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UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA

OUR CHILDREN'S EARTH, a non-profit
corporation, and ECOLOGICAL RIGHTS
FOUNDATION, a non-profit
corporation,

Plaintiffs,

vs.

No. C13 0402 (EDL)

LELAND STANFORD JUNIOR UNIVERSITY,
Defendant.

2550 Hanover Street
Palo Alto, CA 94304
December 20, 2013
8:26 a.m.

Deposition of
TOM WENDELL ZIGTERMAN

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2

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13 BY: SARAH G. FLANAGAN, ESQ.

14

15 ALSO PRESENT:

16 Mike Costa, Our Children's Earth

17

18

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20

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1 PALO ALTO, CALIFORNIA DECEMBER 20, 2013

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3

TOM ZIGTERMAN,

4 being first duly sworn by the Certified Shorthand
5 Reporter, was deposed and testified as follows:

6

7

EXAMINATION BY MR. SPROUL

8

MR. SPROUL: Q. Can you state your full name
9 for the record, please?

10

A. Tom Wendell, W-e-n-d-e-l-l, Zigterman,
11 Z-i-g-t-e-r-m-a-n.

12

Q. And where are you employed, Mr. Zigterman?

13

A. Stanford University.

14

You can call me Tom.

15

Q. And you can call me Chris.

16

A. All right.

17

**Q. So, Tom, how long have you been employed at
18 Stanford?**

19

A. Fifteen years.

20

Q. What's your current job title?

21

A. Associate Director, Water Services and Civil
22 Infrastructure.

23

**Q. So is there a director who is above you in the
24 hierarchy at Stanford?**

25

A. Yes.

1 **Q. And who is that individual?**

2 A. Joe Stagner, S-t-a-g-n-e-r. He's the Executive
3 Director of Sustainability and Energy Management.

4 **Q. And are you the highest person up in the**
5 **Stanford hierarchy with respect to managing the water**
6 **distribution system at Stanford University?**

7 A. Yes.

8 **Q. And do you supervise other individuals?**

9 A. Yes.

10 **Q. And who are those?**

11 MS. FLANAGAN: You're talking about all of
12 his -- all employees under him, or just his direct
13 reports or --

14 MR. SPROUL: Q. I mean if there's 712 people,
15 I don't want you to give me the names of each of those
16 712 people, but, as a general sense, to maybe just kind
17 of establish the playing field, can you give me a rough
18 sense of how many people you supervise?

19 A. Yes. Twenty.

20 **Q. And do those 20 people have differing jobs or**
21 **do they have very similar jobs?**

22 A. Differing jobs within the general category of
23 water services and civil infrastructure, scientists and
24 engineers and technicians.

25 **Q. The scientists that you supervise, do they all**

1 **have similar expertise, or do their areas of expertise**
2 **vary?**

3 A. It varies.

4 **Q. And what's the range of their expertise?**

5 A. Geology, water quality, regulatory compliance.
6 That's it.

7 **Q. And who's the -- the person on your staff that**
8 **you supervise that has responsibility for water quality?**

9 A. Margaret Laporte, L-a-p-o-r-t-e.

10 **Q. Is Margaret Laporte sometimes referred to in**
11 **documents as Marty Laporte?**

12 A. Yes.

13 **Q. Do you know whether Ms. Laporte does field work**
14 **or field survey or gathering of field data to assess**
15 **water quality for Stanford University?**

16 A. Yes.

17 **Q. Do you know what water quality parameters she**
18 **supervises -- I mean what water quality parameters she**
19 **has focused on in her field work?**

20 MS. FLANAGAN: Are you talking about a
21 particular period of time, or just --

22 MR. SPROUL: Q. Just in general. If it's
23 like, well, over the years it's been 612 different
24 areas, okay, then we'll narrow it, but if it's like no,
25 of the time she's worked under me there's really been

1 three things, or somewhere in between.

2 A. Can you repeat the question?

3 **Q. Is there a particular parameter of water**
4 **quality that Margaret Laporte's field work or analytical**
5 **work for Stanford has been directed to?**

6 A. Yes.

7 **Q. And what parameters are those?**

8 A. Potable water, chlorine residual. Another
9 would be waste water constituents. Those are the
10 primary areas.

11 **Q. Would it be fair to say that her work in the**
12 **assessment of water quality has been on the assessment**
13 **of water supply delivered to Stanford for domestic use,**
14 **as opposed to the water that's still in the field?**

15 **Would that be fair?**

16 MS. FLANAGAN: I'm going to object to the
17 question as vague and ambiguous, especially since he
18 mentioned waste water.

19 MR. SPROUL: Q. Do you understand the
20 question?

21 A. I think you should rephrase it.

22 **Q. In my mind, water quality assessment could be**
23 **directed towards assessing the water quality of**
24 **different types of water, or water that might show up in**
25 **three different areas.**

1 A. Okay.

2 Q. One in the -- natural water that's in natural
3 water bodies; two, water that is gathered and is stored
4 in a reservoir or tank or some other anthropogenic
5 feature, taken out of the natural system and stored by
6 humans; and the third would be water that's been used by
7 humans and is in a waste water disposal system or
8 process.

9 Of those -- does -- do those categorizations of
10 three types of water make sense to you?

11 A. Yes.

12 Q. Of those three types of water uses, which of
13 those types of water uses has Margaret Laporte's
14 water -- field water quality work been directed to?

15 A. All three.

16 Q. During your 15 years at Stanford, have you had
17 the same job?

18 A. Yes.

19 Q. And where did you work before you came to
20 Stanford?

21 A. Prior to my current 15 years stint in this
22 position, I was self-employed as a civil engineer.

23 You want me to go back further?

24 Q. I'm sorry, how long before your Stanford job
25 were you employed as a --

1 A. Just six months, and then prior to that I also
2 worked at Stanford, but in a contract employee role as a
3 project manager for them in the same department I'm in
4 now, and I did that job for three and a half years.

5 **Q. In your contract role with Stanford University**
6 **did you do anything fundamentally different from the**
7 **types of job tasks that you do now for Stanford?**

8 A. Yes.

9 **Q. And what was the fundamental difference?**

10 A. I managed projects on an individual basis,
11 rather than managing the functions of the group
12 entirely.

13 **Q. But, in both instances, would it be fair to say**
14 **that the projects that you have worked on or the program**
15 **that you've worked on has all been related to Stanford**
16 **supplying -- acquiring, storing and supplying water to**
17 **Stanford campus for various purposes?**

18 **Would that be fair?**

19 A. Not totally.

20 **Q. It would be partly accurate?**

21 A. Partly.

22 **Q. And what would you need to add to make it more**
23 **accurate?**

24 A. A broader category of civil infrastructure. I
25 worked on road projects, landscaping projects, so more

1 than just the water areas specifically.

2 **Q. Are you currently still working on road and**
3 **landscaping projects?**

4 A. Yes. My group is water services and civil
5 infrastructure, and all of those roads, dams, bridges -
6 hardscape as we call it - portion of the landscaping all
7 fall under my group for operation, maintenance, and new
8 projects.

9 **Q. So how much autonomy would you be given with**
10 **respect to a road project at Stanford University?**

11 **Is that something that you have the authority**
12 **to build or approve to not build, or someone else**
13 **proposes?**

14 **Can you explain what your authority is with**
15 **respect to road projects?**

16 MS. FLANAGAN: That is his current authority?

17 MR. SPROUL: Q. Your current authority.

18 A. Our group is fundamentally operations and
19 maintenance, but that encompasses construction of new
20 projects and projects that involve rebuilding an
21 existing infrastructure. None of that work is done in
22 isolation.

23 We have other Stanford functions of planning,
24 funding, development of the campus, programming that all
25 affect these projects, so I implement what's decided by

1 the broader group of Stanford departments.

2 Q. I'm sorry for being dense, but I didn't really
3 quite understand.

4 What I got out of what you told us was that you
5 interact with other departments about a project that
6 might come along, but whether --

7 Whose ultimate responsibility would it be to
8 say we're going to move this road that goes down to the
9 golf cart crossing and goes across San Francisquito
10 Creek -- would that be a decision that your department
11 would make and then you, as the head, would make, or
12 that would be not a decision that you could make?
13 Someone else would have to make it?

14 A. Someone else would have to make it.

15 Q. But you could recommend it to that person?

16 A. I could.

17 Q. And have you typically, for road projects that
18 have come up in the last 15 years, made recommendations
19 about yes, that's a good road project; no, someone has
20 proposed that but I don't think that's a good idea?

21 A. I have.

22 Q. And who would you make your recommendations to?

23 MS. FLANAGAN: Could we talk about something
24 specific, because you're talking about 15 years of all
25 types of projects, so -- give him an example and then

1 perhaps he can respond.

2 MR. SPROUL: Q. All right. I suppose -- I
3 don't know if that's entirely necessary, but we'll try
4 this angle, maybe the specific and then the general.

5 The specifics aren't necessarily so important,
6 only to the extent they illustrate the general.

7 So, are you aware of the Stanford University
8 project to move the golf cart crossing the San
9 Francisquito Creek?

10 Are you aware of that project?

11 A. I'm aware of it.

12 **Q. Did you have any role in -- any role in that**
13 **project?**

14 A. No.

15 **Q. Did anyone from your department have any role**
16 **in that project?**

17 A. No.

18 **Q. Didn't that project involve at least some**
19 **removing -- or realigning at least of a Stanford road,**
20 **or a portion of a Stanford road?**

21 A. It may have; I don't know.

22 **Q. So there are some Stanford road moving projects**
23 **that would not involve your department?**

24 A. Correct.

25 **Q. And what -- how is it -- how does Stanford**

1 **decide which of the road projects it undertakes are**
2 **going to be routed through your department versus routed**
3 **through some other department?**

4 A. Okay. Various entities at Stanford, athletics,
5 Jasper Ridge Biological Preserve, for example, have --
6 and lessees of Stanford lands have some autonomy in road
7 and driveways constructed on their areas that do not
8 involve my department because they're not within the
9 main campus area, or areas where generally the
10 university lands are concerned.

11 **Q. So who up above you would have the authority to**
12 **decide whether to go forward with the project or not,**
13 **since you said you don't have authority. Someone above**
14 **you does.**

15 A. Right.

16 **Q. And who would that be?**

17 A. Primary individual involved in those broader
18 areas would be the campus architect.

19 **Q. And who's the campus architect currently?**

20 A. David Lenox, L-e-n-o-x, and Robert Reidy is the
21 Vice President for Land, Buildings and Real Estate.
22 Robert Reidy is ultimately responsible for all of those
23 decisions.

24 **Q. So Robert Reidy is above David Lenox?**

25 A. Yes.

1 Q. And Robert Reidy is above you?

2 A. Yes.

3 Q. And you're in the direct chain down from him --

4 A. Yes.

5 Q. -- in the Stanford hierarchy.

6 A. Correct.

7 Q. And Robert Reidy's title, again, was?

8 A. Vice President Land, Buildings and Real Estate.

9 Q. When it came to the Stanford project to remove
10 the golf cart crossing, was that a project approved by
11 Robert Reidy, do you know?

12 A. Can you be more specific about this project
13 location?

14 Q. Yeah. I've got some documents that we'll pull
15 out. It might take a little while, but we can circle
16 back to it.

17 You don't know exactly where it is just hearing
18 that reference?

19 A. Not the one you're referring to.

20 Q. Is there more than one?

21 A. There have been a couple of crossings, yes.

22 Q. Who does Robert Reidy answer to?

23 A. President Hennessy.

24 Q. So he's one level under the president of
25 Stanford University; is that correct?

1 A. Yes. He also has a dashed line reporting to
2 the provost.

3 **Q. And can you explain the difference between the**
4 **provost and the president in terms of their respective**
5 **authorities?**

6 MS. FLANAGAN: Do you feel qualified to answer
7 that?

8 THE WITNESS: No.

9 The provost reports to the president. The
10 provost is primarily responsible for the business of the
11 university and the academic departments. The president
12 has broader responsibilities beyond that, and I'm not
13 able to delineate those right now.

14 MR. SPROUL: Q. Okay.

15 A. For example, the president has Stanford
16 Hospital under him. That does not fall under the
17 provost.

18 **Q. Okay.**

19 MS. FLANAGAN: Stick to what you know.

20 MR. SPROUL: Q. Have you ever had an occasion
21 to brief either the provost or the president about a
22 decision facing Stanford University?

23 A. No.

24 **Q. Have you ever had the occasion to produce**
25 **briefing materials that you knew were going to be used**

1 **by someone else to brief the provost or the president**
2 **about a Stanford decision?**

3 MS. FLANAGAN: I'm sorry, was that "prepared
4 material", or --

5 MR. SPROUL: Q. Yeah, have you ever prepared
6 material that somebody else used, or were going to use?

7 A. Not that I recall.

8 **Q. I have a couple of foundational things.**

9 **Have you ever had your deposition taken before?**

10 A. Yes.

11 **Q. And when was that?**

12 A. A couple years ago. I don't recall exactly
13 when.

14 **Q. Was it in your capacity as a Stanford employee?**

15 A. Yes.

16 **Q. Was Stanford suing some other party or**
17 **individual?**

18 A. No.

19 **Q. Some other party or individual was suing**
20 **Stanford?**

21 A. Yes.

22 **Q. Do you recall what the lawsuit was about?**

23 A. Generally.

24 **Q. And what was that?**

25 A. Had to do with a trip and fall medical claim.

1 Q. Were you called on as a fact witness, someone
2 who just observed, you know, eye-witnessed the facts, or
3 were you called for some other reason?

4 A. Some other reason.

5 Q. What was the reason why you were asked to
6 testify?

7 A. To describe the nature of our maintenance of
8 hardscape in the university.

9 Q. Do you know whether you were qualified as an
10 expert witness in that case?

11 A. Can you define that for me, expert witness?

12 Q. Well, yeah.

13 I don't think we need to belabor it too much.
14 My question is, did anybody tell you, "You are an expert
15 witness"?

16 There's a whole procedure in the law for having
17 somebody formally designated as an expert witness. You
18 might or might not have been privy or savvy about that
19 going on or not going on, but, generally, if someone is
20 being used as an expert witness, more than one person
21 would tell them they're an expert witness.

22 A. No, it wasn't as an expert, it was as to my
23 role at Stanford.

24 Q. And any other depositions besides this slip and
25 fall case?

1 A. Not that I recall.

2 Q. You understand that in a deposition you're
3 being asked to answer my questions under oath and your
4 obligation to speak truthfully is the same as if you
5 were in a court of law; is that clear?

6 A. Yes.

7 Q. And it's also really important for the court
8 reporter, who's the most important person in the room,
9 that we try not to speak over each other.

10 Sometimes I'll -- maybe I'll be asking you a
11 question and maybe I'll pause for a second as I'm
12 ponderously gathering my thoughts, such as they are, and
13 it's tempting to blurt out an answer, and that can make
14 it very difficult for her, so it's a good idea to pause
15 and make sure I'm done and not try to talk over each
16 other.

17 She also, of course, can't take down nods and
18 hand gestures, only spoken words, so it's important to
19 articulate clearly, and --

20 Yeah, any other questions about the logistics?

21 A. No.

22 Q. Any time if you need a break, please let me
23 know, and we'll take breaks as needed.

24 And it's not, you know, interrogation tactics
25 or bright lights shining on you kind-of-thing.

1 **So -- and did you prepare any documents in --**
2 **did you review any documents in preparation for today's**
3 **deposition?**

4 A. Yes.

5 **Q. What documents did you review?**

6 A. Various documents pertaining to our water
7 operations.

8 **Q. Is that quite a few documents, or just one or**
9 **two?**

10 A. A few.

11 **Q. Did you learn anything new in your review of**
12 **these documents, or was it all material you felt, "Oh, I**
13 **already know that"?**

14 A. Mostly the latter. I already knew pretty much
15 about it, but it helps to see documents to recall things
16 that happened many years ago.

17 **Q. Did you review any electronic mail messages**
18 **from others to prepare for today?**

19 A. Email from others?

20 **Q. From others.**

21 A. Possibly. I don't recall specific ones though.

22 **Q. And any email messages that you sent to anyone**
23 **else?**

24 A. Yes.

25 **Q. Like email messages to Catherine Palter, did**

1 **you look at those?**

2 A. I don't recall if there were specific emails to
3 Catherine that I reviewed.

4 **Q. Email messages to Alan Launer?**

5 A. Possibly. Again, I don't recall that
6 specifically. I can't think of one specific one that I
7 reviewed to Alan.

8 **Q. Can you give me a sense of roughly how many
9 email messages you looked at to prepare for today?**

10 A. Half a dozen.

11 **Q. Do you recall the identity of any of the
12 people?**

13 A. Yes, I remember an email exchange with Gary
14 Stern, National Marine Fisheries.

15 **Q. Do you recall what that email was about?**

16 A. Yes, it was about diversions at Searsville.

17 **Q. Do you know what the occasion was for the
18 email?**

19 **Were you spontaneously reaching out to
20 Mr. Stern or is Mr. Stern spontaneously reaching out to
21 you, or is it part of an ongoing dialogue and you just
22 picked out one in what had been a series of email
23 messages?**

24 A. The email exchange was part of a series of
25 exchanges that had gone on with Gary.

1 **Q. Do you recall the time frame?**

2 A. Roughly two, three years ago.

3 Excuse me. There may have been some earlier
4 this year as well, last -- excuse me, late 2012, about a
5 year ago. ***

6 **Q. Were these emails focused on the topic of**
7 **Stanford removing Searsville from the HTP, or did it**
8 **have other topics?**

9 A. Other.

10 **Q. Was that one of the topics?**

11 A. No.

12 **Q. So do you recall what the topics were?**

13 A. Clarification about our Searsville diversions,
14 how much, when.

15 **Q. So Gary had some -- is it that Gary had some**
16 **questions about how much water Stanford is diverting**
17 **from Searsville Reservoir and how those diversions are**
18 **taking place or being managed, and you were attempting**
19 **to answer some of those questions?**

20 **Is that fair?**

21 A. Generally.

22 It had to do with the amount of monthly
23 diversions over the last several years.

24 **Q. Is that email dialogue ongoing, or do you think**
25 **it reached a resolution where Mr. Stern seemed to be**

1 **satisfied with your responses?**

2 A. The latter. It's no longer ongoing.

3 **Q. Can you please tell us what your educational**
4 **background is.**

5 A. Sure, I have a Bachelor of Science in Civil
6 Engineering.

7 **Q. And when did you get that degree?**

8 A. 1978.

9 **Q. You beat me, not by much.**

10 **Where did you get your BS degree?**

11 A. University of Arizona in Tucson.

12 **Q. And you came to Stanford in what year?**

13 MS. FLANAGAN: Are you talking about as the
14 contract employee or as the full-time employee?

15 MR. SPROUL: Q. Backing up, let's just start
16 with when did you first come to Stanford University for
17 any reason, other than to visit the campus, when you
18 came to Stanford to do some work here at some time.

19 A. I think it was 1993.

20 **Q. And that's when you were retained as a**
21 **contractor?**

22 A. Correct.

23 **Q. So without providing all the details, which I**
24 **don't think are necessary, can you give us just a sense**
25 **of what you did between 1978 and 1993 professionally?**

1 A. Sure. I worked as a civil engineer in Tucson
2 for two different engineering companies. The second
3 engineering company I worked for was Brown & Caldwell.
4 I worked there until 1981, and then was transferred to
5 Brown & Caldwell's California office in Walnut Creek.

6 I was employed there for a few months, and then
7 we moved to the peninsula, where I worked for an
8 engineering company through the remainder of the 1980s,
9 and became a partner in that firm, and that firm went
10 into demise in 1989 because of a previous recession, and
11 I went in the business for myself for a year and a half,
12 and then joined Stanford as a contract employee.

13 Excuse me. I worked for Barrett Consulting
14 Group, two r's, two t's, from 1991 to 1993 before I went
15 to Stanford.

16 **Q. Have you written what you would call academic
17 publications in the field that you are educated in?**

18 MS. FLANAGAN: This is post education?

19 MR. SPROUL: Q. Yeah, post education.

20 A. No, not that I can recall.

21 **Q. Have you written any publications in the field
22 of civil engineering that you would describe as a trade
23 journal level publication?**

24 A. No.

25 **Q. Just to be sure I'm not unduly narrowing it --**

1 I think those are fair categories -- is there anything
2 that you would point to that you would call "This is a
3 publication I have written on a civil engineering
4 topic"?

5 A. No.

6 Q. Have you ever been involved in a peer review or
7 peer review panel evaluating somebody else's publication
8 in the field of civil engineering?

9 A. No.

10 Q. Have you ever taught civil engineering
11 academically at Stanford University?

12 A. No.

13 Q. Do you consider yourself an expert in civil
14 engineering?

15 A. Yes.

16 Q. Do you consider yourself an expert in any
17 subset of the field of civil engineering?

18 MS. FLANAGAN: If you're going to be asking the
19 word "expert", I think we need a little definition on
20 that. There's expert witnesses as you've defined to him
21 before, or are you asking does he think he has expertise
22 with respect to something?

23 MR. SPROUL: Q. Well, yeah. So I guess -- I'm
24 going to start -- I'm going to route back. Those are
25 fair things.

1 If he said no, there's no way I'm an expert, it
2 would be a short line of questions, so we'll find out
3 what it means to you to be an expert.

4 So right now I'll just ask -- maybe we'll back
5 up and just say right now when I'm using the word
6 "expert" -- I'm using it the way my 12-year old uses the
7 word "expert", just a common sense understanding, not a
8 legal one, not a -- an esoteric one within the world of
9 science, just how would Webster's define an expert.
10 Common sense understanding.

11 With that in mind, would that change any of the
12 answers I just asked you?

13 Are you an expert in civil engineering in the
14 way that, you know, common English usage would have you
15 use the term?

16 A. Yes, and I'm basing that on a credential I have
17 from the Society of Civil Engineers called a Water
18 Diplomate, DWRE, Diplomate Water Resource Engineer, so
19 that's a credential recognized by ASCE for my water
20 engineering background, and I was given that credential
21 a couple years ago, so that's what I'm basing my yes
22 answer to.

23 **Q. Okay. And then are you an expert, again, in**
24 **the same common usage sense of the word "expert" in any**
25 **subfield of civil engineering?**

1 A. No, not beyond that general water resources
2 engineering category.

3 **Q. In the water engineering category, that's an**
4 **officially recognized category by ASCE, or -- I'm sorry,**
5 **did I miss -- it's water resources engineering?**

6 A. Diplomate, Water Resources Engineer, yeah.

7 **Q. And that's a subset of civil engineering as a**
8 **whole?**

9 A. Right. It's awarded by the Environment and
10 Water Resources Institute, which is a subset of ASCE.

11 **Q. The water and environment --**

12 A. Environment and Water Resources Institute, EWR.

13 **Q. So you're recognized by that organization as a**
14 **civil engineer with broad expertise in all aspects of**
15 **water engineering, management of potable water,**
16 **management of waste water, and so forth?**

17 A. Correct.

18 **Q. But beyond those two areas, or beyond those**
19 **areas of engineering, you wouldn't consider yourself an**
20 **expert in civil engineering?**

21 MS. FLANAGAN: You're asking him outside the
22 area of water resources engineering does he have any
23 other expertise in civil engineering?

24 MR. SPROUL: Yes.

25 MS. FLANAGAN: That's the question?

1 MR. SPROUL: Yes.

2 THE WITNESS: No, I don't have other areas of
3 expertise.

4 MR. SPROUL: Q. Like, for example, you
5 wouldn't have the expertise to evaluate the structural
6 integrity of Searsville Dam and its ability to
7 withstand a given magnitude of earthquake.

8 A. Correct.

9 **Q. Have you ever been designated as an expert**
10 **witness -- as the law uses that term, expert witness --**
11 **in any field of civil engineering that you're aware of?**

12 A. Yes.

13 **Q. And when was that?**

14 A. Several years ago. I don't recall the exact
15 date, or year.

16 **Q. Was that for Stanford University?**

17 A. No.

18 **Q. And it was for who?**

19 A. I was retained by an attorney to discuss
20 aspects of a trip and fall incident case that he was
21 involved in with an individual claimant and a
22 municipality. I don't recall if I actually was deposed
23 in that process. I know I had discussions with the
24 attorney, but I don't recall if I went through a
25 deposition formally in that case.

1 Q. Do you recall what municipality that was?

2 A. Cupertino.

3 Q. Is there any other topic besides these civil
4 engineering topics we've been discussing that you
5 consider yourself an expert in the way that that term is
6 used in common parlance?

7 A. No.

8 Q. Earlier you indicated that you supervised an
9 individual who worked on regulatory compliance issues,
10 and who was that person?

11 A. In my group?

12 Q. Yes.

13 A. Margaret Laporte.

14 Q. Ms. Laporte works on both water quality and
15 regulatory compliance?

16 A. Yes.

17 Q. And how long has Ms. Laporte worked on both of
18 those topics?

19 A. For at least the 15 years that I've been in
20 this position.

21 Q. Do you know what Ms. Laporte's educational
22 background is?

23 A. It's a non-engineering science area. I believe
24 geology is her -- I don't know the specific degree she
25 has.

1 **Q. Do you know if Stanford has provided her any**
2 **specific on-the-job training or on-the-job training**
3 **courses?**

4 MS. FLANAGAN: When you say on-the-job
5 training, most people think of that as doing a job.

6 MR. SPROUL: Well, maybe some people think of
7 it that way.

8 MS. FLANAGAN: Why don't you define it so we
9 know what you mean.

10 MR. SPROUL: Q. Has Stanford done anything
11 like to give her specific curricula to review, papers to
12 review, and say, "Hey, you need to study this and learn
13 what this has to say. This is important information."

14 MS. FLANAGAN: Are you ranging from HR --I mean
15 -- or you're talking about her substantive area of
16 geology and water resources?

17 MR. SPROUL: Right, right, not telling her how
18 to fill out leave slips, but teaching her, you know,
19 things germane to the regulatory compliance -- directly
20 germane to the regulatory compliance and water quality
21 assessment of work that she does.

22 THE WITNESS: Has Stanford provided that
23 information?

24 MR. SPROUL: Q. Yeah, that on-the-job training
25 to her.

1 A. Not that I know of offhand.

2 **Q. Or sent her to outside vendors to get more**
3 **training in either of those two areas? Do you know if**
4 **Stanford has done that?**

5 A. Yes, we go to seminars on those topics.

6 She would have gone to seminars in that general
7 area sponsored by Stanford as an employee.

8 **Q. Do you feel like you have a good sense of what**
9 **Ms. Laporte knows about water quality and regulatory**
10 **compliance, or you don't really know the extent of her**
11 **knowledge?**

12 MS. FLANAGAN: Could you be more specific about
13 what it is you're asking does she know? It's a very
14 broad question as to what she knows about a lot of
15 things.

16 MR. SPROUL: Q. Yeah, it's a broad question,
17 but I'm just -- at the outset here, I'm trying -- you
18 know, for clarity, just so you understand, just think of
19 a broad survey.

20 If you say, "Geez, I don't really don't know
21 anything about what she knows," I don't have to start
22 delving down into the weeds, but if you say, "Yeah, I
23 know something," then we'll delve.

24 MS. FLANAGAN: Your question was, though, do
25 you have a good sense of what she knows, not do you have

1 some knowledge about what she knows, so I want the
2 record to be clear.

3 MR. SPROUL: Q. Okay, I think it's clear.

4 But do you have any sense of what Ms. Laporte
5 and -- Ms. Laporte knows about water quality or
6 regulatory compliance?

7 A. Yes.

8 **Q. How good is your sense of what she knows?**

9 A. I have a general knowledge and awareness of
10 what Marty -- what her involvement is in the water and
11 other environmental areas of work that she's familiar
12 with at Stanford.

13 **Q. Do you know, for example, would she be able to**
14 **get an alkalinity measurement from a stream monitoring**
15 **location and know what that level of alkalinity**
16 **signifies, if anything, to the environment?**

17 A. Yes.

18 **Q. She would know that?**

19 A. She would know that.

20 **Q. And would she know what the significance is of**
21 **a differing range of temperature readings in a creek,**
22 **why it might matter whether the creek was 15 degrees**
23 **Celsius or 22 degrees Celsius?**

24 MS. FLANAGAN: And are you asking just
25 generally, as opposed to impacts on different species or

1 plants, or --

2 MR. SPROUL: Yes, would she know why that might
3 matter environmentally, that's the question.

4 MS. FLANAGAN: That's the general question.

5 THE WITNESS: Likely not.

6 MR. SPROUL: Q. She likely wouldn't know?

7 A. Right.

8 **Q. Regulatory compliance, my understanding of that**
9 **phrase when I hear it is it's a person who helps the**
10 **organization they work for figure out what permits they**
11 **need to do their activity without being held, arguably,**
12 **in violation of the law.**

13 **Is that how you use the term "regulatory**
14 **compliance"?**

15 A. That is one --

16 MS. FLANAGAN: You're asking is it limited to
17 that?

18 MR. SPROUL: Q. Well, I'm asking him the
19 question I asked him, which is, is that how you use that
20 term?

21 MS. FLANAGAN: Just yes or no.

22 THE WITNESS: No.

23 MR. SPROUL: Q. How do you use the term?

24 A. I use the term "regulatory compliance" in our
25 area of operations regarding water supplies and systems

1 to mean compliance with regulations pertaining to
2 potable water quality, because we distribute potable
3 water to the University, and waste water discharge to
4 the Palo Alto treatment plant, that's where our sewer
5 system discharges to, and also to runoff from
6 construction sites.

