

1 UNITED STATES DISTRICT COURT  
2 NORTHERN DISTRICT OF CALIFORNIA  
3 \_\_\_\_\_ )  
4 OUR CHILDREN'S EARTH, a non- )  
5 profit corporation, and )  
6 ECOLOGICAL RIGHTS FOUNDATION, )  
7 a non-profit corporation, )  
8 Plaintiffs, )  
9 vs. ) No. C 13 0402  
10 LELAND STANFORD JUNIOR )  
11 UNIVERSITY, )  
12 Defendants. )  
13 \_\_\_\_\_ )

14 2550 Hanover Street  
15 Palo Alto, CA 94304-1115

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17  
18  
19 DEPOSITION OF ALAN E. LAUNER, Ph.D.  
20 WEDNESDAY, DECEMBER 11, 2013

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A-P-P-E-A-R-A-N-C-E-S

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Also Present: MIKE COSTA, ESQ.

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1 ALAN E. LAUNER, Ph.D.

2 having first been duly sworn, thereupon deposed and  
3 testified as follows:

4 EXAMINATION BY MR. SPROUL

5 MR. SPROUL: Q. Could you state your full  
6 name for the record, please?

7 A. Alan Eugene Launer.

8 **Q. And where are you employed, Mr. Launer?**

9 A. Stanford University.

10 **Q. And how long have you been employed there?**

11 A. Been employed at Stanford since '88.

12 **Q. And what's your current job position at  
13 Stanford?**

14 A. Current job position is conservation program  
15 manager.

16 **Q. And how long have you held that position?**

17 A. With that title, three years or so. Before I  
18 was campus biologist.

19 **Q. And can you describe your job duties?**

20 A. I work with the university on protecting bio-  
21 diversity on its lands, integrating with the academic  
22 environment, as well.

23 **Q. And can you further explain what you mean by  
24 "protecting biodiversity"?**

25 A. Protecting what's there and working on

1 generalized permits and having a Federal Habitat  
2 Conservation Plan. I worked on that quite a bit.

3 **Q. When you say the habitat conservation plan**  
4 **that you worked on quite a bit, can you explain what that**  
5 **is?**

6 A. Stanford issued a consulting permit  
7 conservation plan last summer for areas right around Deer  
8 Creek and main campus in the foothills.

9 **Q. And you indicated you were a conservation**  
10 **biologist at Stanford before your current job?**

11 A. Conservation biologist is a descriptor of what  
12 I do, yes.

13 MS. FLANAGAN: He said campus biologist.

14 THE WITNESS: Campus biologist.

15 MR. SPROUL: Okay. Campus biologist.

16 THE WITNESS: Yes.

17 MR. SPROUL: Q. What were your job duties,  
18 then?

19 A. Essentially the same thing.

20 **Q. And -- and did you have that position back to**  
21 **the point when you started at Stanford?**

22 A. No.

23 **Q. And what other positions have you held at**  
24 **Stanford?**

25 A. Teaching associate, post-doctoral fellow,

1 research associate.

2 **Q. Are you -- do you -- are you currently**  
3 **supervised by anyone at Stanford?**

4 A. Yes.

5 **Q. More than one person?**

6 A. Directly one person, but there's hierarchy at  
7 Stanford.

8 **Q. And can you explain the supervisorial**  
9 **hierarchy that you answer to?**

10 A. I'm in the -- the division of land buildings  
11 and real estate. Directly above me is Catherine Palter,  
12 director of a group called land use and environmental  
13 planning, and above Catherine Palter is Bob Reide, who is  
14 director of land use -- director of land building and  
15 real estate.

16 **Q. And do you know who Mr. Reide answers to?**

17 A. He would answer to the provost president.

18 **Q. And who is that?**

19 A. Provost is John Etchamendy and the president  
20 is John Hennessey, and we also have a board of directors  
21 that they answer to.

22 **Q. Do you ever directly brief the board of**  
23 **directors?**

24 A. I have not.

25 **Q. Do you brief the president or the provost**

1     **president?**

2         A.         I have not.

3         **Q.         Do you brief Mr. Reide?**

4         A.         Rarely.

5         **Q.         And when was the last time you briefed Mr.**

6     **Reide?**

7         A.         Within the last six months.

8         **Q.         Do you brief him about issues related to**

9     **Jasper Ridge Biological Preserve?**

10        A.        I have not.

11        **Q.        Did you brief him on issues with respect to**

12     **the HCP?**

13        A.        Yes.

14        **Q.        And when was last time you did that?**

15        A.        That would have been two, three years ago.

16        **Q.        Do you recall what the subject matter was of**

17     **your briefing?**

18        A.        No.

19        **Q.        Did it have anything to do with San**

20     **Francisquito Creek?**

21        A.        I don't recall the specifics.

22        **Q.        Do you brief Ms. Palter?**

23        A.        Yes.

24        **Q.        Do you do that frequently?**

25        A.        Yes.

1           **Q.           And how do you typically brief her?**

2           A.           We have meetings on a regular basis. We're  
3 part of the same groups.

4           **Q.           And what -- what groups are those that you**  
5 **just mentioned?**

6           A.           Development of the Habitat Conservation. We  
7 had a group for that. We have a series of Alternatives  
8 Working Group. There's a Foothills Management Group that  
9 we're part of.

10          **Q.           Any other groups?**

11          A.           Not that I can recall right now.

12          **Q.           Do you regularly communicate with Ms. Palter**  
13 **via e-mail messages?**

14          A.           Occasionally, yes.

15          **Q.           Does the frequency of your e-mail**  
16 **communication with her vary or is it pretty regular?**

17          A.           Varies.

18          **Q.           Over the past year, do you have a sense of**  
19 **roughly how many e-mails you sent her?**

20          A.           That I've sent her over the last year?  
21 Probably average two or three a week on average. Some  
22 more, some less. Maybe five.

23                   MS. FLANAGAN:    If you don't know --

24                   THE WITNESS:    I don't -- I don't know.

25                   MR. SPROUL:     Yeah. I'm just asking for a



1 reasonable estimate.

2 THE WITNESS: Ballpark, yes.

3 MR. SPROUL: Q. Ballpark two to three,  
4 maybe a little more?

5 A. Maybe a little more.

6 Q. Okay.

7 A. It's so variable, it's hard for me to  
8 calculate a running average.

9 Q. Okay. And of those e-mails, do you have a  
10 rough sense of how many of them deal with the Searsville  
11 Alternative Group or topics related to the Searsville  
12 Alternative Group?

13 A. It would be a small percentage.

14 Q. Can you give me any kind of ballpark of what  
15 you mean by "small"?

16 A. Twenty percent.

17 Q. Do you have a sense of what the majority of  
18 your e-mail communications with her are about?

19 A. Having a conservation plan has been a lot, and  
20 certainly over the last decade was dominated.

21 Q. In your mind sort of categorizing the e-mails  
22 that would be about this -- related to the Searsville  
23 Alternative Group versus, say, the HCP, would a dividing  
24 line be whether the topic related to Searsville Reservoir  
25 and Searsville Dam versus areas outside of -- out of

1 **those two areas that I just mentioned?**

2 MS. FLANAGAN: I'm sorry. Could you rephrase  
3 the question?

4 MR. SPROUL: Yeah, yeah.

5 THE WITNESS: Clarify that.

6 MR. SPROUL: Q. So when -- when you say,  
7 "Oh, I've sent e-mails -- e-mails related to the  
8 Searsville Alternative Group," would those e-mails just  
9 deal with Searsville Dam and Searsville Reservoir, or  
10 would they include other topics?

11 A. With Catherine and Searsville Working Group,  
12 it was Searsville related.

13 Q. So if -- if an e-mail dealt with Steelhead in  
14 Los Trancos Creek, you wouldn't call that an e-mail that  
15 was related to the Searsville Alternative Group?

16 A. To Los Trancos Creek, no.

17 Q. It would not be a Searsville Alternative Group  
18 e-mail?

19 A. Not necessarily.

20 Q. Have you ever had your deposition taken  
21 before?

22 A. No.

23 Q. Do you know what a deposition is?

24 A. Roughly, yes.

25 Q. You understand that you're under oath?

1 A. Yes.

2 Q. And also understand the court reporter's  
3 taking down everything we --

4 A. Yes.

5 Q. -- we say?

6 A. Can't see me nod, yes.

7 Q. And then also to make his job a lot easier,  
8 it's important that you let me finish my questions even  
9 though you think I, oh, I know what he's asking and I'm  
10 going to -- I can answer it, because it's hard for him to  
11 take down two people talking at once.

12 A. Yes.

13 Q. And if at any point you don't understand my  
14 questions, it's fair to say "I don't understand what  
15 you're asking for."

16 A. Yes.

17 Q. And in asking my questions, if I ask you to,  
18 to "oh, can you give me a -- an estimate?" I'm only  
19 asking for your -- the best that you can do, and if it's  
20 complete speculation, then I'm not asking you to  
21 completely speculate, but if you have a rough sense of  
22 what I'm -- of the information, then I'm asking for that,  
23 which I think is fair information to ask for.

24 A. Okay.

25 Q. Did you review any documents in preparation

1 **for your deposition today?**

2 A. Yes.

3 **Q. And what documents did you review?**

4 A. The scattering of documents that I produced  
5 and -- and some documents that have been -- that had been  
6 produced relative to Searsville and San Francisquito  
7 Creek.

8 **Q. The scattering of documents that you produced,  
9 can you recall what those were or at least what some of  
10 those were?**

11 A. Plunge pool report. There were a couple of  
12 reports from the late '90s that I quickly refreshed a  
13 little bit. There were some working data table reports.

14 **Q. What was the plunge pool report that you just  
15 referred to?**

16 A. We -- it's per -- per a state required dam  
17 inspection, the pool at the base of Searsville Dam needed  
18 to be dewatered, and I wrote up the biological component  
19 to that action.

20 **Q. And that was sometime this fall of 2013?**

21 A. Yes.

22 **Q. Do you recall when the plunge pool dewatering  
23 was?**

24 A. September.

25 **Q. And did you make an effort to survey the**

1     **aquatic life that was in the plunge pool as it was being**  
2     **dewatered?**

3         A.         Yes.

4         **Q.         And you were assisted by other individuals?**

5         A.         Yes.

6         **Q.         And who were those other individuals?**

7         A.         Christina Fang, one of my assistants.  Annette  
8     Potvin was another assistant.

9         **Q.         And anyone else?**

10        A.        There were other workers there, part of the  
11     actual dewatering process, but they really weren't  
12     assisting me.

