20 31:11 36:18	changing [1] 166:14
185:1 209:13	217:12 226:11 231:1	231:4 231:18 231:23	18:19 18:21 21:9	41:4 44:15 49:13	channel [18] 59:10
brought [11] 13:10	California's [1] 122:5	Californians [1] 196:2	23:13 26:2 28:14	49:21 51:3 52:2	73:6 73:7 88:20
71:1 84:13 93:20	Californians [1] 196:2	canal [2] 59:10	28:14 28:17 28:18	52:19 56:7 57:5	89:18 114:6 115:14
96:12 104:24 111:11	canal [2] 59:10	193:22	28:22 29:2 36:4	58:6 60:12 61:24	118:7 118:7 119:22
121:22 165:24 168:13	California's [1] 122:5	Californians [1] 196:2	60:5 62:24 62:25	63:9 64:10 64:14	159:1 159:18 159:24
178:21	Californians [1] 196:2	canal [2] 59:10	89:20 102:23 121:2	64:17 64:24 65:24	160:11 160:16 160:22
brush [1] 42:22	Californians [1] 196:2	193:22	135:3 177:4 177:18	66:21 67:4 68:17	163:13 163:14
build [5] 82:18 107:18	canal [2] 59:10	193:22	177:22 178:10 178:12	70:22 72:9 72:14	channels [6] 77:1
128:14 212:10 219:23	canal [2] 59:10	193:22	178:18 179:2 179:18	73:15 80:9 81:15	84:11 115:3 115:17
building [5] 104:6	canal [2] 59:10	193:22	210:5 211:14 212:19	83:21 91:12 92:10	156:9 189:10

characterization [1] 45:6	coined [1] 35:6	commitments [1] 90:5	compromises [1] 42:14	151:13 167:5
characterized [1] 122:20	cold [1] 71:16	committed [2] 56:22 119:18	computer-aided [1] 231:10	confront [1] 228:8
charge [2] 103:10 179:1	collaborate [1] 46:3	committee [5] 66:25 192:18 197:16 213:9 213:12	COMPUTERIZED [1] 231:21	confused [2] 31:5 32:15
Chart [1] 17:20	collapse [1] 59:11	committing [1] 148:19	conceded [1] 54:4	confusing [2] 36:16 148:4
charts [1] 180:16	collateral [1] 224:24	common [14] 10:10 63:13 71:8 72:7 84:14 198:24 199:23 199:25 200:23 209:13 211:8 211:11 211:13 224:15	conceive [1] 70:9	confusion [3] 146:21 149:3 173:2
check [1] 6:17	colleague [1] 51:25	commonly [1] 33:22	concentrate [3] 74:22 75:5 113:18	congratulate [1] 170:12
checking [1] 91:9	collegial [1] 61:25	communicate [1] 30:11	concept [14] 32:12 55:22 61:9 65:1 76:3 81:2 82:24 102:9 122:13 164:20 177:25 178:9 203:20 211:7	Congress [6] 21:25 22:7 23:4 26:1 27:6 69:16
chemical [1] 122:14	collide [1] 220:9	communities [2] 165:25 203:20	Conceptually [1] 80:14	Congressional [1] 27:7
chemically [1] 38:16	collision [1] 220:8	community [9] 2:17 66:13 82:4 83:1 146:16 174:25 203:23 204:17 215:13	concepts [5] 30:6 32:19 53:7 123:24 225:1	connecting [1] 225:18
Chesapeake [1] 51:9	Colonel [1] 189:21	companies [1] 203:2	conceptual [2] 135:23 179:12	connection [1] 224:11
chip [1] 188:1	colonization [1] 49:1	compare [1] 19:21	concern [21] 7:23 10:11 10:21 10:25 33:24 35:16 36:9 53:3 54:11 67:6 70:5 107:21 121:16 126:2 146:11 155:25 188:19 194:24 203:22 204:1 204:3	connections [1] 189:11
chocolate [1] 188:1	colonize [1] 38:5	compensatory [2] 34:9 55:23	concerned [12] 10:7 10:13 10:16 34:18 93:9 105:4 108:10 121:14 122:8 150:15 172:7 211:22	connotation [1] 122:22
choice [1] 217:25	colonized [1] 50:13	compensive [1] 53:7	concerns [10] 7:7 8:3 9:5 9:19 11:5 11:6 36:20 42:22 125:23 193:9	conscious [1] 127:23
choices [1] 186:4	Colorado [9] 214:17 214:23 215:1 217:4 217:9 217:11 217:13 218:2 218:4	compete [3] 38:13 38:22 72:4	consequently [1] 79:5	consciously [1] 127:20
chose [3] 112:10 112:17 146:22	column [1] 47:9	competet [1] 214:5	conservation [1] 203:1	consensus [10] 71:8 97:4 125:10 127:9 128:24 129:1 147:10 169:18 209:2 209:3
Christmas [1] 27:7	combination [5] 32:20 124:22 148:17 206:12 207:15	competing [1] 48:11	consider [5] 21:17 38:20 50:14 73:9 133:18	consequences [4] 43:11 56:1 67:7 185:25
circle [3] 26:6 26:7 27:8	combine [3] 17:13 17:16 179:4	competition [7] 36:22 42:1 42:23 43:5 43:8 43:20 67:7	considerable [3] 36:2 56:15 215:17	consequently [1] 79:5
circles [2] 27:20 80:16	combined [2] 31:23 206:16	competitor [1] 48:12	consideration [1] 119:20	consequently [1] 79:5
cited [1] 16:20	combine [3] 17:13 17:16 179:4	compilation [1] 177:4	considerations [2] 118:18 126:23	consequently [1] 79:5
cities [1] 208:16	comfort [2] 104:2 172:7	complete [4] 23:2 96:24 223:14 223:18	concluded [3] 16:11 138:5 180:2	consequently [1] 79:5
clam [9] 47:7 47:13 48:20 48:21 49:7 56:4 61:13 61:17 97:15	comfortable [10] 20:25 23:23 55:18 55:19 137:9 138:4 145:22 168:22 171:25 192:4	completed [2] 16:25 210:18	concludes [1] 230:10	consequently [1] 79:5
clams [3] 47:13 48:25 97:14	coming [11] 51:11 54:10 62:18 99:8 127:13 165:13 168:5 190:25 192:7 207:14 229:14	completes [1] 117:20	concluding [1] 17:22	consequently [1] 79:5
Clara [1] 208:12	comma [1] 161:25	complex [5] 49:25 50:6 115:6 170:14 205:6	conclusion [2] 106:14 196:20	consequently [1] 79:5
clarification [2] 120:6 132:9	comment [28] 4:21 4:23 7:6 7:10 43:21 57:7 60:14 61:20 66:23 68:18 72:20 98:11 103:17 138:3 169:24 188:22 192:25 194:6 194:24 195:5 203:4 207:18 216:22 227:23 228:11 228:19 230:7 230:11	compliance [2] 12:12 12:12	conclude [3] 11:21 16:15 154:7	consequently [1] 79:5
clarifying [1] 167:10	comments [20] 6:20 7:23 7:25 18:21 62:3 98:3 127:8 162:25 167:16 176:10 183:2 183:4 188:13 192:16 194:15 201:15 203:5 204:4 206:3 222:22	complicated [3] 12:4 25:7 170:14	conclude [3] 11:21 16:15 154:7	consequently [1] 79:5
clarity [2] 173:11 174:19	coming [11] 51:11 54:10 62:18 99:8 127:13 165:13 168:5 190:25 192:7 207:14 229:14	complimentary [1] 26:19	conclude [3] 11:21 16:15 154:7	consequently [1] 79:5
Clean [1] 205:23	comment [28] 4:21 4:23 7:6 7:10 43:21 57:7 60:14 61:20 66:23 68:18 72:20 98:11 103:17 138:3 169:24 188:22 192:25 194:6 194:24 195:5 203:4 207:18 216:22 227:23 228:11 228:19 230:7 230:11	component [6] 15:14 21:15 66:11 203:13 208:25 209:10	conclude [3] 11:21 16:15 154:7	consequently [1] 79:5
clear [18] 20:7 25:25 37:18 62:16 69:3 69:5 69:6 71:16 75:21 111:23 126:3 126:5 126:21 127:1 132:22 143:25 160:5 161:9	comments [20] 6:20 7:23 7:25 18:21 62:3 98:3 127:8 162:25 167:16 176:10 183:2 183:4 188:13 192:16 194:15 201:15 203:5 204:4 206:3 222:22	components [7] 58:10 99:21 99:22 99:24 116:16 207:24 216:24	conclude [3] 11:21 16:15 154:7	consequently [1] 79:5
clearer [3] 132:24 164:12 205:15	Commerce [3] 2:10 3:16 196:7	composition [1] 38:4	conclude [3] 11:21 16:15 154:7	consequently [1] 79:5
clearly [4] 14:20 63:21 107:17 205:5	Commission [3] 2:3 3:2 202:14	comprehensive [10] 13:3 13:4 25:2 115:16 161:23 162:19 163:24 169:2 169:8 222:4	conclude [3] 11:21 16:15 154:7	consequently [1] 79:5
climate [1] 94:16	commitment [2] 202:3 204:25	compromised [1] 60:19	conclude [3] 11:21 16:15 154:7	consequently [1] 79:5
close [5] 81:20 157:22 168:2 187:21 225:12			conclude [3] 11:21 16:15 154:7	consequently [1] 79:5
closed [1] 189:25			conclude [3] 11:21 16:15 154:7	consequently [1] 79:5
closely [4] 27:10 107:2 126:11 201:23			conclude [3] 11:21 16:15 154:7	consequently [1] 79:5
closer [2] 82:4 225:3			conclude [3] 11:21 16:15 154:7	consequently [1] 79:5
cluster [1] 64:4			conclude [3] 11:21 16:15 154:7	consequently [1] 79:5
co-Chairs [1] 222:23			conclude [3] 11:21 16:15 154:7	consequently [1] 79:5
Coast [1] 2:19			conclude [3] 11:21 16:15 154:7	consequently [1] 79:5
code [1] 177:12			conclude [3] 11:21 16:15 154:7	consequently [1] 79:5
coefficient [1] 40:21			conclude [3] 11:21 16:15 154:7	consequently [1] 79:5
cognizant [1] 70:12			conclude [3] 11:21 16:15 154:7	consequently [1] 79:5

construct [3] 198:17 201:8 207:21	conversation [4] 52:23 58:2 176:3 178:6	223:22	dangerous [1] 12:24	108:3 109:11
constructed [1] 152:4	conversations [2] 214:15 215:2	course [7] 12:15 92:7 93:22 147:2 200:2 200:16 220:8	Daniel [35] 11:23 30:19 30:24 31:20 38:1 39:24 43:21 45:5 45:15 46:20 47:12 48:17 49:23 51:23 52:4 54:22 55:22 57:25 60:24 64:22 65:1 65:23 67:21 68:10 69:24 70:21 120:23 120:25 124:18 125:1 140:9 149:18 177:21 191:8 191:11	deciding [2] 39:22 73:12
construction [1] 115:8	Conversely [1] 203:25	court [3] 31:14 153:12 208:12	darn [1] 44:6	decision [7] 82:23 106:10 127:23 135:1 141:20 152:7 208:12
consultant [1] 52:1	conveyance [3] 40:22 93:2 217:8	cover [6] 50:11 73:14 112:24 113:9 120:23 138:17	data [6] 80:18 81:5 81:8 81:10 136:18 136:23	decisions [11] 65:6 65:10 81:11 82:22 103:12 109:8 142:2 142:2 186:11 205:12 229:6
consultants [2] 101:25 102:3	convinced [1] 205:16	coverage [2] 190:7 190:14	date [3] 6:17 49:6 187:14	declaring [1] 126:16
consumers [1] 171:3	cookie [1] 188:2	covered [3] 4:24 97:13 156:18	dated [1] 125:13	decline [8] 32:1 32:3 32:7 35:21 44:25 60:17 98:19 99:1
consumption [1] 98:16	cooperative [1] 41:5	creates [9] 13:19 35:9 50:23 67:18 78:11 78:22 93:13 166:12 227:12	David [7] 2:16 150:5 161:16 168:11 169:11 169:13 211:21 168:22	declined [2] 36:2 189:3
consumptive [1] 182:9	coordinated [1] 12:13	creation [2] 32:9 49:18	David's [2] 164:3	declines [1] 85:24
cont'd [1] 3:1	coordinates [1] 12:10	creative [4] 201:18 201:19 224:2 224:4	days [8] 148:20 148:21 193:22 210:17 210:23 211:3 211:23 212:8	declining [1] 98:13
contact [1] 213:12	coordinating [2] 222:5 222:7	creating [3] 36:12 78:24 117:13	deadline [2] 198:3 229:15	decrease [1] 60:16
contacts [2] 200:20 222:1	coordination [1] 228:17	creates [4] 13:12 123:3 202:19 227:9	deal [40] 9:12 12:12 12:23 32:6 35:25 36:6 44:4 52:16 62:24 65:22 70:2 70:9 70:11 70:17 83:14 85:23 88:2 119:13 121:10 123:11 123:24 124:4 124:23 142:13 160:6 170:15 175:23 209:20 211:8 214:23 215:18 215:19 216:2 216:12 216:17 216:19 217:2	dedicated [1] 108:1
contain [2] 6:2 68:21	cope [2] 55:1 98:19	critically [1] 201:9	dealing [14] 50:24 84:20 85:10 87:17 88:19 101:18 105:2 105:16 170:13 179:22 180:7 180:9 181:11 211:12	deeply [1] 147:17
contains [1] 137:12	copies [5] 6:5 6:8 29:25 223:9 224:18	critter [1] 33:2	deals [2] 92:18 210:21	defeatist [1] 43:16
contentiousness [1] 200:7	copious [1] 180:18	critters [2] 32:24 130:17	dealt [2] 170:10 172:24	Defense [2] 3:10 3:11
context [2] 114:3 226:17	copper [1] 126:14	crop [4] 37:4 37:5 37:6 121:17	dear [1] 38:9	definability [1] 200:3
contingency [2] 115:17 115:20	copy [5] 11:13 144:24 145:2 213:18 220:22	croppie [1] 50:9	debate [5] 80:22 104:4 165:17 179:24 180:22	define [11] 10:24 46:3 56:13 60:18 66:5 85:7 138:22 153:24 157:10 167:4 199:23
continually [1] 104:23	corner [1] 127:16	cross [1] 89:18	debating [1] 153:25	defined [5] 103:9 103:14 163:8 200:11 200:12
continue [7] 54:18 113:15 122:6 172:24 189:19 194:25 212:23	corners [2] 193:6 193:7	cross-section [1] 14:11	December [16] 7:13 12:9 17:14 17:14 28:5 28:6 28:8 28:25 63:2 64:1 137:2 198:5 209:22 210:3 229:10 230:13	defines [1] 163:3
continued [1] 126:2	Corps [1] 189:19	crossed [1] 227:17	deals [2] 92:18 210:21	defining [6] 63:7 108:21 181:23 200:7 200:24 203:15
continuing [1] 98:19	correct [12] 6:18 6:21 29:19 59:20 73:25 91:3 136:11 155:20 155:21 171:20 231:11 231:12	CSR [2] 1:20 231:24	dealt [2] 170:10 172:24	definitely [2] 64:1 192:5
continuity [2] 189:9 189:16	correctly [2] 138:2 174:6	curious [1] 60:22	dear [1] 38:9	definition [20] 15:5 17:21 84:6 103:21 129:1 130:10 130:24 132:2 132:23 133:6 138:22 142:12 148:9 148:9 149:10 149:11 149:17 153:15 153:21 173:3
Contra [1] 2:6	cost [10] 44:11 63:18 66:17 115:4 145:14 186:8 202:15 204:18 209:7 209:17	current [4] 11:22 176:21 194:2 214:22	debate [5] 80:22 104:4 165:17 179:24 180:22	definitive [3] 66:5 81:5 81:10
contracted [2] 197:6 199:11	Costa [4] 2:6 185:4 192:24 193:12	cut [4] 60:4 88:1 110:17 111:6	debating [1] 153:25	definitively [1] 128:17
contracts [4] 25:21 199:11 199:13 199:19	costs [3] 202:18 203:21 209:7	cuts [1] 96:18	December [16] 7:13 12:9 17:14 17:14 28:5 28:6 28:8 28:25 63:2 64:1 137:2 198:5 209:22 210:3 229:10 230:13	degradation [1] 148:7
contractual [1] 198:21	Council [16] 1:4 2:1 2:6 3:1 3:10 4:8 7:6 20:20 21:5 62:23 65:20 75:17 76:5 86:3 184:6 184:21	cutting [2] 86:7 87:5	dealt [2] 170:10 172:24	degraded [1] 32:2
contrary [1] 104:14	count [1] 38:25	CVP [1] 94:1	dear [1] 38:9	degree [2] 39:16 214:14
contribute [3] 46:18 58:16 178:13	counties [1] 145:17	cycle [3] 78:20 96:7 143:22	debate [5] 80:22 104:4 165:17 179:24 180:22	delayed [1] 86:19
contributes [1] 45:12	country [1] 56:22	cycles [1] 140:3	debating [1] 153:25	delete [1] 156:21
contributing [1] 229:2	county [13] 3:7 10:12 128:7 213:9 213:14 214:1 214:3 215:4 215:9 215:21 215:23 231:2 231:18	Dam [1] 90:13	decide [5] 72:22 109:3 109:9 109:13 139:1	deliberate [1] 194:18
contribution [2] 175:17 175:17	couple [14] 17:6 23:13 41:6 57:15 104:1 124:23 162:25 195:7 201:15 213:22 214:6 220:1 221:1	dams [1] 72:3	decided [3] 17:13	deliberately [1] 50:13
control [11] 35:3 37:4 39:15 68:6 69:17 70:8 93:21 118:11 126:12 175:3 175:6	counties [1] 145:17			deliberations [1] 185:12
controlled [2] 34:8 55:7	country [1] 56:22			delineation [1] 103:21
Controllers [1] 222:18	county [13] 3:7 10:12 128:7 213:9 213:14 214:1 214:3 215:4 215:9 215:21 215:23 231:2 231:18			deliver [3] 22:6 215:3 218:4
controlling [2] 67:8 189:8	couple [14] 17:6 23:13 41:6 57:15 104:1 124:23 162:25 195:7 201:15 213:22 214:6 220:1 221:1			
controls [1] 33:13				
controversial [1] 12:5				
convened [1] 62:18				
convenient [1] 7:17				

delivered [1] 217:12	denominator [1] 84:14	163:24 169:8 211:9	39:3 96:19 121:10	204:21
deliveries [1] 199:24	Department [1] 69:9	developed [14] 77:5	133:22 190:1 200:18	discuss [5] 4:11
delivery [1] 198:21	departmental [1] 107:16	79:1 102:2 102:22	201:12 209:3 217:23	84:4 179:23 187:15
Delta [155] 2:9	depend [1] 111:4	105:10 108:20 113:19	difficulty [3] 30:16	187:16
3:2 15:19 16:8	dependent [1] 76:20	113:22 113:25 115:9	200:21 215:10	discussed [10] 36:21
16:12 16:16 24:2	depending [3] 180:10	177:11 177:16 192:2	digress [1] 22:15	78:2 97:12 99:25
25:15 32:1 32:5	DEPOSITION [2] 1:23 231:22	210:20	diminish [2] 147:3	146:3 174:2 195:11
33:25 35:16 37:14	depth [1] 63:2	developing [12] 15:6	180:15	215:25 221:10 229:25
40:7 40:11 40:15	derived [1] 46:22	18:23 19:10 26:25	direct [10] 14:6	discussing [6] 58:16
40:18 42:8 44:4	describe [6] 31:22	78:5 79:24 102:5	77:23 119:25 121:7	68:20 86:11 87:1
47:19 47:23 48:1	33:12 57:9 177:19	102:8 116:4 116:14	125:17 138:16 139:15	174:22 222:11
50:5 52:14 53:15	182:4 182:15	178:1 186:17	164:13 217:4 224:24	discussion [52] 17:12
55:5 59:1 59:4	described [9] 32:11	development [4] 177:17 183:25 205:9	direction [6] 110:23	18:9 20:16 23:16
61:11 68:3 72:25	33:19 102:10 106:8	210:1	167:19 174:19 208:2	24:5 25:22 26:2
73:4 73:13 75:10	178:18 179:3 179:20	develops [1] 218:9	221:19 225:23	26:4 30:12 41:14
76:24 77:1 77:3	182:24 230:2	devise [2] 20:4	directions [2] 164:21	58:5 58:8 58:15
78:11 78:15 78:18	description [6] 154:2	66:18	184:10	63:22 68:18 69:22
78:23 79:3 79:7	168:8 177:13 189:2	diagram [6] 40:3	directly [8] 68:19	69:25 72:22 83:13
79:13 80:4 84:2	220:2 224:8	59:3 61:23 129:14	75:25 126:10 138:10	95:10 100:2 100:6
84:4 84:6 84:10	descriptions [3] 30:3 168:6 177:10	156:12 211:10	139:9 139:11 201:11	106:25 125:9 125:11
84:19 85:1 85:16	design [4] 46:7	diagrams [1] 27:20	227:21	126:20 126:24 132:9
85:24 86:11 89:9	82:8 201:10 201:11	dialogue [1] 27:25	Director [81] 2:4	136:8 145:18 147:8
92:14 92:15 92:19	Designated [2] 3:5	Diamond [1] 2:15	4:17 8:17 21:8	148:14 153:19 154:6
92:21 92:24 93:1	3:6	dichotomy [1] 183:21	22:5 23:17 25:8	165:23 166:17 166:20
93:8 93:12 93:24	designed [2] 16:20	Dick [26] 11:23	28:1 28:4 29:24	167:6 171:13 173:23
94:3 96:3 98:15	49:19	30:18 30:20 31:11	57:6 59:15 63:10	174:11 176:15 179:16
98:22 99:12 102:13	desirability [1] 122:17	42:2 44:22 49:17	63:24 64:12 64:20	180:21 184:5 188:14
102:16 105:6 105:11	desirable [3] 38:18	49:22 64:25 68:19	65:25 72:12 72:18	197:12 198:8 210:4
105:17 105:22 105:23	40:13 46:12	70:19 72:14 73:17	81:16 89:1 90:25	221:17 222:9 229:6
106:17 107:4 111:2	desire [1] 142:16	81:13 82:1 97:12	91:3 91:8 101:21	discussions [12] 11:23 25:13 87:6
114:6 114:17 114:18	despite [1] 161:20	120:23 137:21 137:22	103:6 112:9 120:22	137:19 145:6 168:6
114:20 114:20 114:22	detail [27] 9:9	141:8 148:13 177:1	125:4 125:8 127:22	174:5 181:2 184:16
114:23 115:3 115:17	13:24 15:12 15:22	177:19 183:5 183:18	128:11 129:12 130:11	186:22 193:3 213:22
116:16 116:25 121:3	15:23 16:23 31:3	191:10	130:18 130:25 131:23	disintegration [2] 150:21 150:25
121:7 121:14 121:22	74:14 76:5 81:14	Dick's [3] 58:18	132:15 132:19 133:8	disparity [2] 76:18
122:9 122:15 122:17	85:20 86:1 86:2	66:23 140:6	133:15 134:19 135:5	106:6
123:9 124:9 126:12	87:12 89:14 89:22	dictionary [2] 32:23	135:13 137:18 138:20	displace [1] 37:5
126:22 126:24 127:25	90:7 90:18 94:8	153:15	143:14 144:6 144:10	displaced [1] 48:22
128:2 133:4 133:12	99:25 103:22 103:23	Diego [10] 128:7	148:11 149:14 151:24	displacing [1] 43:13
134:5 139:9 140:13	114:1 135:22 174:14	212:24 213:14 213:15	152:21 153:4 154:10	disposal [1] 124:24
140:15 141:2 142:20	216:13 222:11	214:1 214:3 215:4	154:16 154:25 155:12	disruption [3] 59:9
142:24 149:24 149:24	detailed [10] 59:16	215:21 215:22 218:24	156:16 157:1 158:8	155:4 156:6
152:23 154:8 154:21	89:13 113:22 131:9	difference [6] 45:12	159:21 162:5 162:19	dissimilar [1] 178:6
154:23 155:4 155:7	156:18 176:3 211:18	57:11 57:16 139:19	167:21 168:1 168:4	distance [2] 117:14
155:7 155:8 155:25	220:1 222:13 224:8	140:5 206:20	169:1 169:17 176:24	117:15
156:4 156:7 156:15	details [1] 90:20	differences [4] 139:19	187:1 188:3 195:9	distinct [2] 140:5
157:4 157:6 158:13	deteriorated [1] 130:6	139:20 171:10 226:24	209:24 210:10 212:4	194:10
158:17 158:23 158:25	determination [1] 143:8	different [47] 9:8	212:14 218:14 218:25	distinction [1] 131:23
159:25 161:3 161:8	determine [5] 93:22	13:1 13:6 26:9	229:19 230:15	distinctly [1] 139:6
163:11 163:12 163:14	105:21 150:12 209:15	27:14 31:3 31:6	Directors [2] 213:8	distinguish [1] 191:12
168:20 173:3 173:4	227:19	33:4 33:5 33:5	215:6	distorted [1] 15:18
173:7 173:9 173:9	determined [1] 209:18	40:25 41:1 41:2	disadvantage [2] 46:11 50:1	distributed [1] 223:5
174:8 175:19 180:4	determining [2] 80:18	58:13 61:13 89:2	disadvantaged [2] 38:9 38:20	distribution [1] 198:8
182:6 182:8 182:11	129:10	99:21 102:13 110:22	disadvantaging [1] 54:6	district [17] 2:14
189:1 189:3 202:17	detrimental [1] 134:7	111:10 132:4 134:8	disagreeing [1] 133:9	3:9 3:12 3:15
202:20	devastate [1] 13:13	134:8 139:6 139:13	disagreement [4] 108:6 108:7 108:8	160:3 189:14 204:12
delve [1] 147:17	develop [13] 10:14	141:5 144:25 168:15	167:11	206:19 206:21 206:24
demand [34] 75:6	64:1 81:7 85:7	168:21 170:16 178:23	disappearing [1] 73:6	206:24 212:25 213:8
77:14 100:1 100:3	98:20 101:9 109:21	181:20 184:10 191:3	disaster [1] 156:23	213:25 214:18 214:20
100:11 100:15 100:19	112:5 117:4 117:6	194:10 199:1 207:21	discharge [1] 131:11	215:20
100:20 102:8 102:11		224:22 225:2 225:6	discharged [1] 121:25	districts [2] 197:18
102:12 102:14 102:16		225:7 225:8 227:13	disclosed [1] 48:19	207:6
102:20 104:15 104:17			discomfort [1] 146:6	diverse [2] 163:5
105:8 105:20 105:20			discovered [2] 50:19	171:5
106:4 106:6 106:16				diversion [8] 26:12
107:5 107:6 110:6				38:12 90:13 96:8
110:14 110:17 110:18				
110:25 111:8 126:25				
174:7 184:11 184:15				
demands [6] 79:22				
80:1 101:1 105:24				
106:8 217:14				