7 That's the three areas of regulatory compliance
8 that Marty and our group focus on.

9 **Q. So the three areas that Marty and you focus on**
10 **here are the quality of potable water, construction site**
11 **storm water runoff and waste water disposition or**
12 **disposal.**

13 MS. FLANAGAN: Okay, and I'm going to object to
14 the formulation of the question, because you said it was
15 what Marty and the witness focus on, and he earlier
16 testified to what Marty focused on, so you need to
17 clarify that.

18 MR. SPROUL: I think he said both.

19 Do you work on all three of the areas I just
20 listed?

21 MS. FLANAGAN: Exclusively, or inclusively?

22 I'm trying to be clear on the record. He told
23 you those are the three things that Marty focuses on,
24 and now you're switching it to what he focuses on. That
25 may be right, it may be part of what he focuses on.

1 I just want a clear record.

2 MR. SPROUL: We'll try again, but too much more
3 of it and we might have to have a little sidebar
4 conversation.

5 I ask the questions. If he can understand
6 them, he's to answer them, rather than the constant
7 coaching about, "Hey, let's think about this."

8 MS. FLANAGAN: That's not what I did. You can
9 go back and read the original line of questioning. He
10 said it was Marty's focus, and then you mischaracterized
11 that in your next question.

12 I'm entitled to have a clear record. The
13 witness is entitled to have clear questions.

14 MR. SPROUL: You get a chance to ask your
15 questions at the end to clean it up, but the constant
16 interrupting to slow down the questioning process and --
17 I've let it go, but just in the last few exchanges it's
18 going a little beyond where it needs to go.

19 MS. FLANAGAN: If you don't understand
20 questions, or if he's not accurately characterizing what
21 you've said, then do not respond.

22 THE WITNESS: Okay.

23 MR. SPROUL: Q. I would say that --

24 MS. FLANAGAN: Go ahead and ask your question.

25 MR. SPROUL: Q. What the law clearly says is,

1 if I ask you a question and you don't understand it, say
2 "I don't understand your question, can you please
3 rephrase it."

4 And I'll do my best to ask clear questions. I
5 don't want to have you here any longer than you have to
6 be here.

7 That's probably the one thing we all agree on.

8 Anyway, so the -- in your department there are
9 three types of regulatory compliance issues with respect
10 to water that you are concerned with in your department
11 as a whole, yes?

12 A. State the three again.

13 **Q. The three are potable water, construction site**
14 **storm water runoff and waste water; is that correct?**

15 A. Correct.

16 **Q. And then for each of these three areas, do both**
17 **you and Marty, in a general sense, work on all three**
18 **areas?**

19 A. Yes.

20 **Q. So with respect to potable water, what do you**
21 **do at Stanford?**

22 A. I oversee the management of the day-to-day
23 operations of those systems by my operations group, and
24 look to the long term supplies -- for example, the
25 contract with San Francisco Public Utilities Commission

1 for potable water brought to the campus, and I oversee
2 particularly Marty's efforts on filing the various
3 reports about water quality sampling and analysis that
4 she oversees on a day-to-day basis.

5 **Q. Okay. As part of the potable water supply work**
6 **that you just discussed, does your department -- anyone**
7 **in your department take water samples in San**
8 **Francisquito Creek to measure any quality of the water**
9 **as it would then relate to potable water?**

10 A. Does anyone in my department take samples?

11 **Q. Yes.**

12 A. No.

13 **Q. Does anyone take samples like this for your**
14 **department?**

15 A. Yes.

16 **Q. And who does that?**

17 A. Balance Hydrologics, consulting firm.

18 **Q. And do you know what water quality --**

19 **Let me back up. Does the term "water quality**
20 **parameter" have a meaning to you?**

21 A. Yes.

22 **Q. So I'm not confusing you if I use the term**
23 **"water quality parameter"?**

24 A. No, it's a general category, though. It's a
25 broad category.

1 Q. It's a broad category.

2 Alkalinity, pH, dissolved oxygen, levels of
3 phosphorus, levels of phosphorous, levels of nitrogen,
4 all those could be water quality parameters, correct?

5 A. Correct.

6 Q. So what water quality parameters does Balance
7 Hydrologics take measurements of for your department?

8 MS. FLANAGAN: If I could just ask, you earlier
9 were talking about all of this in the context of potable
10 water.

11 Are you now talking about for any purpose, or
12 just potable water?

13 MR. SPROUL: We're still talking about potable
14 water until I change topics, okay?

15 MS. FLANAGAN: So what sampling they do for
16 potable water you're talking about.

17 MR. SPROUL: Q. Sampling --

18 Let me put it this way. What I asked, just
19 literally, was do they do sampling for your department
20 that you use for potable water. That was the question.

21 So maybe Balance Hydrologics has some other
22 motivation for taking it and maybe they give it to other
23 people at Stanford University, but I'm only asking you.

24 When you said yes, other people take samples,
25 water samples that are relevant to us for potable water,

1 I said who, you said Balance Hydrologics, so I'm asking
2 you -- I'm continuing to ask you those same questions.

3 Does that change anything of what you said a
4 moment ago?

5 A. Yeah, I didn't catch that you were still in the
6 potable water context, so Balance Hydrologics does not
7 take samples for us for potable water supply. Those
8 samples are taken by own technicians from our potable
9 water distribution system.

10 **Q. So, again, there's not confusion, I'm talking**
11 **about taking samples in the creek as part of an**
12 **assessment of potable water supply, and I want -- I**
13 **thought when I asked you does anyone in your department**
14 **take samples within the creeks for potable water supply,**
15 **you said no, right?**

16 A. Correct.

17 **Q. And then I said does anyone else take**
18 **potable -- take supplies -- take samples within a creek**
19 **for potable water purposes assessment.**

20 MS. FLANAGAN: Actually, I don't think you said
21 potable water. That's when I asked for the
22 clarification, because sometimes you said it, sometimes
23 you haven't.

24 MR. SPROUL: Q. Okay, so then the true answer
25 is nobody takes water samples within any of the creeks

1 at Stanford for the purposes of getting information that
2 is then used in an assessment of potable water supply.

3 A. Correct.

4 **Q. So people in your department do take some water**
5 **samples and have them analyzed as part of their work at**
6 **Stanford, just generally.**

7 A. We're not restricting this to potable water or
8 non-potable water, just in general?

9 **Q. No, just in general.**

10 A. Yes.

11 **Q. And what are all the reasons that people in**
12 **your department take water samples for?**

13 A. We take water samples from our potable water
14 distribution system to verify compliance with regulatory
15 requirements.

16 **Q. Is that it?**

17 A. To your question about do we take water quality
18 samples for other purposes?

19 **Q. Yeah, anything, your department. What's all**
20 **the list?**

21 MS. FLANAGAN: Again, you're asking them
22 themselves as opposed to having consultants.

23 MR. SPROUL: Yes.

24 MS. FLANAGAN: So just your own people.

25 MR. SPROUL: Q. Yes, your own people, what do

1 you take water samples for?

2 A. Can you clarify? You're asking if people in my
3 department actually collect water samples?

4 **Q. I guess -- yeah, I'm starting with that, and**
5 **then I'm going to ask next -- well, if they don't take**
6 **any water samples, are there any contractors that --**

7 A. Okay.

8 **Q. -- or other Stanford people that they direct or**
9 **ask to do it.**

10 A. Okay.

11 **Q. That be would the next question.**

12 A. All right. We also collect water quality
13 samples in our waste water system infrequently, and, on
14 occasion, we've taken water quality samples from our
15 storm drainage system. We've also taken water quality
16 samples from our -- what we call our lake non-potable
17 water system.

18 **Q. Does that include Felt Reservoir?**

19 A. Possibly. I don't know if we've taken samples
20 there.

21 **Q. Why do you take samples at the storm drain**
22 **system?**

23 A. We wanted to determine or find out the
24 constituents of that storm water runoff to consider
25 storm water as a possible alternative water source.

1 **Q. When was that done?**

2 A. Within the last couple years. I don't know
3 specifically.

4 **Q. And whose idea was it to do that?**

5 A. Mine, I guess.

6 **Q. And did you reach conclusions about whether
7 storm water was a potential alternative water source?**

8 A. We're in the process of studying that.

9 **Q. In your study, have you come to any conclusions
10 about the potential volume of storm water that can be
11 captured and used?**

12 A. We're studying that. Not yet.

13 **Q. Not even a rough sense?**

14 A. No.

15 **Q. Did you have the storm water analyzed for any
16 pollutant parameters, level of pollution present in the
17 storm water?**

18 A. I don't recall if we've taken storm water
19 samples to detect levels of certain pollutants
20 specifically, no.

21 **Q. Who else is working on this assessment of the
22 storm drain system?**

23 A. My water systems engineer.

24 **Q. And who's that?**

25 A. Mark Quady, Q-u-a-d-y.

1 So another aspect of my group's activities that
2 I think I didn't list earlier is water systems
3 engineering. We have operations, water quality, and
4 engineering, and he's part of that engineering group.

5 **Q. Did you have to get approval from anyone up
6 above you to do this study?**

7 A. Not specifically.

8 **Q. It's within your authority to use the resources
9 that you oversee to decide this is what we're going to
10 do?**

11 A. Yes.

12 **Q. Have you received any feedback from Stanford
13 personnel outside of your department about the merit or
14 lack of merit of this study effort?**

15 MS. FLANAGAN: I want to object to the -- I've
16 let it go because this is general background, but what
17 is the relevance of the storm drainage system -- studies
18 on it -- to this case?

19 He's not here to satisfy curiosity, he's here
20 to answer questions germane to the lawsuit.

21 MR. SPROUL: The potential impact on water
22 quality, dealing with species that depend upon the
23 aquatic quality of the watershed, rerouting storm water,
24 managing storm water, in your own papers, is something
25 that is talked about as a way to perhaps help the

1 species that are at issue in this case.

2 MS. FLANAGAN: What papers are you referring
3 to? My papers?

4 MR. SPROUL: There's material in there.

5 MS. FLANAGAN: What material? I'm not familiar
6 with references we've made to storm drains being
7 rerouted to assist in this case.

8 MR. SPROUL: Not that specific.

9 MS. FLANAGAN: If we could just keep on the
10 topics that are germane.

11 MR. SPROUL: This is a germane topic.

12 So, can you read back my last question?

13 THE REPORTER: Question: "Have you received
14 any feedback from Stanford personnel outside of your
15 department about the merit or lack of merit of this
16 study effort?"

17 THE WITNESS: Could you clarify the study
18 effort that you are specifically referring to?

19 MR. SPROUL: Q. Yeah. You mentioned that
20 there's been some investigation of looking into taking
21 water out of the storm drain system as an alternative
22 water source.

23 Have you had any conversation/communications
24 with anyone outside your department about whether that
25 seems like a good idea or not a good idea?

1 A. Yes.

2 **Q. And who was that?**

3 A. I think by department, you mean my group, or
4 the department I work within?

5 **Q. Let's say the group that you work within.**

6 A. Okay. Yes, I have talked with my boss, Joe
7 Stagner, about the concept, and he's agreeable to
8 looking at the possibility.

9 **Q. In any of the conversation you've had with
10 people at Stanford about this, has anyone brought up the
11 idea that capturing the storm water could have important
12 environmental benefits by keeping storm water out of
13 local creeks and, therefore, keeping the pollutants that
14 are potentially in local storm water out of the creeks,
15 like this is a benefit of what this project could be?**

16 A. Could you repeat the question? That was a long
17 one.

18 **Q. Yeah. Has anyone -- has there been any
19 discussion that you heard about this project that
20 capturing storm water, rather than letting the storm
21 water run into local creeks, could help the water
22 quality and thus the environment of those local creeks
23 by keeping pollutants out of them?**

24 A. Yes, there's been general discussions
25 academically with faculty, as well as operationally,

1 about storm water capture, as we call it, but we're
2 primarily responding to increasing regulations about
3 storm water treatment, as we call it, from our
4 development of the campus, so it's within that context
5 that we are investigating this approach of not just
6 having our storm water from new building sites and
7 construction sites go through bioswales, for example,
8 but also to capture and intercept that water. We would
9 then store it, treat it, and then use it for irrigation
10 on our own land.

11 So that's the context of the study that we're
12 doing.

13 **Q. It seems to me that, as I would look at it,**
14 **exploring this project would have two components: One,**
15 **we'd want to look at would this actually be beneficial,**
16 **would it yield some benefit. More water and/or less**
17 **pollutant runoff would be the first benefit.**

18 **Would you agree that that seems to you -- let**
19 **me -- is that one of the potential benefits of this**
20 **project that comes to mind for you?**

21 A. Sure, it's both, to me. Water, an alternative
22 water supply, primarily we could use that for
23 irrigation, for example.

24 MS. FLANAGAN: Just yes or no.

25 THE WITNESS: Yeah.

1 MR. SPROUL: Q. Well, can you explain, use it
2 for irrigation supply, and you were explaining?

3 A. As well as reducing the storm water that runs
4 off our campus to creeks.

5 MR. SPROUL: I would just note, I don't think
6 it's proper, when the witness is answering the
7 question -- not in the middle of a question.

8 MS. FLANAGAN: It's perfectly acceptable to say
9 yes or no -- the answer is yes or no.

10 MR. SPROUL: You can tell me him all you want,
11 but in the middle of an answer -- I don't think it's
12 proper to interrupt a witness in the middle of answer,
13 so I'd ask you not to do that.

14 Tell him to answer him yes, no, whatever you
15 want, when he's not in the middle of answering a
16 question.

17 BY MR. SPROUL:

18 Q. **And the second aspect to looking at this would**
19 **be, well, is it feasible. It might be good for the**
20 **environment, pass the first criteria. Second criteria**
21 **is, like, we just can't do that, it's not really a very**
22 **worthwhile idea, right?**

23 **Would you agree with that?**

24 A. Yes.

25 Q. **Have you looked into the feasibility of this**

1 **storm drain system idea and, therefore, have an opinion**
2 **about how likely it is this could actually be done?**

3 A. Can you clarify what the "it" is? What are we
4 specifically talking about?

5 **Q. Capturing storm water runoff that currently is**
6 **not being captured and then re-using it for water supply**
7 **on campus.**

8 **That's what I understood your idea was.**

9 A. We're still conducting that study.

10 **Q. And you haven't gotten so far as to have any**
11 **rough initial sense about whether it's possible or not**
12 **possible that this could actually work.**

13 A. Correct.

14 **Q. So when the -- you indicated that Ms. Laporte's**
15 **job includes regulatory compliance matters. Can you**
16 **explain to me a little bit more about what it is she**
17 **actually does for regulatory compliance?**

18 A. Yeah, she stays abreast of the potable water
19 quality requirements, and she stays current on the
20 requirements of our waste water discharge requirements,
21 and she stays abreast of the requirements pertaining to
22 storm water runoff from construction sites and then
23 reviews the various sample analyses and construction
24 projects and operations at Stanford to match those
25 activities up with the regulatory requirements.

1 **Q. Does -- storm water runoff from construction**
2 **sites, do you know what regulatory requirements apply to**
3 **that?**

4 A. Generally, yes.

5 **Q. And what's your general understanding?**

6 A. It's a Regional Storm Water Permit issued by
7 the Regional Water Quality Control Board implemented by,
8 in our case, Santa Clara County for the Stanford campus
9 lands within Santa Clara County.

10 **Q. And do you know that that's something that**
11 **Ms. --**

12 MS. FLANAGAN: Laporte.

13 MR. SPROUL: Q. Laporte -- Ms. Laporte knows
14 also?

15 A. Yes.

16 **Q. Have you ever heard of the term NPDES?**

17 A. Yes.

18 **Q. What does NPDES mean to you?**

19 MS. FLANAGAN: Again, I'm going to make it
20 clear here that he doesn't -- he's not a lawyer and not
21 testifying as to a legal meaning, so he's just asking
22 for your understanding.

23 MR. SPROUL: Yeah.

24 THE WITNESS: Non Pollution Discharge
25 Elimination System is my recollection of what the

1 acronym stands for.

2 MR. SPROUL: Q. Close. The N stands for
3 National.

4 A. Okay.

5 Q. **Have you ever helped Stanford apply for a**
6 **National Pollution Discharge Elimination System, or**
7 **NPDES for short?**

8 A. Not that I recall.

9 Q. **Do you know whether Ms. Laporte has ever helped**
10 **Stanford apply for an NPDES permit?**

11 A. No.

12 Q. **Do you know whether your waste water system has**
13 **to have a NPDES permit?**

14 MS. FLANAGAN: Again, this is just your
15 understanding, not a legal understanding.

16 MR. SPROUL: Q. Just if you know.

17 A. I don't know that we're required to have one
18 for our waste water discharge to Palo Alto, no.

19 Q. **Have you heard of the term "Clean Water Act,**
20 **Section 404, permit"?**

21 A. Yes.

22 Q. **What is your understanding of what a Clean**
23 **Water Act, Section 404 permit is?**

24 A. In our area of work, it most usually applies to
25 work we do in creeks. Waters of the U.S.

1 **Q. The term "Waters of the U.S.", what does that**
2 **term mean to you? How do you use it in your job?**

3 A. It applies to the creek corridors that flow
4 through Stanford lands.

5 **Q. Do you know what the boundaries are of the**
6 **Waters of the United States within these creek**
7 **corridors?**

8 A. Generally, yes.

9 **Q. What's your general understanding of what the**
10 **boundaries are?**

11 MS. FLANAGAN: Again, this is just his layman's
12 understanding that he's asking for. So just whatever
13 your understanding is.

14 THE WITNESS: San Francisquito Creek, Los
15 Trancos Creek, Corte Madera Creek, Matadero Creek.

16 MR. SPROUL: Q. All those creeks are Waters of
17 the United States within their creek corridors, is that
18 what you're saying?

19 A. Correct.

20 **Q. You've been in the field in the stream bed of**
21 **San Francisquito Creek, for example, haven't you?**

22 A. Yes.

23 **Q. Many times?**

24 A. Yes.

25 **Q. If I were there with you today and I said,**

1 **"Point out the boundaries of the Waters of the United**
2 **States that are in front of me," could you do it, and,**
3 **if you could, how?**

4 A. I would look to the definition used by the
5 Corps of Engineers that we work with on these 404
6 permits to what's called the ordinary high water mark.
7 It's a break in the bank's slope where it goes from
8 relatively flat to steep. That would be the border of
9 the Water of the U.S.

10 **Q. And how about as further evidenced by things**
11 **such as rack lines?**

12 A. What's the term?

13 **Q. Rack lines, and changes or breaks in vegetative**
14 **type from primarily terrestrial to more aquatic.**

15 I'll stop right there, but -- what I just said
16 to you, does that sound familiar, or you haven't heard
17 that before?

18 A. I've not heard the term "rack line" before.
19 The break in the slope I've heard before.

20 **Q. Break in the slope, but not the change in the**
21 **break and vegetation? You haven't heard that phrase**
22 **before?**

23 MS. FLANAGAN: Haven't used that -- heard that
24 term or haven't heard it used as a boundary?

25 MR. SPROUL: Haven't -- well, I think we were

1 talking in context, right?

2 MS. FLANAGAN: That's what I want to be clear
3 that we were in context.

4 MR. SPROUL: Q. We were talking in the context
5 of you haven't heard any of those things in the context
6 of what is the ordinary high water mark, where is it.
7 You told me some things, and I said and how about these
8 few other things, would those also be things you would
9 use, or have been told to use in identifying where the
10 ordinary high water mark is.

11 A. I'm much less familiar with those other things
12 than with the break in slope.

13 **Q. Okay. So would it be fair to say that you're**
14 **not an expert in the ordinary high water mark**
15 **determination?**

16 A. Yes.

17 **Q. Is there any work that you've done for Stanford**
18 **where knowing where the boundary was of the creek was**
19 **useful to you, or necessary to you?**

20 MS. FLANAGAN: Compound.

21 Which one are you asking?

22 MR. SPROUL: Q. Okay. Let's start with useful
23 to you, and then we will ask necessary to you.

24 A. Okay. Can you repeat that, was there any --

25 **Q. Was there, at any point in any of your work in**

1 **these creeks that we were just discussing -- work for**
2 **Stanford in these creeks we've been just discussing, was**
3 **it useful to you to know where the ordinary high water**
4 **mark was in the creek?**

5 A. Yes.

6 **Q. And when were those occasions where that was**
7 **useful?**

8 A. Well, generally they have to do with siting and
9 working on our water systems' infrastructure, pump
10 stations, pipelines, valves.

11 There would be many instances specifically
12 where those facilities near the creek -- I use that
13 information about -- when I'm actually in the creek
14 versus not when I'm working on that -- when my people
15 are working on that infrastructure.

16 **Q. What difference does it make to you or your**
17 **crews when you're doing this infrastructure work whether**
18 **you're below the ordinary high water mark that's in the**
19 **creek or above the ordinary high water mark and that's**
20 **out of the creek?**

21 A. It goes to whether or not we need state permits
22 for the work activity.

23 **Q. Whether you need to seek permits for the**
24 **activity from whom?**

25 A. The various state and federal agencies involved

1 with work in creeks.

2 **Q. Do you know specifically what state and federal**
3 **agencies that you would need to have permits for to do**
4 **this maintenance work within the ordinary high water**
5 **mark that you were just describing?**

6 A. The state agency that we would first look to
7 would be the California Department of Fish and Wildlife,
8 and the federal agency we would look to initially would
9 be U.S. Army Corps of Engineers.

10 **Q. Do you know what type of permits the Army Corps**
11 **of Engineers issues?**

12 A. Yes.

13 **Q. What type of permit is that?**

14 A. Section 404 I think it's called. Their permit
15 titling is a bit vague and nonspecific right now, but
16 that's generally what it is, Section 404 of the Clean
17 Water Act.

18 **Q. Okay. So -- but I take it that you don't feel**
19 **personally qualified to make an ordinary high water mark**
20 **jurisdictional call, correct?**

21 A. Correct.

22 **Q. And for this work that you were telling me**
23 **about, maintenance work on pipelines and valves and so**
24 **on, did Stanford have somebody in the field making the**
25 **ordinary high water mark determinations?**

1 A. For what specific area?

2 Q. Oh, for -- well, let's -- let me try and break
3 it down a bit.

4 There's something known as the Searsville
5 booster pump, correct?

6 A. Searsville Booster Pump Station.

7 Q. Searsville Booster Pump Station has some
8 pipelines going into it and pipelines going out of it,
9 correct?

10 A. Correct.

11 Q. And it also has what I believe are flexible
12 hoses that can be used to backwash out accumulated
13 leaves and debris from the booster pump, is that also
14 correct?

15 A. The Searsville Booster Pump Station has a
16 backwash station on its filters, yes.

17 Q. When that backwash filter system on the booster
18 pump is operated, a slurry of water and various
19 materials are pumped out of the backwash area and then
20 sent somewhere; is that correct?

21 A. Correct.

22 Q. And the place to which they are sent is via
23 flexible hoses; is that correct?

24 A. No.

25 Q. Okay. How are -- how is it sent?

1 A. The booster pump station with its filter system
2 and filter backwash system was constructed with a
3 discharge of the filter backwash to a perforated pipe
4 which was laid along the bank near the pump station.

5 **Q. Was it a permanent connection from the booster**
6 **pump to this perforated pump you just described?**

7 A. It was constructed with a connection -- yes, a
8 piped connection. Not a flexible hose, a piped
9 connection to this perforated pipe.

10 **Q. Great.**

11 **How long is that perforated pipe?**

12 A. I don't know exactly because it's partially
13 buried, but roughly 50 feet long.

14 **Q. And when was the perforated pipe placed?**

15 A. When the pipe station was constructed.

16 **Q. Which was in 2004?**

17 A. Yes.

18 **Q. Who installed the perforated pipe?**

19 A. I don't recall if we had a contractor do that
20 installation or if we installed it with our own -- I'm
21 sure -- I'm quite sure it was a contractor.

22 **Q. Do you recall what contractor?**

23 A. I don't.

24 **Q. Do you recall whether there was a -- have you**
25 **heard of the term "jurisdictional determination" or**

1 "jurisdictional delineation" in the context of Waters of
2 the United States?

3 Have you heard that term before?

4 A. Yes.

5 Q. And sometimes jurisdictional determination is
6 referred to as a shorthand, JD, a JD.

7 Have you heard that term?

8 A. Yes.

9 Q. Do you know whether Stanford performed or had
10 someone else perform a JD in conjunction with the
11 installation of this perforated pipe that we've just
12 been discussing at Searsville Booster Pump?

13 A. Do I know if we had one -- had one done?

14 Q. Yes.

15 A. I don't. I don't recall if we did that
16 delineation.

17 Q. Have you heard the term "adjacent wetlands"?

18 Let me put it in context.

19 A. Yes.

20 Q. Adjacent wetlands in the context of Waters of
21 the United States.

22 A. Yes, I've heard that term.

23 Q. Do you have an understanding of what adjacent
24 wetlands are in that context, Waters of the United
25 States context?

1 A. Yes, generally.

2 **Q. And what is that concept?**

3 A. It would be low lying areas adjacent to a
4 waterway that are sufficiently inundated by water that
5 soils and vegetation are similar to what's in that water
6 body.

7 **Q. Do you know whether waters -- do you have a**
8 **personal understanding -- again, I'm not asking you to**
9 **make legal rulings here --**

10 A. Right.

11 **Q. -- just your personal working understanding.**

12 MS. FLANAGAN: If we can just have that
13 understanding throughout, then I won't have to be
14 clarifying as we go along either.

15 MR. SPROUL: Sure.

16 MS. FLANAGAN: Unless he says otherwise, it's
17 just your personal understanding. He's not expecting
18 you to give a legal description.

19 MR. SPROUL: Q. Just as you how these terms.
20 It might not be how a judge would use them, but how you
21 use them.

22 So do you have an understanding of the term
23 "adjacent wetlands" in the Waters of the U.S. context?
24 What does it mean?

25 A. I think, as I just described, it's the

1 characteristics of that area, the low lying adjacent to
2 the waterway with sufficient inundation that the soil
3 and vegetation characteristics are similar to what's in
4 that waterway.

5 **Q. Have you ever heard about the Army Corps of**
6 **Engineers' Wetlands Delineation Manual? Is that a**
7 **document you've ever heard of?**

8 A. No.

9 **Q. Or heard that the Army Corps says that there's**
10 **a three-part methodology for determining wetlands?**

11 A. Yes, I'm familiar with that.

12 **Q. And are you familiar that that three-part**
13 **wetlands delineation methodology is that you look at**
14 **soil type, you look at hydrology, and then you look at**
15 **vegetation?**

16 A. Yes.

17 **Q. You've come across that before?**

18 A. Yes.

19 **Q. Do you know whether Stanford or any consultant**
20 **for Stanford made any determination of the extent of the**
21 **adjacent wetlands at the Searsville Booster Pump?**

22 A. We did not conduct such a delineation at the
23 Searsville Booster Pump.

24 **Q. Do you know how far it is from --**

25 **Well, back up. Do you have a sense of -- your**

1 own personal sense of where you think the ordinary high
2 water mark is in San Francisquito Creek along the reach
3 where the booster pump is located?

4 A. Yes.

5 Q. And in relationship to your personal sense of
6 where the ordinary high water mark is, how far is the
7 booster pump building proper from that high water mark?

8 A. Horizontally or vertically?

9 Q. Well, at the closest point -- you know, over
10 the land -- you know, just running along the land, how
11 far from the perforated pipe to the building that
12 constitutes the pump station at Searsville?

13 A. First of all, the pump station is not in a
14 building, it is a facility of equipment on a concrete
15 pad. There is no building there.

16 The pump station and the perforated pipe are
17 clearly in what we call an upland area, based on
18 vegetation, slope. It's -- I don't have measurements,
19 but it's distant from the ordinary high water mark.

20 Q. Okay. How about the perforated pipe, how close
21 is that to where you think the ordinary high water mark
22 is located?

23 A. The same. The perforated pipe is approximately
24 ten feet away from the pump station. It's very close to
25 it.

1 **Q. Does Stanford have any plans to modify what --**
2 **the configuration of the backwash operation that you've**
3 **described earlier at the booster pump?**

4 A. Well, we occasionally modify our facilities in
5 a general operational way. We don't have a project to
6 reconfigure the pump station or do anything major to it.

7 **Q. So when I read various documents, what I**
8 **gathered out of them is that from time to time as**
9 **Searsville does the backwashing process at the booster**
10 **pump, a slurry of materials flows down an embankment and**
11 **into the creek, and that Stanford, I believe in its HCP,**
12 **said Stanford is attempting to do this during high flow**
13 **conditions to get the sediment-laden slurry diluted as**
14 **quickly as possible, something to that effect.**

15 Do you have personal knowledge about that
16 conduct, or that activity, what I just said? Is that
17 accurate?

18 A. I'm generally familiar with descriptions about
19 a Searsville backwash discharge. I don't think what you
20 just said is totally accurate about that discharge going
21 to the creek.

22 **Q. Have you -- have you witnessed the backwash**
23 **operation yourself?**

24 A. Yes.

25 **Q. How many times?**

1 A. Very rarely. The perforated pipe distributes
2 the backwash water in such a way -- its purpose is to
3 dissipate that discharge flow -- not concentrate it,
4 dissipate it, so that the water has a large area of bank
5 above bank to flow over before it would get to the
6 creek, so in that time it's percolating, as well as
7 flowing over, so that water doesn't cascade or go
8 directly to the creek from that perforated pipe.

9 **Q. How many times have you witnessed the -- the**
10 **discharge from the Searsville Booster Pump backwash**
11 **operation?**

12 A. I haven't witnessed it from the perforated pipe
13 system. I'm basing this description on what my project
14 manager for the installation conveyed.