13        **Q.        And what was your job, then, specifically with**  
14     **respect to the dewatering?**

15        A.        Oh, it was to relocate native species.

16        **Q.        Anything else?**

17        A.        Not specifically, no.

18        **Q.        Not, for example, to you euthanize any non-**  
19     **native species that you found?**

20        A.        I don't recall if that was a specific  
21     component of the permit.

22        **Q.        But did you do that?**

23        A.        We left the non-natives in place, yes.

24        **Q.        So then that would cause the non-native fishes**  
25     **to expire?**

1 A. Yes.

2 **Q. Were there any other non-native animals or**  
3 **wild -- species in the animal kingdom found besides**  
4 **fishes?**

5 A. Crayfish. It's a Louisiana red swamp crayfish  
6 and some bullfrogs.

7 **Q. And by drying out the pond, did euthanize**  
8 **crayfish?**

9 A. Most of them, yes.

10 MS. FLANAGAN: Can I just object to the use  
11 of the term "euthanize," if that has some special meaning  
12 to you other than --

13 THE WITNESS: Die.

14 MS. FLANAGAN: -- the animal died as opposed  
15 to someone taking actions to kill it.

16 I'm just clarifying what "euthanize" means.

17 MR. SPROUL: Okay. Well, let's -- that's a  
18 fair point.

19 **Q. Do you use the term "euthanize" in respect to**  
20 **any of the work you've done at Stanford?**

21 A. Typically, no.

22 **Q. Have you ever used that word in a report that**  
23 **you've written to describe your work?**

24 A. I would have to check back through my reports  
25 to see. It's not a word I typically use, but it's a word

1 I might use.

2 **Q. What word would you typically use?**

3 A. Eliminate. I would have to check.

4 **Q. And by "eliminate," what do you -- what do you**  
5 **mean?**

6 A. To be killed.

7 **Q. Either directly or indirectly?**

8 A. Yes.

9 **Q. So I suppose like letting the pond dewater and**  
10 **then leaving the fish doesn't sort of actively kill them**  
11 **like stabbing them, but it causes their death.**

12 A. Yes.

13 **Q. So this pond dewatering eliminated most of the**  
14 **crayfish found, but not all; is that right?**

15 A. All that we could find, yes.

16 **Q. And how about the bullfrog? Did this activity**  
17 **eliminate the bullfrogs you found?**

18 A. All that we could find, yes.

19 **Q. And how is that? Bullfrogs can hop away.**

20 A. The vast majority were tadpoles, so non-mobile  
21 out of water.

22 **Q. What native species did you find in the plunge**  
23 **pool?**

24 A. A minnow called a Roach, a -- Sacramento  
25 Suckers, which is another native fish, and two,

1 Oncorhynchus Mykiss.

2 **Q. Which is the scientific for the Steelhead?**

3 **Yes?**

4 A. And Rainbow Trout, juveniles.

5 **Q. So that's a scientific name for either Rainbow**  
6 **Trout or Steelhead Trout?**

7 A. Yes.

8 **Q. And that's because Rainbow Trout and Steelhead**  
9 **Trout are the same species? Yes?**

10 A. Yes.

11 **Q. And what life stage of the -- I'm going to say**  
12 **Steelhead Trout.**

13 **Is that okay in this context, Steelhead Trout**  
14 **rather than --**

15 MS. FLANAGAN: Well, I'm going to object that  
16 Steelhead is at issue in the case. I think we need to be  
17 fairly exact on this, whether you're talking about  
18 Rainbow Trout of Steelhead.

19 MR. SPROUL: Okay. Objection duly noted.  
20 I'm going to use the term Steelhead Trout.

21 **Q. Is that okay with you?**

22 MS. FLANAGAN: To refer to that.

23 MR. SPROUL: To refer to the -- to refer to  
24 the two fishes that you found that you gave the  
25 scientific name --



1 THE WITNESS: I would --

2 MR. SPROUL: -- O-mykiss.

3 THE WITNESS: -- rather you refer to them as  
4 trout, which could be Steelhead or Rainbow Trout.

5 MR. SPROUL: Q. Do you have any doubt  
6 whether these two fishes that you found were rainbow or  
7 Steelhead?

8 A. Yes.

9 **Q. And what's the source of your doubt?**

10 A. They were juveniles, so they would not have --  
11 they never migrated to the ocean, and that leaves them  
12 as -- as undetermined.

13 **Q. So you think that some of the -- well, let's**  
14 **then perhaps backup. Let's use the term O-mykiss.**

15 A. That's fine. Oncorhynchus Mykiss is the  
16 species name.

17 **Q. Can I say O-mykiss for short?**

18 A. It's easier, yes.

19 **Q. Okay. So you think that some of the O-mykiss**  
20 **found below Searsville Dam are potentially Rainbow Trout?**

21 A. Some of them are non-migratory, yes, so that  
22 would be Rainbow Trout.

23 **Q. And what's the basis for your opinion in that**  
24 **respect?**

25 A. The -- the basis I actually don't know. You

1 see a juvenile, he certainly never had the opportunity to  
2 go downstream.

3 So being broadest category, I just called them  
4 O-mykiss or trout, now is what I refer to them. So  
5 there's no specific knowledge that they're either way.

6 **Q. Do you have any -- any data or study that**  
7 **would suggest that -- that some of the O-mykiss found**  
8 **below Searsville Dam have not exhibited migratory**  
9 **behavior and instead have remained as resident trout in**  
10 **San Francisquito Creek?**

11 A. I have no data dealing with the residency of  
12 the species there.

13 **Q. When O-mykiss reach a certain life stage, can**  
14 **you tell from visual observation whether it's a -- a**  
15 **Rainbow Trout or a Steelhead Trout?**

16 A. If it has been in the ocean, yes, and comes  
17 back a much larger fish.

18 **Q. And is there anything else besides the size**  
19 **that -- that distinguishes a Rainbow Trout from a**  
20 **Steelhead Trout?**

21 A. Visually? Color generally does.

22 **Q. And can you describe the color differences?**

23 A. Steelhead is typically silvery, silvery blue,  
24 steel color in some places. Rainbow Trout is a more  
25 colorful fish, some oranges and speckling -- well, they

1 both have speckles.

2 **Q. Hence the same rainbow?**

3 A. Yes.

4 **Q. Have you observed Steelhead Trout in San**  
5 **Francisquito Creek?**

6 A. I have seen one adult in the creek.

7 **Q. Is that -- is that -- you just made one**  
8 **observation of a Steelhead -- I mean, excuse me. Of an**  
9 **O-mykiss in San Francisquito Creek that you identified as**  
10 **a Steelhead, just one?**

11 A. Yes.

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

13 A. Late '90s.

14 **Q. Have you observed any adult O-mykiss that you**  
15 **determined were Rainbow Trout?**

16 MS. FLANAGAN: In what location?

17 MR. SPROUL: In San Francisquito Creek.

18 THE WITNESS: That I could conclusively  
19 determined were adults, no.

20 MR. SPROUL: Q. So at the moment in terms  
21 of adult O-mykiss in San Francisquito Creek, it's one to  
22 zero?

23 A. That I have conclusively ID'd, yes.

24 **Q. You've seen quite a number of O-mykiss in San**  
25 **Francisquito Creek over the years; haven't you?**

1 A. Yes.

2 **Q. And have these all been life stages that are**  
3 **younger than adults?**

4 A. They're all smaller than the sea run Steelhead  
5 size, yes. I don't know the size which a Rainbow Trout  
6 can be classified as an adult. You need to do sections.

7 **Q. I'm sorry?**

8 A. You need to actually handle them a lot more to  
9 see if they're an adult, if they're sexually mature,  
10 which I have not seen.

11 **Q. Do you know whether anyone else has?**

12 MS. FLANAGAN: With respect to what location?

13 MR. SPROUL: Q. Has anyone else in San  
14 Francisquito Creek surveyed the O-mykiss population to  
15 determine whether it's rainbow or Steelhead?

16 A. Not that I know of.

17 **Q. Do you think that should be done?**

18 A. Uh, no, not necessarily.

19 **Q. And -- and why is that?**

20 A. I'm not sure what information it would provide  
21 to -- for a management consideration.

22 **Q. You think the population should be managed the**  
23 **same, whether it's Rainbow Trout or -- or Steelhead Trout**  
24 **below Searsville Dam?**

25 A. I would have to think specifically about that

1 to understand the ramifications.

2 **Q. Has anyone at Stanford University ever brought**  
3 **this to you as -- as a question, whether the O-mykiss**  
4 **population in San Francisquito Creek is -- is Steelhead**  
5 **versus Rainbow Trout?**

6 A. Yes.

7 **Q. And -- and who has brought that to your**  
8 **attention?**

9 A. I -- I don't know the specifics. Just that  
10 the question has been brought up.

11 **Q. Did Miss Palter bring that question up to you?**

12 A. I don't remember.

13 **Q. Have you received any e-mail messages posing**  
14 **that question from anyone at Stanford?**

15 A. I don't recall any.

16 **Q. Do you believe you're -- you're qualified to**  
17 **tell the difference between Rainbow Trout and Steelhead**  
18 **Trout?**

19 A. I can certainly identify a sea run Steelhead  
20 that's been to the ocean. The juvenilized history  
21 stages, visually, I don't think I can distinguish them.

22 **Q. Do you know whether other people can?**

23 MS. FLANAGAN: And again, this is with  
24 respect to juveniles?

25 MR. SPROUL: Yes.

1           **Q.           Do you know -- do you know whether other**  
2 **people can distinguish whether a juvenile O-mykiss is a**  
3 **Rainbow Trout or a Steelhead Trout?**

4           A.           No.

5           **Q.           You don't know whether people can?**

6           A.           No. No.

7           **Q.           Okay. Can you explain to me what your**  
8 **educational background is?**

9           A.           I have a Master's and a Master of science from  
10 Stanford and a Bachelor of Arts and a doctorate from  
11 Harvard.

12          **Q.           What's your doctorate from Harvard in?**

13          A.           The department was organismic evolution  
14 biology, and I specifically worked on -- ontogeny  
15 development, of feeding mechanisms in Centrarchid fishes,  
16 sunfishes, bass. Centrarchids.

17          **Q.           Do you consider yourself an expert in the**  
18 **feeding behavior of Centrarchids?**

19          A.           At the time, yes. I haven't worked on it  
20 specifically in twenty years.

21          **Q.           So you earned your Ph.D. from Harvard twenty**  
22 **years ago?**

23          A.           1982 -- not 1980 -- '89. Got to get my dates  
24 right. '82 is when I graduated from Stanford. Seven  
25 years, and I've not worked on the feeding since then.

1           **Q.           And you have an -- an MA from Stanford**  
2           **University?**

3           A.           An MS.

4           **Q.           MS. What's your MS in?**

5           A.           It was oddly from the Department of Biological  
6           Sciences and I was working on the population and ecology  
7           of Checkerspot Butterflies.