112:13 143:7 226:7	86:5 177:5 197:23	ecological [17] 43:10	139:16 165:11 165:16	enhancement [1]
226:18	210:20 219:1 220:3	71:10 146:10 146:20	effort [15]	117:10
diversions [7] 19:16	223:4 229:8 229:22	147:20 147:22 147:23	14:22 16:25 17:25	enhancing [1] 167:10
19:16 26:18 45:11	drafted [1] 197:12	149:24 150:1 162:17	21:17 22:17 25:24	enjoyed [1] 181:16
81:21 134:25 179:18	dragline [1] 189:16	162:18 162:20 163:25	31:5 82:2 107:22	enormous [8] 39:19
diverting [1] 111:2	drainage [3] 124:12	164:12 165:10 169:2	131:15 132:6 195:14	44:8 53:14 53:19
doable [1] 68:6	124:24 196:13	173:18	196:6 219:4	54:17 180:21 188:17
doctor [1] 187:23	dramatic [2] 60:2	ecologically [2]	efforts [5]	204:16
document [11] 8:3	112:17	42:10 149:21	67:23 70:1 124:1	ensuing [1] 26:4
15:8 30:10 49:6	dramatically [1]	economic [12] 2:5	195:18	ensure [1] 171:4
49:9 63:4 103:25	61:12	76:19 101:25 122:5	eight [3] 178:21 178:24	ensuring [1] 172:22
104:9 156:3 177:5	drastically [1] 189:3	155:17 185:22 186:1	183:15	enter [1] 95:9
177:6	draw [6] 58:9 59:17	196:2 197:15 215:10	EIR [1] 93:22	entering [1] 98:15
documentation [5]	142:8 146:22 168:2	220:13 220:17	EIR/EIS [1] 15:8	entertain [1] 36:17
15:11 15:11 16:20	171:16	economically [1]	either [15]	entire [5] 48:13
88:11 184:19	drawing [2] 131:24	32:5	24:25 38:9 38:24	70:15 117:15 133:19
documented [1] 106:19	137:8	economics [2] 195:12	83:2 92:22 93:3	158:7
documents [2] 58:13	drawn [1] 128:8	219:12	95:7 98:18 105:24	entirely [2] 38:1
80:23	dredge [1] 160:11	economist [1] 203:14	107:2 117:24 140:14	99:12
doesn't [21] 11:1	drink [5] 121:7	economy [2] 13:13	180:8 207:1	entities [4] 12:3
11:1 13:18 13:19	121:11 122:25 123:2	215:9	either/or [1] 207:14	213:17 217:3 217:10
25:19 29:22 41:23	123:22	ecosystem [62] 10:22	elected [1] 22:19	entitlement [1] 214:22
53:25 54:19 57:1	drop [1] 161:15	26:6 26:8 26:10	electricity [1] 202:24	entity [2] 215:20
66:9 66:20 73:10	dropped [1] 25:20	26:22 30:18 31:20	element [3] 33:12	215:21
92:20 108:5 164:7	drought [2] 12:22	31:24 32:11 34:1	116:21 117:7	entrainment [2] 26:11
168:17 185:23 189:7	105:13	35:17 41:1 47:19	elements [7] 13:22	179:18
206:25 221:13	drove [1] 140:20	51:20 55:5 65:3	32:21 111:10 116:13	entreaty [1] 190:6
dollars [5] 40:1	dry [1] 99:15	66:6 71:10 71:14	116:18 116:23 117:2	environment [11]
66:14 145:14 204:19	due [3] 98:15 117:19	81:23 90:2 92:8	eliminate [2] 139:12	40:9 47:1 52:17
224:10	198:2	112:6 115:12 116:10	179:2	55:3 55:14 108:22
domestic [1] 202:17	dump [1] 9:20	120:1 122:13 124:2	eloquent [1] 171:9	109:15 109:17 148:19
dominant [1] 47:7	DUNNING [10]	130:6 130:22 147:1	embarking [1] 93:22	175:2 194:21
domino [1] 114:13	2:24 49:16 151:5	147:18 148:20 148:21	emerged [1] 184:16	environmental [22]
DON [1] 2:14	152:12 153:5 210:8	148:23 149:4 149:5	Emeryville [2] 1:12	3:11 12:13 15:8
done [29]	210:12 226:6 226:17	149:6 149:17 149:21	4:9	15:10 15:11 16:19
10:5 16:11 24:17	226:22	150:1 155:1 155:18	emphasis [1] 174:3	66:13 107:9 107:23
24:17 24:18 44:19	durable [2] 145:5	157:12 159:2 159:17	emphasize [1] 175:5	107:24 108:1 108:5
55:12 55:15 68:7	151:13	163:3 166:22 170:25	enable [1] 218:3	108:11 108:12 109:24
69:7 88:22 101:2	during [12] 33:5	171:2 171:4 171:6	encourage [5] 181:8	111:1 123:13 123:18
102:16 106:17 109:15	114:20 123:22 124:10	173:6 173:12 173:14	185:8 190:13 207:15	123:23 146:16 170:8
130:1 176:14 180:16	135:21 136:16 180:17	173:24 174:25 175:4	227:14	191:24
187:14 188:16 189:16	181:21 189:11 197:21	175:8 175:22 176:7	encouraged [1] 8:6	environmentally [1]
197:5 199:3 208:4	198:4 200:16	179:10	encouraging [1]	32:5
208:8 214:6 216:8	dwelt [1] 86:10	edge [2] 139:3 152:6	215:17	envision [2] 25:4
224:11	dwelling [1] 74:9	Edison [1] 3:14	end [23] 4:22 6:14	212:3
double [2] 132:5	dysfunctioning [1]	editorial [1] 153:13	15:14 15:17 16:9	envisioning [1] 129:13
132:6	154:23	educate [2] 65:22	16:15 16:19 19:13	EPA [1] 65:16
doubt [1] 191:18	early [10] 24:12	204:17	21:23 23:3 83:5	equal [1] 203:21
down [39]	24:20 47:10 69:8	educated [1] 204:13	84:10 98:7 103:3	equation [5] 45:7
15:1 30:7 34:16	150:20 198:5 198:5	education [2] 89:9	145:1 201:11 206:12	53:20 56:4 102:25
37:14 42:7 42:16	201:25 207:17 220:22	204:21	208:5 209:20 215:18	186:3
70:15 71:15 73:23	earth [3] 34:14 34:18	educational [2] 32:17	222:11 224:5 225:14	equipped [1] 191:14
80:17 84:13 85:19	53:13	73:17	endangered [15] 26:21	equitable [6] 75:23
86:7 88:1 90:3	earthquake [2] 65:8	effect [10] 48:15	35:21 38:25 44:5	145:5 151:12 167:4
94:4 96:19 98:6	65:9	56:11 61:16 69:14	51:7 54:9 78:9	168:9 219:11
98:16 99:10 99:14	esier [1] 209:20	114:13 118:11 133:25	78:19 111:18 111:21	eradication [1] 70:7
114:25 124:14 124:15	East [4] 1:24 3:8	180:7 180:9 202:25	112:7 112:10 112:12	Eric [2] 2:6 147:11
133:22 153:23 159:10	204:16 231:22	effective [8] 63:19	115:22 140:15	erosion [1] 114:14
165:4 179:19 189:6	Eastern [1] 15:19	68:13 77:18 104:25	ended [3] 112:14	ESA [4] 12:12 85:15
189:22 190:14 210:22	easy [3] 27:11 89:3	105:13 134:24 165:17	125:22 146:5	85:16 160:5
212:21 217:7 221:19	185:11	193:25	ends [1] 18:22	especially [9] 53:8
223:25 231:6	eating [1] 34:25	effectively [3] 42:18	energy [1] 202:25	75:8 154:19 173:17
downside [1] 187:24	echo [1] 190:6	78:12 78:25	engaged [2] 29:8	196:2 200:22 201:13
downstream [3] 137:8	ecobabble [2] 10:23	effects [1] 179:18	109:24	203:19 208:23
171:24 172:8	32:12	efficiency [2] 109:9	enhance [1] 134:10	essence [1] 57:8
downtown [1] 4:9		109:13		essential [1] 184:14
draft [13] 17:24		efficient [10] 40:21		
68:19 69:22 69:25		47:16 80:3 93:3		
		105:17 107:12 139:10		

essentially [8] 115:11 126:4 197:12 198:18 199:12 207:23 219:17 224:24	227:23	175:9 175:24 176:1 189:5 189:8	71:3 71:4	Farallons [1] 133:2
establish [1] 182:19	examples [7] 51:9 78:4 111:24 112:4 113:19 178:10 180:5	expand [3] 154:12 206:21 223:21	extinctions [1] 54:18	farm [3] 2:16 38:15 196:8
established [3] 84:11 126:10 213:9	exceed [1] 34:6	expanded [1] 94:5	extremely [2] 104:20 194:11	farmer [2] 43:4 152:22
establishment [1] 34:9	exceeds [1] 214:25	expansion [1] 87:14	eye [1] 187:23	farmers [3] 2:18 108:17 215:23
estimate [1] 47:11	excellent [2] 168:5 186:23	expect [6] 15:13 39:16 101:7 222:19 228:22 229:4	face [2] 18:20 42:13	farming [1] 215:12
Estuarian [4] 119:18 137:12 143:4 172:2	except [4] 48:3 55:24 86:25 143:1	expectation [1] 136:12	faced [1] 62:8	farmland [1] 114:7
estuary [24] 12:8 37:8 37:10 37:24 45:9 47:7 48:9 48:14 48:20 51:14 51:20 62:18 71:14 76:19 118:24 119:3 119:19 120:9 130:9 192:3 216:23 217:5 217:6 217:14	exception [2] 45:22 152:16	expectations [2] 15:24 15:25	facilitate [1] 123:16	Farms [1] 215:14
Estuary's [1] 76:15	excess [4] 142:24 142:24 214:16 217:11	expecting [1] 27:21	facilitator's [1] 183:18	fashion [5] 12:14 20:6 29:2 75:23 130:3
et [7] 62:10 62:15 88:20 88:20 166:22 170:19 172:20	excise [1] 226:15	expensive [4] 10:9 27:9 67:16 121:10	facilitators [1] 180:19	fashions [1] 195:11
Eurasian [3] 43:12 67:14 68:8	exclude [1] 127:20	experience [2] 21:24 204:12	facilities [3] 40:11 78:21 215:3	faster [3] 53:22 205:1 219:23
evaluate [6] 19:20 46:4 87:24 179:24 220:12 220:15	excluded [1] 67:15	experiences [1] 151:20	facility [8] 10:1 40:22 74:25 90:14 121:23 180:13 217:9 217:25	fate [1] 38:1
evaluated [1] 97:10	exclusive [1] 214:1	experiencing [1] 150:8	fact [40] 9:13 16:3 47:20 54:3 54:17 59:16 60:3 70:18 82:1 87:16 88:1 88:8 89:8 92:14 97:22 98:13 107:25 111:8 117:3 119:17 121:3 124:10 124:14 126:1 128:6 129:9 138:2 144:4 154:1 156:12 171:1 172:18 173:9 176:6 177:7 185:9 191:13 202:22 222:22 227:18	fault [2] 73:2 73:7
evaluating [1] 46:8	exclusively [2] 49:19 49:23	experiment [2] 45:23 46:7	factor [5] 36:5 80:4 134:20 174:24 186:10	favor [2] 185:24 207:12
evening [1] 17:8	excuse [4] 16:13 188:8 194:5 206:8	expert [2] 68:1 68:15	fact [40] 9:13 16:3 47:20 54:3 54:17 59:16 60:3 70:18 82:1 87:16 88:1 88:8 89:8 92:14 97:22 98:13 107:25 111:8 117:3 119:17 121:3 124:10 124:14 126:1 128:6 129:9 138:2 144:4 154:1 156:12 171:1 172:18 173:9 176:6 177:7 185:9 191:13 202:22 222:22 227:18	fax [2] 223:7 223:7
events [3] 31:22 161:15 172:20	executed [1] 213:17	exploration [1] 228:21	factor [5] 36:5 80:4 134:20 174:24 186:10	feared [1] 150:18
eventually [4] 34:18 90:17 91:2 220:3	Executive [81] 2:4 4:17 8:17 21:8 22:5 23:17 25:8 28:1 28:4 29:24 57:6 59:15 63:10 63:24 64:12 64:20 65:25 72:12 72:18 81:16 89:1 90:25 91:3 91:8 101:21 103:6 112:9 120:22 125:4 125:8 127:22 128:11 129:12 130:11 130:18 130:25 131:23 132:15 132:19 133:8 133:15 134:19 135:5 135:13 137:18 138:20 143:14 144:6 144:10 148:11 149:14 151:24 152:21 153:4 154:10 154:16 154:25 155:12 156:16 157:1 158:8 159:21 162:5 162:19 167:21 168:1 168:4 169:1 169:17 176:24 187:1 188:3 195:9 209:24 210:10 212:4 212:14 218:14 218:25 229:19 230:15	explain [4] 112:18 137:9 139:18 212:15	factor [5] 36:5 80:4 134:20 174:24 186:10	fears [2] 7:7 215:7
everybody [5] 20:12 168:18 191:7 202:16 225:9	exercised [1] 144:10	explicit [3] 154:3 172:17 209:19	factor [5] 36:5 80:4 134:20 174:24 186:10	feasibility [4] 190:10 190:12 205:22 228:21
everybody's [2] 62:3 186:8	exercise [2] 64:6 212:11	explore [2] 190:13 213:10	factor [5] 36:5 80:4 134:20 174:24 186:10	feasible [4] 24:12 67:16 205:25 206:2
evidence [2] 107:17 130:5	exhaustive [1] 180:24	explored [1] 228:21	factor [5] 36:5 80:4 134:20 174:24 186:10	feature [1] 19:5
evolution [1] 54:25	exist [1] 130:17	exploring [1] 76:3	factor [5] 36:5 80:4 134:20 174:24 186:10	February [1] 7:14
exacerbate [1] 134:10	existed [1] 166:1	export [11] 40:6 47:20 47:21 48:4 80:2 87:18 102:16 105:16 105:22 174:4 217:5	factor [5] 36:5 80:4 134:20 174:24 186:10	fecund [1] 34:1
exacerbated [1] 115:6	existence [1] 71:23	exported [3] 121:15 180:4 218:2	factor [5] 36:5 80:4 134:20 174:24 186:10	Federal [11] 3:5 12:2 21:7 21:17 24:25 74:20 87:17 105:4 115:7 201:17 205:24
exact [5] 107:11 130:19 177:6 212:10 216:9	existing [8] 24:19 35:19 73:13 121:23 122:23 136:17 136:18 229:24	exports [5] 42:16 67:20 99:6 123:25 140:14	factor [5] 36:5 80:4 134:20 174:24 186:10	Federation [2] 2:16 2:19
exactly [10] 32:16 63:5 84:18 119:24 140:11 146:13 164:9 185:4 208:2 227:19	exists [1] 145:23	express [2] 7:7 126:2	factor [5] 36:5 80:4 134:20 174:24 186:10	fee [4] 200:5 200:8 201:4 203:24
examine [3] 74:13 106:13 135:4	exotic [21] 37:3 37:14 37:18 39:14 42:6 44:1 67:7 67:9 67:17 70:17 137:14 174:23 174:24 175:3 175:6 175:8	expressed [3] 53:4 67:5 213:16	factor [5] 36:5 80:4 134:20 174:24 186:10	feed [4] 47:10 50:3 52:8 52:15
examining [1] 136:22	exists [1] 145:23	expressing [1] 90:10	factor [5] 36:5 80:4 134:20 174:24 186:10	feedback [4] 9:1 9:12 74:18 74:19
example [32] 15:23 16:13 35:22 55:16 67:9 78:13 78:24 85:10 97:9 99:9 108:24 116:1 116:5 116:8 117:20 120:3 122:11 123:22 126:14 130:17 134:3 140:4 140:10 142:20 151:15 177:11 179:15 179:24 192:1 202:24 206:15	exists [1] 145:23	expressions [1] 216:3	factor [5] 36:5 80:4 134:20 174:24 186:10	feeder [1] 48:20

figure [3] 44:7 87:5 129:15	217:2 219:17 223:3 227:8 227:17 229:22	129:8 129:21 131:18 143:20 171:24 175:19 189:12	forth [6] 84:1 84:4 84:12 85:18 136:3 147:15	193:19
fill [3] 82:12 90:8 191:2	fish [37] 11:2 19:14 33:1 35:15 37:13 37:14 38:24 40:23 44:3 44:13 47:10 48:10 48:15 49:10 49:21 52:6 52:15 62:14 69:9 70:15 71:14 71:15 72:3 79:5 99:6 99:10 116:20 140:10 140:14 140:16 140:23 141:1 179:24 180:3 180:6 180:6 182:23	fluctuations [1] 76:16	forum [4] 2:5 58:3 197:16 229:5	frogs [1] 43:13
filter [6] 47:16 48:20 48:24 49:1 49:7 175:13	fisheries [7] 33:22 71:21 71:22 71:23 80:2 134:16 140:7	flush [5] 104:9 115:2 129:9 166:23 223:20	forward [14] 9:14 10:4 10:18 11:6 12:9 12:17 20:14 25:18 131:20 150:23 169:14 177:18 214:24 215:18	front [10] 6:1 11:13 12:25 13:18 23:5 74:16 190:11 223:10 224:5 224:19
final [7] 27:2 43:21 120:22 174:21 189:21 201:15 208:4	fisheries' [1] 43:25	flushed [1] 97:10	found [13] 29:6 31:1 104:25 168:14 170:5 179:3 179:4 179:5 181:25 182:3 182:14 199:7 204:25	fruitful [1] 176:15
finalized [1] 23:9	Fishermen's [2] 2:20 2:21	flying [1] 7:17	foundation [3] 76:8 89:9 221:5	frustrating [1] 187:12
finally [5] 7:12 93:17 201:15 201:22 223:18	fishery's [1] 79:15	focus [25] 14:8 26:5 26:17 27:3 27:10 27:12 30:9 35:23 58:10 74:25 75:8 109:20 109:21 168:10 174:4 197:13 197:21 197:22 197:24 197:24 198:4 199:6 203:23 204:3 206:10	four [25] 18:2 18:5 23:12 77:12 86:19 86:23 131:14 143:11 143:12 145:4 154:5 176:18 178:23 181:20 187:13 189:20 193:6 193:7 197:2 197:13 197:15 213:4 218:21 220:16 229:14	frustration [1] 90:10
finance [15] 195:12 196:17 197:5 197:14 198:7 198:9 198:13 198:16 199:14 199:20 201:6 203:8 209:11 219:12 222:19	Fishes [3] 49:25 50:8	focused [3] 10:11 147:8 178:4	fourteen [2] 179:8	full [6] 74:4 96:11 214:21 217:4 231:11
financed [2] 199:25 200:14	fit [8] 16:7 24:15 29:3 70:6 90:14 103:14 212:9 212:16	focuses [1] 158:22	fourth [3] 115:4 163:13 227:7	full-time [1] 186:19
financial [27] 13:25 185:14 185:19 186:6 197:8 204:25 205:8 214:10 217:22 217:24 218:5 218:13 219:2 219:16 219:18 219:20 219:22 220:4 220:13 220:18 221:2 221:4 221:15 222:10 223:12 225:23 227:12	fits [4] 102:7 102:21 182:21 219:9	focusing [1] 147:2	fun [1] 70:21	function [12] 12:15 14:20 48:25 79:19 79:25 80:3 92:15 94:23 119:19 120:16 140:18 161:3
financially [1] 66:19	fitting [2] 19:9 21:7	folder [1] 16:4	functioning [1] 171:1	functions [20] 12:8 85:7 115:13 137:13 147:20 149:23 149:24 150:3 154:9 154:21 158:23 158:25 159:18 161:14 163:11 171:5 172:2 173:18 175:23 176:8
financing [24] 195:14 195:19 196:12 196:21 196:23 197:8 197:9 199:5 199:8 201:9 201:12 202:10 206:12 206:22 207:22 208:1 208:20 209:14 209:19 218:16 220:4 225:19 227:11 228:12	five [12] 12:2 12:2 16:13 17:8 62:14 86:23 93:13 94:20 95:24 131:15 148:20 151:11	folders [3] 6:1 6:2 6:5	fund [1] 3:11	fundamental [4] 53:4 66:2 66:11 82:23
finding [5] 9:16 80:15 90:10 202:4 213:3	fix [12] 10:13 10:25 13:1 42:8 66:5 89:17 102:18 134:9 157:10 157:11 157:13 157:19	Foley [5] 3:12 205:21 207:2 214:4 216:20	fundamentally [5] 18:25 87:2 89:13 90:8 210:25	fund [10] 115:17 115:19 181:15 205:13 206:3 207:15 207:24 224:9 225:16 225:19
findings [4] 181:18 197:23 198:1 198:2	fixing [1] 25:15	folks [3] 60:18 62:23 205:1	Francisco [21] 1:11 2:11 51:14 110:10 110:11 126:7 129:9 129:22 130:6 130:9 130:12 131:3 131:9 132:2 142:9 142:16 143:3 143:9 143:23 145:17 192:3	funds [4] 50:17 201:14 201:17 205:23
finds [1] 33:2	flag [1] 22:14	follow [1] 162:12	Frank [1] 217:21	future [14] 10:15 25:23 26:1 88:4 105:24 165:6 165:13 168:6 171:13 172:23 174:19 178:1 198:14 229:23
fine [5] 86:7 161:3 185:17 188:24 224:6	flexibility [4] 77:16 78:12 78:24 106:17	follow-up [3] 24:10 48:7 198:4	framework [5] 18:25 87:2 89:13 90:8 210:25	gain [1] 206:13
finish [1] 229:15	flood [4] 59:24 115:20 118:6 118:11	following [6] 4:1 61:20 113:4 130:19 156:19 195:16	Frankly [4] 68:10 106:24 178:15 181:15	gained [1] 108:1
finished [2] 21:23 21:25	flooded [2] 44:13 114:12	font [1] 220:24	Fred [8] 195:16 206:9 209:6 219:5 224:14 224:21 227:23 228:19	game [3] 49:21 69:9 101:17
finite [1] 85:25	flooded [2] 44:13 114:12	food [13] 33:16 36:10 37:15 48:12 48:13 49:4 49:11 56:4 97:14 97:17 130:16 130:16 175:17	Fred's [1] 221:10	gander [1] 62:7
Firebaugh [1] 3:4	fixing [1] 25:15	foot [2] 110:3 203:21	free [1] 74:13	gap [1] 29:14
firms [1] 217:2	flag [1] 22:14	forego [1] 68:2	freeze [1] 150:14	gaps [1] 191:1
first [44] 7:14 15:4 17:10 29:16 29:22 29:25 54:6 64:3 73:21 76:8 98:4 98:12 100:8 100:13 104:19 109:3 111:17 118:20 125:23 142:17 144:14 163:1 168:4 170:3 170:11 177:3 177:12 179:1 179:11 195:23 198:6 198:20 203:6 204:11 207:19 207:19 208:5 210:19	flexibility [4] 77:16 78:12 78:24 106:17	foregoing [1] 231:10	frequently [3] 9:22 121:9 226:11	Garland [1] 7:13
	flood [4] 59:24 115:20 118:6 118:11	foresee [1] 22:3	fresh [14] 17:5 51:17 76:15 91:17 120:9 126:6 126:17 129:16 129:18 130:8 130:21 134:16 137:24 143:9	Gary [2] 170:2 170:7
	flooded [2] 44:13 114:12	forget [3] 119:7 119:8 169:15	Friday [1] 191:25	gas [1] 226:11
	flooded [2] 44:13 114:12	forgetting [1] 119:10	friend [2] 51:25 68:1	gasoline [1] 200:1
	flooded [2] 44:13 114:12	forgive [1] 107:10	friends [2] 73:3	Gate [5] 2:21 91:18 131:8 133:2 134:17
	flooded [2] 44:13 114:12	forgotten [1] 107:10		gather [1] 118:3
	flooded [2] 44:13 114:12	form [9] 6:20 7:11 32:2 48:5 67:1 80:24 86:5 209:1 226:19		gathers [1] 20:15
	flooded [2] 44:13 114:12	formally [2] 13:8 22:20		gee [2] 137:18 156:19
	flooded [2] 44:13 114:12	format [7] 87:13 90:23 104:24 170:17 193:2 193:24 194:25		general [31] 4:23 6:7 50:25 60:14 61:20 74:15 75:11
	flooded [2] 44:13 114:12	former [1] 132:16		
	flooded [2] 44:13 114:12	forming [3] 19:3 19:19 28:23		
	flooded [2] 44:13 114:12	forms [1] 61:13		
	flooded [2] 44:13 114:12	Fort [1] 215:16		