15 **Q. And who is that person?**

16 A. Joe Kearney. He was the project manager back
17 in 2004.

18 **Q. Have you spoken with Mr. Kearney about that**
19 **issue, or about the backwash water being disposed of**
20 **since then, since 2004?**

21 A. Yes.

22 **Q. When was the last time you spoke with him?**

23 A. Couple months ago.

24 **Q. Do you recall the occasion when you were**
25 **speaking with him about the topic?**

1 A. Yes, we were talking about one of these
2 upgrades to the facility, adding another filter to the
3 filter system on the pump station, and we talked about
4 the backwash piping, perforated pipe system, and decided
5 that it would be good to upgrade/modify that system as
6 well and move the perforated pipe further away from the
7 bank, make it longer, make the dissipated flow even more
8 than it was.

9 And that's an operational change, not a
10 reconfiguring of the whole pump station, but a
11 refinement in its operation that we've implemented.

12 **Q. You've already implemented this?**

13 A. Yes. The second filter is installed and the
14 perforated pipe system has been redone. I think we're
15 just waiting for one component in that system to be
16 installed, which should be done this week.

17 **Q. When do you think you'll be done with all the
18 upgrade work?**

19 A. Hopefully this week.

20 **Q. Whose idea was to do this upgrade work?**

21 A. My operators and mine.

22 **Q. So it would be Joe Kearney --**

23 A. No, he's -- he was the engineer for the pump
24 station's construction project in 2004, but Richard
25 Souza is my water systems operations supervisor, and he

1 and I talked about the filter system upgrade, adding a
2 second filter to the system and reconfiguring the
3 backwash.

4 **Q. So the heart of the improvement is an upgrade**
5 **to the filter system so you're getting better**
6 **filtration, number one, yes?**

7 A. Better filtration, and it backwashes less
8 frequently, yes.

9 **Q. How often did it backwash before this upgrade?**

10 A. It would backwash dozens of times a day during
11 diversion periods.

12 **Q. And how often do you think it will back up --**
13 **you need to use the backwash system now?**

14 A. Well, with the second filter, the backwash
15 should happen maybe half the time it does now. We've
16 doubled the capacity of the filtration system.

17 **Q. Okay. And in relocating the perforated pipe,**
18 **where did it move to?**

19 A. Just above the pump station.

20 **Q. So does it still -- in the past did it operate**
21 **sort of as a -- kind of a drain field or leach field**
22 **structure almost? Would that be a way of thinking it?**

23 A. Yes, you could characterize it as that.

24 **Q. And it still does, right?**

25 A. Yes.

1 **Q. But it's now longer?**

2 A. Correct.

3 **Q. How much longer?**

4 A. Probably four times as long, from about 50 feet
5 to about 200 feet.

6 **Q. And how far away from its former location have
7 you moved it to?**

8 A. Maybe 20 feet, 30 feet away. It's all in kind
9 of a flat area above the creek, so it's all in the same
10 general vicinity.

11 **Q. Do you know whether Stanford ever made any
12 attempt to systematically monitor and record whether any
13 of the materials that were being routed into the
14 original perforated pipe were making it into San
15 Francisquito Creek?**

16 A. I don't know of any such measurements or
17 observations.

18 **Q. Are you okay? Do you want a break?**

19 THE WITNESS: What time is it?

20 MS. FLANAGAN: It's ten after ten, so we've
21 been going an hour and 40 minutes.

22 MR. SPROUL: Do you want a break?

23 THE WITNESS: Five minutes would be nice.

24 MR. SPROUL: Five minutes.

25 (A break was taken.)

1 FURTHER EXAMINATION BY MR. SPROUL

2 MR. SPROUL: Q. So why did Stanford elect to
3 make these changes to the Searsville Booster Pump that
4 you were talking to us about a moment ago?

5 A. We're always looking at ways to refine the
6 operations of our facilities, and Richard expressed the
7 desire to modify the filter system.

8 **Q. And who's Richard?**

9 A. Richard Souza is my water shop supervisor. He
10 manages the technicians who operate the system.

11 **Q. Did he say anything about this would have water**
12 **quality benefit and it would reduce the level of**
13 **sediment that would reach San Francisquito Creek?**

14 A. No.

15 **Q. Well, is there some other reason why -- you**
16 **said to improve the system or upgrade our system, but**
17 **how or why would it be better as a result of what he**
18 **did? What's better about it?**

19 A. Mostly mechanical. These mechanical systems,
20 when they go into backwash mode and water is sent to the
21 filter backwards, in effect, it has a long-term wear
22 effect on the filter and pump system, so, by putting in
23 a second filter, he was able to decrease that mechanical
24 wear and tear.

25 **Q. So there wasn't any environmental rationale for**

1 **making this change, it was just to improve the**
2 **mechanical operation of the backwash filter practice or**
3 **operation?**

4 A. Yes.

5 MR. SPROUL: Okay.

6 At this time I'd like to -- I'd like to have
7 you mark this as an exhibit...

8 (Exhibit No. 1 marked for
9 identification.)

10 And please look over the document, and when you
11 had a chance to do so, please let me know that you're
12 ready to talk about it.

13 (Document reviewed by witness.)

14 A. I'm ready.

15 **Q. Okay, great.**

16 **Is this a document that you wrote?**

17 A. The text looks familiar to me. I don't recall
18 writing this specific document. Looks like it's taken
19 from another.

20 **Q. Do you have any sense what document it's taken**
21 **from?**

22 A. I prepared this information during the course
23 of the preparation and writing of the HCP.

24 **Q. And who directed you to prepare that**
25 **information?**

1 A. I was asked for -- not directed, but asked for
2 input from the Land Use and Environmental Planning group
3 at Stanford.

4 **Q. And that would have been Robert Reidy's group?**

5 A. It's within Bob Reidy's Land, Building and Real
6 Estate group, yes.

7 **Q. You don't recall a specific individual who**
8 **asked you to do this exercise?**

9 A. Yes, I do.

10 **Q. Who was that?**

11 A. Catherine Palter.

12 **Q. You interacted with Ms. Palter quite a lot,**
13 **yes?**

14 A. Yes.

15 **Q. You regularly exchange emails back and forth**
16 **about various topics with her?**

17 A. Yes.

18 **Q. Would you say it's a rare week that doesn't go**
19 **by that you don't email her at least once?**

20 A. Yes.

21 **Q. In the last year or two, would it also be fair**
22 **to say that a good percentage of your email messages to**
23 **and from Ms. Palter have dealt with the "Searsville"**
24 **committee?**

25 A. Yes.

1 **Q. Are there topics that you would consider**
2 **addressing Searsville Dam and Reservoir that would be**
3 **separate and apart from the Searsville committee that**
4 **you would have had email traffic with Ms. Palter about?**

5 MS. FLANAGAN: What time period?

6 MR. SPROUL: Q. In the last two years.

7 A. The "Searsville Committee" term is a little
8 unclear. We have a Searsville Study, which has a
9 steering committee, which I'm not a part of, and also
10 has a working group, so if you're talking about that
11 collective of Searsville folks, then that's the primary
12 subject of the emails that we've exchanged.

13 **Q. I'm sorry, of the three Searsville committee**
14 **entities, you're a member of two but not three, or all**
15 **three?**

16 A. Just one.

17 **Q. Just one?**

18 A. The working group.

19 **Q. You're not a member of the advisory group?**

20 A. Correct.

21 **Q. And who are the -- who are all the members of**
22 **the Searsville working group?**

23 A. Jean McCown, M-c-C-o-w-n; Catherine Palter;
24 Alan Launer, Eric Wright, W-r-i-g-h-t; Philippe Cohen.

25 **Q. Okay, thanks.**

1 **So back to Exhibit 1, did somebody expressly**
2 **ask you to do this breakdown of Searsville diversions**
3 **into these categories by hundred acre-foot increments**
4 **that this document depicts?**

5 A. I don't recall a specific request for this
6 specific characterization. I was asked for diversion
7 information, historic diversion information.

8 **Q. And historic diversion information, would that**
9 **be just raw data, this is how many acres being diverted**
10 **each year?**

11 A. I prepared this itemization based on the raw
12 data of annual diversion amounts.

13 **Q. Did this characterization scheme have any**
14 **significance to you? Did you think -- let me stop**
15 **there.**

16 **Did this characterization scheme have any**
17 **significance to you?**

18 A. Significant in that it characterized the nature
19 of the magnitude of our annual diversions and that
20 frequency.

21 **Q. Is that useful information to you personally?**

22 A. Well, I know it, but it was useful to the folks
23 who wanted this information about our diversion.

24 **Q. And why was it useful to them?**

25 A. To obtain a historical understanding of the

1 water diverted from Searsville, the quantity and
2 frequency.

3 Q. Why did they want to know that? I assume that
4 that wasn't knowledge for knowledge's sake. The
5 knowledge was to be put to some kind of use or purpose?

6 A. Yes.

7 MS. FLANAGAN: If you know why they wanted it,
8 then you can tell him.

9 THE WITNESS: It was to clarify the activity of
10 diverting water from Searsville.

11 MR. SPROUL: Q. Was it just to get a sense of
12 here's how much water we get from Searsville in a given
13 year on average and here's the range, here's, like, the
14 bell curve? Is it just that?

15 A. That characterizes it pretty well.

16 Q. So it looks like, from what you draft here --
17 well, the numbers don't add up to 100 percent, right, so
18 this is -- this table is, in some sense, cumulative.
19 This isn't like -- a given amount of water diversion
20 wasn't placed exclusively in one category and not
21 another, obviously, right, because 76 percent plus
22 72 percent is well over 100 percent, for example, right?

23 A. Right.

24 Q. Can you explain a little bit more the math
25 that's employed here? What are you actually

1 **representing?**

2 A. Well, it's probably easiest to start with the
3 bottom bullet, and we have some years we divert less
4 than a hundred acre-feet, but, of all the years we've
5 been diverting, 1932 to 2008, 76 percent of those years'
6 annual diversion amounts more than 100 acre-feet, and
7 then 72, a lesser percentage of all of those years had
8 diversion amounts over 200 acre-feet.

9 So this information presents the frequency at
10 which we divert various amounts of annual total. Up to
11 four percent of the time we divert over 700 acre-feet.

12 **Q. Another way of looking at your data here is the**
13 **median is pretty close to 400 acre-feet a year; is that**
14 **correct?**

15 A. Correct.

16 **Q. And so, roughly, half of the years you're going**
17 **to divert less than 400 feet, roughly half the years**
18 **more than 400 acre-feet, correct?**

19 A. Not we would; we did, yes.

20 **Q. Right.**

21 **How about the average? I don't see an obvious**
22 **way of calculating the average based on the data you had**
23 **presented, but maybe you can tell me how you could do**
24 **that.**

25 A. I can tell you how we would do that. We would

1 take each year from 1932 to 2008, that annual total
2 diversion amount, and we would add all those numbers up
3 and divide it by that number of years.

4 **Q. Right, sure. And you haven't done that**
5 **exercise.**

6 A. I didn't do it here. I don't recall ever doing
7 that exercise specifically.

8 **Q. So like today, if I were to ask you what's the**
9 **average amount of water Stanford has diverted**
10 **historically, going back to 1932, from Searsville**
11 **Reservoir, you'd say "I don't know," correct?**

12 A. Correct.

13 **Q. Do you think it's useful to know what the**
14 **median diversion rate has been from Searsville**
15 **Reservoir?**

16 MS. FLANAGAN: Useful?

17 MR. SPROUL: Q. Is it useful to you?

18 A. Not particularly. It's interesting.

19 **Q. Why is it interesting to you?**

20 A. Well, because I am dealing with Stanford's
21 water supplies, planning for the future, as well as
22 operating what we have now, and looking at the median or
23 average gives me an idea of the Searsville components'
24 contribution to that overall water supply picture, so
25 that is interesting.

1 "Useful" is a term that connotes that I
2 actually do something with that number, and I don't,
3 really.

4 **Q. For planning purposes, do you think it would**
5 **be -- for your planning purposes, would it be more**
6 **useful to know the median acre-foot diversion from**
7 **Searsville Reservoir, or the average?**

8 A. Median.

9 **Q. And why is that?**

10 A. Average is affected by the magnitude of the
11 number. If three times four percent of the time I
12 diverted 2,000 acre-feet from Searsville, that would
13 really affect the average, but it would be very, very
14 few years that I could rely on that quantity.

15 If three times four percent of the time we
16 diverted 702 acre-feet, that would greatly reduce the
17 average, as opposed to some of those years being 2,000,
18 but it would still tell me I can count on that much
19 water very rarely.

20 So median is much more reflective of how often
21 I can expect to get that water amount.

22 **Q. Okay. Do you have any information that would**
23 **lead you to redo your -- these calculations --**

24 Well, let me ask you this. Is there anything
25 that you know now that in your -- that would lead you to

1 opine "I think the numbers written down here are
2 fundamentally wrong, and I think the actual -- the
3 median doesn't look anything like that because of other
4 data"?

5 A. I don't have any other data that would tell me
6 that these numbers are wrong.

7 Q. Anything -- is there anything that you know
8 that would lead you to not point to this if someone were
9 to ask you for this type of information and you could
10 say -- would you give this sheet of paper to them and
11 say, "Here, here's some calculations. I think they're
12 still essentially accurate."

13 Would you do that?

14 A. Yes.

15 (Exhibit No. 2 marked for
16 identification.)

17 Q. Let me know when you're ready.

18 MS. FLANAGAN: Do you want him to actually
19 review the data or just --

20 MR. SPROUL: Q. You don't have to read it line
21 by line, just read it to the point where you feel,
22 "Yeah, I recognize that."

23 A. I recognize it.

24 Q. Okay. Have you seen this document before?

25 A. Not exactly in this form, but, yes.

1 **Q. Did you write it?**

2 A. Yes.

3 **Q. And it looks like it was corrected in 2010, on**
4 **the face of it.**

5 **Do you recall it being corrected in 2010?**

6 A. I remember making revisions to this kind of a
7 table, and I think the shading I'm seeing is a yellow
8 highlight that I have done at that time, and
9 December 2010 looks about right, from what I recall.

10 **Q. Actually, let me direct you to -- to this -- I**
11 **don't know whether to make this a separate exhibit or --**

12 **Without objection, I would propose we**
13 **consolidate this, make this page one and this page two**
14 **of the same exhibit.**

15 MS. FLANAGAN: That's fine.

16 You'd like him to take a look at the email.

17 MR. SPROUL: Q. Yeah, take a look at the
18 email, right.

19 Let me know when you're done.

20 And particularly at the bottom of the email.
21 That's the part that I think is pertinent.

22 (Document reviewed by witness.)

23 A. Okay.

24 **Q. Okay. So that the email message at the bottom**
25 **says something to the effect of "We have some**

1 **corrections to make to a table."**

2 **Do you see that language?**

3 A. Yes.

4 **Q. Did you write that language in that email?**

5 A. Yes.

6 **Q. And can you explain how this came about, why**
7 **you wrote this email?**

8 A. Okay, three years ago, I'll tap the memory
9 banks as best I can.

10 We have a myriad of data of meter readings, and
11 I work with Richard Souza on compiling various sets of
12 information from his large spreadsheet of all these
13 meter readings that he records, and I believe that he
14 talked to me when we were producing various diversion
15 information like this table that he realized he had not
16 read some notes which affected the data that he was
17 reporting about the monthly diversion amounts from
18 Searsville, so those were the corrections that we made
19 for those years that are highlighted there in those
20 months.

21 **Q. Okay. As far as you know, the upgrading of**
22 **your data collection and recording system to reduce**
23 **these rare but unacceptable errors that are referred to**
24 **in the bottom of this email on page Bates 5079 happened?**

25 A. Are you asking if the errors happened?

1 **Q. No, the upgrading.**

2 It says, "We are working on upgrading our data
3 collection reporting systems to reduce those rare but
4 unacceptable errors," so my question to you is, like,
5 well, did you do that and is it done, finished?

6 A. It's a continuous process. We make upgrades to
7 our diversion meter reading and reporting processes
8 often. Richard talks to his guys about being more
9 careful about the readings, how they record them in the
10 database, and then how he has them note when meters are
11 not functioning. That's a continuing refinement effort,
12 and we did at that time, certainly, really make sure
13 that we improved the way we were doing that, yes.

14 **Q. Okay.**

15 **Are you aware of any other corrections**
16 **analogous to this one that we're looking at that were**
17 **necessary for the reasons you explained this one was**
18 **necessary?**

19 MS. FLANAGAN: Is this in any table he's ever
20 prepared?

21 MR. SPROUL: Q. Yeah, any other -- is this
22 aberrational, or has this happened on other occasions,
23 too?

24 A. It has happened once or twice besides this
25 specific occurrence, yes.

1 Q. And was corrected in those instances?

2 A. Yes, uh-huh.

3 Q. Are you aware of any data on the total amount
4 of Searsville diversions that Stanford has currently
5 communicated to the outside world that you know has
6 errors in it and should be corrected?

7 A. No.

8 Q. Okay. So, on to the next page, page two, this
9 purports to be a table, Searsville Diversions By Month,
10 2001 to 2010, and I believe you indicated you were
11 familiar with this table.

12 A. Yes.

13 Q. And did you write it?

14 A. I don't recall if I wrote it or got it from
15 someone in this form.

16 Q. The person who you might have got it from,
17 would they have been writing down your work, or would
18 they have been doing original work?

19 In other words, if someone else wrote it, was
20 it using information they got from you?

21 A. No, it would be using their own information.

22 Q. And you don't know?

23 A. I don't recall if I actually formed this table,
24 or if the table was sent to me and I attached it to the
25 email.

1 Q. All right, but do you have any reason to doubt
2 the accuracy of this table that you attached to the
3 email?

4 A. No.

5 Q. So I note that -- some things jump out, at
6 least to me, the acre-foot --

7 Let me go to the last column. The last column
8 that says "Total." That's total acre-feet of water
9 diverted from Searsville Reservoir.

10 Is that what that column represents?

11 A. For that year, yes.

12 Q. And the year, that first year column, is that
13 calendar year or water year?

14 A. I believe -- we use both, calendar year and
15 water year, so I believe this is calendar year, because
16 it doesn't have "WY" in front of the year.

17 Q. Okay. Do you think there's -- do you more
18 typically, personally, use one more than the other,
19 water year, WY, versus calendar year, CY?

20 A. We use both.

21 Q. In 2001 -- I would just note, this is an aside,
22 and you can tell me if you disagree, in some way it's a
23 moot point because all the months are spelled out and
24 you could draw your own calendar year or water year from
25 the data if you wanted to, correct?

1 A. Yes.

2 **Q. So I note that in January 2001 there are no**
3 **diversions reported from January through April, and then**
4 **there's a couple other years where there's no diversions**
5 **at all in early months of the calendar year, but that**
6 **one year really stands out.**

7 **Do you have any explanation for that, why were**
8 **there no water diversions from Searsville Reservoir**
9 **through April 2001?**

10 A. I don't know the reason for that specific year,
11 but the rainfall and flow in the creeks and spilling
12 over Searsville varies tremendously from year to year,
13 so there's a high variability in not only creek flow but
14 diversion rates and volume.

15 **Q. Well, did you just list all the drivers for**
16 **making water diversion determination, or are there**
17 **others?**

18 A. There could be others.

19 **Q. So water determination drivers could include**
20 **rainfall.**

21 A. Variability.

22 **Q. Rainfall variability. And it could include**
23 **reservoir level?**

24 A. Yes.

25 **Q. And it could include variations in demand for**

1 **water?**

2 A. Yes.

3 **Q. Anything else?**

4 A. Mechanical difficulties.

5 **Q. Anything else?**

6 A. Those seem to pretty well cover it.

7 **Q. So I haven't come across any documents where**
8 **Stanford expressly changed a water diversion or altered**
9 **a water diversion decision to specifically target**
10 **improvements to steelhead habitat, for example.**

11 **Am I missing something? Is there a Stanford**
12 **document where Stanford says we're going to divert water**
13 **from -- we're going to change our water diversion**
14 **decision at Searsville specifically to affect steelhead**
15 **as one of the drivers?**

16 A. Are you asking me if I --

17 **Q. Yeah. I haven't seen any such thing.**

18 **My question is, is there such a thing?**

19 A. Not that I'm aware of.

20 **Q. And is there anything that Stanford has written**
21 **that expresses that one of the drivers for managing**
22 **Searsville diversions is the effect of the diversions on**
23 **California red-legged frog?**

24 A. Not that I'm aware of.

25 **Q. Okay -- so back to 2001, why there would have**

1 **been no diversions in January, February, March, April,**
2 **is that because -- I mean do you have any sense of why,**
3 **and I think you said "Well, not really," but -- focusing**
4 **on those specific four months, and not maybe -- not a**
5 **memory of those four months, but just kind of knowing**
6 **the dynamic of the system, like why in the -- that's the**
7 **wettest time of the year in California, typically, yes?**

8 A. Yes.

9 **Q. And why, during the wettest time of the year,**
10 **would there be no diversions from Searsville Reservoir?**

11 A. Well, factors could have included a lot of
12 rainfall that year and a lower irrigation demand,
13 successful diversions from Los Trancos Creek to fill
14 Felt Reservoir and a decreased look to Searsville
15 diversions that year, in addition to these factors that
16 we listed about a mechanical problem with a pipeline,
17 maybe that year.

18 Those would be my list of factors that would
19 have possibly explained that, but I don't know
20 specifically why those months, actually.

21 **Q. And then it pumped up a bit into the spring,**
22 **but then really started to increase in the late summer,**
23 **August, September, October, where there was bigger**
24 **drawn-down months.**

25 **I haven't done any rigorous regression analysis**

1 analyzing -- correlating those three months and water
2 diversions, but it doesn't necessarily look like water
3 diversions always bump up in August, September or
4 October, but they did a bit in this year, and there's
5 some other years as well.

6 Any explanation why -- for this pattern, sort
7 of gradual increase in water diversion through the early
8 summer and then picking up in the late summer, early
9 fall?

10 MS. FLANAGAN: You're looking at 2001?

11 MR. SPROUL: I'm looking at 2001.

12 THE WITNESS: Sure.

13 Demand would be -- pre-irrigation water would
14 be high in the late summer, August-September, combined
15 with rainfall. That would have enabled us to divert
16 from Searsville.

17 MR. SPROUL: Q. So by September -- well, by
18 August, you would only be diverting stored water from
19 Searsville Reservoir, rather than inflow into Searsville
20 Reservoir, right?

21 MS. FLANAGAN: Again, you're asking about 2001?

22 MR. SPROUL: In 2001?

23 MS. FLANAGAN: Do you know?

24 THE WITNESS: Could you repeat the question?

25 MR. SPROUL: Q. Yeah.

1 Let me make this a little broader, and I can
2 ask you a question, which is a good thing.

3 So, just in general, all the water years that
4 are on this table, water diversions in September --
5 let's take that month, September.

6 My hypothesis, all of that water comes from
7 stored Searsville Reservoir water. It doesn't come from
8 water -- it's not augmented from water that's inflowing
9 into Searsville Reservoir once you get into September.

10 My hypothesis.

11 MS. FLANAGAN: I'm going to --

12 MR. SPROUL: Q. Am I right or wrong?

13 MS. FLANAGAN: -- the question is vague and
14 ambiguous, because the diversion point is in the
15 reservoir. All diversions are from the reservoir, so
16 I'm not sure what you're asking.

17 MR. SPROUL: Well, I think he understands, but
18 we'll try one more time.

19 BY MR. SPROUL:

20 **Q. So my question is, does all inflow into the**
21 **reservoir stop -- first question: Does all inflow into**
22 **the reservoir stop by September every year, in your**
23 **experience?**

24 A. No.

25 **Q. What sources of inflow into the reservoir do**

1 **you see in September?**

2 A. Early rainfall, which would have water from the
3 creeks flowing into Searsville Reservoir, comprising
4 inflow.

5 **Q. Do you ever look at long-term weather records
6 for the Stanford campus area? Do you?**

7 A. Yes.

8 **Q. And average monthly rainfall for the month of
9 September through the period of historic recording is
10 really low, yes?**

11 A. Yes.

12 **Q. So the late summer/early fall September rain as
13 a driver for water inflow into Searsville Reservoir is a
14 fairly rare event, yes?**

15 A. I wouldn't comment on the statistics. It's not
16 common, but it can happen.

17 **Q. And looking at the September column for 2001
18 through 2010, you see varying rates of diversion. The
19 high was in 2001, it's 11 acre-feet, down to several
20 years has zero.**

21 Do you have any sense of how much of that
22 acre-foot diversion was capturing water that was added
23 to Searsville -- or capturing a volume of water that was
24 equivalent to the volume of water added to Searsville
25 Reservoir from a late summer rain versus how much of it

1 was taking water that had been stored there for quite
2 some time?

3 A. I don't.

4 Q. Something else I noticed about your graph, your
5 table, water diversions are quite low, comparatively,
6 from 2001 to 2004. They're always in the double digits,
7 and then in -- after 2005 they're always in the triple
8 digits, and in some cases much, much larger than the
9 2001 through 2004 diversions.

10 One, have I accurately characterized your
11 table?

12 A. Yes, sir.

13 Q. And what's the explanation? Why did water
14 diversions from Searsville dramatically ramp up in 2005
15 and stay at a high level, at least through 2010?

16 MS. FLANAGAN: Objection.

17 Just the -- I object to the use of the word
18 "dramatically", because you're only comparing it to the
19 preceding years on this chart and not history.

20 THE WITNESS: May I answer it then?

21 MS. FLANAGAN: Yeah. Go ahead, if you
22 understand.

23 THE WITNESS: Yeah, that increase coincides
24 with the installation of the Searsville Booster Pump
25 Station.

1 MR. SPROUL: Q. So prior to the Searsville
2 Booster Pump Station being installed in 2004, correct --

3 A. Uh-huh.

4 Q. -- the Searsville diversions were by gravity
5 feed, yes?

6 A. Yes.

7 Q. And now, post 2004, the Searsville diversions
8 are pumped via pressure via the Searsville Booster Pump,
9 therefore significantly increasing Stanford's capacity
10 to take more water, yes?

11 A. Not quite.

12 Q. What's wrong?

13 A. The Searsville diversion remains to be gravity
14 inflow into the intake at Searsville Reservoir to the
15 piping that the booster pump station is located along.
16 It didn't change from a gravity system.

17 Q. So what portion of the system is gravity?

18 A. The portion from Searsville to the booster pump
19 station.

20 Q. And it becomes pressurized from -- downstream
21 of Searsville Booster Pump?

22 A. Correct.

23 Q. And that's where the increase in capacity is?

24 A. Correct.

25 Q. Do you know whether Stanford acquired any

1 **permits to increase the capacity of its Searsville water**
2 **diversion operation? Any permits?**

3 MS. FLANAGAN: I'm going to object.

4 If you could just explain what you mean by
5 "capacity". It has different meanings that are
6 applicable.

7 MR. SPROUL: Q. Okay, we'll back up and say
8 did Stanford get any permits for the Searsville Booster
9 Pump?

10 A. Yeah.

11 **Q. What permits were those?**

12 A. They were San Mateo County permits for building
13 this facility, and the typical mechanical, electrical
14 and planning permits from the county to do that.

15 **Q. Do you know if there was an Environmental**
16 **Impact Report done in conjunction with the San Mateo**
17 **County permits?**

18 A. There was an environmental document. I don't
19 recall if it was an Environmental Impact Report.

20 **Q. Did you have any role in drafting any of the**
21 **sections of the Environmental Impact Report?**

22 MS. FLANAGAN: I'm going to object to the
23 characterization, because he said he doesn't know if it
24 is an Environmental Impact Report.

25 MR. SPROUL: Q. Of the environmental document

1 that you referred to?

2 A. I provided a description of the pump station to
3 San Mateo County. They used that information to prepare
4 various documents associated with the permits.

5 **Q. Who was your point of contact at San Mateo**
6 **County?**

7 A. I do not recall.

8 **Q. Okay. Any other permits besides the San Mateo**
9 **County permit?**

10 A. No.

11 **Q. Did anyone in your department recommend to**
12 **anyone that we should get a Clean Water Act NPDES permit**
13 **for the discharge from this pump station?**

14 A. No.

15 (Exhibit No. 3 marked for
16 identification.)

17 MS. FLANAGAN: Do you want him to read this?

18 MR. SPROUL: Q. Yes, please.

19 Could you look this over, and let me know when
20 you -- I don't think you need to read every line. It's
21 kind of a long document, but read it to the point where
22 you can say yes, I'm familiar with this, or, no, I've
23 never seen this before, or general familiarity, and we
24 can take it from there.

25 We're not going to go over each line, line by

1 line.

2 MS. FLANAGAN: Just so he knows, is your first
3 question to him has he seen this document before?

4 MR. SPROUL: Yes.

5 THE WITNESS: I don't recall having seen this
6 before.

7 MR. SPROUL: Q. Do you know the people --
8 well, do you know Catherine Palter?

9 A. Yes.

10 **Q. Do you know the people that she sent this email**
11 **message to?**

12 A. Yes.

13 **Q. So who is Shawn Zovod?**

14 A. She's --

15 MS. FLANAGAN: It's the cc line.

16 THE WITNESS: Yeah, yeah.

17 She's an attorney that assists Stanford on the
18 HCP.

19 MR. SPROUL: Q. And who's Charles Carter?

20 A. He was Director of Land Use and Environmental
21 Planning, Catherine Palter's supervisor. Since retired.

22 **Q. And Alan Launer?**

23 A. Also in Land Use and Environmental Planning,
24 campus biologist.

25 **Q. Did you ever participate in any conversation**

1 with anyone from National Fishery Service about whether
2 there should be 300 acre-foot maximum winter withdrawal
3 from Searsville in the HCP as part of the conservation
4 program?