8           **Q.           As part of your Master's work, did you study**  
9           **any aquatic species?**

10          A.           At Stanford?

11          **Q.           At Stanford.**

12          A.           No.

13          **Q.           And you also have a Bachelor's Degree from**  
14          **Stanford.**

15          A.           Yes.

16          **Q.           And what was your major?**

17          A.           Biological sciences.

18          **Q.           Did any of your course work emphasize the**  
19          **biology of aquatic species?**

20          A.           No.

21          **Q.           Do you -- do you consider yourself an expert**  
22          **in -- in any topic?**

23                   MS. FLANAGAN:    With respect to biology or  
24          just life?

25                   MR. SPROUL:    Anything.

1           **Q.           Do you consider yourself an expert in**  
2 **anything?**

3                   MS. FLANAGAN:    Okay.  If you can answer that  
4 question, go ahead.

5                   THE WITNESS:    I'm not quite sure how to  
6 define "expert."

7                   MR. SPROUL:    Q.    Have you heard the term  
8 "expert witness"?

9           A.           Yes.

10           **Q.           Does that term have a meaning to you?**

11           A.           Not particularly.

12           **Q.           Do -- do you use the term "expert" in your**  
13 **work at Stanford?**

14           A.           Not usually, no.  I would say -- not usually,  
15 no.

16           **Q.           Is there a term that you use in your work at**  
17 **Stanford University to describe an individual with**  
18 **expertise in a scientific area or field?**

19           A.           I don't recall using it, having a descriptor  
20 for such people.

21           **Q.           Or a phrase?**

22           A.           Not -- I'm at a loss.  I can't actually think  
23 of a phrase that would describe somebody.

24           **Q.           Well, are you aware that Stanford University**  
25 **has retained the consulting firm URS?**



1           A.           Yes.

2           **Q.           Is there anything you'd use to -- phrase or**  
3 **word you'd use to describe who the people at URS are or**  
4 **what role they're serving at Stanford?**

5                   MS. FLANAGAN:    I think we're going far afield  
6 to what your original question was, Chris, and I think it  
7 is becoming confusing for the witness.

8                   So with respect to what?   What area are you  
9 asking about with respect to URS?

10                  MR. SPROUL:    I'm just trying to find --

11                  MS. FLANAGAN:    Why don't you ask him if he  
12 has expertise in certain science areas.   It was your  
13 unwillingness to limit it to science rather than life  
14 that got us off on this tangent.

15                  MR. SPROUL:    Well, I don't know about that.  
16 That's your opinion.   But maybe we'll try another --  
17 another way here.

18           **Q.           Do you think you have -- well, I want to**  
19 **back -- back -- back up.**

20                   **The people at URS, is there -- is there**  
21 **some -- something that you'd use, a word or phrase you'd**  
22 **use to describe those people, what -- what are they?**  
23 **People who are knowledgeable about things?   What would**  
24 **you -- how would you describe them?**

25                   MS. FLANAGAN:    Who specifically at URS are

1 you referring to?

2 MR. SPROUL: The people at URS who are  
3 working with Stanford on the -- and the Searsville  
4 committee?

5 THE WITNESS: There -- there are many in URS  
6 who are working with us and they are comprised of many  
7 specialties. That might be our word.

8 MR. SPROUL: Q. People who -- so people who  
9 have specialties?

10 A. Yes.

11 **Q. That's what you'd use?**

12 A. Yes.

13 **Q. Do you think you have a specialty in any field  
14 of science?**

15 A. Conservation biology.

16 **Q. And can you describe what the field of  
17 conservation biology is for you in this context?**

18 A. Well, it's -- conservation biology's is the  
19 science to preserve some level of biodiversity. That's  
20 what this context and maybe every context.

21 **Q. Would you say that your -- your specialty in  
22 the field of conservation biology is one of -- of a  
23 generalist as opposed to someone who's got expertise or  
24 specializes in a particular species?**

25 A. Yes.

1           **Q.           Would you consider yourself a specialist in**  
2 **the conservation of Steelhead?**

3           A.           No.

4           **Q.           Would you consider yourself a specialist in**  
5 **the field of conservation of California red-legged frog?**

6           A.           Yes.

7           **Q.           So it would be fair to say you know quite a**  
8 **bit more about California red-legged frog than Steelhead?**

9           A.           No. No.

10          **Q.           Well, can you explain to me why you would**  
11 **consider yourself a specialist with respect to California**  
12 **red-legged frog, but not Steelhead?**

13          A.           More -- it has more to do with -- my voice  
14 gets -- when I talk quite a bit.

15          **Q.           Do you need water?**

16          A.           Yes. When it gets cold and I talk, my voice  
17 gets raspy. It always has and it always will.

18                    Thank you.

19          **Q.           Sure. Any time you need a break for water.**

20          A.           Just a sip here.

21                    These are more comparative fields. Fisheries  
22 biology is a gigantic field. There are many, many  
23 individuals working on it.

24                    Central California frog biology is a smaller  
25 field and it's a smaller subset of information to know.

1 Q. Okay. Thank you.

2 How about -- do you consider yourself a  
3 specialist with respect to San Francisco garter snake?

4 A. No.

5 Q. Is anyone at URS that Stanford is currently  
6 working with a specialist in Steelhead?

7 A. Yes.

8 Q. And -- and who's that?

9 A. Jonathan Stead is the primary fisheries  
10 biologist that we've worked with. Cosmo -- I forget his  
11 last name -- is a fisheries biologist specializing in  
12 fish passage. Cosmo Bates.

13 Those are the two fisheries people who we're  
14 working with.

15 Q. Is anyone -- anyone else at Stanford a  
16 specialist in Steelhead?

17 A. Not that I know of.

18 Q. Is anyone at URS a specialist in California  
19 red-legged frog?

20 A. I don't know.

21 Q. Do you know who would know?

22 A. URS would know.

23 Q. Do you know whether URS is working on  
24 California red-legged frog issues for Stanford currently?

25 A. In a general sense, characterizing the creek,

1 yes. But they're not doing specific studies.

2 **Q. When you say "characterizing the creek," can**  
3 **you explain that?**

4 A. It's part of the Searsville alternative  
5 process. There's many studies that are -- that is  
6 started that's what URS will be investigating the creek  
7 in much more depth than has been done before.

8 **Q. Okay. And you said characterizing the creek,**  
9 **but not doing the specific studies.**

10 **What did you mean by "the specific studies"?**

11 A. I'm sorry. I'd have to -- I'd have to put  
12 that in a context. I don't see where -- I'd have to see  
13 where I said that.

14 **Q. Well, maybe I misparaphrased you.**

15 A. Yeah.

16 **Q. But I thought you said something like "they**  
17 **are doing this, but they are not doing that."**

18 A. Oh. The red-legged frog study.

19 **Q. Yes.**

20 A. Yes.

21 **Q. So can you explain what they're -- what it is**  
22 **that they're not doing?**

23 A. They're not doing a red-legged frog study, as  
24 far as I know.

25 **Q. And what would a red-legged frog study be**

1 **in -- in your estimation?**

2 A. We do the annual monitoring for red-legged  
3 frogs in our creek -- creeks, so it would be a  
4 distribution and abundance study.

5 **Q. So would that involve actually surveying in**  
6 **the field for the -- the presence of California red-**  
7 **legged frog?**

8 A. Yes.

9 **Q. Would it involve any other study -- stud**  
10 **effort or research effort?**

11 MS. FLANAGAN: What are we talking about now?  
12 Are we talking about the annual monitoring?

13 MR. SPROUL: A study of California red-legged  
14 frogs.

15 I mean, just hypothetically. You said they're  
16 not doing a study, and I said, "Well, what would a study  
17 consist of?" and you said, "Well, it would include  
18 monitoring for distribution and abundance."

19 MS. FLANAGAN: I think that mischaracterizes  
20 his testimony. He states that Stanford is not doing any  
21 monitoring.

22 THE WITNESS: URS is not doing that.

23 MR. SPROUL: Q. Yes. Understood. So  
24 Stanford is doing that, so that constitutes in your mind  
25 a red-legged frog study?

1           A.           A study, yes.

2           **Q.           And my question, then, is whether in your mind**  
3 **a California red-legged frog study in this setting would**  
4 **include additional work besides monitoring distribution**  
5 **and abundance.**

6                   MS. FLANAGAN:   And I'm going to object to the  
7 question as vague and ambiguous as to what "in this  
8 setting" means.

9                   And are you asking for all behaviors of  
10 red-legged frogs?

11                  MR. SPROUL:   I'm just asking. I think it's a  
12 fair question. Right? I'll try again. I think --

13                  MS. FLANAGAN:   If you understand it, you can  
14 answer.

15                  THE WITNESS:   I'd appreciate a clarification.

16                  MR. SPROUL:   Q.   Okay. So You're a  
17 specialist in California red-legged frog, so you could  
18 design a California red-legged frog study in San  
19 Francisquito Watershed; couldn't you?

20           A.           I could design a study, yes.

21           **Q.           And if you were to design a study, you would**  
22 **include monitoring for distribution and abundance of the**  
23 **frogs? Yes?**

24                   MS. FLANAGAN:   Again, I'm going to object to  
25 the question again because -- design a study to do what?

1 Design a study to what? Count them? See what they eat?

2 I mean, it's just -- you need to put a little  
3 more --

4 THE WITNESS: I'd design it to answer a  
5 specific question.

6 MR. SPROUL: Q. Okay. Well, are there  
7 specific -- are there specific questions with respect to  
8 California red-legged frog in San Francisquito Creek --  
9 in the San Francisquito Creek watershed that you think  
10 are not -- not completely answered that are of interest  
11 to someone who's a conservation biologist?

12 A. I can only speak for not the entire watershed,  
13 because that's out of the realm of things that I have  
14 worked with.

15 The red-legged frog in San Francisquito Creek,  
16 the first step of any study would be to continue the --  
17 this surveys for distribution and abundance, which we do.

18 Anything after that would be specific to a  
19 question.

20 Q. Well, do you think it would be useful to  
21 assessing the status and trends of -- of the California  
22 red-legged frog population in San Francisquito Creek --  
23 let's limit it to San Francisquito Creek -- to monitor  
24 the -- the prevalence of -- of organisms that are known  
25 to be predators on California red-legged frog?



1 A. Among other things, yes.

2 **Q. Well, when you say "among other things," what**  
3 **are the other things that you had in mind?**

4 A. Well, there's -- weather is always an issue  
5 with small organisms. The organisms. Conditions such as  
6 gravel deposition is a -- potentially a factor with red-  
7 legged frogs. Disease is potentially a factor with red-  
8 legged frogs.

9 **Q. How about food sources?**

10 A. Food sources could be.

11 **Q. How about water temperature? Would you**  
12 **include that parameter in the study?**

13 A. If you were doing an in-depth study of all  
14 conditions you could think of, you would do water  
15 condition -- water temperature, as well.