86:14	89:12	102:20	94:16	95:4	95:8	179:17	78:10	80:12	80:19	head [1]	149:19
123:1	135:21	167:13	106:25	108:21	120:2	groups [23]	81:23	84:21	84:21	headed [4]	8:24
173:14	174:5	198:15	122:2	122:20	122:24	9:4	84:23	111:21	112:8	11:21	96:19
200:4	200:9	200:13	123:2	128:18	133:13	12:10	114:8	115:23	116:12	heads [1]	192:19
200:14	200:15	200:17	141:8	142:21	147:10	62:18	116:17	116:20	116:22	headway [3]	69:11
201:7	201:14	202:12	152:15	152:17	152:19	181:19	116:25	117:1	117:2	69:12	107:6
203:13	219:13	224:25	157:25	158:1	164:23	187:4	117:4	117:6	117:10	health [30]	112:7
225:9	227:22	228:4	170:13	170:20	183:9	197:13	119:6	120:13	122:14	120:1	122:5
generalized [1]	89:25		183:10	183:22	183:22	197:22	129:19	138:1	138:15	131:6	146:10
generally [3]	199:25		183:24	184:1	188:6	199:6	140:22	140:23	141:3	146:18	146:20
201:6	204:2		188:13	189:23	190:11	213:13	143:4	159:2	173:7	146:25	147:22
generated [1]	181:19		198:24	198:25	200:23	grow [6]	173:9	173:19	180:9	149:11	150:1
generates [1]	121:9		200:25	209:8	209:13	37:1	189:1	189:3		153:23	153:24
generic [2]	95:11		209:13	221:13	223:16	37:4	habitats [11]			157:12	162:17
95:15			229:10			121:17	31:25			162:20	163:25
genetic [1]	34:5		goods [13]	198:18		growing [2]	32:2	32:3	35:19	169:3	175:2
gentleman [1]	187:6		198:20	199:2	199:10	65:9	35:24	40:13	44:9	176:7	196:2
Gentlemen [1]	4:5		199:23	199:25	200:13	grows [1]	79:10	147:19	148:18	healthier [1]	149:5
geographic [12]	106:25		200:14	201:6	202:13	guarantees [5]	148:25			healthy [16]	38:22
107:4	125:7	125:9	224:15	224:15	224:16	25:17	half [6]	37:2	37:13	71:21	71:22
125:10	125:13	129:4	goodwill [1]	216:9		84:1	111:7	138:13	147:3	134:16	143:20
135:11	136:7	171:14	goose [1]	62:6		84:1	183:16			148:23	149:6
171:21	173:1		Government [2]			guarded [2]	44:18	44:21	45:7	149:17	149:21
geographical [1]			142:3	205:24		9:13	46:13	47:3	48:6	164:11	165:10
132:23			grade [1]	31:23		9:16	49:12	68:18	70:19	hear [4]	51:19
given [17]	14:11		gradient [2]	139:20		guess [29]	106:22	107:14	108:25	185:10	218:16
33:19	34:11	37:17	139:23			22:5	125:14	127:5	128:6	heard [8]	34:25
46:22	55:24	62:12	gradients [1]	140:4		27:6	135:25	137:16	138:5	86:23	122:1
62:20	105:17	109:1	Graff [8]	3:11		72:13	138:12	144:14	145:21	153:19	170:22
121:17	145:17	197:9	21:3	21:20	22:12	106:22	155:12	158:2	161:6	222:7	
200:20	201:13	202:22	127:13	128:9	213:1	132:8	162:18	170:9	192:13	hearing [1]	136:9
231:13			216:22			156:24	208:22	208:24	213:23	heartburn [1]	167:19
giving [3]	172:23		grains [2]	179:25		161:13	218:15			heartland [1]	185:4
220:22	231:8		180:3			167:24	218:15			held [3]	5:15
glad [3]	127:7	223:10	grants [1]	201:17		194:4	218:15			192:24	55:13
226:2			grasp [1]	95:8		hand [3]	hand-in-hand [1]			hell [1]	165:17
Glenn-Colusa [1]			grasped [1]	92:25		145:20	145:20			help [34]	5:8
2:14			gravel [1]	134:25		145:20	145:20			11:1	14:16
glitch [1]	88:6		great [12]	9:12		145:20	145:20			25:21	32:18
global [2]	176:6		42:10	52:25	209:20	145:20	145:20			52:16	63:4
176:7			215:7	215:9	216:11	145:20	145:20			88:7	88:13
globalized [1]	174:6		216:12	216:17	216:19	145:20	145:20			94:22	94:25
glossary [1]	63:12		222:24	229:13		145:20	145:20			112:25	117:11
goal [3]	71:9	90:2	greater [9]	45:2		145:20	145:20			137:21	153:25
170:24			50:7	50:10	87:13	145:20	145:20			190:16	190:19
goals [5]	15:6	71:8	119:2	172:23	203:11	145:20	145:20			192:5	192:7
71:11	72:7	183:25	204:25	217:13		145:20	145:20			207:4	210:3
goes [12]	20:1	37:14	greatest [2]	76:2		145:20	145:20			215:9	225:22
66:22	68:19	71:16	182:7			145:20	145:20			helped [1]	181:4
85:4	94:2	105:7	greatly [1]	199:20		145:20	145:20			helpful [7]	24:11
134:17	154:20	207:13	green [4]	84:23		145:20	145:20			24:20	25:3
214:23			131:5	131:8	139:3	145:20	145:20			72:17	153:19
Golden [4]	2:21		grips [1]	34:19		145:20	145:20			helping [1]	222:20
91:18	131:8	133:2	GROSS [1]	29:20		145:20	145:20			helps [2]	31:7
gone [11]	17:23		ground [6]	37:1		145:20	145:20			hereby [2]	230:12
40:20	41:9	51:13	89:6	162:2	182:17	145:20	145:20			231:4	
53:19	58:19	111:16	182:19	182:21		145:20	145:20			Hatch [1]	110:12
120:25	163:2	163:8	groundwork [1]	71:11		145:20	145:20			Hetchy [1]	110:12
189:15			group [20]	84:15		145:20	145:20			hide [4]	50:1
good [68]	4:4		97:1	134:6	167:17	145:20	145:20			52:8	52:15
5:3	24:12	25:8	178:24	180:2	180:18	145:20	145:20			hierarchies [1]	29:12
31:17	44:6	44:13	183:14	183:14	192:20	145:20	145:20			hierarchy [1]	28:12
46:9	52:13	52:23	197:6	197:24	197:25	145:20	145:20			high [10]	27:15
58:9	62:6	62:7	198:4	200:6	209:12	145:20	145:20			101:5	103:23
63:19	72:14	72:16	212:18	222:19	225:14	145:20	145:20			115:5	125:10
80:15	81:19	82:9	225:15			145:20	145:20			140:19	189:11
84:23	84:24	86:13	groupings [5]	28:15		145:20	145:20			higher [3]	55:14
88:23	90:6	94:13	178:12	178:21	178:25	145:20	145:20				

61:2 142:3 highlight [3] 25:10 146:1 146:7 highlighted [3] 125:18 125:21 129:4 highly [4] 95:6 186:20 194:11 194:16 highway [1] 200:1 HILDEBRAND [17] 2:9 36:20 39:13 41:21 41:25 44:12 67:5 68:5 98:3 124:7 124:24 150:7 150:24 152:16 152:25 188:9 188:25 Hilton [1] 7:16 historically [1] 199:10 history [2] 46:10 146:25 hit [3] 28:12 30:15 149:18 hits [1] 228:24 hold [2] 38:8 108:11 holder [3] 118:24 119:19 120:16 holders [2] 119:1 119:10 holding [1] 108:13 holiday [3] 1:11 7:2 17:16 home [3] 35:1 104:7 180:25 hook [1] 194:14 hope [20] 9:12 9:17 15:17 28:7 28:25 32:13 75:17 81:9 94:4 110:22 137:1 198:3 201:8 207:22 208:13 220:21 220:21 220:23 223:19 228:12 hoped [1] 207:10 hopefully [4] 9:11 16:15 101:4 201:25 hopes [1] 7:7 hoping [1] 147:9 horizons [1] 77:13 hour [7] 4:6 52:22 52:24 113:8 187:15 187:16 231:6 hours [3] 86:19 104:3 174:22 house [2] 35:1 67:11 housekeeping [2] 5:23 8:10 HOWARD [1] 3:14 huge [1] 205:5 huh [1] 161:12 human [8] 34:13 53:12 54:5 55:25 56:14 56:23 71:3 171:2 humans [2] 53:20 71:6 humorous [1] 51:24	hundred [5] 71:19 71:23 94:19 191:14 204:19 hundreds [2] 104:3 216:1 hyacinth [3] 67:24 69:17 70:8 hyacinths [4] 43:12 67:14 68:4 68:6 hydraulic [5] 24:1 118:5 118:11 118:18 189:9 hydrilla [1] 69:17 hydrologic [2] 76:16 140:2 hydrological [1] 96:7 hydrology [1] 119:22 i.e [1] 224:9 Ice [1] 71:15 idea [10] 26:23 43:23 46:9 55:23 148:8 169:5 170:23 171:18 181:10 222:3 ideas [3] 24:13 50:23 183:25 identifiability [1] 225:3 identifiable [1] 33:18 identification [4] 19:10 27:21 137:11 138:19 identified [24] 20:9 51:14 66:25 70:3 76:10 77:23 78:7 79:8 79:21 85:9 85:15 85:15 111:25 114:4 114:10 114:16 115:4 116:9 129:18 133:12 172:22 173:5 173:8 211:13 identify [13] 13:20 26:24 27:14 27:15 30:21 31:16 85:22 94:18 94:22 101:4 136:17 225:4 228:24 identifying [2] 25:24 85:8 ignore [2] 124:17 141:2 ignored [2] 107:20 108:2 IID [5] 213:11 213:16 215:6 215:17 216:9 illegal [1] 189:18 illuminated [1] 184:15 illustrate [3] 41:7 98:24 116:5 illustrated [1] 40:3 image [1] 20:4 imagine [1] 217:10 imagined [1] 166:2 imagining [1] 166:3 immediate [1] 24:3 immediately [4] 59:24 117:8 117:16	168:12 impact [15] 13:11 56:14 56:23 95:24 97:14 151:18 152:8 152:9 152:23 157:13 160:17 175:14 186:1 189:5 208:11 impacts [27] 13:20 18:12 19:20 42:9 57:2 76:16 85:17 94:11 106:10 136:24 145:8 145:9 151:14 151:21 151:23 152:13 165:25 166:7 166:10 166:12 166:15 166:24 167:5 167:8 175:9 185:20 220:17 Imperial [4] 212:24 213:8 213:9 215:19 impinge [1] 54:19 implement [9] 14:1 20:10 21:15 21:18 66:19 169:8 169:15 169:16 221:12 implementable [1] 145:5 implemental [1] 151:12 implementation [2] 204:23 204:24 implemented [3] 106:11 164:6 190:9 implementing [1] 115:15 implication [3] 131:1 217:18 221:11 implications [5] 208:20 214:10 217:19 218:5 218:5 implicit [1] 142:22 implied [4] 41:11 49:17 96:22 228:25 implies [2] 166:8 166:9 imply [1] 39:20 implying [1] 207:22 importance [1] 119:5 important [60] 5:13 6:21 11:19 11:25 14:8 15:3 18:3 22:14 26:4 30:9 30:11 32:5 38:21 40:2 53:2 53:5 54:20 66:16 70:24 71:1 71:13 81:1 87:25 89:24 90:9 92:19 98:8 104:20 107:19 119:20 122:5 124:9 128:21 134:20 144:20 144:23 145:19 161:19 161:21 162:8 163:2 169:16 173:10 176:4 177:17 182:4 182:13 191:11 197:3 200:22 201:9 202:10 209:16 210:14 214:9 217:22 222:5 224:13 228:11 229:23 importantly [2] 30:5	46:23 imported [1] 50:13 imposed [1] 105:18 imposes [1] 208:20 impossible [1] 209:11 impoverishing [1] 151:19 impressed [1] 186:16 impression [2] 22:6 24:14 impressive [1] 188:14 improperly [1] 230:2 improve [21] 56:2 68:25 84:21 111:20 121:11 122:18 123:21 147:3 147:19 147:20 148:17 148:25 162:1 162:20 164:15 165:6 165:12 169:3 175:1 177:8 199:24 improved [6] 44:9 78:8 127:9 147:24 148:22 174:19 improvement [9] 37:20 58:15 128:25 148:6 148:6 164:17 165:14 170:24 172:11 improvements [7] 40:8 42:3 122:7 124:20 129:5 173:15 199:2 improving [8] 37:16 37:17 115:5 148:18 168:18 173:18 176:8 196:14 in-Delta [1] 80:2 in-depth [1] 136:2 inaccurate [2] 53:10 56:12 inadequate [1] 96:5 inadequately [1] 179:3 inch [1] 138:13 include [12] 21:10 60:20 92:5 105:19 111:9 116:25 127:2 138:5 138:18 154:12 205:9 205:10 included [6] 6:7 110:24 129:10 137:10 172:1 177:14 includes [3] 127:15 173:4 174:7 including [5] 62:18 111:10 132:11 141:9 141:11 inclusion [1] 87:6 inclusive [1] 124:8 incomplete [1] 177:7 incorporate [3] 116:16 117:1 204:5 incorporating [2] 116:12 116:22 increase [8] 53:21 78:10 78:14 106:17 114:17 118:20 172:6	182:10 increased [2] 76:14 91:17 increases [2] 114:14 175:15 increasing [2] 98:15 175:7 incredibly [1] 131:9 incrementally [1] 128:23 incurring [1] 204:24 indeed [3] 53:14 57:22 185:24 independently [1] 45:19 indicate [4] 17:6 128:6 153:13 168:17 indicated [4] 146:16 152:4 171:15 217:16 indicates [1] 37:9 indicating [11] 42:23 76:13 87:3 91:20 96:23 104:10 156:15 167:22 177:3 214:6 214:8 indicators [1] 65:17 individual [4] 7:5 26:16 33:6 230:8 individually [1] 201:4 individuals [2] 198:22 200:11 induce [1] 114:22 induced [1] 103:11 industrial [3] 34:15 57:15 121:21 industries [3] 122:4 142:5 142:6 inefficiencies [1] 82:14 inefficient [2] 27:9 93:4 inequity [1] 204:1 inevitably [1] 57:1 infamous [1] 220:11 inflow [9] 92:15 92:16 93:9 94:3 98:12 99:11 124:10 124:12 175:20 inflows [3] 79:13 98:22 135:18 inform [1] 205:11 information [21] 5:21 6:4 6:6 20:22 22:21 46:17 80:24 83:19 83:25 86:4 87:4 88:16 89:4 93:20 97:10 97:18 101:3 141:5 192:21 193:15 223:16 informative [1] 187:5 informed [1] 194:23 informs [1] 173:18 infrastructure [13] 155:1 155:18 195:15 196:13 197:8 197:10
---	--	--	---	--

198:12 198:14 198:16	184:8 216:25	islands [27]	59:5	6:2 104:20 128:22	kind [100]	8:22
198:19 199:15 199:17	interestingly [2]	59:12 59:21 73:6	155:19 170:9 195:7	10:12 10:21 11:2		
206:21	159:8 204:20	73:7 75:10 114:7	197:12	11:8 12:18 13:9		
inhibitor [1]	52:25	114:9 114:15 114:17	iterate [3]	13:14 14:12 15:12		
initial [6]	19:7	114:20 118:23 119:5	98:10 150:17	15:22 16:22 17:4		
96:18 135:24 136:16	68:23 107:9 107:16	119:8 119:10 119:13		19:24 20:17 21:22		
198:1 198:2	215:15	120:7 120:8 120:11	iterated [1]	22:2 24:21 26:5		
Inn [2]	7:2	142:25 155:7 155:9	iterative [7]	27:14 28:12 28:14		
innate [1]	56:6	155:17 156:9 157:7	20:3 83:2 83:8	28:16 29:8 33:16		
innovative [1]	224:1	159:14 161:11	98:5 150:11 174:16	45:21 46:9 50:11		
input [11]	6:20	isohaline [1]	itself [9]	53:6 57:18 57:24		
14:5 17:4 106:4	154:23	isolated [5]	14:11 53:15	53:6 57:18 57:24		
177:8 181:4 181:17	intersection [3]	74:25 90:13 119:8	92:20 92:21 132:12	60:25 62:8 62:19		
181:24 183:20 198:4	27:20	181:21	145:19 161:22 188:20	63:3 63:4 63:5		
202:1	58:10 80:16	issue [76]	214:13	63:5 64:4 64:12		
inputs [1]	interstate [1]	13:10 15:13 18:13	IZMIRIAN [8]	67:11 73:17 74:2		
insight [2]	216:6	18:18 20:11 22:13	66:22 111:17 112:6	78:4 78:13 79:24		
180:22	intervention [1]	22:19 22:20 23:5	112:20 137:7 138:18	80:5 80:24 81:22		
insofar [2]	189:21	26:5 53:2 57:9	141:7	82:7 82:24 83:16		
53:8	intrinsic [2]	66:3 66:17 73:1	Jack [6]	90:5 90:17 96:13		
installation [1]	142:12	78:18 82:4 85:23	3:12 16:10	97:21 99:17 101:17		
instance [5]	introduce [1]	86:24 89:9 92:19	205:20 206:18 214:4	102:7 109:12 112:14		
108:25 116:15 139:22	213:5	94:3 94:7 100:23	216:17	113:24 114:13 116:5		
175:12	introduced [8]	101:11 101:14 101:18	jail [1]	116:23 127:5 134:1		
instead [2]	42:1	102:20 112:17 112:18	January [1]	134:2 135:14 135:18		
211:10	45:10 68:22 68:24	118:4 118:5 119:23		135:19 138:4 139:2		
Institute [4]	69:4 69:25 72:4	126:17 126:19 129:20	Joaquin [11]	145:20 146:15 149:7		
65:16 138:3 170:7	83:19	129:24 130:3 131:19	79:4 98:25 99:11	151:17 160:7 168:10		
institutional [2]	introduces [1]	133:21 133:22 134:21	124:10 124:12 124:13	168:22 177:3 177:17		
21:11 203:10	168:21	135:3 135:10 138:15	231:18	179:15 181:24 182:13		
institutionally [1]	introducing [2]	138:21 139:16 139:23	job [6]	184:19 184:20 188:5		
66:19	30:6	141:23 143:16 146:2	10:5 72:15	198:21 200:4 202:11		
institutions [1]	introduction [2]	146:22 161:11 165:24	170:13 170:20 181:23	205:18 212:1 213:12		
instruments [1]	68:11 125:21	170:14 170:21 172:25	188:13	219:1 219:1 219:2		
insufficient [2]	introductions [1]	173:25 174:23 175:5	joint [1]	219:3 228:7 229:11		
121:7	175:8	185:7 187:15 187:16	196:6	kinds [12]		
130:8	introductory [2]	190:7 195:12 196:1	judgment [3]	24:6 26:9 36:12		
intact [2]	173:22 174:12	200:12 200:23 202:12	46:21 136:14	65:10 112:4 116:18		
73:13	intrusion [4]	203:6 203:12 203:18	judgments [2]	127:2 131:17 140:2		
163:2	114:18	203:24 206:5 210:2	102:1	181:2 215:2		
integrate [4]	123:17	issues [62]	Judith [4]	kingdom [1]		
13:8 13:20 24:6	intuitive [1]	9:14 9:18 10:19	13:9 165:21 168:5	70:10		
integrated [9]	28:13	11:2 11:24 12:5	Judy [2]	knowing [1]		
115:15	intuitively [1]	12:5 12:13 13:7	191:16 191:21	104:3		
118:2 118:3 173:23	29:13	14:16 14:25 18:3	jump [2]	knowledge [3]		
174:13 174:15 201:9	inundation [9]	20:9 20:13 21:11	30:15 100:24	46:16		
201:11 201:24	59:4	22:7 22:25 24:6	jumped [1]	191:5 216:19		
integrating [1]	59:8 154:22 155:6	26:3 28:9 45:23	80:11	known [1]		
18:21	155:16 156:22 157:7	51:10 51:15 57:17	junk [1]	63:21		
integrity [2]	159:14 161:11	83:1 89:21 89:22	49:25	knows [3]		
163:12	invaders [1]	101:23 112:11 118:12	justifiably [1]	143:1		
intend [4]	40:24	124:23 126:14 129:19	170:16	labyrinth [1]		
126:16 129:6 223:15	49:1	130:12 131:2 131:11	juvenile [3]	216:5		
intended [4]	invasions [1]	131:17 133:4 134:24	40:15	lack [3]		
126:1	176:1	137:25 138:7 140:7	keep [16]	130:21 200:5		
153:14 155:15 158:4	inventory [1]	141:11 141:16 141:20	22:25 23:5 35:5	218:22		
intent [2]	219:2	142:4 142:7 142:11	60:9 73:12 75:2	lacking [1]		
127:2	investigation [1]	148:15 172:18 173:13	75:18 88:10 143:3	40:13		
156:19	143:17	179:23 180:12 186:19	143:20 163:2 171:17	Ladies [1]		
intention [2]	investments [1]	186:21 197:4 197:20	190:10 217:4 223:16	4:4		
128:22	198:19	198:6 199:6 205:16	keeping [5]	laid [5]		
interaction [2]	198:19	218:16	6:25	51:21 74:16		
160:1	involvement [4]	itch [1]	8:22 8:22 128:23	85:4 100:16 139:7		
interactions [1]	6:14 25:11 213:6	122:11	214:21	Lake [2]		
160:13	215:17	item [19]	keeps [1]	70:16 197:17		
interest [9]	involved [11]	4:18 4:21	34:22	59:21 75:10		
101:5	13:5	6:3 7:5 8:7	KELLY [1]	116:17 117:7 117:12		
195:15 200:4 202:3	14:18 69:18 99:22	23:18 24:3 87:16	191:22	117:18 117:19 124:22		
213:16 216:3 216:11	122:21 168:13 186:23	96:23 111:15 113:10	kept [1]	124:25 142:1 142:2		
216:17 218:22	193:13 195:18 213:24	113:10 125:5 176:16	143:22	155:17 159:1		
interested [7]	222:19	176:17 176:21 195:5	Kern [1]	landscaping [1]		
5:6	involved [11]	195:11 212:24	3:7	109:12		
63:8 141:10 164:16	13:5	items [11]	key [16]	language [8]		
192:21 205:1 213:13	14:18 69:18 99:22	4:23 5:6 5:23	51:16 51:18	126:4		
interesting [3]	122:21 168:13 186:23		55:10 65:3 65:13	138:10 139:15 146:23		
119:12	193:13 195:18 213:24		76:17 77:12 106:16	154:8 158:9 165:8		
	222:19		114:17 114:19 139:8	large [13]		
	involvement [4]		203:13 203:24 207:23	9:4		
	6:14 25:11 213:6		209:10 221:3	28:15 48:2 50:8		
	215:17		kid [1]	61:3 67:10 76:11		
	involved [11]		56:25	170:20 184:20 208:23		
	13:5		kidding [1]	214:24 214:24 216:2		
	14:18 69:18 99:22		128:19	largely [1]		
	122:21 168:13 186:23		kill [1]	18:17		
	193:13 195:18 213:24		162:16			
	222:19					