5 A. Not that I specifically recall. I was involved
6 in conversations with Gary, but I don't recall about
7 that specific topic.

8 Q. Other than talking about it with a Stanford
9 lawyer, have you talked to anyone else about a 300
10 acre-foot maximum winter withdrawal requirement from
11 Searsville as part of the conservation program?

12 A. No.

13 Q. Have you ever written anything about such a
14 conservation program with a 300-acre maximum limit?

15 A. No.

16 Q. Have you ever seen anything in writing about a
17 300-acre maximum winter water withdrawal from Searsville
18 conservation program conservation effort?

19 A. Not that I recall.

20 Q. So this letter right here, looking at it today,
21 this is news to you? This is the first you've heard of
22 maybe Stanford should be -- should agree to a maximum
23 winter withdrawal from Searsville of no more than
24 300 acre-feet?

25 That's the first time you've heard that?

1 A. Yes.

2 **Q. The second bullet from the bottom on page one**
3 **says that -- the last sentence says, "We described the**
4 **Covered Activity as a maximum of 300 [sic.]**
5 **acre-feet (300 acre-feet in the winter) which was a**
6 **realistic expectation of Stanford's Searsville water**
7 **diversions."**

8 You can read the larger paragraph if you feel
9 **like you need more context, but I had a couple questions**
10 **to ask you about that sentence in particular.**

11 A. Yeah. That's the context that I recall.

12 It was not the amount of the total diversion
13 but the timing of it that 300 acre-feet in the winter,
14 that would be December 21 to March 21 typically, but
15 600 acre-feet overall.

16 That's the nature of the discussions I recall
17 having, not anything about a 300 acre-feet total annual
18 maximum.

19 **Q. Did you have any role in shaping a**
20 **recommendation around that as an acre-foot water**
21 **diversion regime, 600 overall, 300 in the winter?**

22 A. I recall discussions about it. I don't recall
23 being part of a formulation of a statement that really
24 got that specific.

25 **Q. Do you recall expressing opinions about such a**

1 **water regime for Searsville?**

2 A. Yes.

3 **Q. And who did you express opinions to?**

4 A. Catherine Palter and Alan Launer.

5 **Q. What did you tell them?**

6 A. That, looking at our typical distribution of
7 diversion month by month, that 300 acre-feet during
8 those winter months and a 600 acre-foot total would be
9 fitting with respect to the historic numbers.

10 **Q. And was it -- in coming up with your analysis**
11 **of fitting, were you specifically looking at how much**
12 **water has Stanford diverted historically and said, well,**
13 **we can meet this because that's what we've done, so we**
14 **can keep doing it?**

15 **Is that your analysis?**

16 A. Yes.

17 **Q. And you weren't asked to analyze, well, how**
18 **much water diversions should we target if we're trying**
19 **to help steelhead, for example? That wasn't one of your**
20 **tasks?**

21 A. No.

22 **Q. Okay.**

23 **(Exhibit No. 4 marked for**
24 **identification.)**

25 **I'll represent to you -- and this might jog**

1 **your memory. This is -- like the footer says at the**
2 **bottom, this -- this is a page from Stanford's Response**
3 **to Interrogatories.**

4 A. Sorry, I don't have a footer on mine.

5 **Q. You don't have a footer?**

6 MS. FLANAGAN: Are they otherwise the same?

7 MR. COSTA: Yeah.

8 MR. SPROUL: Q. So I'll represent to you that
9 this is a page from Stanford's Interrogatory Responses
10 to the plaintiffs, and just to pick up this one page,
11 because this is the page that's relevant, and ask you
12 whether you have seen this particular table before.

13 A. It looks familiar, yes.

14 **Q. Did you help write it?**

15 A. Yes.

16 **Q. Did anyone help you to write it?**

17 A. Yes.

18 **Q. And who helped you?**

19 A. Richard Souza, my water shop supervisor, who
20 tracks diversions.

21 **Q. Okay. To the best of your knowledge, is**
22 **everything -- all the data that's reflected in this**
23 **table accurate?**

24 A. No.

25 **Q. What's inaccurate about it?**

1 A. Well, I recall having to revise a couple of
2 these numbers, so this wouldn't be the latest version of
3 this tabulated information.

4 **Q. When did you do that?**

5 A. Very shortly after this was issued.

6 MS. FLANAGAN: Before he answered, I was going
7 to ask you about using the pre-revised version.

8 MR. SPROUL: Did you send us the revised
9 version?

10 MS. FLANAGAN: Yes.

11 MR. SPROUL: Q. Actually, before we come off
12 of this, one thing in particular, in 2013, the data for
13 2013, it shows no diversion starting April, May, June,
14 July, August -- no water diversion during that time
15 period.

16 Is that information accurate?

17 A. Yes.

18 MS. FLANAGAN: It was just a correction to a
19 few of the numbers that he had found.

20 MR. SPROUL: Q. Okay.

21 MS. FLANAGAN: And you can ask him about the
22 table if you're not going to be getting into the
23 specifics of numbers, just understanding that some of
24 the numbers were revised.

25 MR. SPROUL: Q. All right, fair enough.

1 And is there a reason why water diversions
2 ended in April 2013?

3 A. Yes.

4 **Q. And what was that reason?**

5 A. This has been one of the driest years on
6 record. We've had very little, if any, rain since
7 January, so we stopped diverting in March or early
8 April -- actually in March, because we had zero for
9 April.

10 **Q. There was still water in Searsville Reservoir,**
11 **right?**

12 A. Yes.

13 **Q. And -- but you decided not to divert any of**
14 **that water out of Searsville Reservoir from April**
15 **onward, yes?**

16 A. Yeah.

17 **Q. And why? What was your motivation for not**
18 **wanting to take water out of Searsville Reservoir after**
19 **April?**

20 A. I have to think back to -- we don't want to
21 deplete the reservoir. We impound water with the dam
22 and extract some of that impounded water down a few feet
23 from the spillway, but, beyond that point we don't empty
24 the reservoir's water supply typically -- actually,
25 ever. We use our other water diversions or water

1 supplies for diversion instead.

2 **Q. Does the term "dead pool" have any mean to you?**

3 A. Pardon me?

4 **Q. Does the term "dead pool" have any meaning to**
5 **you?**

6 A. D-e-a-d, dead pool? No.

7 **Q. Not a term you use?**

8 A. No.

9 **Q. As in taking a reservoir to dead pool?**

10 A. Yeah, I'm not familiar with that term.

11 **Q. Okay.**

12 **So I understand you to say that Stanford**
13 **doesn't want to take the reservoir down to --**
14 **essentially as far down as it can be drained given the**
15 **current configuration, it wants to -- instead, wants to**
16 **leave some water in it, even if it's a really dry year,**
17 **and the answer to that is yes?**

18 A. Yes.

19 **Q. And why? Why is that important to have some**
20 **water left in the reservoir?**

21 A. I interact with Philippe Cohen at Jasper Ridge,
22 which is right at the location of Searsville Reservoir,
23 and he monitors various habitat and research activities
24 up there, and lets me know when he thinks we've taken
25 the water -- the reservoir's water level down enough,

1 and then we stop diverting.

2 **Q. Do you ever argue with Mr. -- is it Dr. Cohen**
3 **-- Dr. Cohen about him cutting you off from water**
4 **diversions out of Searsville Reservoir?**

5 A. No.

6 **Q. Does he have to get someone's authority above**
7 **his to give you the cutoff order, or is it on his own**
8 **authority?**

9 MS. FLANAGAN: I'm going to object to the
10 characterization of "cutoff order".

11 THE WITNESS: Philippe and I have a casual
12 conversation about diversion timing. There's no
13 ordering going on.

14 MR. SPROUL: Q. But you're the person,
15 operationally, who actually controls whether the
16 diversion continues or stops, correct?

17 A. I manage those who control it, yes.

18 **Q. Do you consult with any other Stanford people**
19 **besides Dr. Cohen about when to stop the Searsville**
20 **diversion?**

21 A. Occasionally Alan Launer, but -- I can't
22 remember specific instances offhand, but, yes, he would
23 be the other person I would consult about that.

24 **Q. And why? What would Mr. Launer bring to the**
25 **table for you?**

1 A. Similar to Philippe, understanding of the
2 species, habitats, research activities up around
3 Searsville Reservoir and Jasper Ridge.

4 **Q. Do you talk to Catherine Palter about when to**
5 **adjust Searsville diversions?**

6 A. No.

7 **Q. Have you ever talked to Gary Stern about when**
8 **to adjust Searsville diversions?**

9 A. No.

10 **Q. Or anyone at National Marine Fishery Service?**

11 A. No.

12 **Q. Or anyone at the U.S. Fish & Wildlife Service?**

13 A. No.

14 **Q. Or anyone at the California Department of Fish**
15 **and Wildlife?**

16 A. No.

17 **Q. Looking at this table -- and perhaps we'll find**
18 **the revised that's got the absolute corrected numbers --**
19 **it looks to me that from 2009 to 2013, the amount of**
20 **water diversions were roughly comparable to the level of**
21 **water diversions we were seeing from Searsville in the**
22 **few years prior to that, is that a fair**
23 **characterization? Or would you look at it differently?**

24 MS. FLANAGAN: You're asking him with reference
25 to your Exhibit 1 or 2?

1 MR. SPROUL: To Exhibit 2.

2 THE WITNESS: The pattern is similar.

3 MR. SPROUL: Q. The pattern is similar, yes?

4 And that Stanford is generally falling within
5 the 300 to 600-acre-foot range?

6 A. Yes.

7 Q. **Neither under 300 nor over 600 acre-feet of**
8 **diversion, correct?**

9 A. Yes.

10 Q. **And the corrections you've made aren't so**
11 **dramatic that they would change that basic fact.**

12 A. Yes.

13 Q. **Yes, they would not change it?**

14 A. Correct.

15 (Exhibit No. 5 marked for
16 identification.)

17 Q. **Can you please look through that document --**
18 **I'm not expecting you to memorize page after page and**
19 **numbers -- but to look through it to see if this is a**
20 **document you have seen before and are -- otherwise**
21 **consider yourselves knowledgeable about, and let me know**
22 **when you're done.**

23 (Document reviewed by witness.)

24 A. Okay.

25 Q. **Have you seen this document before?**

1 A. Yes.

2 **Q. Did you write it?**

3 A. No.

4 **Q. Do you know who wrote it?**

5 A. Yes.

6 **Q. And who was that?**

7 A. Richard Souza.

8 **Q. And that's a person on your staff?**

9 A. Yes.

10 **Q. Did he do that at your direction?**

11 A. In general. This is data from the spreadsheet
12 that he keeps water information on.

13 **Q. Do you have any reason to think that the data**
14 **that your employee has written into this spreadsheet is**
15 **inaccurate?**

16 A. No.

17 MS. FLANAGAN: I'm just going to -- you're
18 representing to us that you printed it off of -- this is
19 something you printed. It doesn't have Bates numbers on
20 it.

21 MR. COSTA: You provided it in a spreadsheet
22 format, and it just didn't have Bates numbers on it,
23 just the title of the document.

24 MS. FLANAGAN: And I'm asking, you're
25 representing all you did is you just printed it out as

1 is.

2 MR. COSTA: Yes.

3 MS. FLANAGAN: Just so you can make that
4 assumption.

5 MR. COSTA: It's locked. The spreadsheet is
6 locked.

7 MR. SPROUL: Q. So the first column to the
8 left says "Meter readings at Searsville pump meter."
9 Can you explain what those are?

10 A. Yes, it's flow -- it's a reading of a meter at
11 a point in time near the Searsville Booster Pump
12 Station.

13 **Q. On the upstream side of the Searsville Booster**
14 **Pump Station, or downside?**

15 A. I, frankly, don't know which side of the pump
16 station the meter is on.

17 **Q. More to the point, do you know -- the next**
18 **column over, Gallons Register, I take it that this is an**
19 **attempt to show -- or this column is meant to show**
20 **what's the gallonage of water flowing past this meter --**

21 **Well, let me just stop there. Is that what**
22 **that column is meant to show?**

23 A. It indicates the gallons that have flowed
24 through the meter as of that point in time.

25 **Q. So then my question is, flowing into the pump**

1 or out of the pump? The pump meaning the Searsville
2 booster pump.

3 A. I believe it's into the pump. I'm just trying
4 to picture the pump station, and I just don't recall
5 which side of the pump the meter is on, but I believe
6 it's upstream on the Searsville side.

7 Q. And then the next column over, Meter readings
8 at Searsville Dam meter, what is that referring to?

9 A. The gallons that have flowed in the pipeline
10 where that meter is right at Searsville Dam.

11 Q. And then the next over, Gallons Register, so,
12 again, that would be the amount of gallons of water that
13 have flowed past the -- that meter located on Searsville
14 Dam, or near Searsville Dam, at that point in time, yes?

15 A. Yes.

16 Q. I see that there's -- on 12/29/07 there's an
17 entry of zero. Any explanation why it would have been
18 zero on December 29th?

19 A. I'm sorry, why is the meter reading zero?

20 Q. Yeah.

21 A. It looks like a reset of the meter.

22 Q. I see.

23 Okay, and why the pairing between these two --
24 this spreadsheet seems to be presenting these two
25 informations next to each other, as if there's some

1 relationship between the two, so let me stop you there.

2 Is there a relationship between these two
3 pieces of information that this document is meant to
4 portray?

5 A. Yes, it's just two different meters basically
6 at the two different ends of a pipeline.

7 Q. So measuring the amount of water that went in,
8 that's the meter to the right in this column, and then
9 meter to the left in these columns is measuring water
10 exiting?

11 A. Correct.

12 Q. And why would Stanford want to track that?

13 A. In case one meter goes out, we have the other
14 one to measure the same flow.

15 Q. Is it simply a system of redundancy and not to
16 capture loss, for example?

17 A. It would have the benefit of capturing loss,
18 but the predominant reason is redundancy.

19 Q. Is this information used by you for any other
20 purpose?

21 MS. FLANAGAN: For any purpose other than what?

22 MR. SPROUL: Any other purpose than what he
23 just mentioned, which was redundancy.

24 THE WITNESS: Yes.

25 MR. SPROUL: Q. What else do you use it for?

1 looking at it before, but it's quite possible.

2 MR. SPROUL: Q. Why do you say it's quite
3 possible?

4 A. It was the first year I was in -- here at
5 Stanford in this job doing this role. Larry Andrews is
6 Richard Souza's predecessor. We had been preparing
7 these reports for years, and this is just another one in
8 the series.

9 MS. FLANAGAN: He's asking had you seen this
10 before.

11 MR. SPROUL: Q. Have you ever prepared a
12 document like this one to the State Board yourself, a
13 Supplemental Statement of Water Diversion and Use?

14 A. Yes.

15 **Q. When was the last time you did that?**

16 A. A few years ago.

17 **Q. Do you know whether Stanford is still doing
18 that?**

19 A. I know that we are still filing reports, yes.

20 **Q. And those reports are filed annually?**

21 A. The Division of Water Rights, DWR, is changing
22 their procedure from a manual process to an online
23 process. Along with that, they're changing reporting
24 from a three-year reporting cycle to an annual cycle, so
25 different diversions are being reported different ways

1 right now in this transition period.

2 **Q. Do you know when the last report was that**
3 **Stanford filed with the State Board along these lines?**

4 A. For which diversion?

5 **Q. For Searsville.**

6 A. Yes, just recently, for the last water year,
7 within the last few months.

8 **Q. Okay, we can go on.**

9 **There seems to be some handwritten -- this is**
10 **how we got it from Stanford -- how it was given to us.**
11 **There's some handwritten notations on this, and we're**
12 **just curious if you can recognize the handwriting.**

13 MS. FLANAGAN: This is on page one?

14 MR. SPROUL: It's page one, right, where it
15 says Richard Souza --

16 MS. FLANAGAN: Which page are you on?

17 MR. SPROUL: On Bates stamp 1687.

18 MS. FLANAGAN: So page two they've gone to now.
19 And your question is?

20 MR. SPROUL: Q. Do you recognize the
21 handwriting?

22 A. Yes.

23 **Q. Whose handwriting is that?**

24 A. Mine.

25 **Q. And why did you cross out Larry Andrews and**

1 **write Richard Souza?**

2 A. Larry had retired and Richard Souza had been
3 hired to replace him.

4 **Q. And up in the upper right corner, 2002, 2003,**
5 **2004 is crossed out, and different years are written**
6 **instead, and why was that?**

7 A. This was several years ago I did this, so what
8 I recall is that we needed to file reports for
9 subsequent years, that we had not received what we
10 called the template from DWR for those years, so we used
11 the template they had sent us for a subsequent year and
12 used that for the prior year, so that's why it's crossed
13 out. It wasn't that something was wrong, we didn't have
14 a template for those for '99, 2000, and 2001 years, so
15 we had to use this one to fill out the report for the
16 prior years.

17 **Q. I see.**

18 **Did you use the same information to calculate**
19 **the acre-feet values that are in the box in the middle**
20 **of this document that you used in the earlier tables**
21 **that we were referring to?**

22 MS. FLANAGAN: You're talking about Exhibits 4
23 and --

24 MR. SPROUL: Yeah.

25 MS. FLANAGAN: -- for example?

1 THE WITNESS: The numbers would have been from
2 the same base spreadsheet that Richard keeps for this
3 data collection over time. I don't know how that
4 correlates to the previous exhibit.

5 MR. SPROUL: Q. You can't think of a reason
6 why -- I'm not saying there is a difference, but you
7 can't think of a reason why this type of reporting you
8 would use a different methodology that might come up
9 with different numbers than the methodology you would
10 use in the other spreadsheets that we were talking about
11 in the earlier exhibit?

12 A. There wouldn't be a different methodology, no.

13 **Q. Now down to Bates stamp page 1689.**

14 A. Okay.

15 **Q. Are you familiar with this page?**

16 A. Yes.

17 **Q. And is this a page that you wrote? Looks like**
18 **it has your initials.**

19 A. Yes, it's over a decade ago, but, yes, it looks
20 like I wrote it.

21 **Q. To the best of your knowledge, is it accurate?**

22 A. Yes, I have no reason to doubt it. I don't
23 think there were revisions in the water years from 2001.

24 **Q. Okay.**

25 **And when I look at the data, it seems fair to**

1 say -- I think you might have said it yourself earlier
2 -- that there's very wide variability in the amount of
3 acre-feet per year that Stanford diverts from Searsville
4 Reservoir.

5 Would you agree with that?

6 A. Yes.

7 Q. I notice that there were a couple years, 1993
8 and '94 and 1996, where, according to your data,
9 Stanford didn't divert any water from Searsville
10 Reservoir.

11 Do you believe that's true?

12 A. I have no reason not to.

13 Q. Do you have any -- do you have any explanation
14 why Stanford didn't divert any water at all from
15 Searsville Reservoir in those years?

16 A. No.

17 Q. I also see that there's just large gaps, or
18 there's just gaps between 1981-2, and 84-85, there's no
19 entry at all.

20 Do you know why that is?

21 A. No.

22 Q. And the same for 1933-34?

23 A. No.

24 Q. If I were to say would it refresh your
25 recollection -- oh, yes, those were years we just didn't

1 have any data available for whatever reason, there's no
2 data that shows zero, no data that shows positive, just
3 no data, would that be an explanation, or still don't
4 know?

5 A. Well, we do not have data for those years.

6 Q. If you had data for those years, you would have
7 put it in the table?

8 A. Yes.

9 Q. The other thing that jumps out at me in this
10 data is that the very highest amount of acre-feet
11 diverted is 1,021 acre-feet. Do you have any
12 explanation how it was that Stanford was able to divert
13 that large of a volume in that year?

14 A. I don't know why that year's volume is that.

15 Q. I also note that starting around 1987, or maybe
16 even more particularly 1981 onward, through the year
17 2001, the amount of the water diversions are quite
18 obviously very much lower than the average or median
19 water diversions in the rest of the data set.

20 Does that also look apparent to you?

21 A. Yes.

22 Q. And do you have any reason for that?

23 A. No.

24 Q. Did it have anything to do with Searsville
25 Reservoir silting in, for example?

1 A. Well, it's before my time here, so I can't
2 explain what's going on in the operation then.

3 (Exhibit No. 7 marked for
4 identification.)

5 **Q. When you've had a chance to look over that**
6 **document, please let me know.**

7 (Document reviewed by witness.)

8 A. Okay.

9 **Q. Have you seen this email message from Catherine**
10 **Palter before?**

11 A. I don't recall seeing it before, no.

12 **Q. Are you familiar with the topic of conversation**
13 **that Ms. Palter is addressing in the email message?**

14 A. I'm familiar with the question about continuing
15 diversions. I'm not familiar with the term "cumulative
16 analysis".

17 **Q. Okay. Were you aware that the National Marine**
18 **Fisheries Service was asking Stanford something to the**
19 **effect of what are your future plans with respect to**
20 **water diversion?**

21 Is that right?

22 A. Yes.

23 **Q. Did anyone at the National Marine Fisheries**
24 **Service ask you that directly?**

25 MS. FLANAGAN: In this time period?

1 MR. SPROUL: Yeah, in this time period.

2 THE WITNESS: Did anyone at National Marine
3 Fisheries ask me about the future of Searsville
4 diversions.

5 MR. SPROUL: Q. Yes.

6 A. No, I don't recall that question from them.

7 **Q. At any time?**

8 A. Well, this is two and a half, almost three
9 years ago. We were discussing Searsville diversions
10 generally. I don't remember them asking that specific
11 question: "Will you keep diverting as you have in the
12 past."

13 **Q. Or, how about this: Do you recall ever, I mean**
14 **ever, anyone from the National Marine Fisheries Service**
15 **asking you what are Stanford's plans with respect to**
16 **future diversions of water from Searsville Reservoir?**

17 A. I can't say that I do, no.

18 **Q. Do you recall telling Ms. Palter that actual**
19 **future diversions from Searsville will vary, as they**
20 **have in the past, with creek conditions and rainfall?**

21 A. Yes.

22 **Q. Did you also say future diversions will be**
23 **similar to those that have occurred in the past?**

24 MS. FLANAGAN: You're asking has he ever said
25 that to Ms. Palter?

1 MR. SPROUL: Q. Yes, have you ever said that
2 to Ms. Palter?

3 A. I don't recall specifically saying that, but
4 that would have been logical, and something I would say
5 to her in the context of those discussions.

6 Q. Is that right now your belief, as the person
7 who's the head of Stanford's water system, that right
8 now Stanford's plan is to continue its water diversions
9 along -- similarly to how it has diverted water in the
10 past? That's your current plan?

11 A. Yes, but we do have the Searsville Study going
12 on to look at the future of Searsville, including
13 diversions, but all of that is being deliberated right
14 now as a part of that study.

15 Q. But, pending an outcome to that study, you
16 don't have any plans to change your water diversions.

17 A. Correct.

18 (Exhibit No. 8 marked for
19 identification.)

20 Q. This document purports to be a couple emails.
21 If you'll just look through them, and let me know when
22 you've looked at them enough to know whether you've seen
23 them before and have some familiarity with them.

24 It's really the bottom email that matters.

25 MS. FLANAGAN: He's asking have you seen it

1 before.

2 THE WITNESS: No.

3 MR. SPROUL: Q. Do you ever recall hearing
4 that the National Marine Fisheries Service was inquiring
5 about Stanford -- inquiring of Stanford about the
6 relationship between inflow and outflow at Searsville
7 Dam?

8 Do you recall that as a topic?

9 MS. FLANAGAN: Is that in this time period, or
10 ever?

11 MR. SPROUL: Q. Well, let's start with ever.

12 A. No.

13 **Q. Have you ever discussed with anyone the**
14 **relationship between inflow and outflow at Searsville**
15 **Dam?**

16 A. Ever?

17 **Q. Ever.**

18 A. Yes.

19 **Q. And who have you discussed that with?**

20 A. I believe it was Corrine Gray at the Department
21 of Fish and Wildlife, and I don't remember if Gary Stern
22 may have been on that phone call -- he could well have
23 been -- where we discussed that.

24 **Q. Do you recall roughly when that was?**

25 A. Yes, a few months ago.

1 **Q. Were they asking you for a water balance -- a**
2 **water balance model for Searsville?**

3 A. Yes. We called it a water budget. Same thing.

4 **Q. And have you done a water budget before for**
5 **Searsville?**

6 A. No.

7 **Q. Have you done one anywhere before?**

8 A. Sure.

9 **Q. And what other water bodies have you done a**
10 **water budget for?**

11 A. Well, not water bodies, but water budgets for
12 flow into our pipe system.

13 In our potable water system, for example, we
14 know how much water we buy from San Francisco and how
15 much water we deliver to customers, so that's another
16 form of water budget. It's just a pipe system instead
17 of a water body.

18 **Q. But you haven't personally done a water budget**
19 **for a freestanding water body before?**

20 A. I have not.

21 **Q. Do you know if anyone at Stanford has done a**
22 **water budget for a freestanding water body?**

23 A. I don't.

24 **Q. Do you know why the resource agencies -- can I**
25 **say resource agencies, rather than --**

1 A. Right.

2 **Q. -- why the resources agencies were interested**
3 **in a water budget for Searsville?**

4 MS. FLANAGAN: Do you know why?

5 THE WITNESS: No.

6 MR. SPROUL: Q. They didn't express to you or
7 in this conversation anything that you recall about what
8 use they would make of a water budget for Searsville?

9 A. No.

10 **Q. A water budget for Searsville would include the**
11 **amount of water that flows into Searsville from the**
12 **various upstream creeks as one component, yes?**

13 A. Yes.

14 **Q. It would also include the amount of water that**
15 **exits the reservoir via any egressing creeks or**
16 **waterways, yes?**

17 A. Yes.

18 **Q. And it would include any amount of water that**
19 **evaporates from Searsville Lake, yes?**

20 A. Yes.

21 **Q. Any water, I guess -- similarly, but is removed**
22 **by plants through evapotranspiration?**

23 A. Yes.

24 **Q. It would include any water removed by**
25 **subsurface percolation into the ground?**

1 A. Yes.

2 **Q. And then any water removed by water diversion,**
3 **actual act of pumping out of the water, or gravity flow**
4 **out of the lake, yes?**

5 A. Yes.

6 **Q. Of all those factors that we just listed, have**
7 **you analyzed any of them to the point where you would**
8 **have a good personal opinion, or a personal opinion that**
9 **you would say is reliable, on what's happening with**
10 **respect to any of those parameters that would go into a**
11 **water balance?**

12 MS. FLANAGAN: I'm going to object to the
13 question. It's vague and ambiguous in terms of what is
14 it you're -- you mean in terms of anything that's
15 happening.

16 Is it the amount in a given year, or what?

17 MR. SPROUL: Q. All right, we can frame it a
18 little more.

19 So you haven't done a water balance, yes.

20 A. Correct.

21 **Q. There are lots of things that would go into a**
22 **water balance, yes?**

23 A. Yes.

24 **Q. Foundational question: Have you done any of**
25 **the things that would go into a water balance, or just**

1 **not worked on that at all?**

2 A. We have worked on some components of that.

3 **Q. What are the components of that that you have**
4 **worked on?**

5 A. Well, the measurement of rate of spill over the
6 dam, and the diversion amounts.

7 **Q. Anything else, or is that the only data that**
8 **would go into a water balance?**

9 A. We do have creek flow gauges on the upstream
10 tributary creeks. Corte Madera Creek's gauge has been
11 there for a few years so we have some data collected on
12 that one, but not the other creeks.

13 And that's it.

14 **Q. You've made no attempt to estimate evaporation**
15 **from the lake?**

16 A. No.

17 **Q. And no attempt to estimate subsurface**
18 **percolation of water stored in the reservoir.**

19 A. No.

20 **Q. Do you have any sense of the subsurface geology**
21 **from the lake, whether it's characterized by bedrock on**
22 **one hand versus alluvial deposition down to depth at the**
23 **other end of the spectrum, any sense of that?**

24 A. Yes.

25 **Q. And that would affect subsurface percolation,**

1 **would it not?**

2 A. Yes.

3 **Q. And what's your sense of the what the substrate**
4 **underneath Searsville Reservoir is, from the work you've**
5 **done?**

6 A. It's bedrock.

7 **Q. Which would tend to slow down subsurface**
8 **percolation as a factor of loss in a water budget.**

9 A. Yes.

10 **Q. Do you know whether Stanford is -- has current**
11 **plans to development a water budget for Searsville?**

12 A. Yes.

13 **Q. Is Stanford going to do that?**

14 A. Yes.

15 **Q. And is there a deadline for doing that?**

16 A. We have a commitment, self-imposed, to start
17 that process with this coming rainy season, assuming we
18 have one.

19 **Q. Let us hope.**

20 A. Yeah.

21 **Q. Who's going to do the water budget?**

22 A. We have consultants who will assist us with
23 that effort.

24 **Q. Is that URS?**

25 A. Primarily Balance Hydrologics, who is a

1 sub consultant to URS for the Searsville study, but
2 Balance will be primarily involved with us on the water
3 budget.

4 They work with us directly, contract with us
5 directly.

6 **Q. Do you have a sense of how long it will take to**
7 **complete the water budget analysis?**

8 A. We're going to collect the data for it starting
9 with this coming rainy season, and, hopefully, we'll
10 gather enough data to get a good handle on it.

11 We'll compile all our data, share it with
12 agencies this coming spring or summer, and then decide
13 what data we collect the following year to supplement
14 the water budgeting effort for the next year.