16 But there's not a good link with water  
17 temperature and red-legged frogs at this point.

18 **Q. How about water -- water flow conditions in**  
19 **San Francisquito Creek?**

20 A. Flow would actually be tied to the weather  
21 parameter, the first one mentioned.

22 **Q. And would that also then include evaluation of**  
23 **the presence or absence of pools of water in the creek**  
24 **bed?**

25 A. Slide pool, yes.

1 Q. Has anyone at -- anyone else at Stanford an  
2 expert in California red-legged frog?

3 A. Not that I know of.

4 Q. Is anyone at URS a specialist in San Francisco  
5 garter snake?

6 A. I believe so.

7 Q. And who is that?

8 A. Tammy Lim, L-i-m. I believe is at URS.

9 Q. Is that Ms. Lim?

10 A. Yes.

11 Q. Is anyone else at Stanford an expert in San  
12 Francisco garter snake?

13 A. Not that I know of.

14 Q. Do you know whether Catherine Palter is a  
15 specialist in any field of environmental science?

16 A. No.

17 Q. No, you don't know, or no, she's not?

18 A. No, I don't know.

19 Q. Do you know what her educational background  
20 is?

21 A. Not specifically. You'd have to ask  
22 Catherine. I have vague ideas.

23 Q. Between the time you graduated from a Harvard  
24 and when you started working for Stanford, have you found  
25 any jobs in the science field in that interim?

1           A.           I actually started at Stanford as a teaching  
2 assistant before I graduated from Harvard. So no.

3           **Q.           Busy in the academic world.**

4           A.           I haven't left, yes.

5           **Q.           I'd like to direct the witness' attention to**  
6 **this document (Indicating) and ask you to take a moment**  
7 **to --**

8                       MS. FLANAGAN:    Are you going to mark this as  
9 an exhibit?

10                      MR. SPROUL:    Yes. Let's mark this as Exhibit  
11 1.

12   (Launer Exhibit No. 1 was  
13 marked for identification.)

14                      MS. FLANAGAN:    Do you want him to look  
15 through the whole thing?

16                      THE WITNESS:    Yeah. What am I looking for?

17                      MR. SPROUL:    This is -- for the record, this  
18 is an excerpted -- an excerpt from the final environmental  
19 impact statement dated November 2012 prepared in  
20 conjunction with the Stanford Habitat Conservation Plan.

21   And you can look through it and tell me  
22 whether you agree with what you what I just said, and let  
23 me know when you've looked through it enough to, you  
24 know, feel familiar with -- you know, generally familiar  
25 with the document.

1 I'm not asking you to read it word for word.

2 THE WITNESS: Right. My only first one is it  
3 seems to be dated October 2011.

4 MS. FLANAGAN: Well, this is what I sent to  
5 Mike yesterday, and I -- I don't know what you're giving  
6 him.

7 Is that from the last deposition?

8 MR. SPROUL: You can still look at Exhibit 1,  
9 but we're going to give you an Exhibit 2.

10 MS. FLANAGAN: Yes.

11 MR. SPROUL: So this will be Exhibit 2, but  
12 you can look at both (Indicating).

13 (Launer Exhibit No. 2 was  
14 marked for identification.)

15 MS. FLANAGAN: 1, the cover sheet is 2011 and  
16 the other is 2012, right?

17 MR. SPROUL: Yes.

18 MS. FLANAGAN: So he -- you want him to look  
19 through Exhibit 2?

20 MR. SPROUL: Yeah, Exhibit 2. Look at that.

21 THE WITNESS: (Complying) Again, what am I  
22 looking for?

23 MR. SPROUL: Q. Just -- is this is a  
24 document that you're familiar with?

25 A. I must admit I've never read the Final EIS.

1           **Q.           Did you read any portion of it?**

2                   MS. FLANAGAN:    And again, is -- is this an  
3 excerpt?

4                   MR. SPROUL:       This is an excerpt.

5                   MS. FLANAGAN:    The last page and --

6                   MR. SPROUL:       Yes. This is an excerpt from  
7 the --

8                   THE WITNESS:     I would have seen small pieces  
9 of the draft. I was -- this is a federal document.

10                  MR. SPROUL:    Q.    Okay. When did you see  
11 small portions of this draft?

12                  A.       It would have been before the final.

13                  **Q.           And who showed it to you?**

14                  A.       You know, I got to backtrack. I'm not sure I  
15 ever specifically saw parts of the draft.

16                         There were questions being asked. The federal  
17 agencies would ask us questions to Catherine Palter,  
18 Shawn Shopod and I would get occasional questions, but  
19 I'm not quite sure -- I don't remember specifically  
20 seeing a section of the draft.

21                         I just can't seem to remember --

22                  **Q.           Okay. Okay.**

23                  A.       -- all the documents.

24                  **Q.           So Catherine Palter would ask you questions**  
25 **and you would provide her answers to questions related to**

1 **the Draft EI -- EIS?**

2 A. She would ask questions. I'm not quite sure  
3 the ultimate destination. So I was not the point of  
4 contact with the agencies.

5 **Q. The point of contact was Ms. Palter?**

6 A. Yes.

7 **Q. And do you recall giving Ms. Palter any**  
8 **answers to questions she posed related to the EIS in**  
9 **writing?**

10 A. I don't actually recall.

11 **Q. Okay. Are you aware that Stanford's 2009**  
12 **Draft Habitat Conservation Plan included Searsville**  
13 **related activities? Are you familiar with that?**

14 A. Yes. The early versions of HCP did.

15 **Q. Did you help draft any portion of that HCP?**

16 MS. FLANAGAN: Which HCP?

17 MR. SPROUL: The earlier HCP, as I just said.

18 MS. FLANAGAN: You're saying 2009.

19 Is that the one you're referring to?

20 MR. SPROUL: The July 2009 HCP that included  
21 references to Searsville related activities.

22 **Q. Did you have any role in drafting any portion**  
23 **of that HCP?**

24 A. Related to Searsville activities or just the  
25 HCP in general?

1 Q. Let's start broader. The HCP in general.

2 Did you have any role?

3 A. Yes.

4 Q. Did you have any role with respect to the  
5 Searsville specific activities?

6 A. Yes.

7 Q. And what was your role?

8 A. It would have been to -- first off, to -- are  
9 there any maintenance typically issues associated with  
10 Searsville that could potentially cause a take, and I  
11 would have been asked that question, if I knew of any.

12 Q. And "cause take," can you explain what you --  
13 what you mean by that?

14 A. If you're getting an incidental take permit,  
15 you can only get a permit if there is a -- some sort of  
16 take at least potential -- potentially involved with an  
17 action.

18 So trying to catalog all potential sources of  
19 take is an exercise we conducted.

20 Q. And that's all potential sources of take of  
21 species protected by the Endangered Species Act?

22 A. Or that were potentially covered by the HCP.

23 Q. So is answer is yes, covered by -- protected  
24 by the Endangered Species Act or addressed by the HCP?

25 MS. FLANAGAN: Mischaracterizes his

1 testimony.

2 MR. SPROUL: Well, let him answer.

3 THE WITNESS: As a -- of proposed covered  
4 species. If it was causing a take, the proposed covered  
5 species.

6 MR. SPROUL: Q. And the species that were  
7 covered by the HCP were all species that were protected  
8 by the Federal Endangered Species Act?

9 A. Which version of the HCP?

10 Q. **The - all these questions right now until**  
11 **switch are the July 2009 HCP.**

12 A. Okay. The answer's no.

13 Q. **What -- some of the species, though, covered**  
14 **by the July 2009 HCP were -- are federally protected by**  
15 **the Federal Endangered Species Act; is that correct?**

16 A. Yes.

17 Q. **And what species were those?**

18 A. California red-legged frog, California  
19 salamander and Central Coast Steelhead.

20 Q. **And did the July 2009 HCP also cover San**  
21 **Francisco garter snake?**

22 A. I would have to look at that document.

23 Q. **Do you recall whether the -- whether your --**  
24 **your work involved any assessment of the impact of**  
25 **Searsville related activities on any of the -- these**



1 **species, California red-legged frog, Central Coast --**  
2 **California Central Coast Steelhead, San Francisco garter**  
3 **snake?**

4 A. So your question is?

5 **Q. Did your work, what you did for the July 2009**  
6 **HCP include anything related to those three species that**  
7 **I just mentioned?**

8 A. The -- again, I'm not sure of when the garter  
9 snake was included in the HCP discussions. My work would  
10 have been the other species to come up with some, again,  
11 inventorying possible actions or activities that could  
12 cause take.

13 **Q. That could cause take of any of those three**  
14 **species?**

15 A. Yes.

16 **Q. And do you recall identifying any**  
17 **activities -- Searsville related activities that could**  
18 **potentially cause take of any of those three species?**

19 A. The maintenance of the activity -- of the  
20 facility could cause a -- a low level of non-lethal take.

21 **Q. Maintenance of the facility.**  
22 **Which facility are you talking about in that?**

23 A. I thought we were talking about Searsville.

24 **Q. Searsville related activities. Well, let's --**  
25 **let's back up. Let's -- fair point. Let's get a**

1 definition of what we're talking about.

2 So the phrase "Searsville related activities,"  
3 does that have meaning to you?

4 A. Not particularly. It's broad. I would need  
5 to --

6 Q. I'd like to direct your attention to page 2-14  
7 of Exhibit 2. The heading that says: "2.10, Searsville  
8 Dam and Reservoir," the second full paragraph, the first  
9 sentence.

10 Could you read that sentence and then let me  
11 know when you've finished reading it?

12 A. (Complying).

13 A. The first sentence?

14 Q. Yes.

15 A. (Complying) Yes. I've read the sentence.

16 Q. Okay. Do you recall being told or  
17 understanding that the July 2009 draft HCP addressed the  
18 following Searsville related activities: Water diversion  
19 measures, pipeline valve flushing measures and dredging  
20 measures?

21 A. Do I remember that they were in the 2009  
22 draft?

23 Q. Yeah. Do you remember that?

24 A. Not specifically, but these are features that  
25 were involved with drafts of that era.

1 Q. Okay. So would you use the term "Searsville  
2 related activities" to then refer to those three types  
3 of -- or one -- yeah, three types of activities?

4 A. It's not -- Searsville related activities sort  
5 of could include -- include those, but it's -- it's --  
6 Searsville related activities potentially is a much  
7 broader category.

8 Q. Okay. What -- what else could be included in  
9 Searsville related activities?

10 A. Anything in the vicinity of Searsville, from  
11 county road fixing to class field trips nearby.

12 Q. Would maintenance of Searsville Dam itself  
13 constitute a Searsville related activity in your mind?

14 A. Yes.

15 Q. And would maintenance of the Jasper Ridge Road  
16 crossing that's near the confluence of Corte Madera Creek  
17 and Bear Creek also constitute a Searsville related  
18 activity in your mind?

19 A. No.

20 Q. And why would that not be included?

21 A. I don't see a connection between that and  
22 Searsville.

23 Q. Do you recall whether as part of this HCP work  
24 in July 2009 you were asked to give any assessment of the  
25 Jasper Ridge Road crossing?