larger [4] 40:6	LELAND [1] 2:23	90:17 102:14 142:3	139:11 155:19 180:13	211:9 212:16 221:14
59:8 133:11 133:13	lengths [1] 39:19	225:2 225:8 228:18	linking [5] 25:16	221:15 230:1
largest [1] 214:13	lengthy [1] 114:2	228:25	155:8 220:4 227:14	looked [6] 51:10
last [40] 13:9 17:11	lenses [1] 225:8	liable [1] 136:13	228:17	95:25 205:22 206:17
17:12 18:8 18:18	less [15] 47:24 47:25	library [1] 104:7	list [31] 15:6 17:22	226:13 228:20
18:18 25:14 26:14	47:25 53:17 67:16	license [1] 208:18	18:20 85:12 94:24	looking [43] 6:10
27:13 32:13 44:1	73:17 81:25 118:25	life [7] 33:6 34:12	95:1 96:11 102:23	7:3 12:19 19:18
47:3 48:8 58:3	123:6 123:17 147:14	38:6 47:10 61:11	104:17 111:24 153:8	28:17 40:16 50:25
60:17 62:6 67:25	150:16 150:19 159:14	78:20 144:4	179:19 185:2 189:5	51:1 64:4 76:9
69:8 72:19 87:23	194:17	light [3] 141:14 141:16	189:7 192:2 192:3	80:11 88:3 91:19
104:1 125:8 125:24	lessened [1] 175:18	176:7	219:18 221:20 221:24	92:12 93:5 94:10
138:11 145:4 145:18	Lester [59] 2:4	lighter [1] 220:24	222:2 222:3 222:10	101:5 101:25 103:3
155:23 176:16 177:6	4:16 5:18 7:16	liked [1] 164:18	222:24 223:4 223:5	106:7 117:25 121:11
177:8 178:3 181:6	8:14 20:19 20:22	likely [3] 25:1	223:21 223:21 225:13	127:9 131:16 135:16
185:13 187:24 189:15	30:25 32:10 40:3	204:14 208:25	225:25 226:7	135:18 136:2 143:19
193:2 195:5 195:13	57:5 58:7 58:22	limit [8] 10:14 10:15	listened [1] 187:4	146:17 146:17 159:25
197:1 219:15	61:8 61:23 63:9	36:25 112:12 122:15	listening [2] 14:13	176:6 178:15 179:5
lasting [1] 12:20	64:15 64:19 65:24	122:15 131:18 199:20	62:2	181:24 185:15 197:20
lasts [1] 13:1	71:1 72:10 75:1	limitation [2] 39:22	listing [1] 160:20	198:9 200:4 201:16
late [3] 58:3 137:2	81:15 97:21 100:24	111:19	lists [6] 29:8 96:14	201:19 208:3 227:9
197:1	106:8 111:15 120:21	limitations [1] 62:20	189:4 190:23 190:23	looks [1] 185:14
launch [1] 218:17	125:3 128:19 128:24	limited [11] 24:16	191:25	loop [1] 23:1
laundry [5] 219:18	130:5 132:8 139:8	33:11 39:18 39:21	literally [3] 54:1	loose [1] 194:12
221:20 222:24 223:5	142:10 143:6 147:13	39:25 40:1 50:18	191:19 220:10	loosely [1] 219:12
225:25	151:5 154:7 163:11	50:18 105:6 154:21	live [5] 32:25 52:7	Los [2] 3:16 7:15
laws [1] 54:9	164:25 167:9 167:15	183:13	52:17 110:10 185:7	lose [1] 117:5
lay [3] 44:24 71:10	170:12 171:9 171:22	limiting [8] 33:21	local [9] 115:6 142:1	losing [1] 72:25
207:20	183:17 185:1 186:25	44:10 46:3 49:11	142:3 193:4 204:12	loss [8] 35:9 51:16
leaches [1] 160:12	187:25 194:3 195:3	59:14 83:10 111:18	206:16 206:24 206:24	59:21 59:21 114:8
lead [4] 15:10 75:9	212:3 212:23 216:18	154:19	207:6	114:11 114:25 115:1
81:10 114:12	218:12 219:7 221:25	limits [1] 33:18	locally [1] 105:10	lost [5] 26:14 59:24
leading [1] 88:17	lets [2] 160:3 219:21	line [10] 27:4 90:3	located [1] 191:15	59:24 64:12 153:11
leads [4] 19:10 75:24	levcc [29] 58:15	94:4 137:8 142:8	location [5] 15:21	lots [3] 104:5 157:8
91:20 201:8	65:9 71:12 114:5	165:20 171:16 192:16	16:21 53:16 145:10	191:3
League [1] 2:25	115:8 115:13 115:19	194:7 217:8	193:13	lottery [2] 201:18
leaped [1] 66:1	115:23 116:13 116:18	lines [5] 84:22 84:23	long-term [12] 12:25	227:24
learned [1] 5:10	116:19 116:22 117:1	122:7 202:13 206:4	32:8 33:9 36:14	love [1] 27:20
least [23] 22:1	117:9 117:21 118:10	lining [1] 96:11	77:13 98:18 110:15	low [3] 27:15 101:6
45:3 68:3 76:13	120:1 120:15 155:16	link [1] 139:15	114:10 163:24 169:2	124:11
81:9 93:5 93:8	157:20 159:1 159:18	linkage [33] 20:11	169:8 227:13	lower [3] 61:4
94:17 94:21 96:16	159:24 160:5 160:12	26:5 30:6 30:13	long-time [1] 66:24	105:22 130:16
96:22 99:2 101:3	160:16 160:22 163:12	51:12 58:21 60:7	longer [9] 47:14	lowest [1] 84:13
118:22 118:23 119:21	163:14	78:13 92:18 92:24	56:16 111:24 123:22	luck [1] 198:5
142:25 186:20 195:10	levccd [1] 55:7	92:25 93:5 93:7	143:10 177:22 177:23	luggage [1] 91:9
199:18 203:1 208:25	levccs [32] 40:11	93:8 93:19 112:14	208:7 210:24	lunch [5] 6:24
209:2	59:21 59:25 65:7	113:19 116:1 116:8	look [79] 12:25 14:23	7:4 52:22 52:24
leave [6] 36:15 184:17	77:1 114:7 114:12	117:20 118:18 119:15	21:14 26:6 29:12	112:22
193:19 211:6 211:16	114:14 115:5 115:17	119:25 121:20 124:17	32:23 38:19 43:4	MADDOCK [9]
213:4	116:15 117:5 117:8	126:1 126:2 132:22	43:10 46:10 46:10	2:10 23:8 92:12
leaves [1] 188:19	117:12 117:14 117:17	137:24 138:10 138:16	51:4 58:20 58:23	96:1 96:21 97:12
leaving [1] 138:8	117:18 118:3 118:22	155:3 227:12	69:20 72:7 75:18	118:2 118:14 165:3
led [1] 19:12	118:23 119:5 119:8	linkages [42] 26:3	80:25 84:5 89:8	Madigan [121] 2:2
left [3] 4:16 193:17	119:14 119:19 120:12	27:19 27:22 31:9	94:4 98:9 98:17	4:4 4:13 20:19
225:25	155:25 156:8 157:8	40:4 40:8 40:10	99:21 100:15 100:20	22:8 22:14 24:8
legal [2] 153:12 216:5	157:14 158:6 160:4	58:8 58:14 74:10	100:25 101:8 101:12	30:20 31:11 36:18
legislation [7] 21:12	level [33] 15:8	75:25 76:1 76:4	102:10 102:12 102:19	41:4 44:15 49:13
21:14 21:17 24:22	15:10 15:12 15:20	77:21 77:23 77:25	104:2 104:8 107:3	49:21 51:3 52:2
25:6 25:21 69:15	15:22 15:23 16:19	78:7 79:8 80:12	111:7 121:19 124:19	52:19 56:7 57:5
legislative [4] 21:6	16:22 21:6 21:7	92:12 94:5 95:11	126:22 128:2 129:14	58:6 60:12 61:24
22:22 24:15 25:10	30:7 61:2 63:22	99:22 111:17 111:23	130:12 131:2 131:5	63:9 64:10 64:14
legislature [1] 26:1	81:24 85:20 85:25	111:25 112:4 116:4	131:11 131:24 133:25	64:17 64:24 65:24
legislatures [1] 21:24	86:7 86:8 89:23	117:25 123:5 124:7	134:2 134:7 135:15	66:21 67:4 68:17
legitimacy [3] 108:2	94:8 94:18 103:23	167:1 171:20 171:23	135:21 136:24 136:25	70:22 72:9 72:14
108:14 110:1	104:2 108:1 109:9	172:8 172:9 172:13	143:23 144:18 144:23	73:15 80:9 81:15
legitimate [1] 9:23	109:13 125:10 132:4	172:22 173:5 182:5	165:2 167:16 175:21	83:21 91:12 92:10
LEHMAN [1] 2:23	137:3 171:6 171:12	182:13 229:24	177:21 178:24 179:7	95:20 98:1 99:23
	172:7 184:5	linked [10] 20:8	185:2 185:19 189:22	101:19 103:15 104:11
	levels [11] 25:1	107:2 112:16 126:11	195:14 197:7 198:11	106:21 108:23 110:4
	55:13 87:18 90:6	134:16 138:14 139:9	198:13 198:15 200:10	
			204:22 205:7 208:23	

111:12	111:14	112:22	107:5	107:6	107:8	24:17	24:22	25:10	measurable [1]	60:17	method [1]	26:20
113:7	118:1	118:15	107:12	107:23	109:24	26:1	27:18	27:25	measure [4]	19:22	methodical [2]	89:12
119:11	120:4	120:15	110:6	110:14	110:18	29:1	31:5	37:22	33:17	46:25	47:1	194:19
120:20	124:6	125:2	110:25	111:9	126:11	37:23	39:21	42:4	measures [12]	46:24	methods [3]	185:15
125:6	127:11	128:19	126:23	126:25	134:9	43:19	48:14	49:7	49:18	65:2	65:13	198:15
130:4	132:20	135:8	141:20	141:24	147:4	50:11	53:4	54:10	65:17	69:17	70:7	199:5
137:6	142:14	144:5	147:21	162:21	163:24	58:12	58:19	61:16	85:5	85:6	85:8	Metropolitan [4]
144:8	147:11	150:4	164:15	165:11	165:12	61:18	63:20	67:16	88:18	149:15		3:12
150:18	151:3	152:11	165:16	165:17	166:4	83:9	87:7	91:14	mechanically [1]			214:20
153:6	153:17	159:7	166:12	169:3	182:17	98:12	103:11	106:14	38:16		Mets [1]	214:22
161:16	162:13	162:23	182:19	184:11		112:13	121:17	122:15	mechanism [2]	59:10	MICHAEL [2]	2:2
163:19	164:23	165:21	managers [5]	82:6		122:24	123:5	126:2	119:9		3:6	
167:7	167:23	168:3	108:12	108:13	108:18	134:23	136:15	140:12	mechanisms [4]		microphone [1]	72:19
168:24	169:19	176:12	110:21			141:4	149:8	151:19	155:5	208:1	219:3	mid-May [1]
183:3	184:3	184:24	managing [2]	108:15		151:20	152:19	153:22	227:11			middle [1]
186:13	187:8	187:20	206:20			156:24	160:12	166:22	mcet [9]	17:2	83:16	might [66]
188:4	188:24	190:4	manipulate [1]	39:9		166:25	167:15	182:10	93:24	105:8	105:14	5:19
191:10	191:18	192:9	manipulated [1]			192:20	192:20	193:10	105:24	185:16	186:8	15:13
192:12	194:1	195:2	123:16			212:15	212:17	227:1	197:25			16:1
195:20	196:23	202:2	manipulating [1]			Mayor [1]	3:4		meeting [43]	1:3		16:9
204:7	205:20	206:6	33:21			McCARTY [2]	3:2		4:7	4:14	5:14	17:17
207:7	208:10	209:5	mannings [1]	40:21		194:6			5:17	6:2	6:20	21:5
209:21	211:20	212:22	MANTELL [1]	3:6		McPeak [53]	2:5		7:12	7:14	7:15	24:24
216:21	218:6	218:19	Manufacturer's [1]			4:15	27:18	28:3	8:20	13:9	25:9	33:16
magic [1]	39:2		196:9			41:5	41:24	44:20	25:25	27:24	28:6	33:18
magnified [1]	76:16		map [3]	84:22	128:17	56:8	58:7	60:6	28:8	29:1	29:17	35:22
mailed [3]	29:16		133:13			80:10	82:15	86:22	31:13	41:11	64:1	41:1
125:12	192:1		MARCIA [1]	3:4		88:7	88:21	91:4	76:5	125:9	125:24	55:13
mailers [1]	192:2		mark [1]	141:3		91:11	95:21	97:5	167:25	185:25	192:24	61:4
mailing [6]	29:17		marked [1]	6:2		118:17	119:15	120:14	193:1	193:20	194:13	65:19
29:23	29:25	104:1	markedly [1]	139:24		135:9	136:4	137:5	195:13	209:23	210:15	80:17
192:1	192:4		marker [2]	17:5		139:18	141:4	149:12	211:17	211:23	212:13	82:18
main [6]	76:22	77:6	17:5			153:2	153:18	154:14	212:13	218:23	219:15	90:3
77:9	115:11	142:15	marker [2]	17:5		154:17	155:2	156:1	228:14	229:9	230:17	94:24
179:8			market [1]	213:11		157:23	158:10	158:21	meetings [12]	5:13		112:7
maintain [4]	14:3		marketing [2]	196:14		159:6	160:24	161:10	8:2	8:5	9:2	119:20
118:24	176:20	189:16	213:9			206:9	207:4	207:10	13:15	14:7	17:8	121:18
maintained [1]	189:12		marsh [2]	139:24		207:13	208:9	226:4	17:8	29:9	188:10	122:9
maintaining [3]	115:5		140:22			227:3	228:9	228:16	191:16	198:4		123:8
120:12	189:9		marshes [1]	146:14		229:4	229:10	229:13	meld [1]	79:5		139:19
maintenance [6]			marshes [1]	146:14		230:4			member [5]	66:24		142:18
58:15	115:8	115:19	marvelous [1]	61:23		McREYNOLDS [8]	219:7	226:14	96:22	214:11	214:12	153:25
115:23	118:21	160:5	Mary [10]	3:8		226:23	227:16	228:22	215:24			167:3
major [12]	28:5		49:15	52:20	60:12	229:7	229:11		members [17]	2:1		166:17
28:6	41:16	87:16	64:9	70:24	98:2	mean [47]	23:15		3:1	5:16	6:10	167:6
87:19	92:3	127:17	103:15	204:8	206:18	39:20	53:16	63:13	6:24	7:6	7:8	179:13
143:7	174:24	175:14	Mary's [1]	82:19		64:3	89:16	92:21	8:9	8:16	104:5	181:9
179:21	216:24		mass [1]	37:24		93:25	95:17	96:3	127:12	174:2	184:6	181:12
majority [4]	6:4		massage [1]	22:1		96:24	97:16	97:17	187:14	204:21	223:8	187:18
24:16	45:21	55:8	match [4]	77:10		97:18	101:24	118:3	229:21			189:18
makes [6]	43:6		92:4	100:17	207:5	120:11	120:12	129:8	memo [2]	125:13		191:2
157:5	157:18	166:6	matching [3]	15:24		130:14	132:25	133:6	145:1			198:20
166:11	207:16		201:17	206:23		134:5	134:14	134:15	memorandum [2]			198:23
man [1]	36:12		mated [1]	48:15		143:22	145:14	146:12	125:12	213:18		200:9
manage [2]	72:1		material [16]	6:8		147:25	148:5	151:1	memory [2]	113:20		201:20
152:5			11:17	17:17	17:24	154:24	156:11	160:25	163:2			203:4
manageable [1]	171:17		23:10	61:11	69:24	163:4	164:7	167:4	mention [3]	28:11		203:12
managed [1]	174:9		73:24	87:13	87:16	168:7	168:15	168:19	64:8	199:9		203:12
management [62]			104:7	124:3	147:14	185:23	203:11	204:19	mentioned [7]	14:23		203:12
33:22	33:23	33:23	160:11	211:2	212:6	220:17	220:18	221:13	75:1	96:10	98:22	203:12
35:24	35:25	46:2	materials [3]	6:1		227:18			151:5	195:13	224:21	206:9
66:3	66:10	75:6	65:21	87:14		meaning [2]	60:23		merely [1]	37:23		212:20
77:18	79:11	79:13	matter [5]	111:7		144:16			Mesa [3]	185:4		215:3
79:22	83:4	83:8	151:19	169:24	213:6	means [11]	28:17		192:24	193:12		215:3
83:10	91:25	100:3	214:6			61:14	105:8	105:23	mess [1]	40:18		215:3
100:16	100:21	102:2	maximum [1]	81:24		128:16	131:1	138:8	message [1]	14:14		215:3
102:8	102:11	103:11	may [62]	5:14	13:8	168:15	185:15	185:21	met [1]	178:3		215:3
104:15	104:17	104:21	21:18	22:16	24:15	220:7			metagony [1]	218:1		215:3
105:13	106:4	106:16				meant [3]	53:18					215:3
						130:15	146:21					215:3
						meantime [1]	87:8					215:3

misread [1] 146:12	35:9 35:15 35:20	228:16 229:4 229:10	need [78] 12:20	nice [2] 25:19 207:24
miss [1] 88:5	36:2 36:5 45:1	229:13 230:4	14:16 14:23 15:16	Nicely [1] 176:14
missed [3] 141:3	45:2 45:10 45:13	Mud [1] 204:16	15:25 16:12 17:4	niche [1] 48:20
179:5 183:17	53:8 53:9 55:23	multi-objective [7]	22:12 22:16 22:20	night [1] 180:25
missing [1] 230:2	56:11 89:17 89:17	75:19 75:24 79:1	22:24 23:5 24:17	ninety [4] 47:8
mission [34] 18:1	most [23] 8:5	79:12 79:19 79:21	27:10 52:5 52:6	48:12 49:8 214:2
23:8 23:19 23:22	12:24 25:1 30:16	multi-objectives [1]	69:2 71:16 75:2	nobody [3] 49:9
58:11 59:3 104:18	46:23 48:17 65:23	75:22	75:14 75:18 81:21	66:12 143:1
127:10 144:12 144:15	66:16 74:10 80:19	multi-resource [1]	82:12 83:6 83:9	nod [2] 135:6 187:2
144:15 144:18 144:18	82:9 105:17 110:2	75:23	90:5 90:16 91:16	non-endangered [1]
144:19 145:1 145:19	122:25 124:18 147:7	multiple [9] 26:25	91:23 99:7 101:12	112:15
145:23 145:24 146:5	191:14 196:2 208:23	45:19 80:15 177:25	102:16 102:18 104:23	non-habitat [1] 70:6
146:9 147:10 147:21	211:1 213:7 215:13	179:7 179:14 181:13	105:22 106:18 112:18	non-native [1] 50:8
148:16 151:6 154:20	mostly [1] 186:23	181:15 182:2	120:8 121:19 123:25	none [2] 67:19 111:4
156:13 161:22 162:8	MOU [2] 212:25	multitude [2] 85:22	130:3 131:2 131:5	nooks [3] 40:18
163:23 167:14 167:24	215:19	181:12	131:9 131:11 132:8	56:3 140:21
170:21 196:21 196:24	mountain [3] 10:12	municipal [2] 3:8	135:24 136:25 141:22	noon [1] 113:3
mitigate [2] 152:5	71:16 145:17	202:17	141:24 143:9 143:23	normal [2] 71:4
167:1	mouth [2] 50:8	mussels [1] 68:15	145:7 150:12 153:11	71:5
mitigated [2] 73:2	140:7	must [2] 32:8 51:9	157:10 157:11 157:12	Normally [1] 60:24
167:7	move [36] 8:15	mutual [1] 151:1	160:7 163:7 166:17	north [7] 16:12 16:16
mix [7] 37:21 37:22	9:14 10:3 10:18	MWD [9] 214:4	166:23 169:4 180:13	71:15 78:15 78:17
67:22 106:20 182:21	11:6 12:17 15:7	214:11 214:13 215:24	184:14 185:10 185:19	141:25 182:6
207:23 207:24	20:13 23:6 25:18	215:24 216:11 216:18	186:2 190:3 190:8	Northern [2] 3:3
mixing [1] 51:17	71:8 72:13 77:2	217:24 217:24	190:10 194:13 199:17	197:17
mixture [1] 67:14	81:21 84:25 86:15	myriad [1] 139:5	205:17 210:14 228:12	note [2] 217:16 222:5
model [3] 94:15	86:25 88:2 88:14	name [4] 4:13 6:22	229:8 229:20	noted [1] 227:1
184:20 198:12	94:21 94:25 95:12	31:16 187:7	needed [4] 92:7	notes [6] 154:11 165:1
modeling [1] 136:23	98:8 125:6 138:13	names [1] 21:9	105:12 129:9 228:4	180:18 180:20 231:6
models [2] 102:1	144:12 161:19 163:18	narrative [3] 30:2	needing [1] 206:21	231:9
136:18	163:21 167:24 177:18	78:2 154:11	needs [19] 33:4	nothing [2] 43:17
modification [1] 18:20	195:10 201:2 212:21	narratives [5] 103:25	33:5 73:24 79:15	229:20
modifications [4] 17:7 38:10 144:7	215:18 218:12	104:9 172:10 173:22	79:16 80:1 87:13	noticed [1] 4:7
144:21	moved [3] 12:9	174:12	105:14 106:19 126:3	notices [1] 190:24
modified [5] 23:20	184:1 210:4	narrow [2] 155:10	126:8 143:2 148:8	notifications [1] 191:4
38:19 39:14 54:9	movement [1] 180:6	156:2	159:4 174:19 185:25	noting [1] 119:21
74:6	moves [4] 16:14	native [7] 32:4	198:12 206:17 228:20	notion [3] 53:25
modify [2] 56:9	145:9 169:9 169:13	42:5 48:23 49:19	negative [4] 160:1	214:16 215:8
143:18	moving [7] 15:1	50:4 50:10 50:14	160:7 160:13 180:9	NOTTHOFF [7] 3:10 99:24 100:10
modifying [2] 39:10	69:15 72:19 87:11	natives [1] 47:15	negatively [1] 160:18	100:14 102:24 129:3
123:12	91:19 110:22 203:8	natural [27] 3:10	107:15	190:5
moment [5] 22:15	MRI's [1] 167:7	34:7 34:9 34:20	negotiated [2] 107:9	November [3] 17:14
26:7 66:1 216:9	MS [88] 27:18 28:3	35:5 35:9 36:11	104:4	198:3 198:5
219:8	29:20 30:21 41:5	38:3 38:6 39:6	negotiation [2] 62:11	now [64] 12:24 15:5
money [11] 42:9	41:24 44:20 51:4	45:2 53:8 53:18	104:4	18:5 18:5 21:10
42:19 50:23 62:20	56:8 58:7 60:6	53:25 54:24 54:25	neither [1] 42:16	23:9 23:25 27:24
69:16 117:6 185:16	60:13 61:19 62:1	56:11 56:13 56:14	Neomysis [1] 61:5	28:12 32:10 33:24
189:21 204:20 207:5	63:15 64:16 65:19	56:19 57:12 57:24	net [3] 14:12 14:18	37:3 37:7 40:22
207:7	70:23 80:10 82:15	76:16 111:6 143:22	199:19	41:3 42:11 44:7
Monica [1] 190:16	86:22 88:7 88:21	156:23 226:10	Nevada [1] 216:4	46:6 48:25 53:20
monitor [1] 66:18	91:4 91:11 91:14	nature [7] 14:3	never [3] 61:18	57:12 60:8 67:13
monitoring [2] 66:7	92:9 95:21 97:5	24:2 34:22 39:8	68:4 164:11	75:24 77:21 79:8
81:8	99:24 100:10 100:14	53:16 55:11 82:10	new [21] 6:6 11:18	79:24 80:7 90:2
month [3] 5:19	102:24 103:17 110:5	near [3] 38:8 40:21	13:19 20:22 40:18	91:5 94:1 99:4
17:9 58:3	118:17 119:15 120:5	44:4	50:12 50:23 67:19	99:14 106:15 119:4
month's [1] 177:23	120:14 120:18 129:3	nearby [1] 191:15	122:3 122:3 129:4	129:14 136:7 137:7
months [3] 20:1	132:21 133:14 134:12	nearly [1] 105:12	151:8 166:10 166:11	140:22 142:18 144:11
213:10 220:1	135:4 135:7 135:9	neat [1] 145:13	166:12 166:14 199:19	146:1 146:15 147:22
morning [13] 4:4	136:4 137:5 139:18	necessarily [5] 22:1	199:19 201:18 208:21	153:20 153:25 154:4
5:3 29:18 30:10	141:4 149:12 149:13	41:3 143:19 154:13	227:24	154:14 165:1 167:20
76:3 113:1 126:20	152:15 153:2 153:3	168:17	next [32] 5:18 7:12	173:12 173:21 174:5
126:25 154:6 183:14	153:18 154:14 154:17	necessary [9] 21:12	12:22 19:5 19:25	182:25 188:23 188:24
184:11 191:25 222:23	155:2 156:1 157:23	21:15 21:18 24:22	20:16 24:3 25:9	191:17 192:11 209:10
mortality [19] 34:9	158:10 158:21 159:6	32:21 70:7 87:6	25:25 27:24 66:5	213:7 216:13 218:10
35:5 35:7 35:8	160:24 161:10 162:24	necessity [1] 205:17	66:20 76:5 82:1	221:10 229:14