15 **Q. I just want to direct your attention back to**
16 **Bates page 5090, and ask this question: Do you know**
17 **Amanda Morrison?**

18 A. Yes.

19 **Q. And who is Amanda Morrison?**

20 A. She's a staff person at the National Marine
21 Fisheries Service.

22 **Q. And how have your dealings been with**
23 **Ms. Morrison?**

24 A. Sorry?

25 **Q. How have your dealings been with Ms. Morrison?**

1 MS. FLANAGAN: I'm going to object to the
2 question as vague and ambiguous as to what you mean by
3 "How have they been." Content or cordial or what?

4 MR. SPROUL: Q. Is she easy to work with, in
5 your opinion?

6 A. Yes.

7 Q. So she notes that, "Really all we are trying to
8 say is that the water levels in the reservoir are mainly
9 dependent upon inflow and that evaporation and water
10 loss in the surrounding aquifer is not significant."

11 Let me just stop there.

12 Have you heard that statement before? And, if
13 so, do you have an opinion about it?

14 A. I haven't seen this email, so I can't say I've
15 seen this statement before.

16 Q. Not this particular one, but something to that
17 effect. Have you seen or heard somebody say that, and
18 if you did, when they said that, did you have an opinion
19 about it?

20 A. I've heard discussion about the main inflow to
21 Searsville Reservoir being the creek inflow and the
22 percolation losses being very low. I don't know that
23 anybody has quantified evaporation yet.

24 Q. And then the next paragraph, "During the period
25 between mid-April and mid-June of most years, reservoir

1 inflow from Corte Madera Creek drops off and the water
2 surface elevation in Searsville Reservoir drops below
3 the crest of the spillway."

4 Is that a true statement, in your experience?

5 A. Generally, yes.

6 Q. And, "At this point water passing down the
7 spillway from the reservoir to lower Corte Madera Creek
8 ceases."

9 Is that so? A true statement, in your
10 experience?

11 A. Yes.

12 Q. "Reservoir outflow is highly correlated within
13 flow rates, but daily stream flow measurements are not
14 available to present this relationship."

15 Now, is that still true, or has gauging
16 improved that would -- that would no longer have this be
17 totally accurate? I mean I don't know.

18 A. We have more creek flow gauges in place now so
19 we're able to know that more definitively than we have
20 in the past.

21 Q. And when did those new gauges go in?

22 A. This year.

23 Q. Was that at URS's direction, the new gauges?

24 A. No.

25 Q. At whose direction was it?

1 A. Mine.

2 Q. Oh, okay.

3 Was that your unilateral decision, or was there
4 someone that you consulted with?

5 A. No, I consulted folks about the water budgeting
6 process, but the decision was mine to activate the
7 installation.

8 Q. And how many new gauges did you direct that be
9 installed?

10 A. I think it's three.

11 Q. And where are they located?

12 A. The tributary creeks to Searsville.

13 Dennis Martin, Sausal, Alambique, and I don't
14 know if the one on Bear Creek, which is below
15 Searsville, was a new installation or if we already had
16 a meter there. I don't recall.

17 Q. So the gauges, they measure flow and CFS?

18 A. Yes.

19 Well, they measure parameters which calculate
20 effluence of CFS. They measure depth of --

21 Q. Water level?

22 A. Yeah, uh-huh.

23 Q. Do they record other parameters, like water
24 temperature?

25 A. Different monitoring stations, as we call them,

1 measure different parameters. I don't recall which ones
2 measure which parameters, but they all measure flow
3 rate.

4 **Q. And how long have the new gauges been in place?**

5 A. Just a few months.

6 **Q. Do you have any data back yet from them?**

7 A. There hasn't been much flow, so I don't -- I
8 haven't seen a report of flow information from them yet.

9 **Q. Of course, no flow is data.**

10 A. Well, it is. I just don't think they've
11 compiled this year's numbers yet.

12 **Q. And there's a subcontractor or a contractor**
13 **that's actually handling the physical component of the**
14 **gauges?**

15 A. Yes.

16 **Q. And who is that?**

17 A. Balance Hydrologics.

18 **Q. And who at Balance Hydrologics is the point of**
19 **contact for the gauges?**

20 A. Jonathan Owens.

21 **Q. Do you think any additional gauges are needed**
22 **beyond these three new ones, or do you think this is it**
23 **for now?**

24 A. I don't know. I'll be reviewing that whole
25 configuration of gauges and comparing that to the data

1 we want to collect in the next couple weeks.

2 We're going to meet as soon as we get back from
3 our break in January and review all of that.

4 **Q. And you consulted with others in placing these**
5 **new gauges. Who were the others that you consulted**
6 **with?**

7 A. I consulted with the Searsville working group
8 folks, just in general, about the water budget and creek
9 flow monitoring effort. I didn't consult with them
10 about the specifics of what gauges and monitoring go
11 where.

12 **Q. There was no one on the working group who had**
13 **more detailed knowledge than you had about flow gauging**
14 **or flow dynamics on the creeks; is that true?**

15 A. Yes.

16 **Q. Okay. So, the bottom of page Bates stamp 5090,**
17 **"Once the reservoir stops spilling, water diversion,**
18 **evaporation, and groundwater recharge continue to draw**
19 **down the reservoir elevation throughout the dry season,"**
20 **does that statement strike you as in anyway**
21 **controversial?**

22 A. I don't know if it's controversial, but I don't
23 see anything untrue about it.

24 **Q. Next, "Evaporation and recharge rates are**
25 **unknown, but Freyberg and Kim, 2001, report the**

1 interaction between open water at Searsville and the
2 surrounding aquifer is not significant."

3 First of all, that's a couple concepts. Let's
4 break it down.

5 Evaporation and recharge rates are unknown.
6 From what we said earlier, I think your answer to that
7 is yes, am I right?

8 A. Yes.

9 Q. Do you know the Freyberg and Kim 2001 report
10 that's referred to here?

11 A. No.

12 Q. "And the interaction between open water at
13 Searsville and the surrounding aquifer is not
14 significant," I think that's something you indicated
15 you don't have specific knowledge of, yes?

16 A. Yes.

17 Q. And then "Evaporation rates are likely low, but
18 for such a small body of water, the effect is more
19 noticeable," is there anything that would cause to you
20 take issue with that sentence?

21 A. It's so subjective and indefinite, I wouldn't
22 have any comment about it.

23 Q. Is that, among other things, because it says
24 evaporation rates are low, with no definition of what
25 low means?

1 A. Yes, and the term "likely."

2 **Q. Then "Seepage of water from the base and sides**
3 **of the dam keeping portions of the lower Corte Madera**
4 **Creek channel wet through the dry season."**

5 Let me stop right there. Is that a true
6 **statement, in your experience?**

7 A. Yes.

8 **Q. For example, there's a plunge pool at the base**
9 **of Searsville Dam that stays wet through the dry season**
10 **due to seepage from the dam, yes?**

11 A. Yes.

12 **Q. The sentence goes on to say, "But the amount,"**
13 **meaning the amount of the channel, "is very small," the**
14 **amount of the channel that's wet is very small, "and is**
15 **inadequate to --**

16 MS. FLANAGAN: Where are you getting "the
17 channel"?

18 MR. SPROUL: Q. Well, it says, "but the amount
19 is very small."

20 This is how I'm interpreting it.

21 I'll back up, just read what it says, and I'll
22 talk about it.

23 So "Seepage of water from the base and sides of
24 the dam keep portions of the lower Corte Madera Creek
25 channel wet through the dry season, but the amount is

1 very small and is inadequate to sustain most native fish
2 and other aquatic biota in Corte Madera Creek between
3 the dame and the confluence with Bear Creek."

4 So, have you ever seen a statement along those
5 lines before?

6 A. Possibly. Not that I recall specifically.

7 **Q. Have you personally observed the reach of the**
8 **Corte Madera Creek that is downstream of Searsville Dam?**

9 A. Yes.

10 **Q. Many times?**

11 A. Yes.

12 **Q. In the dry season?**

13 A. Yes.

14 **Q. And, in the dry season, this fall, fall 2013?**

15 A. Yes.

16 **Q. Would you agree that most of the -- that Corte**
17 **Madera Creek channel was dry during the dry season this**
18 **year?**

19 A. I don't know if the term "most" is right. I
20 haven't measured the creek to see what the length is of
21 the stretches that are dry compared to those that are
22 wet.

23 **Q. You can't look visually and see like large**
24 **areas that were dry and a couple little puddles? That**
25 **wouldn't be something you would use to describe what you**

1 saw?

2 A. There's a lot of dry stretch of that creek.

3 Q. And do you have any opinion about whether the
4 statement is accurate that it is inadequate to sustain
5 most native fish and other aquatic biota in Corte Madera
6 Creek between the dam and the confluence of Bear Creek?

7 A. I don't know about that. I am not a biologist.
8 I'd have to defer to them.

9 Q. And who do you think on the working
10 group --

11 Well, let me ask you this: Is there anyone on
12 the Searsville working group who you think could answer
13 that question whether that statement is accurate?

14 A. Which part?

15 Q. Who can answer that -- whether the -- that
16 sentence, that last sentence, just before, 2.30, is --
17 is accurate, an accurate sentence, "Seepage of water
18 from the base and sides of the dam keep portions of the
19 lower Corte Madera Creek channel wet through the dry
20 sentence, but the amount is very small and is inadequate
21 to sustain most native fish and other aquatic biota in
22 Corte Madera Creek between the dam and the confluence of
23 Bear Creek."

24 Is there anyone on the Searsville working group
25 that you think would be qualified to answer whether that

1 **question -- that statement that I just read is accurate**
2 **or not?**

3 A. Yes. Alan Launer, Philippe Cohen and I can
4 speak to the first part, that the seepage rate is low,
5 and Alan Launer would be the best to address the
6 statement about the adequacy or inadequacy of that
7 seepage rate to sustain fish.

8 **Q. And there's no one better than Alan Launer, in**
9 **your view?**

10 MS. FLANAGAN: On the working group?

11 MR. SPROUL: Q. On the working group.

12 A. Correct.

13 (Lunch break was taken.)

14 AFTERNOON SESSION

15 FURTHER EXAMINATION BY MR. SPROUL

16 MR. SPROUL: Q. So the three new gauges in
17 Dennis, Sausal and Alambique Creek, why, what's the
18 rational for the new gauges?

19 A. Measuring creek flow coming into the Searsville
20 Reservoir.

21 **Q. Let's see. I got a map and I could look it**
22 **back up, but, just from memory, do you know which of**
23 **these creeks flow into Corte Madera Creek, if any, for**
24 **Searsville Reservoir, or which flow directly into**
25 **Searsville Reservoir?**

1 one PDF, so we just printed it out and stapled it.

2 MS. FLANAGAN: Okay. Well, the reason I asked,
3 the dates on the document are after the first email on
4 this chain, and I don't see any attachment here.

5 I just want to be sure that -- yeah, the dates
6 on that are March 7th but the start of this is
7 March 3rd, so I just want to make sure we've got --

8 MR. SPROUL: That's how it was given to us.

9 MR. COSTA: They gave us electronic files and
10 it was emailed with the attachment.

11 MS. FLANAGAN: So you've seen the electronic
12 version of this yourself?

13 MR. COSTA: Yeah. We're looking at it right
14 now.

15 MR. SPROUL: And it's identical.

16 MR. COSTA: Yes.

17 MS. FLANAGAN: If you could tell me to which
18 email was this attached, that's what I'm trying to find
19 out, because it wasn't Gary and Tom, so it was -- you
20 see the dates I'm looking at, so there just isn't -- for
21 the Gary to Tom, there is no date.

22 MR. COSTA: It says Tom, it was -- it was
23 attached to the 3/3/2006.

24 MS. FLANAGAN: And that's my question, because
25 that says it's March 3rd. If you look at the document,

1 it's March 7th.

2 MR. COSTA: I see. Then maybe -- the attached
3 analysis is what was attached to this email. That's why
4 the email is the 7th and the attachment is --

5 MS. FLANAGAN: The email is the 3rd.

6 MR. SPROUL: No, no, the top one.

7 MS. FLANAGAN: Yeah, but down here it says
8 "Could you please look at the attached file."

9 MR. COSTA: But Tom refers to an attachment as
10 well.

11 MS. FLANAGAN: I get it, but that's what I'm
12 saying. I'm confused by what is --

13 MR. COSTA: It must have been what Tom
14 attached, since it's the same date, and it's revised.

15 MS. FLANAGAN: So you don't have what Gary was
16 asking Tom to look at.

17 MR. COSTA: No.

18 MS. FLANAGAN: Okay, and having seen it come
19 off the electronic version, these are attachments to
20 Tom's emails to Gary's.

21 MR. COSTA: Correct.

22 Thank you for clarifying that. Appreciate
23 that. Now I understand what you're saying.

24 THE WITNESS: Go ahead.

25 MR. SPROUL: Q. So the first page here

1 purports to be an email message from you, March 7th,
2 2006, to Gary Stern and others.

3 Do you recall sending that email message?

4 A. Yes.

5 Q. And do you recall having discussions with
6 Mr. Stern and -- I believe this is Dave Johnston, about
7 Stanford revising its bypass flow calculations in this
8 time frame?

9 A. Could you say that again.

10 Q. Yeah. Do you recall having conversations with
11 Gary and Dave -- Gary Stern and Dave Johnston -- around
12 this time frame, March 2006 or thereabouts, about
13 Stanford revising its calculations of bypass flows?

14 A. Yeah, I recall meetings and phone calls with
15 Gary and Dave about the diversion facility's operation.

16 Q. And is it that the resource agencies were
17 proposing to Stanford that Stanford should increase the
18 amount of water it lets bypass past the San Francisquito
19 pump station and/or the Los Trancos Creek diversion
20 point? They had proposed that to you, is that right?

21 A. Yes.

22 Q. And were you the primary person that they
23 contacted to make that proposal to?

24 A. Yes.

25 Q. And I take it from this email communication you

1 **weren't happy about this request; is that true?**

2 A. We were in a negotiation about operations and
3 bypass flows, and this is more information in the
4 process of those negotiations.

5 **Q. Well, it indicates that -- what you wrote here**
6 **is you said "we," and I assume "we" means Stanford**
7 **University in this context, yes?**

8 A. Yes.

9 **Q. And that "We," Stanford, "are reluctantly**
10 **willing to revise our proposed operation."**

11 **Why reluctantly? Why not enthusiastically?**

12 A. We had biologists who were looking at the creek
13 flow with and without our diversions and the needs of
14 various habitat passage and sustaining flow in the
15 creek. That proposed one set of bypass numbers with a
16 lot of substantiation of why that was appropriate, and
17 the fisheries agencies were not accepting that
18 information and wanted more.

19 **Q. Who were those biologists?**

20 A. That were working for us?

21 **Q. Yes.**

22 A. Bill Carmen, his company name is Carmen,
23 C-a-r-m-e-n, Ecological, and Alan Launer.

24 **Q. Anyone else besides Bill Carmen and Alan Launer**
25 **working with Stanford in devising what the appropriate**

1 **bypass regime should be past these two Stanford**
2 **diversions?**

3 A. Bill Carmen had some assistance of another
4 biologist -- I'm not recalling that person's name --
5 working for him.

6 **Q. Between Mr. Carmen and Mr. Launer, was there an**
7 **equal division of work on this, or was one person really**
8 **primarily responsible?**

9 A. It wasn't a matter of responsibility, but Alan
10 was working with me on Stanford's behalf, and we
11 retained Bill Carmen as a consultant to do the specific
12 studies in the field.

13 **Q. Do you know whether Mr. Carmen is a fisheries**
14 **biologist?**

15 A. Yes, he is.

16 **Q. And does he have expertise in anadromous**
17 **fisheries?**

18 A. I'm not -- I don't know the definition of
19 anadromous, but he does have fisheries expertise.

20 **Q. Anadromous fish in the sense of fish that swim**
21 **back and forth between the ocean and fresh water is what**
22 **I meant in that context.**

23 A. Oh, yes.

24 **Q. Then there's a sentence where you say, "We have**
25 **yielded yet again, in order to reach agreement," so I**

1 take it this was not your first yielding to the
2 agencies.

3 What was the prior yielding to the agencies you
4 were referring to in that sentence?

5 A. Previous values of bypass flow.

6 Q. For these two water diversions in particular?

7 A. Right.

8 I'm trying to remember if we were talking about
9 San Francisquito Creek pump station, and looks like we
10 were.

11 Q. Primarily discussing the Los Trancos?

12 A. Both are part of the SHEP project. This email
13 below looks like it's referring to San Francisquito
14 Creek specifically.

15 Q. I see. Okay.

16 Then in this email at the bottom, when Gary
17 Stern writes to you, "Tom," he indicates, "Looks like
18 I'll be discussing this with Bill, Linda, Dave and
19 Kristine by conference call on Tuesday next week."

20 Do you know who those individuals are?

21 A. Yes.

22 Q. And who are they?

23 A. Bill Hearn, H-e-a-r-n, works with Gary at
24 National Marine Fisheries Service. Linda Hanson is with
25 the California Department of Fish and Wildlife, and Dave

1 Johnston also with Fish and Wildlife -- or Fish and
2 Game, not Fish and Wildlife, and Kristine Atkinson,
3 A-t-k-i-n-s-o-n, is with Fish and Game.

4 Q. Okay.

5 Then, on to the next page -- the next one after
6 that -- at the top of the page -- sorry, because these
7 aren't Bates-stamped. We got these from the agencies.

8 Anyway, it's -- at the top it says Stanford's
9 Steelhead Habitat Enhancement Project, Revised Proposed
10 Operations Plan for Modified Facilities.

11 If you just take a moment to familiarize
12 yourself with this page, and I'll direct you to some
13 specific text.

14 My first question, and answer it when you're
15 ready, is whether you wrote this.

16 I note that your initials are at the bottom, or
17 at least what looks like your initials are at the bottom
18 of the page.

19 A. Yes, looks like the document that I wrote.

20 Q. And then it says here at the top, "In the
21 interest of getting approval from modifying its
22 diversion facilities, Stanford is willing to revise its
23 proposal for operations of the facilities as follows:"
24 And then there's two paragraphs and it sets out the
25 agreement.

1 And also, put in parenthesis, what you were
2 backing off of or what you were agreeing to not do, at
3 least that's how I read it.

4 My question to you is, if you could you just --
5 let's take paragraph 1, and if you could look through
6 that and let me know, is that a -- is that an accurate
7 description of what Stanford was willing to revise its
8 proposal to at that point?

9 A. You mean the lettered sub points under Item 1?

10 Q. Yeah, 1a through e.

11 Is that all correct, to the best of your
12 knowledge?

13 A. Yes.

14 Q. Okay. And in all these changes that are put in
15 parenthesis, were these -- these all came from
16 suggestions from National Marine Fisheries Service or
17 CDFW -- like, for example, 1a, where the attraction flow
18 will be defined as going through October 1st, rather
19 than December 1?

20 A. Are you saying are the changes that I'm
21 proposing, outside of the parenthetical statements, were
22 from them or --

23 Q. Yeah, so that -- outside of the parenthetical,
24 it's changed to reflect what NMFS wanted.

25 A. Yes. Correct.

1 **Q. And the parenthetical is what Stanford had**
2 **originally proposed.**

3 A. Correct.

4 **Q. And that's true for the rest of this.**

5 A. Yes.

6 **Q. And do you recall the specific rationales for**
7 **each one of these individual changes?**

8 MS. FLANAGAN: What's the rationale given by
9 the agency?

10 MR. SPROUL: Q. Yeah, why did the agency want
11 the change.

12 A. No, I don't recall what their rationale was.

13 **Q. Do you recall Stanford's rationale for being**
14 **reluctant to make the changes for each one of these**
15 **changes?**

16 MS. FLANAGAN: Except other than what he's
17 already described?

18 MR. SPROUL: Q. Yeah.

19 I mean is there anything more you recall?

20 Like, for example, 1a, Attraction flow will be
21 defined as forty-eight consecutive hours of 8 CSF flow
22 or greater, and will be effective any time after
23 October 1st."

24 And that's what NMFS wanted, but Stanford was
25 thinking, "No, we don't have to go to that until

1 December 1st," two months later.

2 Do you recall why Stanford thought December 1
3 was okay?

4 A. Well, I don't recall that specific date's
5 rationale, but, based on our discussions with Bill
6 Carmen, our biologist, and Alan, we thought that what we
7 had been proposing with a date of December 1, for
8 example, for the attraction flow commencement, was
9 appropriate for fish passage.

10 They wanted more time; back off the clock
11 earlier.

12 **Q. You just used the term "attraction flow".**

13 **Does that have meaning to you?**

14 A. Yes.

15 **Q. What does that mean to you?**

16 A. Sustained flow in the creek all the way down to
17 the bay that stimulates fish to migrate upstream.

18 **Q. And the fish that you're stimulating to migrate
19 upstream are steelhead trout, yes?**

20 A. Yes.

21 **Q. And have you heard the term Central California
22 Coast Steelhead?**

23 A. Yes.

24 **Q. Are you aware that that's a species that's been
25 listed by the National Marine Fisheries service as a**

1 specified species under the Endangered Species Act?

2 A. Yes.

3 Q. So the intention of these attraction flows that
4 are being referred to in paragraph 1a are to attract
5 Central California Coast Steelhead from San Francisco
6 Bay up into San Francisquito Creek, correct?

7 A. Yes.

8 Q. Have you ever personally seen a steelhead in
9 San Francisquito Creek?

10 A. Not to my knowledge.

11 Q. And is that because you can't tell whether a
12 fish is a steelhead fish or not?

13 A. Yes.

14 Q. Have you heard the term O. Mykiss?

15 A. Yes.

16 Q. And that's the scientific name, shortened, for
17 steelhead trout and/or rainbow trout; is that correct?

18 A. That's my understanding.

19 Q. And is it also your understanding that
20 O. Mykiss -- excuse me, is it your understanding that
21 rainbow trout and steelhead trout are the same species
22 for scientific classification purposes?

23 A. You're getting beyond my knowledge of the
24 biology of this.

25 Q. Okay. The same thing with paragraph 2, just is

1 **there anything about paragraph -- we went through**
2 **paragraph 1 generally, now onto paragraph 2 generally.**

3 **Is there anything in there about the**
4 **description about what Stanford was willing to do that**
5 **is not right as of this time frame?**

6 A. Well, it's the state of the discussion and
7 proposal at the time this was written.

8 **Q. Do you know whether this proposal was**
9 **subsequently modified before the SHEP biological opinion**
10 **and Incidental Take Statement was finally issued?**

11 A. Yes, I believe it was.

12 **Q. Do you recall in what way it was issued?**

13 A. Are we still in San Francisquito Creek, in
14 Number 2, second paragraph?

15 **Q. Yeah, sure.**

16 A. The diversion restriction in the 34 to 46 CSF
17 range -- the range was changed, and diversions are still
18 restricted in that flow range.

19 **Q. Do you know whether the range was -- which way**
20 **the range was moved, to be lower or to be bigger?**

21 A. Yeah, I believe it's 34 to 40 CSF, instead of
22 34 to 46.

23 **Q. Okay. And same thing with paragraph 1, do you**
24 **know if any of those restrictions or provisions on flow**
25 **were modified in the final biological opinion/incidental**

1 **take statement that was issued for the SHEP?**

2 A. Yes, the minimum bypass is 5 CSF instead of 4
3 CSF.

4 **Q. And do you know why those two changes were made**
5 **that you just identified?**

6 A. The agencies wanted that number, 5.

7 **Q. That wasn't a Stanford suggestion, for example?**

8 A. Right.

9 **Q. Was it over Stanford's opposition?**

10 A. Well, we obviously didn't oppose it, we agreed
11 to it eventually, but it wasn't our initial proposal.

12 **Q. You recommended against that change, but, in**
13 **the end, the change was made and you didn't then further**
14 **oppose it; is that fair?**

15 A. Correct.

16 **Q. Okay. The second full paragraph is all the way**
17 **out on the left margin, starts out "As indicated in the**
18 **Analysis Update, diversion is reduced significantly**
19 **(about 39 acre-feet) for water year 2004 by the above**
20 **bypass regime."**

21 **Do you recall coming to that conclusion?**

22 A. Yes.

23 **Q. And why is a 39 acre-feet reduction in bypass**
24 **regime significant?**

25 A. It affects the amount of water we have obtained

1 from the creek to use for our lake water needs -- lake
2 water system needs.

3 **Q. When I saw that "significant", I was kind of**
4 **thinking, you know, like, well, placed in context, or**
5 **placed in scale. That's kind of where my mind went.**

6 **Is that where your mind goes with that, or does**
7 **your mind go somewhere else?**

8 MS. FLANAGAN: Could you clarify what your
9 reference point is?

10 MR. SPROUL: Q. Well, it says -- yeah, it
11 says, "The diversions that are required by the above
12 discussion add up to about 39 acre-feet of loss of water
13 diverted," yes?

14 A. Yes.

15 **Q. "For water year 2004."**

16 A. Correct.

17 **Q. And it characterizes that as significant.**

18 **And I asked -- my question is, why? Why is**
19 **that significant?**

20 **You said, well, it's less water for the system.**

21 **Well, yeah, two thimblefuls would be less**
22 **water for the system, a million gallons would be less**
23 **water for the system. I mean some sense of scale, why**
24 **is that a significant number?**

25 A. Well, relative to a couple hundred acre-feet,

1 that's a significant percentage. Relative to thousands
2 of acre-feet, it would not be significant.

3 That's my intent in the use of the word
4 "significant" there.

5 Q. Do you have any overall chart or table that
6 shows the amount of acre-feet of water that Stanford
7 acquires through its various diversion activities?

8 And to help you answer that question, I'm going
9 to give you a map of your water diversion structure, at
10 least the best map that I have, and let me know when
11 you've had a chance to look it over.

12 (Exhibit No. 10 marked for
13 identification.)

14 (Document reviewed by witness.)

15 A. I have.

16 Can you repeat the question?

17 Q. Yeah. Is this -- actually, there wasn't a
18 question. There will be one now.

19 A. Okay.

20 Q. Is this a document that you wrote?

21 A. I initiated the document. I didn't draft it.

22 Q. I see. Because I see in the naming convention
23 for the document your initials appear, TWZ.

24 A. Yes.

25 Q. Who did you direct prepare this document?

1 A. J. Marianowitz.

2 **Q. And who is that?**

3 A. Do you want me to spell it?

4 M-a-r-i-a-n-o-w-i-t-z.

5 He is a drafter in our maps and records
6 department.

7 **Q. Okay. And is this -- this is more of a
8 schematic diagram than a map, correct?**

9 A. Yes.

10 **Q. And it's not drawn to scale.**

11 A. Correct.

12 **Q. But does it, otherwise, accurately depict all
13 of Stanford University's lake water sources?**

14 A. Yes.

15 **Q. Is there any other source of water diverted
16 from local sources that Stanford acquires other than
17 what is shown on this map?**

18 A. No.

19 **Q. Does Stanford have any groundwater pumping
20 wells that are not shown on this map?**

21 A. Well, off to the right of the map is a line
22 with a circle labeled "wells," and that's intended to
23 diagrammatically represent our groundwater wells.

24 **Q. All of them in collection?**

25 A. Yes, uh-huh.

1 **Q. In collection.**

2 A. Yeah.

3 **Q. And how many groundwater wells are there? How**
4 **many groundwater wells does Stanford have?**

5 A. Five.

6 **Q. And where are those located?**

7 A. Four of them are located generally near Sand
8 Hill Road on the west part of campus, and the fifth well
9 is located near Bonair Siding, B-o-n-a-i-r, and Pampus
10 Lane.

11 **Q. Do any of these monitoring wells have any**
12 **potential -- have any potential to draw water -- or**
13 **groundwater from the aquifers that either feed or**
14 **recharge by flows in Los Trancos Creek, San Francisquito**
15 **Creek, the tributaries up above Searsville Reservoir and**
16 **Bear Creek?**

17 A. Our groundwater wells tap an aquifer --
18 aquifers hundreds of feet below the ground surface in
19 the campus vicinity. The creek system -- San
20 Francisquito Creek primarily, being the biggest creek in
21 the watershed -- along with rainfall, all of the land
22 recharge that groundwater supply.

23 **Q. So, as far as you're aware, there's no**
24 **hydrologic interconnectivity between the groundwater**
25 **extraction wells and flows in any of the creeks in the**

1 **San Francisquito Creek watershed?**

2 A. Correct.

3 **Q. So the -- the schematic map gives elevation for**
4 **Felt Reservoir and Searsville Reservoir, and the Felt**
5 **Reservoir is being shown as a higher elevation than**
6 **Searsville Reservoir.**

7 **Is that accurate?**

8 A. Yes.

9 **Q. So water that's diverted from Searsville**
10 **Reservoir is occasionally transferred to the Felt**
11 **Reservoir by being pumped uphill from the Searsville**
12 **Booster Pump Station; is that correct?**

13 A. Yes.

14 **Q. Is water ever pumped in the other direction**
15 **from Felt Reservoir into Searsville Reservoir?**

16 A. No.

17 **Q. And the -- Lagunita structure, that's known as**
18 **Lagunita Dam; is that correct?**

19 A. Which? Can you show on the --

20 **Q. There's a bubble -- there's a little blue**
21 **bubble that says Lagunita.**

22 MS. FLANAGAN: It's not colored on the document
23 you gave him.

24 MR. SPROUL: Q. Oh, all right. Sorry.

25 A. It's on the right side of the figure?

1 MS. FLANAGAN: There are two Lagunita
2 facilities, that's why he's asking.

3 MR. SPROUL: Q. The oval that's right near the
4 word "campus", it says "Lagunita."

5 That's Lake Lagunita, yes?

6 A. Yes.

7 Q. And then there's a dam there that's generally
8 referred to as the Lagunita Dam; is that right?

9 A. Yes.

10 Q. And water -- the source of water into Lagunita
11 Dam is water that is diverted from Los Trancos Creek; is
12 that correct?