1 MS. FLANAGAN: Excuse me. When you're  
2 referring to Jasper Ridge Road crossing, is that the --  
3 the cement crossing, the concrete crossing?

4 You're giving it a name that's not the name  
5 that's used. I just want to make sure we're talking  
6 about the same thing.

7 MR. SPROUL: Yeah. I just defined it as the  
8 crossing that's near the confluence of Corte Madera Creek  
9 and -- and Bear Creek.

10 **Q. Do you -- do you know what I'm talking about?**

11 A. I know there is a crossing there.

12 **Q. And what do you call that crossing?**

13 A. I typically call it the cement crossing.  
14 Others have called it the concrete crossing. I'm sure  
15 there are other -- I don't know that it has a specific  
16 name, real name.

17 **Q. Is it agreeable to you to refer to it as the**  
18 **Jasper Ridge Road crossing for purposes of our discussion**  
19 **today?**

20 MS. FLANAGAN: Is it necessary that you call  
21 it something that's not on the list of things he says  
22 he's familiar with it being called?

23 MR. SPROUL: No, it's not. We can call it --  
24 you tell me what you would like to call it.

25 THE WITNESS: I would -- only because it's

1 Jasper Ridge Road crossing, that's what he's talking  
2 about. Concrete crossing, cement crossing is fine.

3 MR. SPROUL: Q. The cement crossing?

4 A. There's only one, so yeah. That's fine.

5 Q. Okay. Should I say anything like the -- the  
6 cement crossing near Bear Creek or just the cement  
7 crossing's good enough?

8 A. Unless I -- unless we switch around, but we're  
9 talking about that one downstream of the confluence of  
10 Bear and Corte Madera Creeks.

11 Q. Yes. Cement crossing it is.

12 So my question was: Has anyone at Stanford  
13 ever asked you to give an assessment -- no, no, sorry.

14 My question was: In the context of this --  
15 this July 2009 HCP work, did anyone ask you to give a --  
16 an assessment of the cement crossing?

17 A. No.

18 Q. Have you given one --

19 A. Not that I recall.

20 Q. Have you given any before or since, any  
21 assessment of the cement crossing?

22 MS. FLANAGAN: With respect to what? An  
23 assessment of what?

24 MR. SPROUL: Any assessment at all.

25 Q. Have you done any assessment of that?

1 A. Aside that it's present, not really, no.

2 **Q. So are you aware that in later versions of the**  
3 **HCP, Stanford deleted the Searsville related activities**  
4 **that we've been discussing?**

5 A. Yes.

6 **Q. Do you know who made that decision?**

7 A. No.

8 **Q. Were you consulted in that decision?**

9 A. Yes.

10 **Q. Who consulted with you?**

11 A. We had a group working on the HCP and came up  
12 with that context.

13 **Q. Who were members of that group?**

14 A. Catherine Palter, Charles Carter, who's now  
15 retired, Shawn Shopod.

16 MS. FLANAGAN: I'm going to just stop you  
17 there and alert Chris to the fact that there were lawyers  
18 involved in the group, so we'll need to be careful about  
19 questions that you might ask.

20 MR. SPROUL: It's fair. If I ask -- if this  
21 was -- if any communications were between an -- an  
22 attorney and a client or they were done in anticipation  
23 of Stanford getting sued, I'm not asking you for the  
24 content of those conversations.

25 But the fact that they occurred and he was

1 there as opposed to the content, I'm asking you for that,  
2 and any communications among group members that were not  
3 with an attorney or at the direction of an attorney, I'm  
4 asking you for that.

5 **Q. Okay?**

6 A. Almost all the discussions about the HCP were  
7 under the direction of Sean.

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

9 A. She's a -- our attorney who was shepherding  
10 part of the HCP process.

11 **Q. Have you given me all the names of the people  
12 who are in the group?**

13 A. Many other people were consulted because  
14 it's -- the HCP was meant to cover the entire university.  
15 So there's a large list of people who contributed --  
16 contributed to the HCP.

17 **Q. Apart from something that an attorney told  
18 you, do you know why Stanford dropped the Searsville  
19 related activities from the HCP?**

20 A. It was -- it's a very complex situation, one  
21 that did not appear to be -- needed much more study to  
22 come up with a solution.

23 **Q. When you say "it was a very complex  
24 situation," did you mean --**

25 A. It is a very complex situation. I said it

1 was, but it is. It still is.

2 Q. And the complex situation meaning Searsville  
3 Dam?

4 A. Dam and reservoir.

5 Q. So I'd like to direct your attention to the  
6 next page, 2-15. So the first full paragraph that begins  
7 with "with."

8 A. Mm-hmm.

9 Q. And could you please read that paragraph and  
10 let me know when you've had a chance to look it over?

11 A. (Complying) Yes. I've read it.

12 Q. Okay. There's a reference here in this  
13 sentence to "water diversion restrictions." It says:  
14 "Water diversion restrictions at the Searsville intake  
15 would not be implemented. So it is anticipated that  
16 diversions will continue as historically performed; i.e.  
17 the no action alternative."

18 Do you recall Stanford making a determination  
19 after the July 2009 HCP to not implement water diversion  
20 restrictions?

21 A. There -- as far as I know, there have never  
22 been any water -- water restriction -- water diversion  
23 restrictions that were adopted or actually recommended --  
24 recommended, adopted.

25 As part of the HCP, there were some that were



1 recommended, but they were taken out is what that refers  
2 to.

3 **Q. Do you know who recommended them?**

4 A. They were a result of discussion between  
5 Stanford and Marine Fisheries.

6 **Q. When you say "Marine Fisheries," are you  
7 referring to the National Marine Fishery Service?**

8 A. Yes, Gary Stern.

9 **Q. Do you know Gary Stern well?**

10 A. I know Gary Stern.

11 **Q. Have you had personal meetings with Gary  
12 Stern?**

13 A. I've had -- in professional settings, yes.

14 **Q. How many meetings?**

15 A. I don't know. Fifteen.

16 **Q. And can you give me the timeframe for your  
17 meetings with Mr. Stern?**

18 A. Early 2000s would have been the start,  
19 potentially late 1990s, but I don't know specifically.

20 **Q. Have you met with him since the early 2000s?**

21 A. Yes.

22 **Q. When was your most recent meeting with Mr.  
23 Stern?**

24 A. Last September, August.

25 **Q. And what was the reason for your meeting with**

1 **Mr. Stern?**

2 A. We were meeting with National Marine Fisheries  
3 and Cal Fish -- Cal Fish and Wildlife concerning interim  
4 measures.

5 **Q. And what interim measures were those?**

6 MS. FLANAGAN: We're talking about in August  
7 or September --

8 MR. SPROUL: Yes.

9 MS. FLANAGAN: -- of last year?

10 MR. SPROUL: We're talking -- we're talking  
11 about what he just referred to.

12 MS. FLANAGAN: Well, he talked about meetings  
13 starting in the early 2000s.

14 MR. SPROUL: He did say interim measures.

15 **Q. You last met with him in last September about  
16 interim measures? Yes?**

17 A. The date I may be off. It could have been --  
18 it was plus or minus somewhere in there. It was to  
19 discuss interim measures, yes.

20 **Q. And when -- what were those interim measures?**

21 A. While the Searsville alternative study was  
22 going on.

23 **Q. So measures that Stanford could implement or  
24 might consider implementing as interim measures until the  
25 Searsville community process is complete?**

1 A. Yes.

2 **Q. And what were the measures that were then**  
3 **discussed as possible interim measures?**

4 A. In the -- in the September meetings, there  
5 were some discussion of -- I'm trying to remember. We've  
6 had many meetings about many things.

7 The -- the -- basically the experimental  
8 nature of the interim measures that were trying to gather  
9 information to -- to aid in actually the Searsville  
10 process, and we have a lot of proposed work by URS  
11 primarily to look at creek conditions under various  
12 flow -- creek conditions under various flow rates and  
13 installing water monitoring stations.

14 There was also discussion about screening the  
15 outflow of Searsville Dam for -- during lowest flow  
16 periods for non-native species, and there would have been  
17 a discussion of the concept of bypass flows. And  
18 something called ramping.

19 **Q. Okay. Can you explain what you mean by**  
20 **"ramping" in that -- in that -- as you just used it?**

21 A. Yeah. I had never heard it, either. It's a  
22 diversion that you start incrementally and a little bit  
23 of time ramp up and ramp down as opposed to an on/off.

24 **Q. And the idea in having ramping flows or**  
25 **managing flow diversions from the creek to achieve a**

1 **ramping effect is to avoid abrupt changes in flow in the**  
2 **creek that could then strand Steelhead; is that right?**

3 A. Presumably. I didn't -- I didn't originate  
4 the ramping discussion. So you would have to ask them  
5 exactly what's being targeted.

6 **Q. And who -- who originated the ramping**  
7 **discussion?**

8 A. I think the agencies.

9 **Q. This -- this meeting that you referred to last**  
10 **September, at whose request was the meeting convened?**

11 A. I think it was Stanford's.

12 **Q. And who at Stanford made the request?**

13 A. Essentially the working group.

14 **Q. Do you know whether that was a request**  
15 **specifically made by Catherine Palter?**

16 A. Tom Zigterman is traditionally our point of  
17 contact, but I don't know specifically in this case.

18 **Q. Do you know whether there was any e-mail**  
19 **traffic generated in conjunction with this meeting,**  
20 **either before the meeting or afterwards?**

21 A. Can you specify?

22 **Q. Yeah.**

23 **Do you know whether there were any e-mail**  
24 **messages that you were copied on or that you sent or**  
25 **received -- let's start with before the meeting --**

1 **related to the meeting?**

2 A. Yes.

3 **Q. And do you recall how many such messages?**

4 A. No.

5 **Q. Was it more than one?**

6 A. Likely. I don't remember.

7 **Q. Did you write the message that you're thinking**  
8 **of?**

9 A. No.

10 **Q. Do you know who did?**

11 A. I believe Tom Zigterman would have written a  
12 message, the message.

13 **Q. Do you recall who else received the message?**

14 A. Specifically, no. I don't recall offhand.

15 **Q. Do you recall anything about what the message**  
16 **said?**

17 MS. FLANAGAN: I'm just going to caution you  
18 if there were attorneys involved --

19 THE WITNESS: Robert Donlan was involved, a  
20 wildlife attorney, so --

21 MR. SPROUL: I hardly think that a message  
22 from Robert Donlan to -- to agencies as being privileged.

23 MS. FLANAGAN: We weren't limiting it to  
24 agencies, so that's -- you want to limit it to asked  
25 e-mails to the agencies?