nowhere [1] 40:21	75:11 75:16 156:25	46:4 46:4 46:18	47:25 50:7 50:10	130:8 131:6 131:24
NRDC [1] 190:17	observations [4]	46:20 48:18 49:6	67:25 78:11 140:18	132:23 133:1 133:21
nuclear [2] 40:3	5:7 9:1 74:18	52:2 53:5 54:6	166:25 179:11 191:1	133:24 133:25 134:15
61:25	181:1	55:9 56:1 56:15	194:8 194:22 196:4	134:17 134:19 134:23
nuisance [2] 68:12	observed [1] 11:3	56:19 62:12 62:15	206:11	135:2 135:10 135:14
70:10	obstacles [1] 216:5	64:2 64:7 64:9	opposed [3] 23:3	144:1
number [51] 4:10	obtained [1] 79:21	66:2 69:14 71:7	65:10 155:9	outflows [3] 79:13
4:18 7:25 8:1	obvious [6] 29:13	71:9 71:20 72:13	opposite [1] 107:25	129:21 135:18
8:7 10:1 33:8	121:19 123:6 123:13	72:19 72:24 73:5	OPS [1] 12:10	outline [1] 213:19
33:13 33:18 34:1	124:19 214:10	74:15 78:7 83:1	optimal [5] 105:17	outlined [2] 83:3
35:12 36:11 40:4	obviously [6] 8:4	85:9 85:14 85:21	143:21 168:14 168:15	133:3
46:20 50:16 50:19	25:7 62:10 128:22	89:3 94:6 96:1	168:19	output [1] 134:1
62:14 82:3 102:15	204:15 215:6	96:17 96:22 97:2	optimism [2] 9:13	outputs [1] 129:16
113:11 114:6 122:3	occupy [1] 33:19	99:24 101:11 102:9	9:16	outreach [10] 14:2
122:3 129:17 137:19	occur [2] 57:1	102:10 106:5 107:4	optimistic [1] 196:22	14:17 14:22 185:6
144:25 146:3 150:3	122:16	107:21 112:23 114:6	optimum [4] 163:25	191:16 192:11 192:14
151:9 151:14 163:22	occurred [2] 47:18	115:15 116:3 116:12	164:13 164:19 164:20	192:17 204:17 205:18
164:19 164:21 170:16	176:1	122:11 124:9 124:19	option [2] 38:16	outreaching [1] 191:23
173:15 174:23 176:17	occurs [5] 6:23	125:23 125:23 126:5	189:7	outside [5] 6:9
176:21 180:11 181:25	28:16 57:24 214:17	127:17 128:13 129:15	options [11] 9:24	107:4 123:9 127:3
182:1 182:25 189:4	214:19	137:23 140:4 140:12	23:4 120:17 189:7	195:16
195:11 219:21 219:22	ocean [1] 91:18	142:15 145:21 146:1	222:10 222:11 222:16	outstrip [1] 34:4
221:21 223:7 225:11	occangoing [1] 133:5	149:4 149:5 149:21	223:4 223:21 224:9	overall [12] 8:20
228:25 229:1	October [7] 1:14	152:1 152:22 153:7	224:10	25:2 37:23 42:25
numbers [3] 34:5	4:7 125:13 178:8	157:10 167:16 168:1	orally [1] 212:15	61:15 63:14 102:11
38:25 137:15	178:8 178:22 231:5	168:13 168:23 169:11	orange [1] 84:22	148:16 170:13 172:25
numeric [1] 136:19	off [12] 8:20 18:5	171:2 171:6 174:21	order [15] 32:6	185:22 220:6
numerical [1] 136:15	29:10 30:19 91:2	175:6 179:5 179:7	43:18 60:7 71:17	overcome [1] 36:11
nurturing [1] 48:10	91:10 112:13 134:4	179:8 179:17 180:2	73:25 115:1 117:16	overcommitted [1] 99:1
nutrient [1] 137:24	161:5 194:19 214:13	181:11 183:11 183:13	118:24 143:3 151:6	overestimate [1] 42:4
o'clock [6] 4:6	225:25	183:13 183:14 184:11	171:17 195:8 199:7	overhead [3] 64:18
176:18 188:1 213:4	offer [5] 140:9 156:24	188:10 188:11 188:22	212:23 214:2	132:25 224:23
218:21 229:15	162:24 190:19 191:22	190:15 190:20 190:25	organic [1] 61:10	overheads [6] 6:5
Oakland [3] 5:19	offering [1] 191:19	193:4 194:11 196:12	33:1 33:14 34:10	11:7 145:2 156:4
190:25 192:1	office [1] 190:18	196:13 196:25 198:20	organisms [8] 32:22	212:18 224:6
OAKLAND/SAN [1] 1:11	offices [2] 104:7	202:9 203:21 203:21	33:8 33:14 33:19	overlap [6] 26:24
oath [1] 144:11	191:19	204:9 204:12 205:15	34:11 34:23 35:6	27:15 27:16 28:9
objective [30] 24:4	official [3] 3:5	206:10 207:19 207:22	49:4	42:18 172:2
24:7 29:7 29:15	3:6 14:8	209:10 211:6 213:13	organization [3] 4:16 186:17 215:14	overlapping [2] 27:4
30:23 31:4 31:21	officials [1] 22:19	214:11 217:3 217:9	organizations [2] 197:2 197:13	27:13
59:17 73:20 74:4	offset [2] 98:20	217:10 217:23 221:7	organized [1] 170:16	overlaps [1] 229:25
74:12 77:4 77:9	228:3	222:22 223:3 225:7	orientation [1] 210:7	OVERSIGHT [1] 1:4
78:3 85:5 88:9	offspring [2] 38:23	226:6 227:16 228:24	oriented [1] 218:1	oversimplify [1] 99:20
92:3 100:17 103:21	55:24	ones [1] 230:2	origin [3] 10:13	overtopped [1] 117:5
103:25 115:12 115:21	offstream [6] 16:1	ongoing [1] 81:7	149:7 174:9	overview [5] 8:15
147:18 147:23 148:24	16:5 16:7 16:16	onto [1] 220:11	original [1] 49:3	11:16 147:9 219:16
159:4 159:5 159:10	28:15 78:17	oOo [2] 3:17 230:19	otherwise [4] 4:23	219:20
159:16 178:5	often [6] 25:15 25:20	open [3] 114:13 117:23	121:18 194:20 214:11	Owens [1] 215:8
objectives [46] 14:21	72:21 121:6 129:20	169:24	ought [21] 53:11	owned [3] 92:23
15:6 17:24 19:10	168:8	opening [1] 120:11	54:19 56:25 57:21	214:17 215:15
19:19 23:12 23:24	oil [1] 226:11	operate [1] 16:17	68:21 69:13 69:13	oxbow [3] 67:10
23:25 27:1 27:4	old [2] 34:25 132:21	operated [2] 16:22	69:20 69:23 93:6	67:13 67:17
28:20 30:4 54:16	101:15 109:8 109:11	180:10	93:18 96:25 107:17	ozone [1] 139:20
74:9 74:16 74:21	153:11 164:21 169:4	operation [5] 12:11	108:8 108:22 109:15	p.m [3] 113:4 113:5
74:22 74:23 74:24	169:19 185:8 196:20	84:2 123:15 182:22	109:23 161:13 190:1	230:17
74:25 75:5 75:5	once [10] 84:14	182:23	221:8 222:2	Pablo [20] 129:19
75:7 75:18 76:1	101:15 109:8 109:11	operational [2] 78:25	ourselves [4] 56:25	137:9 137:17 137:25
77:7 87:25 91:16	153:11 164:21 169:4	82:8	65:22 165:4 219:8	138:5 138:9 139:5
93:4 100:20 113:18	169:19 185:8 196:20	opinion [1] 208:18	out-competc [1] 40:24	
115:9 117:24 122:19	once-through [1] 19:24	opossum [1] 61:4	outcome [1] 101:14	
123:8 145:12 145:25	one [159] 4:18 4:20	opportunities [12] 6:13 7:9 50:18	outer [1] 27:8	
159:12 177:25 179:7	5:18 6:18 9:22	78:22 79:6 84:24	outflow [20] 91:17	
179:8 179:22 184:9	10:20 12:20 13:7	121:11 127:17 134:9	126:6 126:17 126:17	
186:1 186:9 212:20	15:5 16:5 18:3	179:24 190:14 201:16		
obligation [8] 200:15	20:11 21:20 23:13	opportunity [19] 4:21 4:22 5:20		
200:17 201:7 201:14	26:3 28:11 28:19	6:12 7:6 40:12		
202:12 202:18 206:15	29:6 30:16 30:19			
225:9	34:13 35:2 37:20			
observation [4] 74:15	40:2 43:21 46:4			

139:21	139:25	140:4	participate [5]	10:4	179:11	179:23	181:10	15:5	15:7	15:14	plant [3]	60:21	60:21	
140:17	140:20	141:9	10:17	14:10	206:11	181:16	181:22	15:17	15:25	16:6	163:5			
141:11	141:23	142:1	214:9			184:1	184:22	16:9	16:14	16:16	plants [6]	43:5		
143:2	172:1	172:14	participated [1]	25:13		185:9	185:20	16:24	66:20	87:11	51:7	51:11	84:10	
172:19			participating [1]			186:2	186:18	89:15	89:19	89:22	189:5	189:8		
pace [2]	53:22	150:15	5:17			186:23	187:3	130:10	130:23	131:22	play [3]	100:3	119:10	
Pacific [1]		2:19	participation [7]			192:22	193:3	132:2	135:11	135:16	120:7			
package [8]		23:3	14:21	112:25	169:22	193:6	193:10	135:16	135:19	135:21	playing [1]	162:15		
25:19	25:19	30:5	183:17	183:25	193:16	193:15	193:21	135:22	135:24	136:8	plays [3]	25:4		
154:21	185:14	186:6	205:10			194:22	200:9	136:10	136:13	136:16	100:1	100:10		
212:7			particular [23]	23:14		204:13	205:16	142:17	222:16		plea [2]	7:21	72:6	
packages [5]		127:3	31:25	34:10	37:22	209:1	209:4	phases [4]	15:4		pleased [1]	201:22		
181:13	210:2	210:5	46:24	62:13	81:18	221:8	221:21	15:13	16:23	222:20	pleases [1]	229:21		
212:16			101:14	106:9	114:20	225:11	225:14	phenomenon [1]			pleasure [2]	4:14		
packet [15]		29:18	115:14	116:8	120:2	people's [2]	9:5	53:18			195:22			
29:21	73:18	73:20	123:3	124:17	133:13	82:3		phonetic [1]	218:1		plow [1]	82:9		
114:1	116:2	125:13	152:22	154:13	180:1	percent [8]	47:8	Photosynthesis [1]			plug [1]	14:9		
144:25	177:2	177:14	182:15	192:5	198:10	48:13	49:8	36:24			plunge [1]	62:23		
178:11	178:17	179:20	225:5			94:19	94:20	phrase [2]	32:14		point [74]	14:22		
211:2	223:9		particularly [9]	48:10		214:3		34:25			15:18	15:25	20:23	
packets [3]		22:22	67:24	104:21	122:25	percentage [3]	69:4	phrased [2]	131:1		21:9	22:8	22:15	
74:6	219:20		175:11	198:7	214:12	98:13	99:2	143:19			24:11	24:13	24:22	
page [3]	30:2	188:25	215:13	216:25		perception [1]	68:22	physical [1]	32:21		25:9	25:15	25:20	
219:20			parties [2]	4:1		perfect [4]	42:15	phytoplankton [4]	48:1	49:8	30:14	36:3	46:15	
pages [1]		80:20	63:8			46:7	46:16	48:1	49:2	49:8	54:4	57:9	57:25	
pain [1]	206:13		partner [1]	207:6		performance [15]	19:22	61:7			63:21	63:21	66:1	
palatable [1]	207:17		partners [1]	128:9		19:22	46:24	65:2			68:19	71:2	72:24	
paper [20]	30:22		partnership [1]	206:24		65:13	65:17	83:3			74:24	81:5	81:9	
31:7	41:9	41:14	parts [3]	82:3	116:25	83:7	83:9	83:14			83:9	84:6	86:6	
57:9	75:12	84:5	227:13			85:5	85:6	85:7			94:2	94:9	96:11	
106:25	156:14	180:20	pass [2]	200:18	209:4	149:15	153:21	153:24			100:8	100:13	101:17	
181:7	197:7	203:11	passed [1]	200:20		perhaps [31]	5:13				103:12	115:24	117:24	
219:2	220:22	220:25	passing [3]	144:10		8:19	18:3	27:22			119:12	120:7	127:7	
221:15	221:23	222:20	200:21	201:14		29:1	29:9	30:5			128:1	128:18	137:23	
228:21			past [5]	143:2	164:9	31:7	32:8	34:25			143:8	143:16	146:8	
papers [5]		70:24	171:15	198:16	226:12	38:10	40:6	53:3			148:19	150:17	152:24	
130:2	198:6	207:14	Pat [2]	3:2	194:5	60:18	72:2	83:1			157:18	161:6	161:7	
222:14			pathogens [1]	122:8		93:23	94:5	95:12			164:3	164:10	166:13	
paragraph [1]	125:20		paths [1]	210:22		118:17	123:25	132:22			168:5	170:23	171:2	
paragraphs [1]	221:2		PATTERSON [1]	3:5		161:7	170:15	182:7			171:4	172:4	174:21	
parallel [2]	117:13		pay [13]	185:21	201:4	194:17	194:20	195:10			183:6	185:13	197:11	
223:15			202:18	202:24	202:25	199:24	201:17	228:17			212:5	212:11	214:15	
parameters [2]	82:8		203:17	203:17	203:23	period [7]	47:14				216:23	218:17	220:20	
82:8			204:3	205:17	205:19	123:23	130:7	130:21			228:8			
PARRAVANO [1]	2:19		220:19	225:5		143:10	143:11	230:11			point's [1]	106:1		
part [54]	16:6	28:5	periodic [1]	129:21		periodically [1]	189:15				pointed [3]	73:5		
28:6	55:4	55:5	periods [4]	78:19		7:3	14:8	36:24			78:1	193:14		
65:11	67:22	80:6	78:20	79:17	114:21	50:1	50:3	50:3			pointing [2]	159:15		
86:22	92:8	104:4	Peripheral [1]	193:22		50:3	50:5	52:15			171:10			
106:12	106:19	107:18	permission [1]	30:15		52:15	52:15	86:21			points [4]	9:8		
107:19	110:7	111:6	permit [3]	189:19		111:1	118:23	119:1			113:16	163:22	202:8	
115:18	115:21	118:12	189:23	216:6		119:10	119:19	120:16			poisoned [1]	70:15		
119:22	130:8	130:10	persisted [1]	36:4		125:17	158:4	166:4			policy [4]	90:6		
130:16	130:23	136:22	persists [1]	35:20		182:19	186:6	194:20			200:20	205:12	229:6	
138:19	140:20	142:16	person [3]	52:2		223:19	224:11				political [4]	22:9		
143:16	148:14	157:2	52:4	192:19		Placer [1]	7:1				25:4	190:10	190:12	
158:23	170:20	177:22	personal [1]	5:7		places [3]	68:7				politics [1]	62:20		
177:23	180:2	185:7	perspective [5]	14:24		144:25	216:4				pollutant [1]	33:17		
191:16	203:8	203:11	57:3	206:19	216:18	plan [20]	66:9	66:14			poor [1]	186:2		
204:25	209:15	214:4	217:1			66:18	98:18	101:17			population [17]	32:22		
217:8	218:1	219:16	perspectives [5]	5:9	13:2	107:8	118:3	118:10			33:14	33:23	34:10	
220:6	220:10	223:3	5:9	13:2	13:6	161:23	162:2	162:3			34:22	35:10	35:10	
223:9	224:7	229:7	196:11	197:19		162:17	162:20	164:3			38:11	38:14	46:19	
229:8			pertain [1]	132:11		166:11	166:11	169:2			48:16	53:9	53:13	
partially [3]	205:13		Pete [2]	141:15	141:18	169:9	169:10	190:9			54:1	55:11	56:11	
206:2	224:18		Petry [1]	230:9		plane [3]	86:19				140:18			
participants [2]	17:13		phase [33]	13:23		91:1	176:19				populations [12]	11:2	32:4	35:5
197:25						planning [7]	13:23							

35:15 35:20 36:1	41:17 74:5 80:14	27:22 28:23 29:7	14:25 17:2 18:17	46:2 50:22 65:3
38:17 39:17 43:25	81:3 86:2 112:3	29:13 29:15 30:3	18:23 19:8 19:18	66:2 66:8 66:11
53:14 56:5 163:5	presents [1] 210:21	30:23 31:4 31:21	19:23 20:3 21:23	70:14 80:6 85:3
PORTALE [5] 1:20	preservation [1] 54:12	34:14 39:13 41:22	22:9 23:20 25:4	94:1 100:21 100:22
1:23 231:3 231:22	preserving [2] 73:1	42:1 42:12 43:8	28:21 31:2 32:17	106:24 115:16 115:16
231:24	73:10	43:20 43:24 55:5	33:21 34:7 34:8	126:6 126:15 126:18
portion [2] 215:4	pressure [1] 217:14	58:8 59:16 60:3	34:16 34:20 36:1	144:3 152:9 160:22
position [1] 92:25	presumably [1] 218:3	61:22 69:4 69:5	38:3 38:6 40:20	162:16 163:24 164:3
positive [2] 180:7	presume [1] 93:16	73:20 74:4 74:12	40:25 41:7 46:14	164:5 176:21 179:9
180:8	pretend [1] 26:7	75:19 76:11 76:17	46:14 48:24 54:24	191:16 193:14 194:2
possibility [1] 152:10	pretty [23] 5:3	76:22 78:2 84:3	54:25 57:13 62:5	204:14 204:18 210:19
possible [16] 24:21	24:12 36:24 44:6	84:16 85:5 85:11	62:16 65:11 69:12	programs [16] 21:25
26:24 47:24 54:12	46:9 57:1 66:2	85:14 86:14 86:15	69:19 70:5 75:20	51:2 51:13 68:10
68:14 73:25 83:5	81:19 81:19 84:23	87:19 88:9 88:9	85:3 85:4 87:1	70:8 70:8 70:9
83:20 109:18 149:17	86:7 96:19 106:25	98:24 103:2 103:4	87:21 87:22 88:2	79:11 81:7 93:21
175:25 176:8 204:6	124:8 140:10 167:14	103:8 103:9 103:10	89:11 90:15 90:21	104:21 131:13 182:9
222:4 223:24 224:4	170:13 170:13 183:9	103:14 103:21 103:25	94:8 94:21 96:13	203:1 229:22 229:24
possibly [2] 21:6	192:4 194:2 221:3	113:22 113:25 114:2	98:6 105:1 109:20	progress [1] 177:17
Potamocorbula [2] 47:7 175:12	224:13	114:10 114:16 115:4	110:7 110:15 116:4	progresses [1] 22:24
potential [13] 39:21	preventing [1] 190:21	115:11 117:17 118:20	118:12 121:1 121:24	progression [1] 15:22
42:3 42:4 42:10	preview [1] 224:7	121:2 121:19 124:11	127:25 129:1 139:9	project [24] 15:10
110:16 114:17 118:21	previews [2] 128:25	126:10 126:22 127:4	139:17 150:11 150:20	15:20 16:19 51:10
123:18 128:7 168:11	230:1	130:10 130:24 131:4	153:23 164:25 174:16	51:14 62:18 84:8
207:16 218:7 224:9	previously [1] 229:25	132:2 132:23 133:6	177:20 177:23 182:15	84:9 85:18 85:24
potentially [3] 206:1	prey [1] 50:10	133:7 133:12 133:16	186:18 195:24 196:5	89:23 105:3 105:4
210:5 213:13	price [3] 185:21 199:12	133:17 134:9 137:8	196:17 196:19 197:11	105:6 114:24 128:14
poured [1] 66:14	203:21	137:10 138:19 138:19	201:10 201:24 201:24	142:20 190:16 192:3
power [1] 221:24	pricing [14] 100:1	138:23 139:7 142:11	202:4 204:20 209:15	199:20 201:10 201:11
practices [1] 107:13	100:10 100:23 101:11	142:13 142:23 154:15	209:18 212:2 213:3	209:12 217:9
pre-exotic [1] 175:4	101:18 101:22 102:2	157:2 160:6 161:2	214:9 215:5 219:3	projects [6] 12:11
preceded [1] 36:21	102:5 102:20 103:2	161:2 164:8 166:1	219:16 220:6 220:10	50:19 87:18 199:5
precedent [1] 148:2	111:10 177:11 201:20	166:2 166:4 166:21	222:8 223:2 223:13	201:1 208:24
preced [6] 37:19	204:2	170:19 171:16 171:18	223:17 229:8	promise [1] 8:19
41:3 94:12 94:13	primarily [3] 49:23	171:24 172:10 172:12	produce [7] 34:1	promising [2] 69:17
94:19 165:13	197:6 200:3	172:16 173:2 173:3	34:5 38:22 56:4	217:7
predictability [1] 95:3	primary [15] 23:24	173:6 173:12 173:14	62:14 116:23 199:14	promote [1] 122:6
predictable [2] 95:6	24:4 29:15 30:22	173:16 174:1 174:13	produced [12] 29:6	prompt [1] 5:2
97:11	31:21 61:6 70:3	178:5 183:11 185:17	29:12 29:15 44:3	pronounce [1] 58:4
preface [1] 196:18	73:19 78:2 88:8	189:9 190:3 211:10	47:19 47:24 61:11	proper [1] 131:11
prefer [3] 39:17	145:12 145:25 148:24	220:16	101:3 103:2 113:21	properly [1] 92:18
126:9 140:16	159:3 221:25	problems [68] 9:15	198:19 198:25	proposal [2] 87:9
preferred [1] 15:9	principal [1] 121:16	10:14 13:18 13:19	produces [1] 55:24	135:9
preliminary [4] 19:3	principle [7] 18:10	14:21 16:8 17:24	product [5] 17:17	proposals [1] 117:11
20:2 28:24 178:2	151:9 221:12 221:13	18:2 18:7 19:11	38:24 63:3 179:15	propose [5] 15:2
premise [8] 53:6	227:18 228:7 228:17	19:11 19:21 26:8	182:4	24:18 135:12 161:23
54:14 54:21 56:18	principles [24] 12:19	26:10 26:21 30:8	production [1] 40:5	205:13
57:21 61:21 62:5	18:1 18:4 18:6	30:12 31:9 31:10	productive [6] 36:11	proposed [6] 24:18
142:22	18:25 144:24 145:3	36:12 41:16 46:16	48:10 73:8 150:9	100:23 128:7 136:7
premises [1] 63:6	145:11 145:19 145:24	58:24 64:3 70:3	180:23 181:16	146:19 165:8
prepare [5] 17:23	151:6 151:11 165:23	74:9 76:9 77:4	productivity [6] 31:23 47:23 61:6	proposing [5] 100:25
22:22 23:2 31:6	166:5 166:18 166:23	84:14 85:9 86:12	68:3 122:16 175:18	117:9 131:4 131:12
116:24	177:25 182:20 219:11	87:20 87:24 93:11	products [3] 14:24	146:23
prepared [3] 17:18	221:2 221:15 221:18	95:11 103:2 107:1	48:4 210:18	professional [2] 51:25 136:14
66:19 206:4	225:24 227:5	113:17 113:21 114:4	professionalism [2] 186:24 191:14	professionals [2] 186:24 191:14
presence [1] 56:14	private [4] 198:20	117:24 119:9 123:10	proficuous [1] 142:25	program [69] 7:22
present [4] 4:1	199:10 203:1 224:15	123:11 123:25 126:6	8:8 8:12 8:21	8:8 8:12 8:21
104:14 105:24 198:17	privatization [1] 201:19	128:3 128:15 132:14	11:9 11:16 11:22	11:9 11:16 11:22
presentation [7] 74:14 75:2 113:13	pro [1] 228:6	134:4 134:10 137:10	12:16 12:18 13:5	12:16 12:18 13:5
183:5 209:25 210:24	problem [140] 10:7	138:17 138:23 139:5	13:8 13:17 13:21	13:8 13:17 13:21
217:21	10:9 11:24 13:11	139:8 139:13 140:12	13:22 13:23 14:3	14:4 14:6 14:17
presented [7] 21:25	13:12 13:13 15:5	145:16 158:20 173:8	15:4 15:7 15:24	15:4 15:7 15:24
	17:21 18:15 18:16	173:23 176:5 178:14	17:19 17:21 20:10	21:5 21:13 21:15
	19:9 19:14 20:5	178:16 181:12 185:16	21:19 21:24 22:24	25:2 35:23 40:3
	22:3 22:4 22:9	202:19		
	24:4 24:7 26:11	procedures [2] 79:1		
	26:16 27:3 27:19	210:21		
		proceed [2] 90:7		
		213:20		
		proceedings [5] 1:10		
		4:1 113:5 231:7		
		231:12		
		process [102] 4:17		
		8:13 9:13 9:21		