13 A. No.

14 Q. Oh, is it -- now it's water that's diverted
15 from -- at the San Francisquito Creek pump station and
16 pumped to the Lagunita -- Lake Lagunita; is that right?

17 A. That's one source of its water, yes.

18 Q. And the other source would be water that's
19 pumped from the Searsville Booster Pump Station into
20 Lake Lagunita.

21 A. No. The main source of water to Lagunita is
22 runoff from the foothills.

23 Q. Water can be pumped to Lake Lagunita from the
24 Searsville Booster Pump Station, right, the schematic?

25 A. Yes.

1 Q. It's -- that just doesn't happen very often?

2 A. Correct.

3 Q. And the schematic says that the capacity for
4 the Los Trancos Creek diversion facility is 40 CSF and
5 -- is that right?

6 A. Yes.

7 Q. So that the Los Trancos Creek diversion
8 facility can divert up to 40 CSF into Felt Reservoir; is
9 that right?

10 A. Correct.

11 Q. And is that a gravity-fed system, or is there
12 pumping involved?

13 A. Gravity.

14 Q. And the San Francisquito Creek pump station
15 consists of two separate pumps, one the Felt pump, the
16 second the Lagunita pump; is that correct?

17 A. Yes.

18 Q. And the Felt pumps pump water to the Felt
19 Reservoir, yes?

20 A. Yes.

21 Q. And the Lagunita pumps pump water into Lake
22 Lagunita?

23 A. Yes.

24 MS. FLANAGAN: You're talking about currently?

25 MR. SPROUL: Q. Currently, yeah.

1 I mean the diagram shows that. I mean all of
2 this -- I'm assuming is information is still current,
3 but let me back up.

4 Is this information that's shown on this map
5 that we are discussing still current?

6 A. Yes.

7 MS. FLANAGAN: My reference was to -- there are
8 two Lagunitas on this schematic, so there's a Lagunita
9 diversion that's not in service.

10 So that's what I was asking.

11 MR. SPROUL: Q. Right, okay.

12 We'll get to the second Lagunita.

13 Right now all the questions I've asked you have
14 been about Lake Lagunita and the dam that's associated
15 with it.

16 We have a common understanding what that is,
17 yes?

18 A. Yes.

19 **Q. Okay. When I refer to the other Lagunita, I'll**
20 **call it the Lagunita diversion facility.**

21 A. Okay.

22 **Q. Or the Lagunita diversion dam, if that's okay**
23 **with you.**

24 A. Yes, okay.

25 **Q. Earlier you gave us some charts about what --**

1 the volumes of water diverted from Searsville Reservoir
2 into the Stanford water distribution system, and my
3 memory is that the data showed about 450 acre-feet as
4 the median roughly.

5 Is that your memory as well?

6 MS. FLANAGAN: You can get out the chart if
7 he's going to ask you about it.

8 Do you recall which one it was? Is it the
9 first one?

10 MR. SPROUL: Yeah, I think it's the first one.

11 MS. FLANAGAN: It was the overflow --

12 MR. SPROUL: No, there was one right after
13 that. What number was that?

14 That one.

15 MS. FLANAGAN: When you talked about the
16 median, it was Table 1.

17 MR. SPROUL: Yeah, Table 1, but was there a
18 second page to this?

19 MS. FLANAGAN: No.

20 MR. SPROUL: Okay. No, you're right.

21 So Exhibit 1 was -- okay.

22 So in Exhibit 1, we're all in agreement that
23 the median shown in the data on Exhibit 1 is about
24 450 acre-feet.

25 MS. FLANAGAN: Why do you keep saying 450? It

1 says over 400.

2 MR. SPROUL: Okay. I was thinking of something
3 else. That's fine. It's not that significant.

4 BY MR. SPROUL:

5 Q. 400 acre-feet, so -- does that -- that's from
6 all the -- your years of working on Searsville
7 Reservoir, that sounds about right, the median is about
8 400 acre-feet of water diverted from Searsville
9 Reservoir?

10 MS. FLANAGAN: Just a clarification: Are you
11 asking him to update that to current, because this was
12 2009, Table 1.

13 MR. SPROUL: Right, there's a data set.

14 MS. FLANAGAN: I'm just asking, are you asking
15 him to say currently, or as of 2009?

16 MR. SPROUL: Q. Well, would you agree that
17 currently Stanford diverts -- if you look at -- over the
18 years in the median range of 400 acre-feet from
19 Searsville Reservoir?

20 A. Historically, that would be the median, yes.

21 Q. So do you have any sense about what the median
22 in annual acre-feet diversion is from the Los Trancos
23 Creek diversion facility?

24 A. No, I haven't compiled that data and done that
25 analysis.

1 Q. Has anyone at Stanford done that analysis?

2 A. Not that I'm aware of.

3 Q. Do you know what the median acre-feet per year
4 diversion is for the San Francisquito Creek pump
5 station?

6 A. No.

7 Q. Or the amount of acre-feet per year, median
8 acre-feet per year, diverted into Lake Lagunita?

9 A. No, I haven't compiled that data.

10 Q. Has anyone suggested to you that Stanford
11 should compile that information?

12 A. Not 'til today.

13 Q. Do you have any knowledge about the total
14 amount of acre-feet per year that Stanford diverts as a
15 whole, all of its water in its lake water sources?

16 A. No.

17 Q. Do you have any data on how much groundwater
18 Stanford extracts as a long-term yearly median?

19 A. No.

20 Q. And, again, no one has suggested to you that
21 Stanford should compile information on its long-term
22 extraction of groundwater from its groundwater wells?

23 A. Yes.

24 I'm working with my management and staff to put
25 together a long-term plan for Stanford's water supply,

1 so we are in the process of compiling data like that and
2 putting that kind of information together, but we
3 haven't completed it yet, so I don't have the numbers.

4 **Q. So that the work that you're doing, when did it**
5 **commence?**

6 A. Within the last couple years.

7 **Q. And at whose urging did it commence?**

8 A. Joe Stagner, my supervisor.

9 **Q. And did he tell why he needed it?**

10 A. Yes.

11 **Q. And what was that reason?**

12 A. To help formulate a single water management
13 plan for Stanford long-term.

14 **Q. And how long do you think it will take to**
15 **complete this long-term Sustainable Water Management**
16 **Plan?**

17 A. Another year or two.

18 **Q. And how long to complete the data input portion**
19 **of it? When I say the data input portion, I mean the --**
20 **this is how much water we get from the lake water source**
21 **in total and here's how much water we get from each one**
22 **of the components of our lake water source.**

23 A. That will happen during that same time period.

24 **Q. So roughly a year or two?**

25 A. Uh-huh.

1 **Q. Did Mr. Stagner give you any kind of written**
2 **memo outlining what the objectives were of the**
3 **Sustainable Water Management Plan?**

4 A. Not that I recall.

5 **Q. Have you seen any other write-ups describing**
6 **what the goals are of the Sustainable Water Management**
7 **Plan?**

8 A. Seen any -- would you repeat that?

9 **Q. Any write-ups, any memos or anything else**
10 **written saying -- describing here's what the goals are**
11 **of the Sustainable Water Management Plan.**

12 A. Yes.

13 **Q. And when did you see writings like that?**

14 A. Over the last two or three years, as we've had
15 discussions about the Sustainable Water Management
16 Plan planning, we've sent each other emails and notes
17 and thoughts about what comprised that plan.

18 **Q. And who's the "we" in that sentence? "We" have**
19 **sent each other emails?**

20 A. Primarily me, Joe Stagner -- I'm trying to
21 think of who was involved.

22 I'm drawing a blank on who else may have
23 written documents. I note back on this map, which is
24 Exhibit 10, there's a structure known as -- or
25 identified as the Lagunita Diversion Facility and Fish

1 Ladder, and it says it's not in service.

2 Are you familiar with that facility?

3 A. Yes.

4 **Q. And is it, in fact, an abandoned former dam?**

5 MS. FLANAGAN: As distinct from a diversion
6 facility are you asking?

7 MR. SPROUL: Q. Well, is it an abandoned
8 former dam? Would you describe it that way?

9 A. It is an existing dam.

10 **Q. That's abandoned?**

11 A. I don't know what you mean by "abandoned".

12 **Q. Does Stanford currently use it for any purpose?**

13 A. No.

14 **Q. Does anyone else use it for any reason?**

15 A. No.

16 **Q. Do you know how long it's been in place?**

17 A. No.

18 **Q. And are you aware that Stanford has had**
19 **discussions with California Department of Fish and**
20 **Wildlife about moving or modifying this -- the Lagunita**
21 **diversion dam over time?**

22 A. Yes.

23 **Q. You exchanged some written communications with**
24 **the agencies about that, didn't you?**

25 A. Yes.

1 Q. Can you tell me what the current status is of
2 the Lagunita diversion facility?

3 Is it any different today than it was, say, a
4 year ago?

5 A. No.

6 Q. Has it been changed at all over the time you
7 have lived here -- that you have worked here?

8 A. Yes.

9 Q. And when was the last time it was changed?

10 A. I believe it was 2006.

11 Q. And, in 2006, there were modifications made to
12 the diversion dam to add a -- to modify a fish ladder
13 that was on the diversion dam; is that correct?

14 A. Yes.

15 Q. Were there any other modifications made to it?

16 A. No.

17 Q. Who made the modifications?

18 A. You mean the contractor or manager of the
19 project?

20 Q. Was the -- were the modifications to the fish
21 ladder made by a contractor hired by Stanford?

22 A. Yes.

23 Q. And that was the last time that the facility
24 has been modified, yes?

25 A. Correct.

1 (Exhibit No. 11 marked for
2 identification.)

3 **Q. Please take a moment to read through that and**
4 **familiarize yourself with the letter.**

5 MS. FLANAGAN: Do you want him to actually read
6 it, or just be able to identify if he wrote it?

7 MR. SPROUL: Just skim through it. Obviously,
8 if you read it word-for-word, we'd be here for a while.

9 Just -- if you've had a chance to kind of thumb
10 through the six pages and familiarize yourself a bit
11 with the document, we'll direct you to particular lines.

12 (Document reviewed by witness.)

13 A. Okay.

14 **Q. Is this a copy of a letter that you personally**
15 **wrote on November 28th, 2005, to Gary Stern and Bill**
16 **Hearn?**

17 A. Yes.

18 **Q. And do you recall what the occasion was for you**
19 **writing this letter?**

20 A. Well, generally it's in the progression of
21 discussions we had with agencies about a SHEP, which
22 stands for Steelhead Habitat Enhancement Project.

23 **Q. I want to direct your attention to the second**
24 **to the last sentence in the first paragraph.**

25 "As we've discussed, Stanford's Los Trancos and

1 San Francisquito Creek water diversions are critical to
2 the academic institution's facilities and operations,
3 and serve as a potential emergency and long-term
4 potential potable supply for Stanford and the
5 surrounding community."

6 First of all, I want to say, do you have any --
7 do you have a calculation of what Stanford's median
8 water usage is in total?

9 A. Yes.

10 Q. And do you have it memorized, what that figure
11 is, roughly?

12 A. Yes. It's been -- our total water demand has
13 been decreasing. It's currently about 2.1 million
14 gallons per day, and our non-potable water use is
15 approximately one million gallons per day, overall
16 average.

17 Q. And in terms of non-potable water source, is
18 there any other non-potable water source besides the
19 lake system that we were looking at on Exhibit 10?

20 A. No.

21 Q. So you think that, in aggregate, Stanford gets
22 about one million gallons a day as a long-term average,
23 or long-term median, from the non-potable water sources
24 listed on Exhibit 10?

25 A. Yes.

1 Q. Is all of the water on Exhibit 10 non-potable?

2 I should say, more accurately, are all the
3 sources of water listed on Exhibit 10 non-potable
4 sources of water?

5 A. No.

6 Q. Which ones of them are potable?

7 A. The wells.

8 Q. You have no idea of the breakdown, how much of
9 the non -- how much of the water that is on Exhibit 10
10 comes from wells versus the other sources on Exhibit 10,
11 right?

12 A. I don't.

13 Q. But when you told me 2.1 million gallons of
14 potable water and one million gallons a day of
15 non-potable water, were you including the well water in
16 the one million gallon a day figure or the 2.1 million
17 gallon a day figure?

18 A. The one million gallon a day.

19 Q. And the non-potable water that you referred to,
20 it doesn't include any purple pipe water and -- does the
21 term "purple pipe" have any meaning to you?

22 A. Yes.

23 Q. What are purple pipes?

24 A. Purple pipe is used for what we call recycled
25 water, that is waste water that has been treated and has

1 been subsequently re-used.

2 **Q. Does Stanford -- is any of Stanford's water**
3 **sourced from purple pipes?**

4 A. Yes.

5 **Q. How much of Stanford's daily water use comes**
6 **from recycled or reclaimed purple pipe water?**

7 A. Approximately 10,000 gallons per day.

8 **Q. So, as an overall percentage, it's essentially**
9 **miniscule, correct?**

10 A. Correct.

11 **Q. The 2.2 million gallons a day of potable water,**
12 **where does that come from?**

13 A. We buy that water from San Francisco Public
14 Utilities Commission, part of the Regional Hetch Hetchy
15 Water System.

16 **Q. Any other source of potable water besides water**
17 **purchased from SFPUC?**

18 A. No. Well, our wells are an emergency backup
19 potable water supply, but not normally used.

20 **Q. Okay. So when you said that Stanford's Los**
21 **Trancos and San Francisquito Creek water diversions are**
22 **critical to the academic institution's facilities and**
23 **operations, what did you mean by that?**

24 A. We have athletic fields, recreational
25 activities for our student population and teams that use

1 irrigated play fields for those sports and activities.

2 We have general campus landscaping that
3 benefits from irrigation from our non-potable system.
4 We also have non-potable water used for supplementing
5 water in Lagunita for the benefit of California tiger
6 salamander, so those are examples of the facilities and
7 operations that benefit from that supply.

8 **Q. How much water in terms of MGD does Stanford**
9 **devote as a long-term average or median to Tiger**
10 **Salamander habitat enhancement?**

11 A. It's a very small proportion of that amount. I
12 don't have a figure of what that would be.

13 **Q. Do you know who would know?**

14 A. No. We'd have to go to our meter data to
15 gather that information.

16 **Q. That isn't data that you or your department has**
17 **been tracking and separately keeping log of.**

18 A. Yes, we have that log in our department. I
19 just don't have knowledge of what those numbers are.

20 **Q. I see.**

21 **So if I were to ask you right now, let's leave**
22 **the room and go to your office, you could show me the**
23 **log, "Here it is, this is how much Tiger Salamander**
24 **water there is"?**

25 A. With the help of my staff, yes.

1 Q. Okay, we won't do that right now. Maybe later.

2 A. Okay.

3 Q. Is Stanford currently looking into making any
4 portion of the lake water that we've discussed earlier
5 potable, using it for drinking water?

6 A. We're not currently looking at that, no.

7 Q. Do you have any opinion about whether that's
8 feasible?

9 A. Yes.

10 Q. What's your opinion?

11 A. It's feasible.

12 Q. And can you explain why you think it's feasible?

13 A. Yes, surface water supplies for municipal water
14 potable water supply is a very common function.

15 Q. I've read in lots of places that the water that
16 came out of Searsville Reservoir -- or comes out of
17 Searsville Reservoir has never been used for potable
18 water because very early on it was discovered it was
19 high in sulfur content.

20 Have you read that as well?

21 A. Not that particular fact, but I've heard the
22 general statement that Searsville water was not used for
23 potable water supply.

24 Q. Okay. You don't have any information that
25 would contradict that it's never been used for potable

1 **water supply?**

2 A. No, that's too many negatives. Try again.

3 MR. SPROUL: Q. You don't have any information
4 that would suggest it's ever been used as a potable
5 water supply source.

6 A. Correct.

7 **Q. Of the one million gallons a day non-potable**
8 **water that you identified, what percentage of that is**
9 **used for landscape irrigation?**

10 A. What do you mean by "landscape"?

11 **Q. Well --**

12 A. As opposed to irrigation in general?

13 **Q. Well, okay.**

14 **How about just to irrigate plants on Stanford's**
15 **property?**

16 A. Probably 99 percent.

17 **Q. And one of those facilities that Stanford uses**
18 **this water diverted into its lake system is to irrigate**
19 **a golf course; is that correct?**

20 A. Portions of the golf course, yes.

21 **Q. What percentage of the golf course?**

22 A. I don't have a percentage of the golf course
23 acreage, but it irrigates the fairways.

24 **Q. And there's some other portion of the golf**
25 **course that's irrigated from some other source?**

1 A. No, it's not irrigated at all.

2 Q. I see. To the extent it gets irrigation, it
3 all comes from the lake system?

4 A. Correct.

5 Q. The non-potable water is also used to irrigate
6 a football field?

7 A. Yes.

8 Q. Has Stanford made any efforts to plant plants
9 that are native and use less water on campus?

10 A. Yes.

11 Q. Are you personally involved in that?

12 A. No.

13 Q. Who is involved in that?

14 A. Our planning department that helps design
15 landscape as part of the architectural development of
16 the campus, and our grounds department.

17 Q. I see.

18 Earlier you made reference to a Sustainable
19 Water Management Plan, and do you know whether, as part
20 of that Sustainable Water Management Plan, there's going
21 to be an attempt for Stanford to bring people with
22 different expertise together and, for example, try to
23 match water with water conservation and alterations in
24 landscaping?

25 A. Yes.

1 **Q. So at the end of your paragraph, first**
2 **paragraph back on the letter, November 28th letter, you**
3 **state that the flow regime proposed by Stanford fully**
4 **protects and enhances habitat conditions for steelhead**
5 **in San Francisquito and Los Trancos Creeks based on the**
6 **best and most current available information concerning**
7 **steelhead habitat in the creeks.**

8 **What -- do you recall what best available**
9 **information concerning steelhead habitat you were**
10 **referring to?**

11 A. Yes.

12 **Q. What was that?**

13 A. Information provided by Bill Carmen, our
14 fisheries biologist. That information included
15 measurements of creek flow, width and depth, as well as
16 photos, and even video of steelhead swimming -- moving
17 in the creek.

18 **Q. Did Mr. Carmen show you any of those photos or**
19 **video?**

20 A. Yes.

21 **Q. Do you still have those in your file?**

22 A. Possibly.

23 **Q. So the next page, please, in the first**
24 **statement, "The best available scientific information**
25 **from several years of biological and hydrologic surveys**

1 indicates that a healthy steelhead population currently
2 exists in Los Trancos Creek, both above and below
3 Stanford's diversion facilities."

4 Do you recall writing that statement?

5 A. Yes.

6 Q. Do you have any reason to doubt that that
7 statement is still true today?

8 A. No.

9 Q. Do you recall what -- what was the best
10 available scientific information you were referring to
11 in that Item number 1?

12 A. Not specifically, but generally it's from
13 information provided by Alan Launer, and his
14 observations and surveys and -- over the time he's been
15 at Stanford.

16 Q. Okay. And the next paragraph, "Professional
17 biological conclusions," whose conclusions were you
18 referring to in that next paragraph?

19 A. Alan Launer and Bill Carmen.

20 Q. Okay. Here, "that steelhead habitat conditions
21 have improved since the installation of the Los Trancos
22 fish ladder in 1995 and operational changes at Stanford
23 has made since that time."

24 First off, what information did you have to
25 support this statement that steelhead habitat conditions

1 have improved since the installation of the Los Trancos
2 fish ladder?

3 A. This is a statement that I got in discussions
4 with Alan Launer and Bill Carmen. I don't know what
5 specific biological basis they had for that conclusion.

6 Q. Did they say anything about how fish --
7 steelhead used to be blocked by -- they couldn't get by
8 this fish ladder, now it's fixed, and now that they can
9 get by it, now there's more steelhead because there's
10 more area for them to spawn and grow in? Nothing like
11 that?

12 A. Sorry, what's your question?

13 Q. You said -- I was just saying -- looks like
14 they had biological conclusions that habitat conditions
15 for steelhead have improved since the installation of
16 the ladder.

17 My question is, well, what conclusions, how or
18 why? And you answered and said, well, it seemed a
19 little vague.

20 Did they say something like, well, yeah, with
21 the improvement in the fish ladder, now steelhead can
22 swim by the fish ladder and that's opening up more area
23 to them more of the time, and that's a good thing,
24 something like that?

25 A. Something like that, yeah. General statements

1 like that. They were their conclusions.

2 **Q. Okay, fair enough.**

3 **"And operational changes that Stanford has made**
4 **since that time," do you know what is being referred to**
5 **there, I mean what you meant when you wrote that?**

6 A. Yes. In 1995, an Alaskan steep pass fish
7 ladder was installed at the Los Trancos diversion
8 facility.

9 The operational changes were that flow was
10 directed down that ladder instead of just over the dam
11 or into our flume, so there was a third route for water
12 flow that facilitated fish passage.

13 **Q. Okay, thank you.**

14 **So then the last paragraph, 4, "This project is**
15 **extremely expensive for Stanford."**

16 **Why did you write that?**

17 A. The context of these four bullets is a
18 paragraph that starts on page one expressing Stanford
19 and the agency's desire to do the water supply diverting
20 differently and these four points get at the key reasons
21 that's important, balancing water supply needs with fish
22 passage and steelhead in the creek.

23 So the statement about the project and its
24 expense has to do with recognizing that there is a cost
25 not only in water supply, because we may be diverting

1 less than we did because of this operation, but also it
2 costs a lot of money to build a project like this, so
3 it's just recognition of all the aspects of the project
4 for us and the agencies to recognize.

5 **Q. When you say -- do you recall making any cost**
6 **estimates? Did you have any specific numbers in mind**
7 **when you wrote this paragraph?**

8 A. Yes, we were engineering the modifications to
9 the Los Trancos and San Francisquito Creek diversion
10 facilities as we were discussing their operation with
11 the agencies.

12 **Q. And do you have a sense of what they were? Do**
13 **you recall ballpark figures, like how much did it cost**
14 **to modify the Los Trancos diversion, how much did it**
15 **cost to modify the San Francisquito pump station?**

16 A. Each project was about one and a half million
17 dollars.

18 **Q. And then you say, "including greatly increased**
19 **pumping costs."**

20 **Has Stanford, in fact, experienced greatly**
21 **increased pumping costs as a result of these**
22 **modifications to Los Trancos and San Francisquito Creek**
23 **pump station?**

24 A. Yes.

25 **Q. And do you have a sense of the magnitude of**

1 **those increased pumping costs?**

2 A. I don't have a figure in mind of dollars per
3 year. It's quite variable, so I'd have to go back and
4 look at records about that.

5 The statement can be made because now, instead
6 of the gravity diversion at Los Trancos, we are now
7 pumping water into San Francisquito so that water is now
8 requiring pumping that didn't need pumping before.

9 **Q. And that's an added cost?**

10 A. Yes.

11 **Q. And then you conclude, "This can only be**
12 **justified if all the components are approved together**
13 **and operated so that the annual average diversions are**
14 **not further decreased."**

15 **Are you saying there that, look, if you**
16 **decrease our diversions any further, that's money out of**
17 **our pocket and -- that, you know, in essence, revenue to**
18 **us that's lost that we used to offset the cost of this**
19 **project.**

20 **Is that what you meant by that?**

21 A. Yes. We were looking at the significant
22 construction and annual operating costs resulting from
23 these changes in these facilities, and realizing that
24 the water we would be getting from future diversions was
25 getting more and more expensive because of the need to

1 capitalize that construction cost and increase operating
2 budgets to include the pumping, so the point is, at some
3 point we need to make sure we're not bypassing so much
4 water and decreasing diversions so much that that cost
5 is no longer justified and I can't do a project at all,
6 and that's the point that I wanted recognized in making
7 that statement.

8 **Q. The 2.1 million gallons a day of potable water**
9 **you buy from SFPUC, is that -- how is that purchased?**
10 **Is it -- what sort of arrangement? Is it bought per**
11 **gallon, is it by lot, is bought by subscription?**

12 A. We are a wholesale customer of SFPUC and we pay
13 for the water on a use basis. It's a unit rate of
14 dollars per thousand gallons, along with charges for the
15 meters that they have that measure the amount of water
16 that we're using.

17 I don't recall, I think that bill is a monthly
18 bill.

19 **Q. So does that translate, in your mind, into a**
20 **certain dollar amount per increment of water?**

21 A. Yes.

22 **Q. And like -- do you have, say, a cost break a**
23 **foot, for example, in your mind?**

24 A. Well, for the potable water that you're talking
25 about, the SFPUC water?

1 **Q. Uh-huh.**

2 A. Yes. I don't know what the dollar figure is on
3 a per gallon or per thousand gallon basis right now, but
4 we do have that.

5 **Q. That's something you do track?**

6 A. Yes.

7 **Q. Have you compared the cost to -- of SFPUC water
8 to the cost of non-potable water?**

9 A. Some time ago I did, yes.

10 **Q. How did it compare?**

11 A. SFPUC water is a lot more expensive.

12 **Q. Like 10,000 times more expensive, 1.2 times
13 more expensive?**

14 A. Less and less all the time, as their rates go
15 up. I don't know about the factor --

16 **Q. Do you get any special pricing from SFPUC,
17 given your status as a nonprofit university?**

18 A. No.

19 **Q. Will this be part of your Sustainable Water
20 Management Plan analysis for your cost comparisons
21 between potable and non-potable sources of water?**

22 A. Yes.

23 **Q. You haven't done that work yet?**

24 A. Correct.

25 **Q. Have you ever done any analysis of the**

1 percentage of the flow in any of the creeks that
2 Stanford diverts from that Stanford is diverting?

3 Does that question make sense?

4 A. No. Say that again.

5 Q. Okay. Flow and water, A; diversion, B; water
6 left in -- water after -- water left in A, water after B
7 diversion, A minus B equals C.

8 Does that help?

9 A. I'm still not --

10 MS. FLANAGAN: Yeah.

11 THE WITNESS: You lost me.

12 MR. SPROUL: I'll try again.

13 MS. FLANAGAN: Why don't you ask the bottom
14 line question and then we can ask for clarification if
15 we need it.

16 MR. SPROUL: Q. Do you know -- have you ever
17 done any calculations of how much of the total flow in
18 the creek -- in any of the creeks that we're talking
19 about today does Stanford take, what percentage of the
20 water?

21 A. Very roughly, yes.

22 Q. And when did you do that?

23 A. Saw some -- or discussed some, I don't even
24 think I even saw some figures -- but discussed some
25 rough numbers a few years ago, but the numbers are very

1 highly variable, obviously.

2 **Q. You did this yourself a few years ago?**

3 A. No, it was in discussions. I remember talking
4 about it with Balance Hydrologics, who does a lot of our
5 creek management.

6 **Q. Do you remember who at Balance Hydrologics you
7 were discussing it with?**

8 A. Jonathan Owens. Actually, I think his name is
9 Owen. I maybe said that plural before.

10 **Q. And did Mr. Owens do a calculation of what
11 percent of the creek flow is being taken by Stanford
12 diversion?**

13 A. No, I think he was describing -- I remember
14 discussing roughly the flow going through the
15 San Francisquito Creek system. He doesn't know how much
16 we divert so he wouldn't be able to do a proportioned
17 calculation, but I remember thinking about that on my
18 own, based on, you know, some rough ideas of how much we
19 divert compared to that, you might say, watershed
20 volumes.

21 It's tens of thousands of acre-feet in San
22 Francisquito Creek, and we might divert, overall
23 average, 500 to 1,000 acre-feet. It's, in my mind, a
24 small amount of the total systems flow, but, again,
25 that's a highly variable number, and we haven't done

1 statistical analysis of medians or averages.

2 **Q. Have you thought about doing that?**

3 A. Yeah, but I don't think it's a very significant
4 piece of information.

5 **Q. And why is it not significant?**

6 A. It would be more in the context of
7 environmental aesthetic issues, which would be maybe
8 interesting to those folks to know how much the creek
9 system conveys from the standpoint of fisheries and
10 other habitat concerns.

11 **Q. They're not particularly relevant to you in
12 your task?**

13 A. Correct.

14 Well, sure, I would be interested in making
15 sure that we're sensitive to those needs.

16 **Q. Well, back to the November 28th, 2005, letter
17 that we've been looking at, further down on the page --**

18 A. Two?

19 **Q. Page two, there's a discussion about how much
20 Stanford can divert from Los Trancos Creek and coupled
21 with how much flow will be left in Los Trancos Creek,
22 and this seems to be key to the question that you are
23 writing to the agencies about is how I read this.**

24 **Did you not see that as --**

25 MS. FLANAGAN: Where exactly are you?

1 MR. SPROUL: Q. Further down the page --

2 A. Okay.

3 Q. Requested clarification. Requested
4 clarification.

5 So there's the text that says, "For example,"
6 and there's lots of text and it kind of gets a little
7 repetitive -- this text says, "These values indicate
8 when there is up to 12 CSF in the creek above the pump
9 station, Stanford could divert all creek flow above 5
10 CSF, leaving the creek flow up to 5 CSF as a bypass
11 flow."