1 MR. SPROUL: Well, I asked about --

2 MS. FLANAGAN: You asked about all e-mails.

3 MR. SPROUL: You're right. You're right.

4 **Q. Do you know whether this message that you're**  
5 **referring to went to NMFS?**

6 A. A proposal would have pre -- I actually don't  
7 know, to tell you the truth.

8 **Q. Okay. Do you know who would know?**

9 A. Tom Zigterman would know.

10 **Q. Okay. Thanks.**

11 A. Sorry.

12 **Q. You used the term "bypass" or "bypass flow" as**  
13 **one of the interim measures discussed at the meeting.**

14 **Is that correct?**

15 A. Yes.

16 **Q. And what did you mean by "bypass" or "bypass**  
17 **flow" in that -- as you just used it?**

18 A. It would be a -- an agreed upon -- in this  
19 case testing of a situation of a flow to -- to have a  
20 minimum amount of flow that is allowed to go by if there  
21 is diversion occurring.

22 There's -- there's no control most of the year  
23 and it's completely controlled by weather.

24 **Q. And Stanford is not currently releasing any**  
25 **flows from Searsville Reservoir to augment environmental**

1     **conditions downstream of Searsville Dam; is that correct?**

2           A.           Clarify that a little.

3           **Q.           Yeah. Stanford's not currently releasing any**  
4 **bypass flows past Searsville Dam specifically to benefit**  
5 **environmental conditions downstream of the dam?**

6           MS. FLANAGAN:    I'm going to object as vague  
7 and ambiguous as to what "releasing bypass flows" means.

8           MR. SPROUL:    Q.    Okay. Do you understand  
9 the question?

10          A.           Not particularly.

11          **Q.           Okay. Well, Stanford has bypass flows past**  
12 **the Los Trancos diversion point; is that correct?**

13          A.           Yes.

14          **Q.           Explain to me what is the bypass flow past the**  
15 **Los Trancos diversion point.**

16          A.           It's a complex actual schedule of bypass flows  
17 that I don't have in front of me that was determined  
18 after lengthy discussions with the state and federal  
19 agencies.

20          **Q.           But -- but in a nutshell, tell me if this is**  
21 **fair. The concept is that Stanford lets some water go**  
22 **past the diversion point that it in the past it might**  
23 **have diverted for on-campus use to leave more water in**  
24 **the -- in Los Trancos Creek to help Steelhead.**

25                        **Is that the idea?**

1 MS. FLANAGAN: I'm going to object to the  
2 characterization of what Stanford used to do and also  
3 what the purpose of the bypass flow is.

4 If you can answer it, go ahead.

5 THE WITNESS: A bypass is only meaningful  
6 when there's a diversion going on, because otherwise,  
7 there's to be no control over the -- the outflows are  
8 water going past which sets a minimum flow rate for a  
9 series of flow rates, depending on the flow conditions of  
10 the creek, and those are to allow sufficient water  
11 downstream for some factor, feature.

12 MR. SPROUL: Q. But as a result of the --  
13 the bypass practice that Stanford has adopted at -- at  
14 Los Trancos diversion point, it's now taking less water  
15 out of the creek and leaving more water in the creek; is  
16 that correct?

17 A. Probably not that simple.

18 **Q. And why is it not that simple?**

19 A. Because when the Los Trancos facility was  
20 rebuilt with that -- with those bypass -- so -- I need  
21 some water. There we go. I'm sorry.

22 The amount of water, the reduced structure was  
23 both very much more fish friendly for fishes that pass  
24 that structure and it was potentially more efficient at  
25 taking water and it was a fix in the structure.



1                   So I don't know that A, Stanford lost water,  
2                   or B, more water actually went down the creek.

3           **Q.           But the idea at the Los Trancos diversion**  
4 **point now, how Stanford operates it now is to manage it**  
5 **in a way to deliberately leave a certain amount of water**  
6 **in Los Trancos Creek; is that correct?**

7           A.           It -- it sets a minimum bypass flow, yes.  
8           There are a couple of bypass -- minimum bypass flows  
9           depending on what's going on in the creek.

10          **Q.           Okay. And Stanford's doing something similar**  
11 **at the San Francisquito pump station that's also managing**  
12 **diversions that goes to the San Francisquito pump station**  
13 **to leave a certain set flow or minimum flow in San**  
14 **Francisquito Creek?**

15          A.           Yes.

16          **Q.           Is Stanford doing anything analogous to that**  
17 **at Searsville Dam?**

18          A.           Interim measures, it's been discussed and not  
19           been formalized to try out some of the bypass flows, but  
20           nothing.

21                    It would be as experimental and voluntary  
22           basis to try it out.

23          **Q.           Prior to the September meeting, had Stanford**  
24 **actually done anything at Searsville Dam that would be**  
25 **analogous to what it does at San Francisquito pump**

1     **station or the Los Trancos Creek in terms of bypass flow?**

2           A.           Not that I know of.

3           **Q.           Has Stanford done anything since the September**  
4 **meeting that we've been discussing that would be --**  
5 **constitute an attempt to have a bypass flow past**  
6 **Searsville Dam?**

7           A.           Many ongoing discussions with the agencies.

8           **Q.           But no action yet?**

9           A.           There's no flow, per se. We haven't had much  
10 rain, so even if something had been placed, nothing would  
11 have happened.

12          **Q.           Do you know whether Stanford is going to**  
13 **actually implement some type of bypass practice or**  
14 **operation at Searsville Dam if it does start raining?**

15          A.           I don't know.

16          **Q.           Do you know who would know?**

17          A.           Tom Zigterman will know.

18          **Q.           Have you been involved in discussions since**  
19 **September about this bypass concept with people at**  
20 **Stanford?**

21          A.           Yes.

22          **Q.           And can you tell me who those people are?**

23          A.           Again, Rob Donlan would be involved with  
24 those.

25               MS. FLANAGAN:     So you can identify who you've

1 spoken with, just not the content --

2 THE WITNESS: All right.

3 MS. FLANAGAN: -- if attorneys are involved  
4 or sense of direction of attorneys.

5 He keeps saying Rob Donlan, who is an  
6 attorney.

7 MR. SPROUL: I know Rob Donlan.

8 THE WITNESS: Tom Zigterman, Catherine  
9 Palter, Jean McGowan, Philippe Cohen.

10 MR. SPROUL: Q. Anyone else?

11 A. No. I'm trying to recreate meetings. That's  
12 the best I can remember right now.

13 **Q. Have there been any meetings that were**  
14 **convened to talk -- to discuss just this one topic or**  
15 **were there meetings -- multi topic meetings?**

16 A. We have had many meetings.

17 **Q. Do you know when Stanford will make a decision**  
18 **about the bypass flow question?**

19 A. Potentially Friday. As an experimental  
20 action, not permanent.

21 **Q. Do you know who will attend that Friday**  
22 **meeting?**

23 A. I think it's a teleconference.

24 **Q. Do you know who will be on that tele-**  
25 **conference?**

1           A.           I must admit. I didn't open that up. I was  
2           distracted.

3           **Q.           Do you know whether it will include Robert**  
4           **Donlan? Don't know?**

5           A.           No, don't know. Sorry.

6           **Q.           You also mentioned as an interim measure**  
7           **screening of the outflow from Searsville Dam as an**  
8           **interim measure.**

9                       **Can you explain what you meant by that?**

10          A.           During low flow periods, the flow out of  
11          Searsville goes through some spillways, which are just  
12          kind of gates, if you will, at the top of the dam where  
13          the water is directed out, and currently they're just  
14          opened.

15                       But it is possible -- it might be possible to  
16          screen them so that animals in the Searsville --  
17          primarily animals in Searsville fishes could not go over  
18          the dam through the spillway and into the creek  
19          downstream.

20          **Q.           And do you know whose idea that was?**

21          A.           Not -- no. I haven't thought about that, but  
22          I forget actually where it came up.

23          **Q.           You don't recall whether it was the agencies**  
24          **that suggested that?**

25          A.           No. I don't -- I cannot point a finger to a

1 specific -- it was not me.

2 **Q. Earlier when we were discussing what -- what**  
3 **government agency was involved in the meeting, you**  
4 **identified National Marine Fisheries Service; correct?**

5 A. Yes.

6 **Q. Was California Department of Fish and Wildlife**  
7 **also at the September meeting?**

8 A. Yes.

9 **Q. And who from CDFW was there?**

10 A. Cory Gray, Corrine Gray.

11 **Q. And do you know Ms. Gray well?**

12 A. No.

13 **Q. Have you been at other meetings with Ms.**  
14 **Gray?**

15 A. She typically attends the Searsville Advisory  
16 Group meetings, so she's been at a few of those.

17 **Q. Does anyone from National Marine Fishery**  
18 **Service attend the Searsville advisory meetings?**

19 A. Not so far.

20 **Q. Stanford invited NMFS, but they declined to**  
21 **come; is that correct?**

22 A. That was my impression.

23 MS. FLANAGAN: Chris, we've been going about  
24 an hour and a half. So when you get to a breaking point,  
25 let's take a short break. You don't have to do it now.

1 Just when you get to a good point.

2 MR. SPROUL: Okay. Fine.

3 Q. You're doing okay?

4 A. Except for my voice.

5 Q. Okay. The -- do you have an opinion about  
6 whether the -- the screening of the outflow of the dam is  
7 a good idea or a bad idea?

8 A. No.

9 Q. Do you ever an opinion about whether the  
10 bypass flow is a good idea or bad idea at Searsville?

11 A. No.

12 Q. And do you have an opinion about whether  
13 ramping flow -- flows, implementing ramping flows at  
14 Searsville is a good idea or bad idea?

15 A. No.

16 Q. Have you heard anyone at Stanford express an  
17 opinion about any of those three things that I just  
18 mentioned, screening, bypass or ramping?

19 MS. FLANAGAN: In terms of whether they're  
20 good or bad?

21 MR. SPROUL: Yeah. Whether they're good or  
22 bad.

23 THE WITNESS: Ramping, bypass or screening,  
24 somebody's opinion if they're good or bad. No specific  
25 opinion, no.

1 MR. SPROUL: Q. Do you know whether  
2 Stanford is going to implement the screening proposal?

3 A. No.

4 Q. Do you know whether that's also going to be  
5 **discussed on Friday?**

6 A. I think so.

7 Q. Do you recall on any -- Ms. Gray at CDFW  
8 **expressing any opinions about any of the measures we've**  
9 **just been discussing?**

10 A. She was focused on bypass flow and ramping.

11 Q. **And do you recall what she had to say about**  
12 **bypass flow of ramping?**

13 A. Specifically, no. She wanted us to look into  
14 testing some values, and she had some values -- she  
15 forwarded something some information from other sources  
16 from other areas.