77:9 79:4 89:13	88:23 89:4 95:23	226:4 227:3	re-inventing [2]	reasons [4]
100:17 115:18 116:19	96:16 105:22 109:17	quick [7]	31:8 212:1	141:19 142:15 164:2
116:19 117:10 165:9	140:6 156:4 159:10	60:13 80:5 103:17	reach [2]	reassuring [1]
165:9 165:10 181:9	160:11 161:24 165:23	124:3 144:13 210:6	185:6	171:23
181:13 181:15 201:25	170:18 180:10 190:17	quickly [3]	read [16]	rebound [1]
214:8	190:20 211:14 212:18	98:4 177:21	54:1 129:6 129:7	rebuild [1]
provided [3]	217:17 222:18 224:11	quit [1]	147:13 151:25 152:3	rebuilding [1]
89:10 180:22	228:13 229:4	quite [20]	155:23 158:10 158:12	received [3]
provider [1]	puts [2]	33:4 40:4 41:22	185:14 211:10 220:12	138:2 169:25
provides [4]	putting [10]	43:9 50:16 61:12	220:23 224:17	receiving [1]
115:16 171:6 182:6	76:7 96:14 150:2	68:14 78:20 102:15	reader [1]	191:4
providing [7]	153:22 153:23 166:8	107:25 112:24 122:12	readily [3]	recent [1]
23:4 40:11 40:14	181:12 182:18 210:21	149:21 176:25 180:24	89:7 103:14	208:12
77:16 77:18 92:4	puzzle [2]	181:15 186:5 187:7	reading [3]	recently [2]
public [63]	69:21	187:25	155:13 211:10	213:24
6:7 6:13 6:16	puzzling [1]	RAAB [11]	ready [3]	recess [1]
6:19 7:8 7:10	103:22	130:5 130:14 130:20	198:7 220:14	reclaim [1]
8:1 9:2 14:2	Pyle [18]	131:21 142:15 186:15	real [26]	reclaimed [1]
14:5 14:7 14:7	3:7 83:22	187:3 187:9 187:22	26:4 40:2 74:3	reclamation [2]
14:9 14:17 14:21	83:23 86:9 87:10	202:8	81:5 81:8 84:1	160:3
14:22 14:24 17:8	88:16 90:19 91:1	rain [1]	84:4 84:6 85:1	recognition [1]
17:8 62:6 63:19	91:6 104:13 104:13	62:15	86:24 89:14 89:22	167:14
87:7 90:6 103:20	107:12 153:10 183:8	raise [6]	89:24 119:25 135:22	recognize [10]
103:20 104:5 123:1	183:8 192:10 192:16	131:19 136:12 185:15	140:12 144:23 145:13	41:25 54:16 54:20
145:6 163:7 169:24	209:6	208:17	162:8 167:19 210:6	57:17 57:18 83:24
188:10 190:6 190:17	qualifier [1]	raised [18]	210:13 211:7 217:18	131:5 188:17 200:21
190:24 191:12 191:15	61:1	22:19 24:1 26:3	realistic [4]	recognizing [3]
192:10 192:14 192:17	qualify [2]	57:18 63:17 112:19	43:19 54:15 57:3	22:18
192:25 194:13 194:15	130:23	128:5 129:20 129:25	reality [1]	88:4 119:5
198:16 199:2 199:3	quality [57]	137:23 139:2 141:15	realization [1]	recommend [2]
200:13 200:13 200:20	12:8	143:16 148:15 174:23	95:10 165:15	193:11
201:1 201:6 202:13	12:12 31:20 31:23	185:17 203:6	realized [1]	recommendation [3]
204:21 205:10 206:14	32:3 32:11 40:9	raises [2]	realizing [2]	15:15 22:13 154:5
209:8 209:13 224:16	60:2 65:4 79:10	203:22	229:14	recommendations [2]
227:22 228:14 228:14	79:14 92:8 93:24	raising [1]	really [82]	15:2 21:4
230:7 230:10	111:25 114:25 115:13	range [9]	17:18 18:4 28:21	recommended [1]
publics [1]	120:23 121:1 121:4	51:10 101:1 101:4	38:15 40:16 43:23	205:2
pull [4]	121:6 121:12 121:22	101:7 106:8 107:3	54:4 61:14 61:24	recommending [4]
132:1 225:17	121:23 121:25 122:2	136:24 207:25	75:8 75:18 83:12	46:15 62:9 62:9
pulling [2]	122:13 122:20 123:5	rapid [3]	86:6 92:13 92:17	131:12
30:22	123:8 123:11 123:17	114:22	92:25 93:7 93:9	reconciling [1]
pulse [1]	123:21 124:9 124:11	rapidity [1]	97:15 97:23 101:14	84:3
129:21	124:20 147:19 147:23	56:15	106:10 110:17 119:12	reconsider [1]
pumped [1]	149:22 149:22 150:1	rapidly [3]	120:11 132:22 133:13	23:19
124:15	157:11 159:2 159:18	57:1 90:24	133:19 135:13 135:15	reconstruct [1]
pumping [3]	160:9 163:3 166:21	rata [1]	135:15 135:24 136:19	171:8
84:10	166:22 173:6 173:12	228:6	136:19 138:20 139:5	record [3]
85:18 85:24	173:14 173:24 179:10	rate [7]	140:22 141:10 143:1	161:17 185:1
pumps [4]	179:10 180:12 186:22	53:25 71:4 71:4	147:16 148:5 149:9	recorded [2]
48:4	188:14 231:21	71:5 204:17	149:20 151:16 153:20	31:13
59:10 114:24 124:15	quantifiable [3]	rates [1]	157:24 158:22 161:18	180:16
purchase [1]	149:16 151:21 227:9	rather [15]	163:8 164:7 166:15	recorder [2]
213:16	quantification [2]	13:19 44:13 50:24	167:3 169:5 170:24	180:19
purely [1]	88:12 88:17	67:10 87:4 102:25	175:3 181:2 183:24	recover [4]
56:12	quantify [1]	143:20 146:25 150:9	184:15 184:22 184:22	40:23
purpose [4]	69:3	162:2 164:3 165:11	185:8 190:8 190:10	78:9 111:20 140:18
40:17	quantitative [1]	205:2 209:14	190:13 205:10 206:4	recovery [3]
183:21 193:14 213:10	148:9	Ray [10]	206:17 207:14 213:19	42:4
purposes [7]	quantity [9]	3:16 187:8	217:24 218:10 220:1	43:24 71:24
6:22	77:10 77:11 80:1	187:9 187:10 187:20	222:9 222:10 223:24	recreate [2]
96:8 107:24 108:1	91:16 92:4 100:17	191:18 192:6 208:10	225:11 225:19 225:22	40:12
108:5 123:22 215:11	123:12 174:4	208:11 208:14	227:21 227:24 229:20	56:3
purse [5]	quarrel [1]	Ray's [1]	rear [1]	recreating [1]
39:12	42:2	190:6	38:23	36:8
140:25 149:15 179:8	quarter [2]	RE [1]	rearing [1]	recreational [2]
179:16	208:5	1:3	40:14	122:10
pursuing [6]	quarters [1]	re-consensus [1]	reason [4]	199:23
13:25	10:2	125:15	111:19 112:10 162:1	84:22 90:12
32:19 36:4 52:18	questioning [1]	re-describing [1]	reasonable [4]	133:18
122:23 123:10	57:21	31:8	145:23 167:18 186:25	Redding [1]
179:14	questions [24]	re-establish [2]		192:6
purview [2]	8:9	146:20		redirect [2]
21:13	20:21 27:17 36:17	re-establishing [1]		14:17
126:18	36:18 41:6 65:18	36:8		18:12
put [37]	74:11 80:7 87:3			redirected [1]
23:15 23:21	96:1 117:23 124:5			145:8
28:18 40:17 44:24	127:8 127:11 132:11			151:14 151:17 151:23
45:25 58:17 59:14	180:11 202:6 211:4			152:13 166:6 166:10
61:13 69:13 69:24	216:16 217:22 226:2			166:15 166:24 167:5
70:14 73:24 74:6				167:8

redraft [1] 181:6	59:17 76:24 79:8	renew [1] 222:17	resolution [2] 81:2	retrofit [1] 204:18
reduce [16] 18:10	85:13 87:19 98:11	repackage [1] 22:2	140:25	return [6] 56:20
38:16 77:7 115:12	126:22 132:11 133:4	repair [1] 175:25	resolve [2] 36:13	73:17 99:12 175:4
115:21 145:7 151:13	141:22 141:24 148:15	repairing [2] 175:22	123:10	176:9 213:15
158:6 159:11 159:17	158:11 229:22	repeat [4] 30:25	resolved [2] 138:11	reused [1] 110:13
160:8 168:16 168:16	relates [4] 94:3 124:14 126:13	34:20 193:24 220:20	146:2	revenge [1] 6:23
179:18 179:25 180:3	relating [2] 114:5	repeated [2] 32:10	resort [1] 11:7	revenue [22] 199:14
reduced [4] 32:2	117:24	41:10	resource [14] 9:17	200:14 205:25 206:16
35:14 35:18 43:1	relation [2] 101:9	repeatedly [2] 98:5	12:5 36:3 77:22	207:1 219:21 219:23
reducing [6] 117:7	101:12	181:22	88:19 108:16 112:1	219:24 224:12 225:6
155:24 156:22 160:21	relationship [7] 14:6	repeating [1] 20:23	116:7 117:21 121:2	225:7 225:10 225:13
165:4 167:5	77:19 112:16 125:25	repetitive [2] 134:14	179:22 183:20 211:8	225:17 225:18 227:10
redundant [1] 225:21	132:1 160:19 219:4	134:15	226:10	227:11 227:20 228:1
Reece [1] 189:22	relationships [1] 29:5	replaced [1] 47:13	resources [5] 3:10	228:4 228:18 229:2
reeks [1] 155:17	relative [14] 46:8	replacement [1] 182:21	42:19 93:21 109:17	revenues [3] 49:22
refer [2] 10:23 53:8	46:21 47:19 50:24	replaces [1] 215:10	133:5	199:12 226:7
reference [1] 82:1	69:25 101:15 123:5	replicate [1] 146:13	respect [4] 62:3	review [7] 8:7
referenced [1] 58:21	124:9 180:11 180:12	report [2] 202:1	97:10 98:25 118:4	8:12 8:20 74:2
referred [1] 25:16	182:7 182:20 196:9	229:22	respond [4] 17:18	140:11 211:2 229:22
referring [3] 63:11	203:12	report's [1] 208:4	82:14 127:8 191:8	reviewed [1] 74:5
96:15 158:19	relatively [2] 89:3	REPORTED [1] 1:20	responds [1] 66:8	reviewing [3] 74:21
refine [4] 181:4	94:12	reporter [3] 31:14	response [6] 8:11	75:4 222:25
182:3 220:12 220:15	releases [4] 78:15	231:4 231:17	54:4 77:4 86:9	reviews [1] 74:20
refined [1] 15:18	79:2 84:16 115:2	REPORTERS [2] 1:23 231:22	103:18 140:2	revised [1] 171:21
refining [3] 18:20	relevance [1] 213:2	reporting [2] 178:5	responsible [1] 93:23	revisions [2] 125:7
60:9 178:5	reliability [32] 58:21	184:18	rest [8] 33:2 50:4	127:5
reflected [3] 103:24	58:24 60:1 60:9	represent [1] 68:23	127:5 135:14 139:13	revisit [2] 167:17
128:24 156:12	71:12 76:10 77:24	representations [2] 86:14 86:15	147:7 221:4 223:1	167:24
reflects [2] 55:20	78:8 80:6 80:13	represented [2] 146:15	restaurant [1] 7:2	revolution [1] 34:15
104:3	95:24 97:7 99:5	197:3	restoration [13] 32:8	revolving [1] 205:23
refresh [2] 15:12	99:6 99:6 99:7	representing [1] 68:23	36:6 40:5 40:9	rewrite [4] 168:11
113:20	99:17 99:20 110:19	represents [3] 26:7	40:17 49:18 65:4	168:12 168:14 169:6
regard [7] 39:19	112:11 112:16 118:19	145:23 147:10	146:18 171:11 171:12	rich [1] 73:7
65:5 103:23 104:23	119:17 120:1 123:20	reproduce [7] 36:10	173:19 189:1 190:16	Richard [7] 2:12
122:25 170:1 226:7	157:12 158:11 158:20	44:11 45:3 45:13	restore [32] 15:16	52:20 64:17 66:21
regarding [5] 125:13	159:5 184:10 186:8	50:5 52:9 52:16	26:13 37:22 38:21	111:16 137:6 141:4
197:5 200:22 206:3	199:24	reproduces [1] 33:3	42:17 67:17 71:18	rid [6] 67:17 68:4
215:2	reliable [3] 40:5	require [2] 21:5	120:13 124:1 146:6	68:8 68:16 161:24
regardless [2] 54:19	80:18 182:20	62:11	146:9 146:10 146:12	161:25
106:15	reliably [1] 62:12	required [2] 109:1	146:21 147:8 147:22	right [49] 4:15
regime [1] 69:10	relied [1] 171:3	119:2	149:5 149:10 153:11	11:13 14:13 14:14
regimes [1] 172:13	relieve [2] 217:14	requirement [2] 134:1	153:14 154:1 161:18	21:10 25:3 59:18
region [3] 105:10	228:5	134:16	162:16 162:17 162:20	62:1 64:20 75:13
105:11 127:18	relocating [1] 18:16	requirements [5] 126:7 131:6 131:25	163:1 163:4 164:7	80:7 85:13 88:21
Regional [2] 131:16	relocations [1] 19:21	132:6 160:3	165:6 169:2 170:23	90:25 91:5 91:19
160:9	rely [2] 38:2 150:11	requires [3] 25:6	175:2	92:10 104:11 112:15
registration [3] 6:9	remain [2] 55:19	118:25 132:4	restored [2] 51:6	118:9 118:13 119:24
6:15 6:19	182:12	research [1] 130:1	147:25	120:18 124:15 129:13
regressions [1] 45:19	remainder [1] 7:18	reserve [1] 36:13	146:24 146:25 148:25	133:14 142:18 149:18
regular [2] 33:11	remains [2] 102:21	reservoir [5] 16:18	149:3	153:6 155:5 157:15
190:2	134:22	16:20 59:11 96:5	restrictions [1] 85:23	161:4 161:11 161:12
regulate [1] 105:19	remember [12] 11:25	182:23	rests [1] 36:10	161:25 164:5 165:1
regulated [1] 92:22	31:13 59:18 67:2	reservoirs [4] 79:2	result [11] 15:9	167:20 168:3 172:12
regulating [1] 105:20	70:14 70:19 71:13	84:9 115:2 123:15	39:4 39:5 85:24	173:21 176:14 183:19
regulations [2] 85:16	138:2 148:14 163:8	residence [1] 47:25	110:18 114:7 114:8	184:1 191:17 193:10
85:16	168:11 219:15	resident [2] 47:14	114:8 114:24 115:1	200:20 216:13 225:23
regulatory [4] 36:1	remind [2] 98:4	resist [2] 170:4	204:2	rights [1] 93:23
68:10 69:10 115:7	219:8	175:8	resultant [1] 155:16	rigidity [1] 112:11
reinforce [1] 115:24	remove [3] 42:5	retreat [1] 187:18	results [13] 46:5	rigorous [1] 180:24
reiterate [2] 126:16	47:8 67:23	retirement [2] 124:22	58:25 76:18 76:23	riparian [2] 116:17
225:21	removed [2] 104:17	124:25	93:12 96:2 96:4	116:25
relate [2] 85:15	174:8	retaining [1] 171:11	96:5 96:7 96:8	risk [9] 63:23 65:2
172:19	Remy [6] 3:16	retirement [2] 124:22	96:23 158:12 223:13	77:18 77:20 79:23
related [18] 18:22	184:25 187:8 187:9	124:25	retaining [1] 171:11	80:4 156:22 158:6
19:13 19:17 46:16	208:11 208:16	retreat [1] 187:18	retirement [2] 124:22	160:21
			124:25	risks [2] 65:5 155:24
				river [16] 67:10

78:16	98:25	99:11	San [59]	2:11	51:14	197:25	198:23	199:22	September [3]	5:15	shifting [2]	98:23
99:15	124:10	124:13	79:4	98:25	99:11	217:7	221:20	222:16	17:9	178:4	145:16	
124:15	189:17	214:17	110:10	110:11	124:10	227:11			series [2]	142:4	short [8]	15:6 17:22
214:23	215:1	217:4	124:12	124:13	124:21	secondly [1]	41:18		220:11		33:9	77:13 87:6
217:11	218:3	218:4	126:7	128:7	129:9	section [4]	58:14		serious [2]	42:12	129:12	189:23 221:1
riverine [6]	15:16		129:19	129:22	130:6	203:10	221:1	222:13	185:25		short-term [1]	45:3
15:18	49:24	67:18	130:9	130:12	131:3	sector [3]	109:2		seriousness [1]	226:13	shorthand [5]	79:24
67:19	117:1		131:9	132:2	137:9	109:4	110:6		served [3]	6:24	231:3	231:6 231:9
road [5]	15:2	133:22	137:17	137:25	138:5	sectors [2]	107:7		117:3	127:24	231:17	
212:21	221:19	223:25	138:9	139:5	139:21	108:21			serves [1]	120:16	shortsighted [1]	
Roberta [15]	2:25		139:25	140:4	140:17	see [67]	5:22	5:25	service [9]	76:20	110:15	
44:16	49:14	51:3	140:20	141:9	141:11	20:20	21:7	40:4	76:23	105:7	shot [3]	66:7 66:18
68:17	70:22	80:9	141:23	142:1	142:9	40:8	42:25	43:2	105:20	105:25	168:2	
91:12	106:21	110:4	142:16	143:2	143:3	43:7	43:7	43:11	126:23	205:13	shoulders [1]	111:13
120:4	132:20	150:5	143:9	143:23	145:17	43:14	55:11	66:8	services [2]	171:2	show [7]	43:3 84:22
162:23	228:9		172:1	172:19	192:3	66:13	69:22	70:1	171:6		96:18	98:13 103:4
robust [1]	40:9		212:24	213:14	213:15	74:16	82:4	82:7	session [2]	184:11	127:23	132:25
Roger [12]	2:15		214:1	214:3	215:4	82:13	82:19	87:10	184:18		showed [1]	178:25
2:21	3:5	24:9	215:21	215:22	217:6	87:15	91:19	91:24	sessions [6]	180:17	shown [3]	77:24
44:16	49:14	52:19	218:24	231:2	231:18	91:24	91:25	95:1	181:21	184:13	116:1	180:5
56:8	93:25	150:5	Santa [2]	190:16		96:21	97:25	99:25	197:24	223:22	shows [1]	133:1
163:19	168:13		208:12			100:2	100:6	101:13	set [23]	11:22	12:7	
Roger's [1]	24:11		satisfy [1]	155:25		102:19	102:24	106:9	20:10	20:16	26:23	
role [7]	14:19	99:25	satisfying [1]	149:8		110:24	116:3	129:6	51:1	63:13	66:7	
100:3	100:9	100:10	Save [1]	2:11		129:23	134:1	142:16	76:11	84:3	87:13	
119:10	120:6		saw [2]	17:11	166:3	145:22	153:7	154:24	92:18	103:13	106:3	
room [8]	6:9	7:1	says [13]	7:16	32:24	173:17	173:21	173:22	127:14	133:1	136:10	
25:13	81:14	151:12	41:22	42:2	42:25	179:13	180:1	186:5	142:11	204:14	209:22	
193:6	193:8	193:18	58:23	137:22	151:14	186:7	187:7	187:22	210:3	210:15	217:18	
root [1]	6:11		162:9	163:4	207:5	187:22	190:23	191:1	sets [2]	87:16	108:20	
rotenone's [1]	70:15		221:6	223:25		218:15	219:25	221:15	setting [5]	15:6		
rough [1]	219:1		scale [2]	140:1	208:24	222:9	222:15	230:3	147:15	152:8	212:21	
round-table [4]	195:25	223:13	scaring [1]	128:1		230:9			213:12			
196:7	222:8		schedule [9]	6:13		seeing [5]	14:15		setup [2]	17:3		
rule [1]	126:9		6:16	7:18	17:1	230:9			29:17			
rules [1]	196:14		17:2	17:4	187:25	seeks [1]	39:8		seven [1]	15:18		
run [7]	9:22	10:1	204:23	204:24		seem [6]	93:6	94:9	several [11]	5:4		
10:6	10:10	34:13	scheduled [2]	7:12		108:5	133:24	171:22	21:9	32:4	81:18	
52:22	85:17		211:23			176:2			86:3	141:1	177:12	
rural [4]	13:13	151:19	schedules [1]	176:20		secs [1]	221:23		213:10	213:13	223:20	
165:25	191:3		schematic [1]	19:8		seismic [2]	119:9		228:18			
SABLAN [1]	3:4		science [3]	62:20		204:18			severance [2]	226:9		
Sacramento [8]	7:13		94:14	94:19		selection [1]	53:18		226:19			
78:16	79:3	99:3	scientific [3]	80:18		self-sustainability [1]	176:9		shad [1]	50:9		
182:9	191:15	194:9	82:3	82:25		self-sustaining [1]	171:5		shaded [3]	15:16		
230:13			scientists [2]	45:9		171:5			117:1	127:14		
Sacramento/San [1]	33:25		46:2			SELKIRK [11]	3:8		shallow [6]	40:12		
33:25			scope [16]	107:1		60:13	61:19	62:1	49:24	67:18	117:13	
sacrifice [1]	26:22		107:4	125:7	125:9	63:15	64:16	65:19	189:1	189:2		
sacrificing [1]	52:24		125:10	125:14	127:2	103:17	153:3	184:4	share [6]	9:8	108:4	
safe [1]	182:20		128:8	129:4	132:5	204:9			108:9	150:7	206:13	
safety [1]	14:12		135:11	136:7	170:19	semantics [4]	23:12		206:13			
sale [1]	199:13		171:14	171:21	173:1	122:21	147:17	165:4	shared [1]	63:5		
sales [1]	199:19		screen [2]	9:25		122:21	147:17	165:4	sharing [1]	5:9		
salinity [7]	115:2		69:14			send [2]	22:15	223:10	Sharon [2]	68:14		
123:16	139:22	139:23	screened [1]	19:16		sense [12]	24:24		221:25			
140:3	172:13	172:18	screening [1]	134:25		27:13	60:22	94:2	Shawn [1]	192:19		
salmon [11]	61:2		sea [3]	114:17	114:22	112:15	135:21	150:23	sheet [2]	77:24	180:20	
71:14	71:21	71:22	118:21			162:18	166:6	210:25	sheets [8]	41:9		
81:18	85:17	89:17	season [1]	17:16		212:8	221:16		73:18	73:22	74:2	
133:13	133:16	134:16	seasonal [1]	122:16		sensitive [2]	102:13		74:3	159:10	177:13	
134:21			seasons [1]	124:11		102:19			188:21			
salt [4]	51:18	121:16	seats [1]	113:8		sensitivity [5]	101:8		shelf [2]	164:4	169:10	
124:16	139:19		second [20]	5:5		101:10	101:13	101:16	shelter [3]	33:2		
salty [1]	121:18		20:20	31:12	76:17	106:9			36:9	40:14		
sample [1]	98:7		77:9	92:3	100:13	sent [4]	23:10	147:14	shift [1]	98:21		
			114:10	115:18	116:21	197:22	219:2					
			147:3	154:4	187:16	sentences [1]	155:23					