12 A. Yes.

13 Q. So it seems like when you were writing this,
14 you're writing to an audience that very much has in
15 mind, well, before we are going to authorize or approve
16 diversion from Stanford, we want to know how much water
17 is going to be left in the creek, so we're going to --
18 to do that, we need to do two things: We need to see
19 how much flow is there in the creek total and then we
20 track out Stanford's diversion, and what's left over is
21 the bypass flow for the fish.

22 That's how I read your text is the discussion
23 being about.

24 Yes?

25 A. Yes.

1 Q. And so my question is, is Stanford doing that
2 now with its -- with Searsville, for example?

3 Is Searsville -- is Stanford looking at
4 Searsville and saying "We divert X CSF. There is X plus
5 Y CSF in the creek without our diversion. Once we take
6 out our diversion, this is how much is left."

7 From what I heard you say earlier, Stanford
8 doesn't know that about Corte Madera Creek, hasn't done
9 that calculation, doesn't know it.

10 MS. FLANAGAN: Could I ask for clarification?

11 I thought you were talking about flow rates at
12 a given point in time, but now you seem to be talking
13 about total volume, so have you switched, because that
14 paragraph is talking about flow rates.

15 MR. SPROUL: I said flow. I'm talking about
16 flow.

17 MS. FLANAGAN: But I thought you were saying
18 then to take the total amount out and what's left.
19 That's different than flow.

20 That's the confusion. If you just clarify it.

21 MR. SPROUL: I think that's an attempt to
22 obfuscate the question. But, sure, I --

23 MS. FLANAGAN: I think you obfuscated the
24 question quite fine on your own. I'm trying to clarify
25 it.

1 MR. SPROUL: And interrupt the answer, sure.

2 MS. FLANAGAN: He hadn't even started his
3 question. I'm trying to get clarity on the question,
4 your terms.

5 Flow rates are different than the total volume
6 of water that flows to the creek, okay.

7 I just want clarity. Which are you talking
8 about?

9 MR. SPROUL: Q. Were you at all confused in
10 the question, Tom, about the example that's in the
11 letter you wrote about we had 12 CSF, you subtract 5 CSF
12 for water diversion, how much CSF are we going to have
13 left over?

14 Any confusion about that?

15 A. No, I was describing what they had proposed in
16 the table --

17 **Q. Okay.**

18 A. -- with respect to flow rates.

19 **Q. So now I'm saying, Stanford hasn't done**
20 **something similar with respect to the Searsville**
21 **diversion. Stanford hasn't looked at the Searsville**
22 **diversion and said the stream gauge shows that there's**
23 **12 CSF of flow in Corte Madera Creek. We are going to**
24 **divert 5 CSF of flow from Corte Madera Creek. That will**
25 **leave X CSF to continue to flow in Corte Madera Creek.**

1 MR. SPROUL: Q. Can you please look through
2 it. You don't have to read it word for word.

3 MS. FLANAGAN: Are you just going to ask him
4 have you seen reports like this before?

5 MR. SPROUL: Yeah, generally, and we'll direct
6 him to specific lines.

7 MS. FLANAGAN: He's just commenting on the --
8 he's probably seen a clearer one, not with all these
9 dashes.

10 MR. SPROUL: That's how we got it from the law
11 firm, so it's --

12 MS. FLANAGAN: I looked at the pages, is this
13 the same one where you asked for the clean copy?

14 MR. SPROUL: No, this is a different one.

15 MS. FLANAGAN: That's a different one, okay.

16 MR. SPROUL: This one is like, yeah, we can
17 still read it.

18 THE WITNESS: Yeah, we can read it.

19 MS. FLANAGAN: He's just not sure he's seen
20 this exact copy is what he's saying.

21 MR. COSTA: And it's kind of small.

22 THE WITNESS: And it is Jonathan Owens, plural.

23 (Document reviewed by witness.)

24 MR. SPROUL: Q. Okay?

25 A. Okay.

1 **Q. This document purports to be a report from**
2 **Balance Hydrologics prepared for you.**

3 **Is this, in fact, that document?**

4 A. Yes, it appears to be.

5 **Q. And why was this report and study undertaken**
6 **for you? What was the purpose?**

7 A. We have Balance provide reports for us on the
8 flow and creek flow measurements and data they collect
9 at the monitoring stations that they operate for us, so
10 the information is general in nature and not a specific
11 purpose to impact my operations or something like that.
12 They're just tabulating and compiling the data they've
13 collected into a report to make it available to us.

14 **Q. This wasn't, for example, to specifically**
15 **follow up on the mandate of the Jasper Ridge Advisory**
16 **Council, for example?**

17 A. I'm not familiar with that.

18 **Q. Okay, we'll come back to that.**

19 **And this report seems to be an annual**
20 **installment of a series of reports, and are you aware of**
21 **their being a series of reports just like this one that**
22 **were given to you?**

23 A. Yes.

24 **Q. And so why was there an ongoing study and**
25 **reporting effort being made year by year?**

1 MS. FLANAGAN: Could you -- vague and ambiguous
2 as to what -- you used the word "study".

3 I think he described why this was being done,
4 but are you asking the way he used it, or are you
5 intending something else by "study"?

6 Just to clarify.

7 MR. SPROUL: Q. If you go to Bates stamp page
8 404, the first sentence says that "This report presents
9 and analyzes data collected from the Corte Madera Creek
10 at Westridge Drive during water year as part of a
11 long-term monitoring program initiated in
12 December 1995."

13 So I'll stop right there. Was there a
14 long-term monitoring program initiated in December 1995?

15 A. Apparently it's before my time, so -- it was
16 ongoing when I came into this position.

17 **Q. Okay. So this ongoing long-term monitoring**
18 **program, what -- what was its purpose?**

19 A. I don't know. I wasn't part of the origination
20 of this monitoring effort.

21 **Q. And for how long have you participated in this**
22 **long-term monitoring effort that's referred to in this**
23 **report?**

24 A. Well, I've known about it since my start at
25 Stanford in this position in '98.

1 Q. Is the long-term monitoring initiative that's
2 referred to on the page we were just reading still
3 ongoing, or is it over?

4 A. Still ongoing.

5 Q. And is it still being conducted by Balance
6 Hydrologic?

7 A. Right.

8 Q. For what purpose today?

9 A. General interest in the flow in these creeks.
10 It's going to help provide the data that we'll use for
11 the water budget for Searsville, and sediment transport
12 as well, as we look at the accumulation of sediment in
13 Searsville Reservoir.

14 Q. Was it your responsibility to retain Balance
15 Hydrologic to -- well, I guess not originally in 1995,
16 right?

17 But since 1998, has it been your responsibility
18 to continue to contract with Balance Hydrologic to keep
19 this long-term initiative going?

20 A. My group's, yes.

21 Q. And is there anyone at Stanford, other than
22 you, who has particularly interacted with Balance
23 Hydrologic in either designing the monitoring program or
24 analyzing the information that the monitoring program is
25 generating?

1 A. Yes, there have been others involved.

2 **Q. And who are those people?**

3 A. Marty Laporte in my group. Philippe Cohen has
4 had involvement, as well as Alan Launer.

5 **Q. Anyone else?**

6 A. No. Those are the primary people.

7 **Q. Okay. There are three different Balance**
8 **Hydrologic people listed as being the preparers of the**
9 **report. Do you know each of those three people**
10 **individually?**

11 A. I know Barry Hecht, who is a principal in the
12 firm, and, of course, Jonathan Owens, who I interact
13 with most. I do not know Scott Brown.

14 **Q. Do you know anything about the relative**
15 **contributions of these three individuals to the report**
16 **or any of the work that the report documents?**

17 A. Do I know how much of the report each of them
18 did?

19 **Q. Yes.**

20 A. No.

21 **Q. Or how much of the work each one of them did**
22 **that the report discusses?**

23 A. No, I don't know that breakdown.

24 **Q. Do you send email communications to either of**
25 **the three individuals about these annual reports?**

1 A. Rarely, if ever.

2 **Q. And why is that?**

3 A. I interact with Jonathan Owens frequently in
4 meetings and field trips at Stanford, so I don't need to
5 do a lot of emailing about these reports. They're
6 pretty much a routine of compilation, and I don't read
7 them every year.

8 **Q. Is there anyone else at Stanford who reads them**
9 **every year?**

10 A. Possibly. I don't know.

11 **Q. On Bates stamp page 404, the report indicates**
12 **that the Westridge Drive location was selected as a**
13 **monitoring point.**

14 **Do you know why --**

15 MS. FLANAGAN: Which paragraph are you
16 referring to?

17 MR. SPROUL: It's right under the word
18 "Introduction."

19 THE WITNESS: Sorry, your question?

20 MR. SPROUL: Q. Why was the Westridge Drive
21 selected as a monitoring location?

22 A. It was accessible. It was a location on the
23 creek that was publicly accessible from Westridge Drive.

24 **Q. How far is that from Searsville Reservoir?**

25 A. I don't have that dimension.

1 **Q. Do you know whether -- do you know whether**
2 **Searsville Reservoir -- whether sediment from Searsville**
3 **Reservoir backs up, or is tending to back up behind the**
4 **dam into further reaches upstream?**

5 **Has that happened?**

6 A. Yes.

7 **Q. And there's a point at which the backflow of**
8 **sediment and water from Searsville Reservoir stops, yes?**

9 A. Sediment and water doesn't flow back from
10 Searsville Reservoir into Corte Madera Creek. Corte
11 Madera Creek sediment and water flow into Searsville
12 Reservoir.

13 **Q. There's an area where -- well, Searsville**
14 **Reservoir creates backwater or backflow conditions, yes?**

15 MS. FLANAGAN: What do you mean by "backwater
16 conditions"?

17 MR. SPROUL: Q. Well, if the witness
18 understands it -- do you understand? Does that question
19 make sense to you?

20 A. You should define backflow or backwater effect.

21 **Q. Would you agree with this point -- we'll come**
22 **back to that -- Corte Madera Creek, high up in the**
23 **watershed above Searsville, is -- has a well-defined bed**
24 **and bank -- creek bed and bank of relatively unimpeded**
25 **system.**

1 **Do you know whether that's true?**

2 A. I don't know whether that's true. I know it's
3 a pretty natural creek channel.

4 **Q. And that there's an area where Corte Madera**
5 **Creek tends to become flattened out in what might be**
6 **called a more alluvial area, or alluvial fan area, where**
7 **it approaches Searsville Reservoir, would that be also**
8 **be true?**

9 A. Yes.

10 **Q. And in that area where Searsville -- where**
11 **Corte Madera Creek channel becomes more alluvial, or**
12 **part of an alluvial fan feature as I've been describing**
13 **it, that is happening, in part, because of the influence**
14 **of Searsville Dam.**

15 **Would you agree with that?**

16 A. Yes. But your term "alluvial fan" is not quite
17 right. That's typically more a function of a natural
18 creek system near oceans or bays, not behind a dam.
19 That's strictly a sediment deposit, so it's not alluvial
20 in a geologic sense.

21 **Q. Okay, so what would you use to describe that**
22 **area?**

23 A. The area where Corte Madera Creek intersects
24 the reservoir?

25 **Q. Yes.**

1 A. Just that, where Corte Madera Creek flows into
2 Searsville Reservoir. I wouldn't give it a geologic
3 descriptor.

4 **Q. If someone said to you please describe to me**
5 **what the morphology is of the creek in that area, you'd**
6 **say "I don't know. I can't tell you"?**

7 A. Yes, I would tell them that.

8 **Q. Do you know what -- anything about -- have you**
9 **physically been to the creek gauge point in Westridge --**
10 **at the Westridge Drive location?**

11 A. No.

12 **Q. Have you seen pictures of it?**

13 A. I may have. I don't recall them at the moment.

14 **Q. Do you know anything about what the Corte**
15 **Madera Creek characteristics are in that area?**

16 A. No.

17 **Q. So in the next paragraph down, the report**
18 **indicates that "We measured stream flow."**

19 **Why is stream flow being monitored as part of**
20 **this effort?**

21 A. To understand the flow in the creek and its
22 change over time.

23 **Q. And, again, you're doing that just for general**
24 **background knowledge purposes, not directed to any**
25 **specific need to know or planning effort to decide based**

1 **upon?**

2 A. Correct.

3 **Q. Okay.**

4 A. Well, not pertaining to any operation.

5 As far as future planning, it will be used for
6 that purpose.

7 **Q. And then the next thing is, "We measured
8 suspended and bed load sediment transport."**

9 **Why did they measure suspended bed load sediment
10 transport?**

11 A. To quantify the sources of the sediment that
12 are accumulating in Searsville Reservoir and the nature
13 of those sediments.

14 **Q. And why does Stanford care about that?**

15 A. Helps us understand the source of the sediment,
16 and possibly a time frame of the continued accumulation
17 of that sediment in Searsville Reservoir.

18 **Q. And why is that of any use or significance?**

19 A. We are watching Searsville Reservoir's capacity
20 diminish, and we'd like to have an understanding of how
21 much longer that will take.

22 **Q. So would it be fair to say the primary purpose
23 of the Balance Hydrologics suspended and bed load
24 measurements and tracking effort is to help develop
25 information to assess how long before Searsville fills**

1 **in with sediment?**

2 A. Yes.

3 **Q. And would it be further to provide information**
4 **on what will the consequences be of Searsville Reservoir**
5 **filling in with sediment, and other sediment**
6 **depositional -- other sediment depositions that will**
7 **occur in the Corte Madera Creek watershed?**

8 A. What will the consequences of Searsville
9 filling up be?

10 **Q. Yes.**

11 MS. FLANAGAN: I'm sorry, are you asking him
12 what he thinks the consequences will be or what the
13 report is saying?

14 MR. SPROUL: Q. Is that why the report is
15 doing this? You're looking into this because you want
16 to know what's going to happen when Searsville fills up
17 with sediment, and this other sediment deposition around
18 this area?

19 A. No.

20 **Q. Not looking into -- that's not one of the**
21 **reasons why this being looked into?**

22 A. Correct.

23 **Q. Does Stanford have any concerns about what's**
24 **going to happen when Searsville Reservoir fills in with**
25 **sediment?**

1 A. Yes.

2 **Q. And -- but this study, the study that Balance**
3 **Hydrologic is doing isn't meant in any way to help**
4 **inform discussion of that question?**

5 A. It informs the process of sediment deposition
6 rate type of sediment, it doesn't get at the issue of
7 what happens when it does fill in.

8 **Q. Are there other reports that do that?**

9 A. We're embarked in a Searsville alternative
10 study right now that is doing that, among other things.

11 **Q. Okay. The next thing in this report says --**
12 **the report says that basic field water quality**
13 **parameters were monitored.**

14 **Why? Why was that of interest to Stanford?**

15 A. Just a general understanding of the nature of
16 the creek flowing water.

17 **Q. No particular environmental management purpose**
18 **for doing that?**

19 A. No particular purpose, no.

20 **Q. Okay. Then under Previous Studies, 1.1 down**
21 **below, there's a reference to some prior monitoring**
22 **work, Brown and Owens, 2011.**

23 **Are you familiar with that report?**

24 A. Just generally that it's another report in the
25 series.

1 Q. Is it, in your view, similar in use to you as
2 this one?

3 A. Yes.

4 Q. And then the last sentence, "Balance also
5 prepared a more detailed study of sediment supply,
6 dynamics and deposition in the Searsville Lake
7 watershed," and there's a citation.

8 Have you looked at that report?

9 A. No, I don't recall that report.

10 Q. Do you know whether that report is being looked
11 at right now by anyone else at Stanford, or any of
12 Stanford's consultants as a more detailed study that
13 would shed further light on these issues?

14 A. It's part of the information that the
15 Searsville alternative study effort by URS, with Balance
16 as a sub consultant, is doing.

17 Q. Okay. I note that on page -- page 6.

18 A. 406?

19 Q. Yeah, it's 6 -- or it's 409, Stanford 409, page
20 6 of the report.

21 There's a discussion here about bed load and
22 suspended sediment data being gathered, and then
23 there's -- this is in the top paragraph -- and then
24 there's a reference to sediment discharge rates being
25 calculated, and my question is whether Stanford has made

1 **water over the spillway and when the water level in the**
2 **reservoir drops below the spillway?**

3 MS. FLANAGAN: Again, I'm going to object to
4 the characterization of the question, because your prior
5 questions didn't ask him what he observed; you asked had
6 he prepared this.

7 **Q. I'm asking a different question.**

8 MS. FLANAGAN: But your question was "so you
9 didn't."

10 THE WITNESS: So your question is?

11 MR. SPROUL: Q. Have you ever personally made
12 observations of when Searsville Reservoir starts
13 spilling over the spillway and when it stops?

14 A. No.

15 (Exhibit No. 14 marked for
16 identification.)

17 **Q. Will you please look over that document, and**
18 **when you've had a chance to familiarize yourself with**
19 **it, let me know.**

20 (Document reviewed by witness.)

21 Okay. So have you seen this email message from
22 Catherine Palter before?

23 A. No.

24 **Q. Are you aware of Ms. Palter having discussions**
25 **with Gary Palter about -- I mean Gary --**

1 A. Stern.

2 **Q. -- Stern about this Searsville Booster Pump?**

3 A. I was aware that she was having discussions
4 with Gary about Searsville in a general sense, not in
5 this issue specifically.

6 **Q. I see. And her first -- she numbers her -- her**
7 **paragraphs, and the first one she says is, "First," she**
8 **says, "First, the independence of a system did not take**
9 **place just those few years when the Searsville diversion**
10 **was cut back to address the seismic issues - it happens**
11 **ever summer, when we're not diverting water from**
12 **Searsville but using local water throughout campus."**

13 Do you know what she's talking about?

14 A. No.

15 **Q. You have no knowledge of a few years back --**
16 **that would have been a few years prior to 2012,**
17 **diversions from Searsville being cut back to address**
18 **seismic issues?**

19 A. No.

20 **Q. First you've ever heard of that?**

21 A. Uh-huh.

22 **Q. Do you know what she means by "the independence**
23 **of a system"? Is that something that you would say?**

24 Would you use that phrase, "the independence of
25 **a system".**

1 A. I remember a discussion about Searsville
2 diversions being independent and not dependent or
3 directly related with the other diversion facilities, so
4 the context of her discussions with Gary that I recall
5 hearing about, she was trying to clarify that Searsville
6 is an independent diversion. Water comes from
7 Searsville with no correlation to water coming from
8 other diversion facilities.

9 That's what I understood by "independence".

10 **Q. I see, but would it be fair to say independent**
11 **in the sense that Stanford does commingle water from**
12 **Searsville Reservoir with water obtained from other**
13 **sources, within the Felt Reservoir, for example, at**
14 **least on occasion; is that true?**

15 MS. FLANAGAN: Are you asking him just that
16 factual question, or relative to the word "independent"?

17 MR. SPROUL: Just the factual question?

18 MS. FLANAGAN: Do they intermingle at Felt
19 Lake?

20 THE WITNESS: Searsville Reservoir is
21 intermingled at Felt Lake, yes, and in the lake water
22 system.

23 MR. SPROUL: Q. Yes.

24 A. It's a separate issue from an independent
25 diversion.

1 **Q. Then, "Second, the water conveyance pipeline**
2 **continues beyond the booster pump before it forks into**
3 **two pipelines - one to Felt Reservoir and one to**
4 **campus."**

5 **Is that an accurate description of the system?**

6 A. Yes.

7 **Q. And "There are Stanford water users along that**
8 **pipeline stretch" -- I think that should be stretched --**
9 **"between the booster pump and the fork (including**
10 **hydrants and some lessees)."**

11 **Who are the lessees in that context?**

12 A. Who specifically are the lessees?

13 **Q. Yes. Do you know?**

14 A. Webb Ranch, a couple other agricultural lessees
15 of Stanford land.

16 **Q. And you provide those lessees non-potable**
17 **water?**

18 A. Correct.

19 **Q. Do you know anything about the volume of water**
20 **supplied to the lessees?**

21 A. Well, we measure the water that's delivered to
22 them. I don't know what those annual uses are, but we
23 do track that information.

24 **Q. Does Stanford sell the water to the lessees?**

25 A. We charge them for the water that they use.

1 Q. And is it metered so you pay per unit?

2 A. Yes.

3 Q. In the next paragraph, "Therefore, consistent
4 with the understanding that you conveyed yesterday,
5 Searsville-related activity should be confined as the
6 16-inch pipeline that extends 50 feet from the dam, the
7 16-inch pipeline that extends two miles to the booster
8 pump and the booster pump itself."

9 In your mind, is that an accurate description
10 of Searsville-related activities?

11 MS. FLANAGAN: That's in the context of the HCP
12 that they're talking about here?

13 MR. SPROUL: Q. Well, I'll just ask this more
14 broadly.

15 If I said to you Searsville-related activities,
16 please describe it, would you describe it that way, or
17 would you describe it something different?

18 MS. FLANAGAN: Just as you would use the term.

19 THE WITNESS: I would not include the booster
20 pump station as a Searsville-related activity. It's too
21 far away. But different people look at the system
22 differently.

23 MR. SPROUL: Q. Okay. And what would
24 Searsville-related activities include then? I get it,
25 it would exclude the booster pump, but what would it

1 include?

2 A. The intake and pipes and valving below the dam.

3 **Q. And the dam itself?**

4 A. No, I don't consider that an activity. That's
5 something that we operate.

6 **Q. Okay.**

7 **(Exhibit No. 15 marked for**
8 **identification.)**

9 **Can you please take a moment to familiarize**
10 **yourself with the document, and let me know when you're**
11 **ready to discuss it.**

12 MS. FLANAGAN: Just to say whether he's seen it
13 before, or the content?

14 MR. SPROUL: Q. Just to look it over, whether
15 it's something you're familiar with.

16 We'll direct you to particular sections.

17 MS. FLANAGAN: Just as to whether you've seen
18 it before.

19 (Document reviewed by witness.)

20 THE WITNESS: Okay.

21 MR. SPROUL: Q. Have you seen this document
22 before?

23 A. I may have. I don't recall this specific one,
24 but I may have.

25 **Q. There are other documents like this in**

1 **Stanford's files, isn't that true?**

2 A. Yes.

3 MS. FLANAGAN: Again, these are two documents
4 stapled together.

5 THE WITNESS: Yes.

6 MS. FLANAGAN: Two documents stapled together.

7 MR. SPROUL: Right.

8 THE WITNESS: Three.

9 MR. SPROUL: I think they came all in one PDF
10 file, that's why we printed them that way.

11 MS. FLANAGAN: Well, yeah, you should be
12 careful about that. Just because they're sequentially
13 numbered doesn't mean they're one document.

14 MR. SPROUL: Okay. So we'll -- this exhibit
15 will be two documents, duly noted.

16 MS. FLANAGAN: It technically is three, but --

17 MR. SPROUL: Q. All right, this document is
18 three documents.

19 The first document is Bates 6572. Have you
20 been involved in inspections at Searsville Dam in any
21 capacity?

22 A. Not directly the inspection itself. I know
23 it's occurring, but I'm not there.

24 **Q. Okay. Let's look -- please go to Bates stamp**
25 **page 6574, and View 1, that photo, View 1 -- it's in**

1 black and white in your version. Is it legible enough
2 that you can make out what it is?

3 A. Yes.

4 Q. And is that the view of the upstream riser
5 that's within Searsville Reservoir?

6 A. Yes.

7 Q. You've seen that yourself personally?

8 A. Yes.

9 Q. And the way that that is physically set up is
10 there are three intake points where water from the
11 reservoir can be taken into that central pipe there; is
12 that correct?

13 A. Yes.

14 Q. But the very bottom of them is buried in
15 sediment, is no longer usable; is that correct?

16 A. Correct.

17 Q. The middle one and the top one are still
18 usable?

19 A. Yes.

20 Q. And Stanford does use both of them?

21 A. Yes.

22 Q. Do you recall how deep the middle one is from
23 the top of the spillway, let's say, if the reservoir
24 were 100 percent full?

25 A. Approximately 12 feet.

1 **Q. That very top reservoir -- I mean top riser,**
2 **the one that's the most shallow, is about how far below**
3 **the spillway elevation?**

4 A. About three feet.

5 **Q. And the next page, 6575, that's a picture of**
6 **the plunge pool at the base of Searsville Dam; is that**
7 **correct?**

8 A. Appears to be, yes.

9 **Q. Do you recognize it?**

10 A. Yes.

11 MS. FLANAGAN: Apart that it's black and white.

12 MR. COSTA: Do you want to see the picture?

13 THE WITNESS: No, I accept that it is.

14 MR. SPROUL: Q. Please, I'd like to draw your
15 attention to page 6576, and did you -- perhaps you've
16 already answered this, and maybe your answer is no, but
17 I got a little lost, so please forgive me.

18 Did you have any role in the inspection of the
19 toe of Searsville Dam that recently took place in --
20 earlier this year?

21 A. Yes.

22 **Q. So this Bates stamp page 6576, there's a --**
23 **under Important Observations and Recommendations Or**
24 **Actions Taken, there's the notation that "The owner is**
25 **waiting for a final approval of their draft HCP from**

1 various regulatory agencies. The HCP includes dam
2 inspections as covered activities. Once the HCP is
3 approved, the owner will proceed with the plunge pool
4 inspection. The plunge pool inspection is not
5 considered an immediate dam safety concern and is a
6 periodic maintenance activity. Therefore, it can be
7 deferred until the HCP is approved."

8 My understanding is basically it's still not
9 been approved. That's your understanding as well,
10 correct?

11 A. No.

12 Q. For Searsville?

13 A. No, there's an HCP that's been approved, but it
14 does not include Searsville.

15 Q. So is there an HCP that's been approved that
16 includes dam inspections at Searsville?

17 A. No.

18 Q. No?

19 A. No.

20 Q. And -- but Stanford went ahead and inspected
21 the plunge pool without an HCP that included dam
22 inspections having been approved; is that true?

23 A. Yes.

24 Q. And were you aware that that was happening?

25 A. Yes.

1 **Q. Did you personally approve the plunge pool**
2 **inspection without the HCP authorizing the dam**
3 **inspection in place?**

4 A. Yes.

5 **Q. And why did you do that?**

6 A. The HCP process went on without the Searsville
7 component, but the SOD, the Division of Safety of Dams,
8 wanted to conduct this inspection, so we facilitated
9 their request this year.

10 **Q. You thought that outweighed the need to wait**
11 **for an HCP approved by the National Marine Fisheries**
12 **Service or U.S. Fish & Wildlife Service?**

13 A. Yes.

14 **Q. Have you discussed that matter with Gary Stern?**
15 **Did you discuss the plunge pool inspection going forward**
16 **without the approved HCP in place with Gary Stern?**

17 A. Not that specific issue, no.

18 **Q. Did you discuss the plunge pool inspection with**
19 **Gary Stern at all?**

20 A. Yes.

21 **Q. And do you recall the substance of your**
22 **conversation?**

23 A. The plunge pool inspection triggered an
24 agreement with California Department of Fish and
25 Wildlife, and I think we had discussions about the

1 dewatering of the plunge pool and the agreement that
2 included Gary as well, so, yes, he would have been a
3 participant in those discussions regarding the plunge
4 pool.

5 I don't remember if specifically he was on the
6 call or in the meeting where we talked about it, but he
7 well may have, because we'd been meeting with Gary and
8 Fish and Wildlife together in various meetings on
9 various issues.

10 **Q. Did Stanford have a California Stream Bed**
11 **Alteration Agreement issued by CDFW signed and in hand**
12 **before dewatering the plunge pool?**

13 A. No.

14 **Q. And has anyone at CDFW complained to Stanford,**
15 **anyone at Stanford about that, objected to it?**

16 A. We raised the issue to them and we discussed
17 it.

18 **Q. And who did you send emails to at CDFW about**
19 **that?**

20 A. Well, we had several exchanges of emails about
21 the agreement as it was being prepared and worked out.

22 Are you asking specifically about getting the
23 agreement finalized, or what part of the process are you
24 referring to?

25 **Q. Yeah. Yeah, did you send any emails to anyone**

1 at CDFW about getting the agreement finalized?

2 A. Yes.

3 Q. And that person at CDFW was?

4 A. Dave Johnston. There may have been others that
5 I emailed as well. Craig Whiteman was another
6 individual involved in the agreement.

7 Q. Other than emails, did you have phone
8 conversations with those two individuals?

9 A. Not that I recall.

10 Q. And then did you send emails to anyone at NMFS
11 about this?

12 A. No, I don't believe so.

13 Q. Do you know when the next plunge pool
14 dewatering and dam inspection will take place?

15 A. No.

16 Q. Whose decision is that?

17 A. The Division of Safety of Dams.

18 Q. When Alan Launer and his crew drained the
19 plunge pool --

20 Actually, let me back up. It's my
21 understanding that Alan Launer and a crew of people
22 working with Stanford drained the plunge pool as part of
23 this dam inspection; is that right?

24 A. Not quite.

25 Q. What is quite right?

1 A. Alan was involved in the -- observing the
2 plunge pool dewatering, but he did not activate the crew
3 that did the dewatering.

4 **Q. So it was a different crew that activated the**
5 **dewatering?**

6 A. Yes, we had a crew in setting up the pumps and
7 hoses and various equipment. I had an engineer out
8 there at the time it was going on.

9 **Q. And who was that engineer?**

10 A. Terry Leong, L-e-o-n-g.

11 **Q. And Mr. Launer and his crew had the task of**
12 **observing the plunge pool and capturing aquatic life**
13 **that was uncovered as the pool drained; is that correct?**

14 A. Yes.

15 **Q. And, among other things, he uncovered two**
16 **steelhead; is that correct?**

17 A. He recovered O. Mykiss. I don't remember if the
18 term "steelhead" was used, and I don't remember the
19 exact number, but I know he did recover O. Mykiss.