17 Q. **And the information that forwarded, that was**  
18 **in writing?**

19 A. Both verbally and in writing, yes.

20 Q. **And was it voluminous material, short, long?**

21 A. It may have been just a reference cite to go  
22 look at. I don't remember getting any actual  
23 information.

24 Q. **Do you recall whether it was a reference that**  
25 **you were familiar with?**

1 A. A reference that I was not familiar with.

2 **Q. Okay. Do you recall whether Stanford has**  
3 **looked up those references and is using them?**

4 A. Stanford definitely looked up references. Me  
5 personally, I did not.

6 **Q. Okay. Do you recall any recommendations or**  
7 **views expressed by Gary Stern about these measures that**  
8 **we've been discussing?**

9 A. Can you clarify that a little?

10 **Q. Yeah.**

11 **Did -- did Gary say at this meeting anything**  
12 **about whether he thought it as a good idea or bad idea or**  
13 **whether he thought any of the measures that we've been**  
14 **discussing were good ideas or bad ideas, bypass, ramping,**  
15 **screening?**

16 A. And the studies?

17 **Q. And the studies, sure.**

18 A. My impression is Gary was favorable.

19 **Q. Favorable to all four?**

20 A. Yes.

21 **Q. And the first thing, the studies, can you**  
22 **explain a little bit more about what those are?**

23 A. Those are -- will be finalized actually coming  
24 up, as well. So there's not specifically a -- an agenda  
25 for the studies.



1           **Q.           Is that additional study work in the San**  
2 **Francisquito Creek watershed to further analyze the**  
3 **endangered species issues? Is that fair?**

4           A.           That's a little overstating.

5           **Q.           Why is that overstating?**

6           A.           Spatially it will be more restrained than the  
7 entire watershed. It's downstream, and particularly near  
8 downstream.

9           **Q.           So that the studies will focus on the**  
10 **downstream reach of Corte Madera Creek below Searsville**  
11 **Dam?**

12          A.           Again, it's not been finalized.

13          **Q.           But it will include that area?**

14          A.           Again, not been finalized.

15          **Q.           Do you think it should include that area?**

16          A.           Do I think it should?

17          **Q.           Yes.**

18          A.           It's the area just downstream of the dam.

19          **Q.           Yes.**

20          A.           So it -- if you're going to see an impact of  
21 changes, you would study right there.

22          **Q.           Let's ask one other question and then we can**  
23 **take a break.**

24                        **It's -- what about upstream of Searsville Dam?**  
25 **Do you think that area should be included in any studies**

1 **that you're referring to?**

2 A. These interim measure studies?

3 **Q. Yes.**

4 A. Unsure. Unsure.

5 **Q. And why are you unsure?**

6 A. I'm not -- they're being looked at as part of  
7 the Searsville alternative study, so I'm not sure that  
8 interim measures would do anything, what you would do up  
9 there.

10 There were some of the monitoring stations put  
11 up there, so in that respect, there are some up there,  
12 but more than that, I don't know of any, what count as  
13 interim measures.

14 MR. SPROUL: Okay. Why don't we take a  
15 break. Okay.

16 (Brief recess).

17 MR. SPROUL: Back on the record.

18 **Q. Do you recall -- I think I asked you**  
19 **whether -- whether CDFW or Ms. Gray expressed any view**  
20 **object the studies at the -- the September meeting, and I**  
21 **think you said she focused on bypass and ramping.**

22 **Did I get that right?**

23 A. Yes. Those are also studies, but they're not  
24 the studies down in the creek downstream.

25 **Q. Okay. Do you recall whether she had any**

1 **suggestions about the studies in the creek that you just**  
2 **referred to?**

3 A. I don't recall her having comments about them,  
4 with the exception that they would be finalized at a  
5 later date.

6 **Q. Okay. Do you know whether these studies are**  
7 **going to be a topic at this Friday meeting that you**  
8 **referred to?**

9 A. Again, the Friday -- all I know is it was a  
10 teleconference call, and I don't know the content of that  
11 meeting, so I don't know when they'll discuss that with  
12 Corrine.

13 **Q. Okay. Do you know whether any of these**  
14 **studies are actually being implemented at this point by**  
15 **Stanford?**

16 A. The -- the water monitoring gauges were put  
17 in, but this last year's been so dry, we actually have --  
18 none of these new studies have been able to get started.

19 **Q. So part of this study included adding more**  
20 **monitoring gauges for monitoring creek flow?**

21 A. Yes.

22 **Q. Do you know whether these gauges will monitor**  
23 **any other parameter besides water flow?**

24 A. No.

25 **Q. No, they won't, or --**

1 A. No. I don't know.

2 **Q. Do you know who would know?**

3 A. Tom Zigterman.

4 **Q. Do you know who picked the monitoring**  
5 **location?**

6 A. Consultants Balance Hydrologic. Potentially  
7 working with URS. I don't know if it's only Balance.

8 **Q. Do you know who at Balance Hydrologic was**  
9 **involved with designing where the monitoring gauges**  
10 **should go?**

11 A. Our contact at Balance Hydrologic is Jonathan  
12 Owens.

13 **Q. Have you had any direct communications with**  
14 **Mr. Owens?**

15 MS. FLANAGAN: About these locations of the  
16 gauges?

17 MR. SPROUL: Sure. We'll start with that,  
18 about these loc -- location of these gauges.

19 THE WITNESS: No.

20 MR. SPROUL: Q. have you communicated with  
21 Mr. Owens about anything else?

22 A. Yes.

23 **Q. And what other things have you communicated**  
24 **with Mr. Owens about?**

25 A. Jonathan Owens has -- we're in contact with

1 Jonathan as part of the working group for Searsville  
2 alternative study.

3 **Q. And what is Mr. Owens doing as part of the**  
4 **working group?**

5 A. He's a consultant.

6 **Q. A consultant on stream hydrology?**

7 A. Yes. Hydrology, geomorphology.

8 **Q. And do you have an understanding of what those**  
9 **terms mean, hydrology and geomorphology?**

10 A. Layman's.

11 **Q. And what's your understanding?**

12 A. Hydrology's study more to do with the water  
13 flow. Geomorphology has more to do with what happens to  
14 the -- the creek channel, and I don't know if that's how  
15 Jonathan describes himself.

16 **Q. Do you have any knowledge about whether stream**  
17 **geomorphology is important for Steelhead habitat?**

18 A. Specifically, no.

19 **Q. General -- general information as opposed to**  
20 **specific?**

21 A. Can you narrow it down?

22 **Q. Well, I've been told that Steelhead like pool**  
23 **and riffle complex, which is a geo -- an aspect of**  
24 **geomorphology; isn't it?**

25 A. Maybe. But yes, I've been told Steelhead like

1 riffle and pool complex.

2 **Q. You -- you hedged that maybe that's a**  
3 **geomorphology.**

4 A. I don't know exactly how they define their --  
5 their specialties.

6 **Q. Okay. Was anyone from Balance Hydrologics at**  
7 **the September meeting that you talked about?**

8 A. I don't think so.

9 **Q. And was anyone from URS at the September**  
10 **meeting that you talked about?**

11 A. I don't recall. I would have to check the --  
12 I don't have records. I would have to check records.

13 **Q. Do you know whether there were any minutes**  
14 **produced of this September meeting that we've been**  
15 **discussing?**

16 A. Not that I know of.

17 **Q. Do you know whether there was any subsequent**  
18 **e-mails sent to the -- either CDFW or NMFS about this**  
19 **meeting after the meeting?**

20 A. About the meeting?

21 **Q. Yes.**

22 A. I don't think about the meeting.

23 **Q. About the interim measures that were discussed**  
24 **at the meeting?**

25 A. There has been ongoing negotiations or

1 discussions with agencies is a better word.

2 **Q. And who's been participating in those ongoing**  
3 **discussions or negotiations?**

4 A. Usually myself, Tom Zigterman, Rob Donlan,  
5 Catherine Palter. I'm just again trying to put meetings  
6 together. That's all I'm recalling right now.

7 **Q. And who has been participating for NMFS in**  
8 **these ongoing discussions or negotiations?**

9 A. Gary Stern.

10 **Q. Anyone else?**

11 A. No.

12 **Q. Has anyone at CDFW been participating in these**  
13 **ongoing discussions or negotiations?**

14 A. Corrine.

15 **Q. Anyone else?**

16 A. Not that I know of, but I don't know if  
17 they're in.

18 **Q. Have these ongoing discussions or negotiations**  
19 **been on the phone?**

20 A. Yes.

21 **Q. No further in-person meetings?**

22 A. Again, Corrine I think showed up to the  
23 advisory, but that was not a meeting, no.

24 **Q. Are you aware of any e-mail messages exchanged**  
25 **by any of these individuals that you've identified as**

1 **participating in these discussions or negotiations? Any**  
2 **e-mail messages about those discussions or negotiations?**

3 A. Between -- can you specify a little bit more?

4 **Q. Yeah.**

5 **Have there been any e-mails exchanged between**  
6 **you, Tom Zigterman, Rob Donlan, Catherine Palter, Gary**  
7 **Stern and/or Corrine gray concerning these ongoing**  
8 **discussions or negotiations?**

9 A. All at once or in subpart?

10 **Q. Subparts, any messages.**

11 A. Certainly there's been internal Stanford with  
12 Rob Donlan involved, and I don't remember either way the  
13 communications, if any, that we've had with the agencies  
14 via e-mail.

15 That's because I don't recall. I don't  
16 offhand remember.

17 **Q. I don't think I've asked you this one, but**  
18 **whether you have any specific opinion about whether**  
19 **Stanford should do the studies that are being discussed**  
20 **as interim measures. I think that's one we missed.**

21 A. Academic studies are always good. We needed  
22 to have specific questions we're addressing for studies.  
23 So that in the studies produced by the alternative study  
24 are good.

25 The interim measures studies are -- have a



1 prelude early version of that, so studies can provide  
2 useful information.

3 **Q. You said that "we need specific questions to**  
4 **answer to -- to design good studies"; is that correct?**

5 A. Yes.

6 **Q. Have you formulated specific questions related**  
7 **to Searsville or Searsville Dam that you think should be**  
8 **asked?**

9 A. That I've formulated, no.

10 **Q. Are you aware of anyone else formulating**  
11 **questions that should be asked to guide the -- these**  
12 **studies?**

13 A. The agencies have questions, and the working  
14 group has questions.

15 **Q. And again, the working group is the Searsville**  
16 **working group?**

17 A. Yes.

18 **Q. Who within the Searsville working group**  
19 **formulated the questions that you're referring to?**

20 A. They're more of a group discussion and  
21 questions evolve.

22 **Q. Are they written down?**

23 A. They get given to the consulting firm. URS.  
24 To so some extent, they have been written down, but I  
25 don't know to what extent. There's a lot of dialogue.