38:8 57:12 90:1	18:23 18:24 24:15	206:22 208:20 225:13	176:1	stalled [1]	87:8	
109:1 189:14 216:14	27:23 28:10 32:8	228:2	specific [32]	8:15	stand [1]	123:7
223:25	36:14 42:15 61:22	sources [14]	11:24 16:21 16:21	standard [4]	62:13	
situational [1]	80:16 102:25 102:25	175:17 181:16 206:12	22:25 22:25 24:25	65:7 123:1	180:20	
six [5]	103:3 107:19 127:3	207:15 219:21 225:6	35:24 62:24 74:11	standards [16]	12:8	
18:5 151:9 151:14	127:14 128:7 128:17	225:7 225:10 225:17	80:7 83:25 84:16	12:12 83:3	83:7	
size [2]	133:1 144:24 145:3	225:18 227:21 228:18	85:20 85:21 91:23	83:8 83:9	83:14	
skewed [1]	145:24 151:5 151:9	229:2	112:14 126:4 127:4	84:11 93:24	108:12	
skilled [1]	151:11 151:17 165:23	south [19]	129:20 138:3 143:15	108:20 109:22	121:24	
skimming [1]	166:3 166:5 166:18	2:9	146:2 146:25 148:9	122:23 153:21	153:24	
skimming [1]	166:23 171:16 173:17	73:4 84:10 124:9	148:24 152:2 158:23	standing [1]	11:10	
slid [1]	177:24 178:1 181:11	126:14 126:24 131:17	159:4 213:21 220:5	standpoint [8]	85:3	
slide [1]	202:4 210:1 210:20	132:12 132:13 132:14	228:5	122:18 123:3	135:23	
slight [1]	213:2 219:10 227:13	133:5 142:5 152:22	specifically [11]	139:10 139:17	183:17	
slightly [2]	solutions [18]	172:20 182:8 185:3	14:19 16:21 22:18	183:18	stared [1]	
58:19	46:15 62:8 62:11	185:3 185:9 217:15	50:20 53:13 78:17	start [38]	14:15 15:1	
slips [1]	62:20 62:25 63:7	southeast [1]	101:21 102:4 102:21	19:1 19:2	19:18	
169:25	102:13 107:3 129:11	southern [21]	105:5 130:15	19:19 22:20	26:25	
slow [1]	133:7 133:19 134:2	47:21 127:15 127:18	specifics [3]	28:1 28:23	30:5	
150:15	145:7 145:13 167:2	129:9 185:5 185:7	86:10 86:17	30:12 30:19	36:23	
slowed [1]	178:14 227:14	190:7 190:11 190:18	specified [3]	53:6 62:23	64:4	
34:16	solvable [1]	192:6 192:17 192:18	15:21 16:17	76:5 76:8	84:14	
slower [2]	solve [13]	192:22 193:23 197:16	SPECTATOR [1]	86:16 88:11	90:12	
205:2	13:12 13:18 18:15	213:25 216:4 217:3	64:18	90:20 90:20	128:1	
sluicing [1]	26:25 43:23 87:20	217:10 217:12	speed [3]	128:16 135:16	176:24	
99:10	128:2 132:14 134:3	space [3]	186:19 186:20	177:24 177:25	178:2	
small [4]	178:13 178:16 181:12	33:19 39:25	spelled [2]	179:12 181:12	182:14	
186:2 223:22 225:11	solved [2]	spawn [1]	172:14	182:18 184:7	186:20	
smelt [4]	10:9	140:16	spelling [1]	started [5]	8:20	
85:24 89:17 140:13	128:15	spawning [5]	6:22	19:25 113:9	181:10	
smoke [1]	solving [5]	133:18	spend [7]	212:9	starting [5]	
9:25	28:23 31:10 75:19	134:24 134:25 140:23	67:25 74:8 74:10	22:21 28:7	28:19	
smoothing [1]	178:16	141:2	76:2 174:17 196:16	30:7	starts [3]	
40:19	someone [2]	speak [4]	spent [1]	189:2 210:8	19:9	
smoothness [1]	223:10	81:13	117:6	starving [1]	49:10	
40:22	someplace [1]	214:5	173:1	state [32]	3:6	
SMUDS [1]	sometimes [1]	214:5	140:13	12:3 21:6	21:17	
203:3	somewhat [5]	speaking [3]	spills [1]	25:1 56:23	74:20	
sneaky [1]	54:9 140:7 171:15	9:3	splittail [1]	80:21 84:8	87:17	
11:12	171:18	27:5 74:23	sponsored [1]	93:21 104:24	105:3	
Snow [82]	somewhere [5]	special [2]	65:15	105:5 115:6	127:16	
2:4	64:19	70:9	Sportfishing [1]	127:19 176:9	185:7	
4:16 8:17 21:8	67:19 106:22 148:7	specie's [1]	2:12	185:22 196:3	197:9	
22:5 23:17 25:8	148:8	species [101]	spot [1]	200:4 205:23	206:15	
28:1 28:4 29:24	soon [3]	26:21 32:4 33:5	75:13	206:22 207:4	222:18	
57:6 59:15 63:10	7:19 83:19	33:6 33:24 35:21	spread [1]	225:10 231:1	231:4	
63:24 64:12 64:20	228:13	36:9 36:22 37:3	182:10	statement [54]	23:8	
65:25 72:12 72:18	sooner [3]	37:13 37:14 37:17	spring [2]	23:19 23:22	31:21	
81:16 89:1 90:25	87:4 186:11	37:18 37:20 37:23	99:14	41:17 56:9	56:10	
91:3 91:8 101:21	sorry [4]	38:4 38:5 38:8	ss [1]	58:9 58:11	58:20	
103:6 112:9 120:22	100:8 111:16	38:13 38:17 38:20	231:1	58:22 59:2	59:3	
125:4 125:8 127:22	188:8 194:5	38:25 39:7 39:15	stability [10]	59:13 60:7	76:22	
128:11 129:12 130:11	sort [28]	39:17 42:1 42:5	35:10	78:3 92:25	95:11	
130:18 130:25 131:23	8:10 9:5	42:6 44:1 44:5	53:9 54:1 56:19	96:24 97:22	97:23	
132:15 132:19 133:8	17:16 24:2 25:22	44:25 45:3 45:11	71:12 118:4 120:2	97:25 97:25	103:1	
133:15 134:19 135:5	25:22 29:10 34:17	45:13 46:11 46:15	160:16 160:23 163:14	103:5 118:20	144:11	
135:13 137:18 138:20	45:16 54:18 55:2	48:11 48:23 49:19	stabilization [9]	144:12 144:15	144:19	
143:14 144:6 144:10	55:11 61:25 110:18	50:4 50:10 50:12	58:16 116:13 116:18	144:19 145:1	145:19	
148:11 149:14 151:24	128:24 128:25 147:24	51:1 51:7 53:17	116:19 116:22 117:2	145:24 146:5	147:18	
152:21 153:4 154:10	173:18 178:4 181:21	53:19 53:21 54:5	117:10 117:21 118:10	147:21 151:6	153:13	
154:16 154:25 155:12	207:14 213:20 215:1	54:7 54:9 54:12	stabilize [3]	154:12 154:20	156:13	
156:16 157:1 158:8	215:7 219:10 219:12	54:17 54:25 55:13	117:12 117:16	161:22 162:9	163:16	
159:21 162:5 162:19	220:7 224:14	55:24 56:15 56:24	stabilizing [1]	166:14 167:14	167:25	
167:21 168:1 168:4	sorts [3]	57:14 60:21 66:15	116:15	170:21 173:6	173:14	
169:1 169:17 176:23	65:4 180:11	67:7 67:9 67:11	stable [5]	196:21 196:24	statements [43]	
176:24 187:1 188:3	221:18	67:17 68:12 68:22	40:11	stake [1]	49:22	
195:9 209:24 210:10	sound [3]	68:24 69:4 69:25	61:18			
212:4 212:14 218:14	170:4 184:25	70:4 70:10 70:17	115:18			
218:25 229:19 230:15	sounded [1]	72:4 78:9 78:19	staff [12]			
society [6]	23:11	78:21 79:5 80:20	8:16			
35:13 44:11 52:17	sounds [3]	81:18 111:18 111:21	19:4 63:3 101:24			
56:22 108:3	157:18	112:7 112:10 112:12	104:4 115:10 170:12			
softens [1]	167:17 202:10	112:16 115:22 137:14	188:13 188:18 190:17			
166:15	source [8]	140:13 140:15 141:1	193:8 205:2			
softer [1]	115:19	163:6 174:23 174:24	staff's [1]			
152:6	206:2	175:3 175:4 175:6	24:21			
sold [1]		175:9 175:9 175:24	stage [2]			
199:12			28:7 219:25			
solid [1]			stages [3]			
20:1			33:6			
solution [46]			47:10 47:10			
12:20			stake [1]			
18:1 18:4 18:9			49:22			

24:5	24:7	29:7	straightforward [1]	33:22	36:16	156:18	137:16	139:21	139:24	supports [1]	122:2
29:7	29:11	29:16	38:12	188:5	229:25		172:2	172:14	172:14	suppose [3]	92:13
30:23	31:4	59:7	Straits [1]	139:23	sturgeon [1]	61:3	173:4	175:14		227:20	228:1
59:17	73:20	73:25	strange [1]	147:16	sub-causes [1]	85:20	suite [1]	46:23		supposed [1]	124:8
74:4	74:4	74:12	strategic [1]	89:5	sub-problem [1]		suited [1]	183:21		Supreme [1]	208:12
74:12	76:11	76:13	strategies [15]	18:10	174:14		summarization [2]			surcharges [1]	205:14
76:14	77:5	77:6	18:11	18:23	18:24	subject [9]	74:3	76:9		surface [1]	117:8
86:11	88:5	88:9	19:2	27:23	28:10	36:1	summarize [2]	30:3		surplus [1]	215:1
88:23	89:25	95:15	80:16	178:1	205:8	104:15	30:4			surrogate [1]	52:12
97:20	113:22	113:25	210:1	211:9	211:12	208:21	summarized [4]	76:12		survival [3]	19:15
114:2	155:3	158:9	211:18	227:15		subjected [1]	76:14	77:5	115:11	33:13	55:10
172:12	172:17	173:2	strategy [11]	13:25		subjects [1]	summary [6]	73:19		survive [1]	71:17
173:12	173:16	174:1	16:7	20:4	28:22	submitted [1]	73:19	77:24	80:24	SUSAN [3]	1:20
174:14	178:5	178:6	28:23	29:3	205:9	subscribe [1]	113:21	158:9		231:3	231:24
statewide [1]	197:13		210:20	211:1	211:7	subscribing [1]	summer [3]	99:12		susceptibility [1]	161:14
station [1]	86:20		218:13			subsequent [1]	99:16	197:22		susceptible [1]	154:22
statistics [1]	98:13		stratification [1]	172:20		subsequently [2]	sums [1]	42:8		suspect [1]	24:12
stay [5]	27:5	27:6	stream [1]	199:13		59:25	Sunne [20]	2:5		suspicion [3]	9:18
90:22	189:25	218:11	streams [2]	71:17		117:12	4:15	41:4	44:19	20:9	20:9
staying [2]	90:23		182:23			117:16	52:20	52:23	56:7	sustain [1]	32:22
187:25			street [1]	29:11		117:19	58:6	78:1	80:9	sustainable [1]	163:4
stem [1]	49:2		STRELOW [7]	2:15		subsidiary [2]	83:24	95:20	118:16	swimmer's [1]	122:11
stems [1]	157:3		24:10	52:25	55:17	215:15	120:7	135:8	153:17	switch [1]	20:15
step [9]	17:21	18:17	56:10	57:20	163:20	substance [1]	157:22	159:15	205:20	Syndrome [1]	215:8
21:21	84:19	219:17	stresses [3]	38:9		substantively [1]	206:8			synergism [3]	116:6
223:1	223:19	224:4	38:11	52:16		10:21	superimposing [1]			116:23	211:11
224:13			strike [1]	125:18		substitute [2]	220:10			synergistic [5]	29:4
steps [3]	17:23	87:6	striped [11]	50:1		112:7	supplemental [2]			79:9	79:20
210:19			50:2	50:9	50:17	subtle [1]	105:7	105:12		211:13	160:19
Steve [30]	2:7		50:20	50:24	61:3	succeed [1]	supplies [11]	10:15		synergy [1]	28:19
11:23	19:5	44:15	66:23	66:24	66:25	11:4	11:1	42:9	49:4	synonymous [1]	148:5
44:17	48:18	61:8	71:23			succeeded [1]	78:12	78:25	105:3	system [103]	12:6
68:17	72:18	73:13	stripping [1]	48:12		successful [2]	105:9	115:1	127:18	26:12	26:18
102:9	103:16	106:21	94:14	107:17	162:8	75:22	174:4			38:7	38:13
111:12	113:14	118:2	170:22	172:1	185:6	succession [2]	supply [74]	12:13		47:17	47:21
120:20	135:17	136:4	strong [7]	65:6		53:22	26:19	26:20	33:16	50:11	50:15
139:18	155:15	155:20	94:14	107:17	162:8	succinct [1]	40:6	48:12	48:13	55:9	56:13
156:2	157:25	158:5	170:22	172:1	185:6	such [19]	49:11	58:20	58:24	59:7	61:7
161:1	161:12	194:4	strongly [2]	131:12		38:13	58:25	60:1	60:9	70:25	72:1
209:22	210:6		171:10			103:22	72:13	73:14	74:23	77:11	77:17
Steve's [1]	161:6		struck [2]	106:24		126:23	76:10	76:23	77:8	77:17	77:19
steward [1]	108:16		147:16			193:12	77:10	77:14	77:23	78:8	79:7
Stewart [2]	11:11		structural [1]	118:4		200:1	78:8	79:15	80:6	80:12	92:7
86:22			structure [7]	67:1		204:3	80:12	92:5	92:7	92:20	93:11
stick [1]	126:9		67:3	174:25	194:14	sucked [2]	92:20	93:11	96:2	96:4	98:20
sticky [1]	180:20		194:17	203:8	227:12	124:15	96:4	98:20	99:4	99:20	100:1
still [19]	17:1	17:1	structured [3]	125:25		sudden [2]	99:20	100:1	100:4	100:11	100:19
18:19	23:11	24:6	138:6	194:11		189:17	100:11	100:19	100:21	105:6	105:11
54:10	72:25	75:7	structures [1]	201:21		suffer [1]	105:6	105:11	105:12	105:16	106:6
81:14	86:5	87:7	struggle [2]	63:6		sufficient [2]	115:13	118:18	119:17	115:13	118:18
97:3	102:18	112:24	103:23			170:24	120:1	123:20	126:21	120:1	123:20
120:12	147:15	148:4	struggled [1]	151:24		sufficiently [1]	142:13	155:1	155:18	142:13	155:1
148:22	153:2		struggling [1]	87:2		suggest [9]	157:12	158:11	158:11	157:12	158:11
stipulating [1]	154:1		Stu [22]	3:7	83:21	150:8	158:12	158:19	159:5	158:12	158:19
Stockton [8]	1:24		83:23	85:3	90:10	172:16	159:18	174:1	174:7	159:18	174:1
5:14	17:10	193:1	91:8	98:8	103:16	209:14	174:7	179:9	179:25	174:7	179:9
193:20	194:8	194:25	104:12	104:12	104:13	suggested [3]	180:4	180:8	182:7	180:4	180:8
231:23			106:2	106:23	107:10	181:22	182:10	184:10	184:15	182:10	184:10
stop [5]	8:8	20:19	150:4	153:9	183:7	183:1	186:7			186:7	
26:12	26:18	74:13	183:8	187:21	192:9	suggesting [9]	support [16]	33:9		34:4	34:6
storage [12]	3:14		208:10	209:5		43:18	71:10	101:4	144:7	71:10	101:4
16:2	16:6	16:7	Stu's [1]	194:7		156:18	146:4	147:6	151:8	146:4	147:6
16:12	16:16	28:15	studies [2]	196:9		205:7	152:14	163:4	171:10	152:14	163:4
78:17	96:6	182:6	196:12			suggestion [4]	204:15	214:6	215:12	204:15	214:6
182:8	197:18		study [7]	32:1		94:7	supported [1]	121:15		supported [1]	121:15
storing [1]	218:2		101:2	133:16	136:22	suggestions [3]	supporters [1]	170:22		supporting [1]	204:23
storming [1]	223:22		139:14	209:6	226:21	181:8	supporting [1]	204:23			
straighten [1]	153:16		stuff [7]	6:11	11:17	181:9					
						Suisun [9]					
						137:13					

systematically [1] 139:12	23:25 28:20 38:25 39:25 40:1 40:14 44:24 46:7 47:23 55:2 58:12 61:9 61:14 61:17 62:7 63:7 63:13 84:20 99:2 99:5 119:15 123:9 123:20 124:3 126:25 147:22 160:21 168:7 170:14 170:25 171:14 172:8 173:13 179:13 181:23 185:8 186:7 198:9 198:24 199:10 201:23 203:12 217:20 220:17 220:18	128:4 136:4 139:4 155:9 168:21 183:9 186:22 187:19 190:15 202:21 212:19 221:22 222:3 222:24 223:24	thoughtful [1] 87:2 thoughts [8] 11:22 17:19 31:6 72:16 89:2 165:19 165:20 208:15	thousand [1] 71:4 thousands [1] 216:1 threat [1] 8:19 threatened [1] 188:1 threats [1] 157:13 three [27] 12:7 13:23 15:4 16:23 23:4 30:2 60:4 76:12 96:9 115:14 116:11 143:11 143:12 159:11 159:20 186:15 187:13 188:1 198:18 207:21 210:19 219:16 220:10 222:19 224:20 228:18 229:8	80:1 80:19 81:20 83:20 91:24 92:4 98:22 100:18 123:12 174:4 175:19 229:12 tired [1] 180:25 title [4] 161:1 161:2 161:14 163:13 today [22] 4:10 8:21 9:9 10:21 28:2 28:12 32:11 32:17 51:15 69:16 86:24 90:19 122:12 167:13 171:22 177:2 184:7 195:17 195:22 197:10 203:17 215:10 today's [1] 6:2 toe [1] 117:14 together [31] 12:3 18:7 19:2 19:2 19:9 20:8 20:12 20:14 25:16 27:3 29:3 46:1 46:3 70:14 74:6 76:7 82:3 82:5 89:4 96:14 116:6 177:24 181:13 190:17 190:20 210:22 211:14 212:9 212:16 212:19 222:18 token [1] 160:15 Tom [22] 2:10 3:11 21:2 22:6 22:8 23:7 24:1 62:5 91:13 92:11 95:22 96:10 97:5 103:18 118:1 118:17 127:12 128:13 164:24 213:1 213:4 216:21 Tom's [1] 98:11 too [25] 10:8 63:12 64:9 67:8 68:9 74:25 75:5 75:8 75:9 75:15 75:17 90:11 99:7 100:22 123:2 136:12 154:19 155:10 156:1 156:2 164:16 165:20 166:16 178:6 221:19	tougher [2] 65:9 70:11 tour [1] 73:3 toward [5] 169:9 175:17 178:16 178:16 213:20 towards [9] 34:17 81:10 83:8 88:15 88:17 193:15 201:2 207:24 207:24 track [4] 8:22 8:22 16:24 90:23 tract [2] 114:11 114:11 tracts [1] 114:15 trade-offs [1] 134:8 tradition [1] 224:6 traditional [2] 110:21 199:21 train [1] 64:13 transcribed [1] 231:9 transcript [2] 1:10 231:12 transcription [3] 231:10 231:11 231:21 transfer [9] 59:9 79:6 115:3 119:8 151:17 151:20 155:4 155:9 216:6 transferred [2] 159:13 174:8 transfers [3] 13:12 151:15 152:7 transitioning [1] 192:13 translate [1] 219:12 translates [1] 122:19 transport [22] 59:1 76:25 77:2 77:17 77:19 78:11 78:22 79:22 80:3 93:3 93:12 93:14 96:3 106:18 156:5 156:7 156:15 158:7 158:13 158:17 158:24 182:11 treated [2] 121:8 202:23 treatment [1] 121:9 tree [1] 27:7 tremendous [6] 43:24 103:22 180:21 199:7 200:6 204:1 tributaries [1] 99:10 tributary [1] 127:23 tried [5] 71:7 73:23 170:19 184:1 199:4 tries [1] 12:11 trivializes [1] 63:12 trophic [2] 61:2 61:4 true [10] 44:2 104:22 121:13 132:7 173:8 175:13 182:22 199:4 231:11 231:12 truncated [1] 171:18 trust [3] 9:21 11:11 83:13
systems [2] 59:1 79:4	26:1 26:15 6:19 95:19 95:23 143:24 185:24 230:5		thoughtful [1] 87:2 thoughts [8] 11:22 17:19 31:6 72:16 89:2 165:19 165:20 208:15			
table [8] 6:9 6:15 6:19 95:19 95:23 143:24 185:24 230:5	26:1 26:15 6:19 95:19 95:23 143:24 185:24 230:5		thoughtful [1] 87:2 thoughts [8] 11:22 17:19 31:6 72:16 89:2 165:19 165:20 208:15			
tacit [1] 144:6			thoughtful [1] 87:2 thoughts [8] 11:22 17:19 31:6 72:16 89:2 165:19 165:20 208:15			
Tahoe [1] 128:1	128:1		thoughtful [1] 87:2 thoughts [8] 11:22 17:19 31:6 72:16 89:2 165:19 165:20 208:15			
takes [4] 79:25 91:10 139:15 166:4	79:25 91:10 139:15 166:4		thoughtful [1] 87:2 thoughts [8] 11:22 17:19 31:6 72:16 89:2 165:19 165:20 208:15			
taking [9] 19:4 85:25 110:25 111:2 142:23 152:22 180:18 180:19 214:13	19:4 85:25 110:25 111:2 142:23 152:22 180:18 180:19 214:13		thoughtful [1] 87:2 thoughts [8] 11:22 17:19 31:6 72:16 89:2 165:19 165:20 208:15			
talks [1] 189:7	189:7		thoughtful [1] 87:2 thoughts [8] 11:22 17:19 31:6 72:16 89:2 165:19 165:20 208:15			
tape [1] 180:19	180:19		thoughtful [1] 87:2 thoughts [8] 11:22 17:19 31:6 72:16 89:2 165:19 165:20 208:15			
target [1] 39:10	39:10		thoughtful [1] 87:2 thoughts [8] 11:22 17:19 31:6 72:16 89:2 165:19 165:20 208:15			
task [1] 96:19	96:19		thoughtful [1] 87:2 thoughts [8] 11:22 17:19 31:6 72:16 89:2 165:19 165:20 208:15			
tax [9] 200:1 200:5 200:14 208:21 226:8 226:9 226:15 226:18 226:19	200:1 200:5 200:14 208:21 226:8 226:9 226:15 226:18 226:19		thoughtful [1] 87:2 thoughts [8] 11:22 17:19 31:6 72:16 89:2 165:19 165:20 208:15			
taxes [2] 205:14 208:18	205:14 208:18		thoughtful [1] 87:2 thoughts [8] 11:22 17:19 31:6 72:16 89:2 165:19 165:20 208:15			
teaser [2] 211:7 .211:16	211:7 .211:16		thoughtful [1] 87:2 thoughts [8] 11:22 17:19 31:6 72:16 89:2 165:19 165:20 208:15			
technical [7] 32:21 60:13 62:8 62:11 186:21 194:12 194:16	32:21 60:13 62:8 62:11 186:21 194:12 194:16		thoughtful [1] 87:2 thoughts [8] 11:22 17:19 31:6 72:16 89:2 165:19 165:20 208:15			
technically [1] 191:14	191:14		thoughtful [1] 87:2 thoughts [8] 11:22 17:19 31:6 72:16 89:2 165:19 165:20 208:15			
techniques [3] 219:22 220:5 225:20	219:22 220:5 225:20		thoughtful [1] 87:2 thoughts [8] 11:22 17:19 31:6 72:16 89:2 165:19 165:20 208:15			
technologies [1] 122:3	122:3		thoughtful [1] 87:2 thoughts [8] 11:22 17:19 31:6 72:16 89:2 165:19 165:20 208:15			
teeth [1] 184:23	184:23		thoughtful [1] 87:2 thoughts [8] 11:22 17:19 31:6 72:16 89:2 165:19 165:20 208:15			
Tehachapes [2] 185:10 217:15	185:10 217:15		thoughtful [1] 87:2 thoughts [8] 11:22 17:19 31:6 72:16 89:2 165:19 165:20 208:15			
telling [1] 86:18	86:18		thoughtful [1] 87:2 thoughts [8] 11:22 17:19 31:6 72:16 89:2 165:19 165:20 208:15			
tells [1] 21:24	21:24		thoughtful [1] 87:2 thoughts [8] 11:22 17:19 31:6 72:16 89:2 165:19 165:20 208:15			
temperature [1] 33:15	33:15		thoughtful [1] 87:2 thoughts [8] 11:22 17:19 31:6 72:16 89:2 165:19 165:20 208:15			
temporarily [1] 195:10	195:10		thoughtful [1] 87:2 thoughts [8] 11:22 17:19 31:6 72:16 89:2 165:19 165:20 208:15			
temptation [1] 150:7	150:7		thoughtful [1] 87:2 thoughts [8] 11:22 17:19 31:6 72:16 89:2 165:19 165:20 208:15			
ten [8] 4:6 25:14 68:3 112:23 145:14 148:21 204:22 212:19	4:6 25:14 68:3 112:23 145:14 148:21 204:22 212:19		thoughtful [1] 87:2 thoughts [8] 11:22 17:19 31:6 72:16 89:2 165:19 165:20 208:15			
ten-year [1] 204:23	204:23		thoughtful [1] 87:2 thoughts [8] 11:22 17:19 31:6 72:16 89:2 165:19 165:20 208:15			
tend [2] 42:22 189:11	42:22 189:11		thoughtful [1] 87:2 thoughts [8] 11:22 17:19 31:6 72:16 89:2 165:19 165:20 208:15			
tendency [3] 99:5 201:1 201:5	99:5 201:1 201:5		thoughtful [1] 87:2 thoughts [8] 11:22 17:19 31:6 72:16 89:2 165:19 165:20 208:15			
tending [1] 53:21	53:21		thoughtful [1] 87:2 thoughts [8] 11:22 17:19 31:6 72:16 89:2 165:19 165:20 208:15			
tends [2] 49:4 173:7	49:4 173:7		thoughtful [1] 87:2 thoughts [8] 11:22 17:19 31:6 72:16 89:2 165:19 165:20 208:15			
term [13] 10:24 35:6 60:19 60:25 98:17 107:11 144:15 153:14 161:18 164:7 177:23 177:23 214:25	10:24 35:6 60:19 60:25 98:17 107:11 144:15 153:14 161:18 164:7 177:23 177:23 214:25		thoughtful [1] 87:2 thoughts [8] 11:22 17:19 31:6 72:16 89:2 165:19 165:20 208:15			
terminal [2] 148:20 148:21	148:20 148:21		thoughtful [1] 87:2 thoughts [8] 11:22 17:19 31:6 72:16 89:2 165:19 165:20 208:15			
terming [1] 96:13	96:13		thoughtful [1] 87:2 thoughts [8] 11:22 17:19 31:6 72:16 89:2 165:19 165:20 208:15			
terminology [2] 32:19 58:13	32:19 58:13		thoughtful [1] 87:2 thoughts [8] 11:22 17:19 31:6 72:16 89:2 165:19 165:20 208:15			
terms [52] 8:23 13:22 14:5 14:7 14:19 17:20 19:8	8:23 13:22 14:5 14:7 14:19 17:20 19:8		thoughtful [1] 87:2 thoughts [8] 11:22 17:19 31:6 72:16 89:2 165:19 165:20 208:15			
terrestrial [4] 43:5 47:5 60:20 148:18	43:5 47:5 60:20 148:18		thoughtful [1] 87:2 thoughts [8] 11:22 17:19 31:6 72:16 89:2 165:19 165:20 208:15			
terrific [1] 8:2	8:2		thoughtful [1] 87:2 thoughts [8] 11:22 17:19 31:6 72:16 89:2 165:19 165:20 208:15			
test [1] 145:13	145:13		thoughtful [1] 87:2 thoughts [8] 11:22 17:19 31:6 72:16 89:2 165:19 165:20 208:15			
testimony [5] 80:21 231:7 231:8 231:9 231:13	80:21 231:7 231:8 231:9 231:13		thoughtful [1] 87:2 thoughts [8] 11:22 17:19 31:6 72:16 89:2 165:19 165:20 208:15			
Texas [1] 215:16	215:16		thoughtful [1] 87:2 thoughts [8] 11:22 17:19 31:6 72:16 89:2 165:19 165:20 208:15			
thank [44] 5:2 5:17 8:17 21:1 31:18 44:18 49:16 61:19 64:21 72:9 72:14 92:9 104:11 107:14 112:20 112:25 118:14 120:19 120:20 135:7 137:5 151:3 169:21 169:22 176:11 176:12 184:3 184:24 186:13 188:7 188:7 192:8 194:1 195:1 195:2 195:21 202:2 202:5 206:6 209:21 210:12 219:7 230:14 230:15	5:2 5:17 8:17 21:1 31:18 44:18 49:16 61:19 64:21 72:9 72:14 92:9 104:11 107:14 112:20 112:25 118:14 120:19 120:20 135:7 137:5 151:3 169:21 169:22 176:11 176:12 184:3 184:24 186:13 188:7 188:7 192:8 194:1 195:1 195:2 195:21 202:2 202:5 206:6 209:21 210:12 219:7 230:14 230:15		thoughtful [1] 87:2 thoughts [8] 11:22 17:19 31:6 72:16 89:2 165:19 165:20 208:15			
Thanks [1] 202:3	202:3		thoughtful [1] 87:2 thoughts [8] 11:22 17:19 31:6 72:16 89:2 165:19 165:20 208:15			
theme [4] 10:1 10:6 10:10 113:24	10:1 10:6 10:10 113:24		thoughtful [1] 87:2 thoughts [8] 11:22 17:19 31:6 72:16 89:2 165:19 165:20 208:15			
themes [3] 9:7 9:10 18:25	9:7 9:10 18:25		thoughtful [1] 87:2 thoughts [8] 11:22 17:19 31:6 72:16 89:2 165:19 165:20 208:15			
themselves [3] 35:1 127:6 193:18	35:1 127:6 193:18		thoughtful [1] 87:2 thoughts [8] 11:22 17:19 31:6 72:16 89:2 165:19 165:20 208:15			
thereafter [1] 231:8	231:8		thoughtful [1] 87:2 thoughts [8] 11:22 17:19 31:6 72:16 89:2 165:19 165:20 208:15			
therefore [3] 27:22 80:20 123:17	27:22 80:20 123:17		thoughtful [1] 87:2 thoughts [8] 11:22 17:19 31:6 72:16 89:2 165:19 165:20 208:15			
thereof [1] 231:11	231:11		thoughtful [1] 87:2 thoughts [8] 11:22 17:19 31:6 72:16 89:2 165:19 165:20 208:15			
they've [6] 105:10 130:2 160:5 170:19 178:20 222:20	105:10 130:2 160:5 170:19 178:20 222:20		thoughtful [1] 87:2 thoughts [8] 11:22 17:19 31:6 72:16 89:2 165:19 165:20 208:15			
thick-headed [1] 159:6	159:6		thoughtful [1] 87:2 thoughts [8] 11:22 17:19 31:6 72:16 89:2 165:19 165:20 208:15			
thinking [13] 6:17 8:4 19:7 22:12 56:25 62:2 62:22 78:5 116:6 173:11 194:19 212:11 229:12	6:17 8:4 19:7 22:12 56:25 62:2 62:22 78:5 116:6 173:11 194:19 212:11 229:12		thoughtful [1] 87:2 thoughts [8] 11:22 17:19 31:6 72:16 89:2 165:19 165:20 208:15			
third [12] 5:5 12:15 58:24 76:22 114:16 115:21 117:7 118:19 125:20 199:2 200:12 227:7	5:5 12:15 58:24 76:22 114:16 115:21 117:7 118:19 125:20 199:2 200:12 227:7		thoughtful [1] 87:2 thoughts [8] 11:22 17:19 31:6 72:16 89:2 165:19 165:20 208:15			
THOMAS [1] 2:21	2:21		thoughtful [1] 87:2 			