20 **Q. And in a net?**

21 A. I don't know how he --

22 **Q. Did you personally witness it?**

23 A. No, I was not there.

24 **Q. But he told you about it?**

25 A. Yes.

1 **Q. Did anyone else tell you about it?**

2 A. Terry told me that Alan was out there. He
3 didn't tell me specifics about how the fish capture or
4 relocation was accomplished.

5 **Q. Was anyone from CDFW observing the dewatering
6 operation?**

7 A. Not that I've been told.

8 **Q. I've been told that Mr. Launer moved the two
9 O. Mykiss downstream and put them back in the water.**

10 **Was that what you heard also?**

11 A. Yes.

12 **Q. Are you familiar with the term "take" or
13 "taking" of species in the Endangered Species Act
14 context?**

15 A. Yes.

16 **Q. That's a term that you've used?**

17 A. I've heard.

18 **Q. When it comes to taking steelhead, do you have
19 a personal understanding of what you would think would
20 constitute taking a steelhead?**

21 A. Do I have an understanding of that?

22 **Q. Yeah.**

23 A. Yes, generally.

24 **Q. Okay. What's your general understanding?**

25 A. Number of activities, injuring, impacting,

1 disturbing, obviously killing, injuring.

2 **Q. Anything else?**

3 A. No, that's generally it.

4 **Q. Do you think scaring a steelhead constitutes**
5 **taking of the steelhead within the -- under the**
6 **Endangered Species Act?**

7 A. Sounds like a legal opinion that I don't think
8 I'm qualified to make.

9 **Q. Do you think that Stanford engaged in taking**
10 **O. Mykiss when it's moved them from the plunge pool and**
11 **relocated them and put them in the stream downstream?**

12 MS. FLANAGAN: I'm going to object. You're
13 asking for him to give you a legal conclusion.

14 THE WITNESS: I won't answer that. I'm not an
15 attorney.

16 MR. SPROUL: **Q.** Does Stanford give you any
17 instructions in your work here that you should avoid
18 taking endangered species on campus in the activities
19 you direct?

20 A. I haven't heard those words from my supervisor,
21 no. It's understood.

22 **Q. What's understood?**

23 A. That I need to comply with the Endangered
24 Species Act.

25 **Q. And how is it that that's understood?**

1 A. Obvious compliance with legal requirements for
2 operating our water facilities and systems is a
3 generally understood obligation. It doesn't have to be
4 stated.

5 **Q. Have you or your department ever done work**
6 **within San Francisquito Creek?**

7 A. Yes.

8 **Q. Construction work?**

9 A. We've had construction work done that we
10 managed, not work that we've done ourself [sic].

11 **Q. Okay. The work that you've overseen?**

12 A. Yes.

13 **Q. In the course of construction work that you've**
14 **overseen, if you saw a steelhead swimming around in a**
15 **pool in an area where you were going to work, has**
16 **Stanford told you what you should do?**

17 A. The term "Stanford" is a little nebulous.
18 Stanford the university? You mean personnel at Stanford
19 that I work with maybe or --

20 **Q. Okay.**

21 A. Yes, I'm clear on what needs to be done.

22 **Q. And what needs to be done?**

23 A. I would cease or not begin those activities
24 where steelhead are present in a creek or water body.

25 **Q. And you would avoid the steelhead?**

1 A. Yes.

2 **Q. So further down under "Outlet" -- under**
3 **Observations and Comments, Outlet, will you please read**
4 **that description of the outlet, and I want to ask you if**
5 **it's accurate.**

6 A. Starting with "Two 16-inch cast iron pipes"?

7 **Q. Yes.**

8 A. Two 16-inch cast iron pipes, penetrating the
9 concrete gravity structure, are used as low level
10 outlets. The right 16-inch cast iron pipe is a blow-off
11 and has an upstream and downstream gate valves. The
12 upstream gate valve is silted in and has been inoperable
13 for years. The left 16-inch cast iron pipe, used as a
14 supply line, has three upstream gate valves in the
15 upstream tower and one downstream gate valve. The
16 upstream valves are operated from a platform on the
17 upstream side of the dam. The top two gates are
18 operable and the bottom gate is silted in. The outlet
19 valves were not exercised during this inspection, but
20 all valves were exercised by the owner on July 12, 2012,
21 and operated satisfactorily. The valves were last
22 cycled in the DSOD's presence during 8/26/2009
23 inspection. I requested the owner to be prepared to
24 exercise the outlet valves during next inspection and he
25 agreed to do so."

1 **Q. Is that accurate? Is there anything wrong**
2 **about it?**

3 A. Not that I know of, no.

4 **Q. This next document, I'm going to ask you to --**
5 **(Exhibit No. 16 marked for**
6 **identification.)**

7 I'd like to draw your attention to the bottom
8 of this email from Gary Stern to you where it says
9 Version 2, and he's -- Gary Stern is asking you to edit
10 his description of Searsville Dam and Reservoir, and you
11 made one minor edit. You crossed out "the top of" is
12 what it looks like to me.

13 So my question to you is, is that Version 2
14 description as written there accurate, or is there
15 anything about it you would change today?

16 MS. FLANAGAN: So, irrespective of Gary Stern's
17 context, it's just does Tom think that -- is there any
18 correction that Tom would make to Version 2 to make it
19 accurate.

20 MR. SPROUL: Yeah, and it goes over onto the
21 next page.

22 THE WITNESS: No, it's okay.

23 (Exhibit No. 17 was marked
24 for identification.)

25 MR. SPROUL: Q. Okay, great.

1 Let me know when you've had a chance to glance
2 through it and become sufficiently familiar with it.

3 (Document reviewed by witness.)

4 A. Okay.

5 **Q. Have you seen this document before?**

6 A. I don't recall seeing this document before.

7 **Q. Do you know a Mandy Morrison?**

8 A. Yes.

9 **Q. Looking at this document as briefly as you've**
10 **looked at it, does this seem like this is something**
11 **responding to communications from Mandy Morrison in this**
12 **2010 time frame?**

13 A. I have no way of knowing, other than the title.

14 **Q. Okay. Do you recall whether Stanford was**
15 **having any discussions with National Marine Fisheries**
16 **service about flushing of the pipes that are near**
17 **Searsville Dam in 2010?**

18 A. I don't recall that those discussions were
19 going on, but that would make sense in the HCP
20 preparation process that they would have been.

21 **Q. Do you recall that there was some discussion in**
22 **the HCP of flushing of the pipes that are next to**
23 **Searsville Dam?**

24 A. Yes.

25 **Q. Have you ever personally witnessed flushing of**

1 **the pipes that are near Searsville Dam?**

2 A. No.

3 **Q. Have you ever directed flushing of the pipes**
4 **that are near Searsville Dam?**

5 A. No.

6 **Q. And do you have any information about how often**
7 **that happens -- how often those pipes are flushed?**

8 A. Just general information, not specific dates.

9 **Q. What's your general information?**

10 A. There are two pipes. The one connected to our
11 lake water system is flushed at the beginning of the
12 diversion season. The second, which we earlier
13 described as the blow-off pipe, is exercised in
14 association with the SOD inspections.

15 **Q. And the first pipe that's flushed at the**
16 **beginning of the diversion season, that's to clear the**
17 **pipe of built up debris so it can convey water; is that**
18 **correct?**

19 A. Say that again.

20 **Q. It's to flush the pipe of built up debris so it**
21 **can convey water.**

22 A. Well, the term "debris" is a little ambiguous.

23 **Q. What term would you use?**

24 A. To flush the pipe of the water and sediment
25 from the reservoir that's accumulated in it.

1 **Q. And when the sediment is flushed from the first**
2 **pipe, why does it go?**

3 A. Into the downstream creek area.

4 **Q. And does Stanford have a Clean Water Act NPDS**
5 **permit to do that discharge?**

6 A. No.

7 **Q. Have you ever talked to anyone about Stanford**
8 **possibly get a Clean Water Act permit to do that?**

9 A. Our attorneys have advised me that that
10 discharge --

11 MS. FLANAGAN: If you're just relying on advice
12 of counsel, that's as far as you need to go.

13 MR. SPROUL: Q. Okay.

14 The second paragraph there says -- there's a
15 question, "Does anyone survey for listed species before
16 flushing?"

17 Answer: "Currently, before flushing at the
18 base of the dam and if a pool of water exists there, the
19 campus biologist is called to inspect the pool."

20 Who's the campus biologist in this setting, do
21 you know?

22 A. Alan Launer.

23 **Q. Do you know who wrote this document?**

24 A. No.

25 **Q. From looking at the writing style or the**

1 content, do you have any educated guesses as to who it
2 might have been, like Catherine Palter, for example?

3 A. I don't know who. I could speculate that she
4 was involved.

5 Q. Well, not speculating, I'm just asking if
6 you've got some reason to know.

7 A. No, I don't.

8 Q. Then "No surveys are conducted prior to the
9 downstream flushing activity."

10 Do you have any personal information about
11 whether that's a true statement or not a true statement?

12 A. Say that again.

13 Q. Do you have any personal knowledge of whether
14 that's a true statement or not a true statement?

15 A. I don't believe it's a true statement.

16 Q. And why do you think that?

17 A. Well, I believe that our technicians do talk to
18 Ken's biologist when that downstream flushing activity
19 occurs, so it's kind of contradictory with the previous
20 sentence.

21 Q. Well, this is how I read it. You tell me if
22 you have a different understanding. We're both not the
23 author, so --

24 A. Yeah.

25 Q. So what I'm asking you is what is Stanford's

1 actual practice. I read this, it seems to me that it
2 says, well, we talked to our campus biologist, but he's
3 not actually there when we do the flushing, so nobody is
4 actually surveying for endangered species before we
5 flush, and -- so I guess I'm asking you whether you have
6 any knowledge about what Stanford's actual practice is
7 these days.

8 Do they send a campus biologist out to make
9 determinations about whether there are listed species
10 present or not before the flushing activity occurs?

11 A. No, I leave this to Richard Souza. I leave
12 this operation to our water system technicians.

13 Q. So Richard Souza would be the person to ask
14 whether that's happened or not?

15 A. Yes.

16 Q. Also, do you think Alan Launer would be
17 qualified to tell the difference between a steelhead and
18 a rainbow trout?

19 A. Yes.

20 Q. He's never expressed to you any doubt about
21 being able to tell the difference between the two?

22 A. I'm not sure what his capabilities or expertise
23 are. I know he's the most familiar with that species.

24 Q. Has he affirmatively said to you, "Yes, I can
25 identify a steelhead versus a rainbow trout"?

1 A. No.

2 **Q. Has he said to you, "Yes, I can affirmatively**
3 **identify a steelhead"?**

4 A. Say your question again.

5 **Q. Has Alan Launer told you "I can identify a**
6 **steelhead"?**

7 A. No.

8 **Q. Would you agree with me that if someone is**
9 **going out for Stanford to identify whether there's**
10 **listed species present, they should be able to identify**
11 **the listed species?**

12 MS. FLANAGAN: I'm going to object to your
13 question to the extent that it assumes that to be
14 protected you have to be able to tell between the two,
15 as opposed to protecting them all.

16 MR. SPROUL: Q. That was my question.

17 A. Sounds like you're asking me to speculate what
18 the requirements are for this survey or inspection
19 activity, and I don't have information about that.

20 **Q. Well, no, I just was saying -- it just seems to**
21 **me it's common sense if you're going to send somebody**
22 **out to survey for list species, they should be able to**
23 **identify the list species, that's all.**

24 **Would you agree with that?**

25 A. I don't have any opinion about that.

1 Q. Okay. Next, paragraph 4, so here it says "it
2 appears that the pipe outlet may be submerged during
3 some of the flushing events. Is this correct?"

4 And then the answer appears to be "Flushing at
5 the base of the dam is not conducted when the outlet is
6 submerged. Flushing of the pipes downstream occurs at
7 the pipeline along the top of the bank."

8 Having been there and seen the configuration,
9 does this language make sense to you? And, if so, can
10 you further explain it?

11 A. No. It's pretty confusing to me, too.

12 Q. Well, I took it -- I'll tell you how I took it.
13 Let me know if this is any further help.

14 So the second pipe that -- not the pipe that
15 goes all the way down to the booster pump but the other
16 pipe, all right, that's used as an outlet pipe, okay?
17 It -- when it's used, when it's opened and used to let
18 out sediment, it's not under water in the creek, it's
19 actually out of water, but it's dumping its slurry of
20 whatever is in it on to the top of the bank -- the top
21 of the creek bank. That's how I read.

22 MS. FLANAGAN: Are you saying in your reading
23 you think the last sentence is referring to the same
24 flushing activity as the prior sentence is? Because
25 that's not how I read it.

1 MR. SPROUL: Well, that's how I read it.

2 That's why how I read it.

3 MS. FLANAGAN: It's talking about flushing at
4 the base of the dam and then it's talking about flushing
5 of the pipes downstream occurs at the pipeline along the
6 top of the bank.

7 MR. SPROUL: I thought downstream is like
8 the -- just past the dam.

9 MS. FLANAGAN: The base of the dam?

10 MR. SPROUL: The base of the dam is downstream.

11 MS. FLANAGAN: Well, I'm just going to caution
12 the witness to go with his own reading, because counsel
13 disagree as to the reading of the exhibit, so be guided
14 by your own judgment.

15 THE WITNESS: Okay.

16 MR. SPROUL: Q. Anyway, did either of my --
17 of -- my explanation or your counsel's explanation jog
18 any further thought about what was being described here?

19 A. No. I'm lost as to what your question
20 currently is for me about this.

21 **Q. You're a member of the Searsville Committee?**

22 A. I'm on the Searsville Alternative Study Working
23 Group.

24 **Q. So the Searsville Committee effort consists of**
25 **three different groups, correct?**

1 A. Yes.

2 Q. And there's the advisory group, there's the
3 steering committee, and there's the working group; is
4 that right?

5 A. Yes.

6 Q. And you are on the working group?

7 A. Yes.

8 Q. Only?

9 A. Yes.

10 Q. You're not part of the advisory group?

11 A. Correct.

12 Q. Who are the members of the steering committee?

13 A. Faculty and staff of the university.

14 Q. And how many members are there.

15 A. Approximately 12.

16 Q. Do you know each of the 12?

17 A. Yes.

18 Q. Are any of them attorneys?

19 A. Yes.

20 Q. Are any of them fishery biologists?

21 A. Are you asking about the steering committee?

22 Q. The steering committee.

23 MS. FLANAGAN: You said a fisheries biologist?

24 MR. SPROUL: Fisheries biologist, yes.

25 THE WITNESS: I don't know if a couple of them

1 have that qualification or not.

2 MR. SPROUL: Q. Of the 12, do any of them have
3 any particular scientific expertise that you definitely
4 know about?

5 A. Do any of them have scientific expertise?

6 **Q. Yeah, that you know about.**

7 A. Yes.

8 **Q. How many?**

9 A. The six faculty members all have various
10 expertise.

11 **Q. Do any of them have expertise in the fluvial
12 geomorphology?**

13 A. Possibly.

14 **Q. Who is that person?**

15 A. David Freyberg.

16 **Q. Anyone else?**

17 A. Not that I know of.

18 **Q. None of them are fisheries biologists?**

19 A. A couple of them may have --

20 **Q. A couple of them may have?**

21 A. Yes.

22 **Q. Who are the two that may have?**

23 A. Pam Sterner -- not Pam Sterner -- Pamela
24 Matson, M-a-t-s-o-n, and Chris Field.

25 **Q. Do any of them have expertise in herpetology?**

1 A. I don't know what that is, and I don't know if
2 they have that knowledge.

3 **Q. Who else -- it's the study of reptiles. It**
4 **would include snakes, and red-legged frogs, for example,**
5 **most pertinent to our case.**

6 A. I don't know.

7 **Q. Are any of them expert in hydrology?**

8 A. Yes.

9 **Q. Who?**

10 A. David Freyberg.

11 **Q. How about hydraulics, as opposed to hydrology?**

12 A. I don't know about that.

13 **Q. How about analysis of water quality?**

14 A. Say that again?

15 **Q. Analysis of water quality as it applies to**
16 **aquatic life.**

17 A. I don't know if they have that expertise.

18 **Q. Do you know who's running the steering**
19 **committee?**

20 A. Yes.

21 **Q. And who's that?**

22 A. Gene McCowen, M-c-C-o-w-e-n, and Chris Field.

23 **Q. Do you know how those two individuals were**
24 **chosen?**

25 A. By the steering committee.

1 Q. By vote of the steering committee itself?

2 A. Yes.

3 Q. I believe you indicated Mr. Field, you thought,
4 might have expertise in fisheries biology.

5 A. Yes.

6 Q. And what about Jean McCown, does she have
7 expertise in any scientific field?

8 A. Not that I'm aware of.

9 Q. Do you know whether Watson and Chris Field have
10 expertise in anadromous fishes?

11 A. I do not.

12 Q. Do you know how often the steering committee
13 meets?

14 A. Yes.

15 Q. How often is that?

16 A. Frequency varies. Right now it's monthly.

17 Q. And is it the steering committee that will be
18 responsible for coming up with the ultimate
19 recommendations that will go to the Provost or President
20 of Stanford?

21 A. Yes.

22 Q. Do you know if they've worked out how they will
23 come up with their recommendations? Will it be by
24 majority vote, consensus, some other format?

25 A. They're working out that process.

1 **Q. Do any of them talk to you about their work on**
2 **the steering committee?**

3 MS. FLANAGAN: Again, I'm going to stop you and
4 say if you're getting into things that are privileged,
5 you have to not talk about content. If you've have gone
6 conversations with them outside of the privileged
7 context, then go ahead and respond.

8 THE WITNESS: Can you repeat the question?

9 MR. SPROUL: **Q. Do any of them talk to you**
10 **about their work on the steering committee?**

11 A. Just in a general way.

12 **Q. And the working group -- and you told us the**
13 **members earlier.**

14 **How often does the working group meet?**

15 A. Usually twice a week.

16 **Q. And you're still meeting twice a week?**

17 A. Yes.

18 **Q. And are those meetings, in your view,**
19 **productive?**

20 A. Yes.

21 **Q. When was your last meeting?**

22 A. Yesterday.

23 **Q. Do any attorneys participate in your working**
24 **group meeting?**

25 A. Yes.

1 **Q. Always?**

2 A. Yes.

3 **Q. Do they instruct you not to reveal the**
4 **communications of the working group outside of the**
5 **working group?**

6 MS. FLANAGAN: I'm going to instruct you not to
7 answer that, since you directly asked him to reveal an
8 attorney communication.

9 MR. SPROUL: Therefore, before closing, is the
10 possibility of inquiring whether attorney-client or
11 attorney work product has been waived.

12 MS. FLANAGAN: That has nothing to do with
13 whether there's been a waiver.

14 MR. SPROUL: We can come back to it.

15 BY MR. SPROUL:

16 **Q. So do you attend meetings of the advisory**
17 **group?**

18 A. I have attended occasionally.

19 **Q. Have you reviewed materials provided to you by**
20 **members of the advisory group?**

21 A. Some.

22 **Q. Have you looked over materials sent to you by**
23 **Beyond the Searsville Dam Coalition?**

24 A. Some.

25 I would it's like to ask for a break.

1 (A break was taken.)

2 MS. FLANAGAN: So Mr. Zigterman had asked to
3 talk to me for a moment, just because he was concerned
4 that he might have made a misstatement earlier and
5 wanted to know if he should correct it, and the
6 statement was with respect -- I think, Chris, your
7 question was did you start the dewatering without a
8 signed permit in hand, and he wanted to be clear, he had
9 signed it. He didn't have the government signature yet,
10 but he ultimately got it.

11 So I don't know what -- how the record stands,
12 but he was concerned that he might have left it
13 incomplete.

14 MR. SPROUL: Okay.

15 MS. FLANAGAN: So you can ask him about that if
16 you want, but that was bothering him, which is why he
17 wanted to raise it.

18 (Exhibit No. 18 marked for
19 identification.)

20 FURTHER EXAMINATION BY MR. SPROUL

21 MR. SPROUL: Q. So I'd like to direct your
22 attention to the exhibit that's Bates-stamped 4796, and
23 in the middle of the page there's a reference to the
24 Jasper Ridge Advisory Committee, and it says that "The
25 judgment of the Jasper Ridge Advisory Committee is that

1 the continued existence of a reservoir provides
2 important values for the Preserve," and in context,
3 that's the Jasper Ridge Biological Preserve.

4 So my first question to you, have you ever
5 heard of the Jasper Ridge Advisory Committee, now seeing
6 this reference in print?

7 A. Yes.

8 **Q. Are you a member of that committee?**

9 A. No.

10 **Q. Do you know who the members are?**

11 A. No.

12 **Q. Is that committee still in existence?**

13 A. I don't know.

14 **Q. Do you know who would know?**

15 A. Yes.

16 **Q. Who would know?**

17 A. Philippe Cohen.

18 **Q. Okay, anyone else?**

19 A. The members of that committee.

20 **Q. But you don't know who those are?**

21 A. I don't know who they are.

22 **Q. Okay.**

23 "Available evidence indicates that careful
24 dredging to maintain open water can sustain nearly all
25 of these values."

1 MS. FLANAGAN: Where are you reading? Fourth
2 paragraph?

3 MR. SPROUL: Q. "And that the impacts of the
4 dredging can be managed in a way that does not create
5 unacceptable damage or risk to the Preserve's goals."

6 Do you ever recall reading a statement like
7 that in this document, or any other document?

8 Have you seen that before?

9 A. Not that I recall.

10 **Q. Do you recall anybody at Stanford saying**
11 **something like that to you?**

12 A. No.

13 **Q. Do you personally believe that statement?**

14 MS. FLANAGAN: That this is available evidence
15 as of October 2007, or are you asking does he believe it
16 today?

17 MR. SPROUL: Q. Do you believe it today, that
18 the available evidence today suggests that careful
19 dredging to maintain open water can sustain nearly all
20 of these values?

21 A. I don't know what the Preserve goals are.

22 **Q. What the goals are of the Jasper Ridge**
23 **Preserve?**

24 A. Yes.

25 **Q. You don't know?**

1 A. No.

2 Q. So you wouldn't then know what -- you wouldn't
3 have an opinion --

4 Well, let me ask you this: Apart from what the
5 goals of the Preserve are, do you think that dredging to
6 maintain open water at Searsville Reservoir is a good
7 management option, good -- something -- that's what
8 Stanford should do?

9 A. The Searsville Study is looking at all options
10 and kinds of activities we could do, so that is one
11 activity action that we're looking at, dredging, among
12 many, so I don't have a judgment now about that being a
13 possible answer or the answer.

14 Q. Well, okay.

15 On the next page, 4797, there's a list of
16 options that are being identified in this document,
17 things that could be done, and not to go through each
18 one of them in -- just in bullet form, capture each one,
19 I'd like to ask you whether these are things that
20 Stanford is still considering.

21 One: Allow the reservoir to fill.

22 Is Stanford considering that, to the best of
23 your knowledge?

24 A. Can you define "considering"?

25 Q. Is that one of the options that Stanford is

1 looking at as to -- what's -- what are we going to do
2 about Searsville? Let's list all the things we might
3 seriously do.

4 A. One possibility among all of the actions or --
5 is a no action. Let it fill in. Yes, that's still --

6 Q. That's still on the table?

7 A. Yes.

8 Q. Next, remove the dam, is that on the table?

9 A. Yes.

10 Q. Lower the reservoir water surface via
11 modifications to the dam --

12 A. Yes.

13 Q. -- at San Mateo.

14 Alter the dam and change its operation to
15 prevents downstream flood mitigation benefits, is that
16 on the table?

17 A. Yes.

18 Q. And dredge the reservoir to maintain open water
19 and wetlands habitat, is that on the table?

20 A. Yes.

21 Q. Okay. That's it.

22 (Exhibit No. 19 marked for
23 identification.)

24 Q. This is a report apparently done by Balance
25 Hydrologics for you.

1 Do you recall having Balance Hydrologic do this
2 **report for you?**

3 A. Yes.

4 **Q. Why?**

5 A. I'm trying to recall. It's been a few years.

6 **Q. Well, it purports to be an analysis of flood**
7 **risk caused by Searsville Reservoir focusing on upstream**
8 **of Searsville Reservoir.**

9 **Does that ring any bells?**

10 A. Yes, the opening paragraph talking about the
11 lake system -- oh, okay, that makes sense. I was
12 reading it as lake water.

13 Yes, we wanted to understand water level during
14 the one hundred year storm above Searsville.

15 **Q. Okay. So then if you go to page 6790, Bates**
16 **6790, page 21, the conclusions of the report are set**
17 **forth there.**

18 A. Yes.

19 **Q. Okay. The -- they note that some of the**
20 **conclusions were expected, others were new to us.**

21 **Do you recall any discussion with the authors**
22 **of the report about, wow, some conclusions are new and**
23 **unexpected, versus something expected?**

24 A. I don't recall a specific discussion about
25 that.

1 Q. Under 8.1, Expected Results, seems to me the
2 penultimate summation sentence, "Flooding depths will
3 continue to get worse unless significant effort is
4 made."

5 So it seemed to me, reading this report, that
6 the overall conclusion was that if Stanford continues to
7 do nothing and nature continues to take its course, that
8 the flooding risk to properties upstream of Searsville
9 Reservoir are going to increase over time, and I was
10 wondering if you had read that -- this report to come to
11 the same conclusion.

12 A. Yes.

13 Q. Do you know whether other individuals have also
14 come to that conclusion at Stanford?

15 A. You mean reading this report, or conducting
16 studies of their own?

17 Q. Yeah, reading -- no, studies of their own, all
18 information provided to them, "Yes, there's other people
19 at Stanford who I've talked to who are like-minded. If
20 we continue to do nothing, we are going to increase
21 flooding risks to properties upstream of Searsville
22 Dam"?

23 A. Well, your use of the term "flooding risk to
24 properties" is a little more than what I think this
25 report covered, which is just water level, how much

1 higher will the water surface get.

2 **Q. Okay, fine.**

3 **So you explain to me what you think the report**
4 **shows and what the situation is with respect to water**
5 **levels rising upstream of Searsville Dam.**

6 A. That the water levels will rise with further
7 sediment deposition, tends to back up the water coming
8 into Searsville, and that water level will rise higher
9 than it is today.

10 **Q. Have you looked into what the consequences of**
11 **that might be?**

12 A. Not specifically. This was a start of that
13 process, but we haven't looked at a more refined way to
14 specifics.

15 **Q. Has there been anything done since this report**
16 **was written to do what you just said, refine and further**
17 **answer questions?**

18 A. Again, as part of the Searsville study, that
19 modeling and refinement of this is being carried on, and
20 we don't have those total results yet. That's in the
21 works now.

22 **Q. And that's being conducted by URS?**

23 A. And Balance Hydrologics, the sub consultant.

24 **Q. Do you have a sense of when that work will be**
25 **done?**

1 **Q. I'm just going to ask like three questions.**

2 **Have you seen this document before?**

3 A. I may have. I don't know if this specific form
4 of it is one that I've seen.

5 **Q. Is -- is it your understanding that there's a**
6 **written statement of protocols about how the Searsville**
7 **Advisory Group is to conduct itself?**

8 A. Yes.

9 **Q. And -- but you have some doubt about whether**
10 **this is actually it?**

11 A. No, I just said I don't know if I've seen this
12 particular version of the protocols -- advisory group's
13 protocols write-up. There have been various versions.

14 **Q. I see. Well, this will truly be my last**
15 **question. It might take longer than three minutes, so**
16 **I'll leave it to counsel whether she's going to let you**
17 **answer or not.**

18 **Is there anything in this substantively that**
19 **says this is different from the protocol that I actually**
20 **think governs the advisory group meetings that I attend**
21 **from time to time?**

22 A. I've had very little to do with the advisory
23 group protocols, so I wouldn't be able to evaluate that.

24 **Q. Okay. Fair enough. Okay. That's it.**

25 MS. FLANAGAN: I wasn't called upon to be

1 gracious or not.

2 THE REPORTER: Counsel, since this is a US
3 District Court case, are you reserving signature?

4 MS. FLANAGAN: Yeah, it will be through
5 counsel. You can send the witness letter to me and I'll
6 arrange for him to see a copy and make any corrections
7 to it.

8 (The deposition concluded at 4:15 p.m.)

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1 STATE OF CALIFORNIA) ss.
2 COUNTY OF MONTEREY)

3

4 I hereby certified that TOM WENDELL ZIGTERMAN, the
5 witness in the foregoing deposition, was duly sworn to
6 testify to the truth, the whole truth and nothing but
7 the truth, in the within-entitled cause; that said
8 deposition was taken at the time and place herein named;
9 that the deposition is a true record of the witness's
10 testimony as reported by me, a duly certified shorthand
11 reporter and disinterested person, and was thereafter
12 transcribed into typewriting by computer, which I then
13 personally proofread.

14 I further certify that I am not interested in the
15 outcome of the said action, nor connected with, nor
16 related to any of the parties in said action, nor to
17 their respective counsel.

18 IN WITNESS WHEREOF, I have hereunto set my hand
19 this 3rd day of January, 2014.

20

21 (SIGNED ELECTRONICALLY)

22

23

JUDIE A. NICHOLAS, CSR 12229

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A C K N O W L E D G M E N T

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STATE OF _____:

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COUNTY OF _____:

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I, TOM ZIGTERMAN, having appeared for
my deposition herein, hereby certify under
penalty of perjury under the laws of the
State of California that the foregoing is
true and correct.

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TOM ZIGTERMAN

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Signed and subscribed to before me this
_____day of _____20_____.

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NOTARY PUBLIC

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