trusty [1] 11:7	two-part [1] 41:15	54:5 54:8	urge [1] 109:23	various [17] 33:6
try [65] 9:4 10:4	tying [1] 20:11	University [2] 65:16	used [24] 17:20	36:3 46:8 53:14
11:6 11:22 12:4	type [18] 9:12 22:17	197:7	32:14 55:19 58:4	58:10 117:11 121:4
12:25 14:3 20:4	72:23 97:18 150:2	unless [2] 126:10	78:18 78:22 97:8	130:22 135:18 142:1
20:15 22:25 23:21	153:12 153:13 156:23	167:18	99:15 107:11 109:5	142:5 170:18 171:3
26:24 27:3 27:5	162:16 193:16 197:10	Unlike [1] 38:15	147:19 147:20 158:3	179:22 197:19 224:12
27:13 29:14 30:3	199:8 200:8 200:10	unnecessary [2] 56:23 219:9	158:3 158:9 163:11	225:20
30:6 36:6 38:21	201:19 203:7 207:21	unproductive [1] 39:19	168:14 177:6 179:16	vary [1] 102:16
38:24 39:3 39:9	types [6] 134:8	unregulated [1] 92:22	182:16 194:25 202:14	varying [1] 102:12
41:6 42:17 43:23	134:8 145:10 198:18	unstable [1] 117:18	226:10 226:11	vast [6] 24:16 42:8
45:16 46:3 52:11	224:12 225:20	untried [1] 10:22	useful [3] 63:2	42:9 45:21 55:8
57:8 57:21 67:23	ultimately [4] 62:7	up [111] 4:19 7:5	65:19 216:13	186:20
69:14 82:22 88:1	81:9 205:12 216:2	7:11 11:22 12:7	usefulness [1] 186:17	vector [1] 168:17
88:23 94:25 100:12	unable [1] 170:4	13:10 13:14 14:2	user [9] 200:1 200:2	vectors [1] 135:15
112:5 112:23 113:18	uncertainty [14] 58:25 76:19 76:23	18:22 19:4 19:13	200:5 200:8 200:10	vehicle [1] 6:25
124:4 129:15 130:3	76:24 93:11 93:14	20:10 20:16 22:15	200:24 206:16 209:8	vehicles [2] 208:23
144:12 148:12 153:6	96:2 96:4 96:15	27:4 28:19 30:12	users [5] 18:11 110:8	209:14
160:4 160:20 161:21	96:17 96:23 158:12	31:17 36:17 38:23	145:8 227:21 228:5	venture [1] 66:12
176:18 194:14 197:18	180:3 180:8	40:19 42:13 46:21	uses [22] 32:7 75:10	version [1] 125:14
204:5 209:25 210:13	uncomfortable [1] 142:18	47:8 51:15 53:23	76:15 76:18 77:8	versions [2] 31:4
222:3 223:16 223:20	uncommon [1] 34:3	55:7 59:14 61:23	77:11 85:12 92:5	168:11
223:21 223:23 224:1	under [25] 22:6	66:6 66:7 67:8	92:6 109:6 109:10	versus [4] 57:12
224:2 224:3 229:15	23:12 23:18 24:18	68:14 68:24 69:9	109:14 121:4 121:21	204:22 209:13 218:3
trying [55] 12:21	43:8 58:20 58:23	70:20 71:1 72:19	141:1 147:4 159:1	viable [1] 217:9
12:23 18:6 26:17	60:11 111:17 113:10	76:12 82:12 88:3	162:21 164:1 164:14	Vice-Chairman [1] 4:15
36:13 39:11 44:23	121:23 154:8 158:19	92:1 93:20 96:11	169:3 202:16	view [8] 13:4 24:22
51:19 51:24 55:22	159:3 159:5 159:9	96:12 99:15 103:4	USGS [1] 130:1	54:15 104:14 184:14
56:20 61:21 63:6	173:24 185:13 188:25	103:13 104:9 106:3	using [16] 28:22 60:25 111:5	200:9 208:22 216:23
68:11 68:16 71:25	189:1 205:23 209:25	111:11 112:5 112:14	147:24 157:5 158:15	views [1] 5:9
72:6 81:2 82:5	219:10 219:11 229:18	114:18 114:23 120:11	164:2 164:15 183:19	vin [1] 211:9
85:6 87:5 87:19	undergone [1] 196:17	125:22 125:23 126:19	190:24 198:17 202:19	virtually [2] 33:17
89:11 90:15 94:10	underlying [2] 71:11	127:13 131:21 133:17	205:22 221:18 228:16	33:24
94:15 94:22 95:10	208:24	136:22 138:6 145:12	utilities [2] 202:13	vis-a-vis [2] 31:24
96:16 97:20 105:16	undermine [1] 71:9	146:5 146:11 149:16	202:23	49:4
105:19 120:6 123:10	underpinning [2] 81:1 82:23	152:1 152:8 154:13	utility [4] 3:8	visit [1] 193:21
130:20 131:17 133:20	understand [33] 5:4	156:4 163:10 165:25	202:22 203:1 204:13	visual [1] 156:13
133:23 136:5 141:11	5:18 11:20 22:23	168:5 168:13 169:24	utilized [2] 123:9	vital [1] 147:1
148:1 148:10 149:16	24:21 30:17 31:7	176:18 178:19 178:20	214:3	voice [1] 170:5
150:22 155:13 157:9	32:18 44:24 52:21	179:9 185:13 186:19	utilizes [1] 44:3	voicing [1] 204:2
157:19 157:24 158:6	53:10 58:11 59:6	186:20 189:11 190:25	utilizing [1] 214:16	volume [2] 119:2
167:12 175:25 190:19	70:25 71:6 73:11	192:19 193:5 194:4	utterly [1] 84:24	119:23
196:10 201:23 207:20	82:17 82:21 94:17	194:24 195:16 197:11	valid [2] 137:23 204:5	volumes [2] 82:12
Tulare [2] 70:15	120:6 128:12 136:6	206:12 207:5 209:13	Valley [13] 31:24	86:3
197:17	137:7 137:24 144:20	209:22 210:3 210:15	33:25 35:16 37:2	voluntary [1] 227:25
tule [1] 146:13	146:23 152:24 157:4	217:2 218:21 219:17	84:9 98:14 105:4	vote [2] 208:25 209:4
tuned [1] 218:11	162:6 162:13 186:3	220:5 222:11 223:1	124:16 124:21 182:10	Voters [1] 2:25
turkey [1] 184:7	207:2 208:9	225:14 227:20 229:14	215:7 215:8 217:6	vulnerability [30] 58:25 59:17 60:4
turn [8] 73:19 76:15	understood [2] 82:18	229:16 229:17 230:5	valuable [3] 163:5	60:11 74:24 75:8
92:1 136:1 140:12	110:20	update [2] 89:10	181:1 187:19	76:24 79:18 93:12
140:16 176:25 177:19	undertaking [1] 205:6	213:1	value [3] 137:25	93:15 96:2 112:1
turnout [1] 5:3	underway [2] 4:12	updated [1] 125:14	205:14 213:11	113:11 113:16 114:5
turtles [1] 43:13	67:23	upper [2] 173:10	variability [1] 133:24	116:10 119:17 154:8
twice [1] 169:19	underwritten [1] 200:14	217:12	variable [3] 97:8	156:4 156:8 156:11
two [53] 11:15 12:11	undesirable [1] 38:17	upset [1] 54:12	97:17 185:11	157:3 157:17 158:13
12:23 18:8 18:9	undoing [1] 148:6	upsetting [1] 32:14	variables [11] 94:11	158:23 159:3 159:10
20:1 30:2 52:3	unduly [1] 54:6	upstream [8] 79:3	94:11 94:17 94:23	159:23 161:3 179:10
63:25 66:5 67:17	uneasy [1] 75:12	84:9 99:7 115:1	95:9 95:16 95:18	vulnerable [4] 157:4
89:2 98:3 101:23	unfortunate [1] 151:10	115:2 123:15 172:8	95:21 97:9 97:11	157:6 157:8 157:18
102:17 107:17 109:2	unfortunately [2] 184:17 211:24	upwards [1] 204:19	variance [1] 140:3	wait [4] 86:15 86:20
125:22 128:9 140:13	unimpaired [1] 98:14	urban [14] 107:7	varied [1] 143:22	91:1 223:13
146:3 155:23 165:24	unique [3] 12:3	107:8 107:9 108:13	varies [4] 97:25	waited [1] 219:24
168:10 178:3 178:24		108:17 109:6 109:22	140:1 140:1 143:21	waiting [2] 209:20
179:4 183:16 184:8		110:6 110:8 110:17	variety [4] 26:15	223:17
184:9 187:4 187:12		111:2 127:15 127:18	55:8 55:9 157:4	
187:17 193:4 194:9				
196:9 196:12 197:3				
202:8 203:5 204:10				
204:19 211:23 212:8				
213:17 216:24 220:9				
220:22 220:25 221:6				
222:12 224:7 227:5				

walk [2] 74:1 219:6	123:22 124:9 124:11	wccds [4] 37:2	57:1 59:11 87:5	186:16 188:11 190:6
walk-through [3]	124:14 124:16 124:20	37:4 37:5 37:6	95:15 111:5 190:11	191:12 191:13
80:5 113:17 211:18	126:6 126:11 126:11	wcek [9] 17:12 18:18	208:18 212:10 223:17	workup [1] 81:19
walking [2] 86:23	126:17 126:21 126:23	27:13 87:23 136:21	withstand [1] 44:11	worry [1] 26:21
91:6	127:17 127:24 128:7	177:7 181:6 187:23	witness' [1] 231:7	worse [1] 73:10
wander [1] 193:18	129:16 129:18 130:8	187:24	Women [1] 2:25	worst [1] 64:3
wanting [1] 83:25	130:21 134:17 137:24	weekend [2] 67:25	wonder [1] 43:6	worth [6] 52:24
wants [2] 137:21	140:14 141:2 141:22	82:2	wondered [1] 91:25	119:20 153:22 167:6
223:10	142:11 142:12 142:23	weeks [2] 104:2	wondering [4] 6:10	187:18 215:16
waste [1] 34:5	143:2 143:7 143:9	223:20	148:5 155:22 202:21	worthwhile [1] 167:3
wasted [1] 107:24	143:12 147:4 147:21	welcome [2] 4:25	word [20] 19:1	worthy [1] 221:17
watching [2] 218:8	151:7 151:15 151:16	195:20	63:11 97:8 146:6	wrap [2] 100:20 176:18
220:8	155:1 155:17 156:5	well-versed [1] 193:11	147:8 147:19 147:20	wrapped [1] 79:18
water [330]	156:15 157:11 157:12	west [2] 124:12 124:21	152:1 152:11 153:20	wraps [2] 80:3
2:2	158:13 158:17 158:19	western [3] 114:20	153:23 159:16 164:2	194:2
2:7 2:9 3:3	158:24 159:2 159:5	116:16 215:14	164:15 164:18 164:23	wrastle [1] 97:22
3:7 3:12 3:14	159:15 159:17 159:18	wet [2] 140:17 141:3	168:14 169:11 173:3	wrastling [1] 95:13
10:15 11:1 12:8	160:9 162:20 163:24	wetland [3] 35:24	200:5	wrestle [1] 89:16
12:11 12:13 26:19	164:1 164:15 165:11	70:4 109:1	worded [1] 146:9	wrestling [1] 170:18
26:20 40:6 40:8	165:12 165:16 165:17	wetlands [5] 32:3	wordiness [1] 73:22	wrestling [1] 170:18
40:12 40:22 42:9	166:4 166:12 166:21	117:13 120:14 141:25	wording [14] 60:10	write [1] 168:8
42:19 43:8 43:11	168:20 169:3 170:8	142:20	146:19 150:10 151:9	writing [1] 7:23
47:9 47:20 51:17	174:1 174:8 174:9	whatsoever [1] 51:8	155:11 155:23 156:3	written [3] 63:4
51:18 58:20 58:24	177:11 179:9 179:9	wheel [1] 31:8	158:3 158:16 158:18	164:4 212:12
59:1 60:1 60:2	179:25 180:4 180:8	wherein [1] 36:9	159:3 159:5 161:7	wrong [2] 100:25
60:3 60:8 60:11	180:12 182:7 182:10	whole [34] 20:11	163:21	221:19
67:14 67:24 68:3	182:11 182:17 182:19	35:13 51:10 51:17	words [8] 54:1	X [4] 39:4 62:14
69:17 70:8 71:12	182:21 184:10 185:9	54:14 54:15 59:10	55:18 58:4 84:5	63:17 73:12
71:16 72:13 73:14	186:7 189:1 189:2	62:5 65:1 70:25	140:6 155:5 163:10	Y [2] 39:5 63:18
74:23 76:10 76:15	192:18 193:11 193:13	74:8 85:12 85:22	201:3	Yacger [30] 11:23
76:19 76:20 76:20	195:15 196:10 196:13	95:1 119:4 119:6	wordsmith [2] 150:8	19:5 73:15 73:16
77:2 77:8 77:11	196:14 196:17 197:5	120:6 122:13 132:4	162:7	81:4 85:2 92:2
77:17 77:19 77:23	197:8 197:13 197:16	132:6 133:17 134:6	wordsmithing [3] 150:10 150:16 161:21	96:10 100:8 100:12
78:8 78:11 78:12	197:17 197:18 198:7	136:24 139:5 142:4	150:10 150:16 161:21	100:15 106:1 111:13
78:15 78:18 78:21	198:13 198:21 199:11	152:8 156:7 156:11	162:7	111:22 113:12 113:15
78:22 78:25 79:4	199:19 199:24 200:5	159:15 168:21 173:10	wordsmithing [3] 150:10 150:16 161:21	118:9 119:24 135:20
79:6 79:10 79:10	202:16 202:19 202:22	199:3 212:2 225:10	150:10 150:16 161:21	136:11 139:4 139:22
79:14 79:15 79:22	203:16 203:21 204:12	wholly [1] 215:15	162:7	141:13 155:21 157:16
80:6 80:12 82:6	205:24 206:19 206:21	wide [1] 26:15	162:7	158:18 158:22 159:16
84:8 84:9 87:17	208:24 209:8 213:9	wider [2] 14:18	162:7	161:6 210:13
87:18 88:20 89:9	213:11 213:14 213:15	140:1	workshop [56] 6:16	year [20] 6:14 43:25
91:17 92:7 92:20	213:16 213:21 213:24	wiggle [1] 151:12	14:24 17:2 17:12	44:1 44:2 44:2
93:12 93:21 93:23	214:1 214:3 214:7	wildlife [3] 33:23	17:13 17:14 18:18	44:13 44:14 69:8
93:24 98:15 98:20	214:8 214:13 214:18	35:15 116:20	18:22 19:5 19:25	69:19 71:24 83:15
99:4 99:9 99:13	214:20 214:21 214:22	willing [3] 9:20	20:18 23:20 27:12	123:23 131:15 136:1
99:14 99:20 100:4	214:23 214:24 214:25	190:19 200:10	28:5 29:1 62:6	140:24 141:3 142:25
101:18 101:22 102:5	215:3 215:4 215:11	willingness [2] 203:17	65:14 65:15 82:1	143:10 197:1 204:22
102:20 103:11 105:3	215:21 215:23 215:25	205:18	82:25 83:18 87:23	year-to-year [1] 214:2
105:3 105:4 105:5	216:4 216:5 216:7	win [1] 61:22	93:20 103:20 103:21	years [28] 25:14
105:9 105:13 105:16	216:10 217:6 217:11	win-win [2] 27:10	146:2 146:3 146:16	26:14 37:11 50:16
105:22 105:23 106:6	218:2 218:3 218:4	80:15	147:7 177:1 177:7	50:21 54:10 57:13
106:6 107:8 107:12	226:7 226:17	winter [1] 85:17	177:20 178:4 178:9	57:15 60:17 61:16
107:23 107:24 107:25	Waterfowl [1] 2:23	wintertime [1] 142:23	178:21 178:23 180:17	62:14 66:5 67:12
108:4 108:11 108:12	waters [3] 69:10	wish [2] 38:2 206:25	180:23 183:1 183:5	68:15 71:19 71:21
108:13 108:17 108:21	80:2 189:10	wishes [2] 4:20	183:12 190:17 190:24	71:24 105:12 105:13
109:1 109:4 109:5	watershed [4] 98:25	230:5	192:13 193:2 194:9	111:1 130:7 140:17
109:9 109:13 109:16	124:13 127:23 127:24	wit [1] 201:11	194:17 194:21 211:23	143:11 143:12 146:13
109:24 110:3 110:9	watersheds [1] 98:16	within [20] 21:12	211:25 212:2 212:6	189:15 189:20 226:12
110:12 110:21 111:2	wave [1] 114:14	21:16 40:14 72:7	212:17 212:18 228:14	yellow [7] 16:3
111:4 111:5 111:5	ways [16] 33:11	82:6 87:20 101:7	229:5	16:4 177:3 178:10
111:25 114:13 114:18	51:22 53:23 63:25	105:10 105:20 106:7	workshops [30] 5:5	179:20 181:7 188:21
114:22 114:25 115:1	71:7 72:1 102:10	106:17 109:4 109:10	8:1 9:3 13:15	yet [8] 4:14 42:24
115:13 115:13 116:17	104:25 119:12 130:22	114:21 117:2 117:15	14:7 17:14 18:9	113:9 127:17 177:10
119:2 120:1 120:9	159:22 170:16 170:18	124:13 127:19 128:8	29:9 60:10 74:5	177:15 196:18 222:3
120:13 120:23 121:1	171:3 198:11 216:8	186:5	74:5 74:19 90:11	yield [1] 182:20
121:3 121:6 121:7	weak [1] 164:16	without [10] 52:17	113:23 114:5 115:10	yielded [1] 18:1
121:12 121:15 121:17	wcather [1] 94:16		115:10 144:21 178:1	young [5] 34:2
121:18 121:22 121:22	web [2] 130:16 130:16		178:3 181:3 183:9	
121:23 121:25 122:2	Weber [2] 1:24		184:8 184:16 185:2	
122:9 122:15 122:20	231:22			
122:25 123:3 123:5	Wednesday [1] 1:14			
123:8 123:11 123:16				
123:20 123:21 123:21				

34:5 38:12 48:10 48:14 yourself [4] 19:22 31:16 51:5 162:16 Z [1] 63:18 Zach [6] 201:23 218:17 219:1 219:6 227:4 228:17 ZACHARY [8] 219:7 226:14 226:20 226:23 227:16 228:22 229:7 229:11 zebra [1] 68:15 zones [1] 117:13 zoom [1] 225:8 zooplankton [5] 47:9 47:9 48:1 49:2 49:8 Zuckerman [1] 62:5				
--	--	--	--	--