1           **Q.           Is there a person who's in charge of scribing**  
2 **for the working group?**

3           A.           No.

4           **Q.           So anyone at the working group could send a**  
5 **question to URS, for example?**

6           A.           No. The point of contact is usually limited.

7           **Q.           And who's the typical point of contact?**

8           A.           Tom.

9           **Q.           So then it would be Tom Zigterman who has**  
10 **given the questions to URS that you were talking about?**

11          A.           Yes.

12          **Q.           But the fact that he gave the questions does**  
13 **not necessarily mean that he's the author of those**  
14 **questions?**

15          A.           Yes.

16          **Q.           How many members are there of the working**  
17 **group, again?**

18          A.           I believe seven.

19          **Q.           And -- and can you name those seven?**

20          A.           Myself, Tom Zigterman, Philippe Cohen, Jean  
21 McGowan, Catherine Palter, Eric Wright. Who am I  
22 forgetting? Whitney McNair. I should have written this  
23 down because I've lost track.

24                   MS. FLANAGAN:   Seven.

25                   THE WITNESS:   Is that seven? Is there

1 anybody else I missed? Philippe?

2 MR. SPROUL: Yes. You did.

3 THE WITNESS: I counted him twice.

4 MR. SPROUL: Q. Well, of these seven  
5 people, would you consider any of these seven to be  
6 specialists in Steelhead?

7 A. No.

8 **Q. Are any of the seven specialists in anything?**

9 MS. FLANAGAN: Specialists in anything?

10 MR. SPROUL: In anything.

11 MS. FLANAGAN: In any field of endeavor?

12 MR. SPROUL: Q. In any field, are they  
13 specialists? If the answer's no, I don't want to start  
14 drilling down if the answer's no, none of them are  
15 specialists.

16 MS. FLANAGAN: Do you know enough about each  
17 of these people to --

18 THE WITNESS: Yeah, that --

19 MR. SPROUL: If you know, obviously.

20 THE WITNESS: No. I would have to spend time  
21 on that one.

22 MR. SPROUL: Q. Okay. Well, with respect  
23 to designing or framing the questions for studies given  
24 to URS, was there any one of the seven or subset of the  
25 seven people that you just listed who were more active

1 than others?

2 A. No.

3 Q. Are -- are any of these seven people expert  
4 in -- or specialists, excuse me. Specialists in  
5 California red-legged frog besides you?

6 A. No.

7 Q. Are any of them specialists in San Francisco  
8 garter snake?

9 A. No.

10 Q. Are -- are any of them specialists in the  
11 predatory behavior or any of the non-native species that  
12 you know are present in the San Francisquito Creek  
13 watershed?

14 A. No.

15 Q. Are any of them specialists in -- in hydrology  
16 as you understand the term?

17 A. I don't know the specifics of Tom's  
18 background, if that was within that field.

19 Q. So you might have enough knowledge of  
20 hydrology to be a specialist?

21 A. Possibly, but I don't know.

22 Q. Okay. How about stream geomorphology?

23 A. Again, Tom would be the only possible  
24 candidate.

25 Q. Well, if -- if none of these people are

1     **specialists in -- in any of the fields I just mentioned,**  
2     **how was it that they came up with questions for designing**  
3     **studies that they gave to URS?**

4         A.         The -- the people on the working group have  
5     quite a bit of knowledge and have read many reports, and  
6     in discussions with URS and Balance Hydrologic can  
7     formulate some broad questions that can get whittled down  
8     by more experts or specialists.

9         **Q.         Would it be fair to say that it was a two-way**  
10     **street, then, between URS and the working group as to**  
11     **what the questions for the study design should be?**

12         A.         Yes.

13         **Q.         And who at URS would these questions have been**  
14     **given to?**

15         A.         Out main point of contact at URS is Seth  
16     Gentzler.     Gentzler.

17         **Q.         Okay.     And do you know what Seth's background**  
18     **is?**

19         A.         No.

20         **Q.         Do you know what role Seth plays in designing**  
21     **the actual studies that we're talking about?**

22         A.         No.

23         **Q.         Now, earlier you said that the agencies also**  
24     **had questions or have questions that can inform the**  
25     **design of studies.     Yes?**

1 A. Yes.

2 Q. And did you mean by the agencies both NMFS and  
3 CDFW?

4 A. Yes.

5 Q. Do you also mean the United States Fish and  
6 Wildlife Service?

7 A. No.

8 Q. And why not the Fish and Wildlife Service?

9 A. They have not been actively involved in the  
10 Searsville alternatives process.

11 Q. Do you understand the division of jurisdiction  
12 between the US Fish and Wildlife Service and NMFS?

13 A. Can you specify, please?

14 Q. Oh, well, do you know what -- what species  
15 NMFS is in charge under federal law to administer the  
16 federal -- you know, federal laws for?

17 A. I -- in our area in San Francisquito Creek,  
18 yes.

19 Q. And what --

20 A. That would be the Steelhead.

21 Q. Steelhead. And US Fish and Wildlife Service  
22 have the charge of looking after California red-legged  
23 frog and San Francisco garter snake? Yes?

24 A. Yes.

25 Q. Do you know anyone at the US Fish and Wildlife

1     **Service?**

2         A.         Yes.

3         **Q.         And who is that?**

4         A.         Sheila Larsen.

5         **Q.         Have you met with Ms. Larsen?**

6         A.         Yes.

7         **Q.         And when was the last time you met with her?**

8         A.         I'd have to check it.  It's been a couple

9     years.

10        **Q.         Do you recall the last time you were on the**

11 **phone with Ms. Larsen?**

12        A.         It's been over the last six months.

13        **Q.         Do you recall what the occasion of the**

14 **conversation was?**

15        A.         No.  That's just escaping me.

16        **Q.         Did it have anything to do with Searsville?**

17        A.         No.  It had nothing to do with Searsville.

18        **Q.         When you met with her a couple years ago, did**

19 **it have anything to do with Searsville?**

20        A.         No.

21        **Q.         Did it have something to do with the Stanford**

22 **HCP?**

23        A.         Yes.

24        **Q.         Has anyone else besides Corrine Gray been**

25 **involved in dis -- discussions about interim measures?**

1 **Anyone else but Ms. Gray?**

2 A. Not --

3 MS. FLANAGAN: From that agency?

4 MR. SPROUL: Yes. Anyone else from Ms. Gray  
5 or CDFW.

6 **Q. Has anyone else at CDFW besides Ms. Gray been  
7 involved?**

8 A. Scott Wilson. And Dave Johnston participated  
9 in some earlier discussions, but I don't know who else.

10 **Q. Of the individuals you named, would it be fair  
11 to say that Ms. Gray was the most involved?**

12 A. Yes.

13 **Q. Did any of the other two individuals have any  
14 further discussions about the interim measures that went  
15 beyond what Ms. Gray had suggested?**

16 A. Since Ms. Gray has been our point person, not  
17 that I know of.

18 **Q. Has anyone else but Mr. Stern been involved  
19 with the discussions about interim measures for NMFS?  
20 Anyone else but Mr. Gray at NMFS. I mean, Mr. Stern at  
21 NMFS.**

22 A. Amanda Morrison, but I don't know the extent.  
23 Not that much.

24 **Q. Okay. Did -- do you recall Ms. Morrison  
25 having any further discussions about the interim measures**



1     **that went beyond what Mr. Stern had to say?**

2           A.           No.

3           **Q.           Do you have any opinion about Mr. Stern's**  
4     **qualifications to render opinions about the interim**  
5     **measures?**

6           A.           No.

7           **Q.           Do you have any opinion about Ms. Gray's**  
8     **qualifications to render opinions about the interim**  
9     **measures?**

10          A.           No.

11          **Q.           Have you discussed the -- the interim measures**  
12     **with anyone associated with the Beyond Searsville Dam**  
13     **Coalition?**

14          A.           I don't know. I haven't.

15          **Q.           Do you know whether anyone at Stanford has?**

16          A.           No. There was a meeting with Beyond  
17     Searsville and American Rivers about the Searsville  
18     alternative process years ago, and interim measures may  
19     have been mentioned. But that's it. I can't say more  
20     than that.

21          **Q.           There are -- there are larger meetings being**  
22     **conducted as part of the Searsville committee process.**  
23                    **Isn't that true?**

24          A.           Can you clarify that?

25          **Q.           Yeah. Larger meetings. As I understand it,**

1     **there are three -- there are three components to the --**  
2     **the Searsville committee process or three subgroups; is**  
3     **that correct?**

4         A.         Yes.     Currently.

5         **Q.         Yeah.     And that's the Searsville Advisory**  
6     **Group.**

7         A.         Mm-hmm.

8         **Q.         The Searsville working group.**

9         A.         Yes.

10        **Q.         And is the third one's called the Searsville**  
11     **committee?**

12        A.         Steering committee.

13        **Q.         Steering committee.     Correct.     I'm sorry.**  
14                 **And Beyond Searsville Dam Coalition is part of**  
15     **the Searsville Advisory Group?     Yes?**

16        A.         Yes.

17        **Q.         And did you attend the Searsville Advisory**  
18     **Group meetings?**

19        A.         Usually.

20        **Q.         And how often are those meetings held?**

21        A.         Average every four or five months.

22        **Q.         So when was the last one?**

23        A.         Two months ago.     I'd have to check a calendar  
24     to be specific.

25        **Q.         And do you know when the next one is**

1 **scheduled?**

2 A. No.

3 **Q. Do all the members of the steering committee**  
4 **attend the advisory group?**

5 A. No.

6 **Q. But Tom Zigterman attends the advisory group**  
7 **meetings? Yes?**

8 A. Usually.

9 **Q. And Catherine Palter, does she attend?**

10 A. I haven't taken specific attendance, but  
11 usually.

12 **Q. Who determines the agenda for the advisory**  
13 **group meetings?**

14 A. The advisory group themselves does some, and  
15 if there is information to pass along, then we give that  
16 to this facilitator and it gets put in.

17 **Q. And the facilitator is Kerns and West?**

18 A. Yes.

19 **Q. Have you ever placed an item on the agenda?**

20 A. No.

21 **Q. Are you aware of anyone else at the steering**  
22 **committee putting an item on the agenda?**

23 A. I don't -- I don't recall.

24 **Q. Have these interim measures that we've been**  
25 **discussing ever been put on the agenda?**

1           A.           That we've been discussing, I don't think so.  
2    I don't recall.

3           **Q.           Do you think -- have the advisory group**  
4   **meetings been personally useful to you?**

5           A.           Yes.

6           **Q.           And how have they been useful?**

7           A.           It's good to hear other opinions and concerns.

8           **Q.           Has there been any particular person who's**  
9   **been particularly outspoken in the advisory group meeting**  
10 **that comes to mind?**

11          A.           No.

12          **Q.           It's multiple input from -- from various**  
13 **people? Would you say that's true?**

14          A.           True. Some don't speak. Some speak.

15          **Q.           Is -- other than the interim measures**  
16 **discussions that we've been talking about, have you been**  
17 **involved personally in other discussion processes with --**  
18 **with NMFS over -- related to Searsville?**

19                   MS. FLANAGAN:   Is there a time period for  
20 that or any time?

21                   MR. SPROUL:   Well, let's just start  
22 generally. If the answer's no, I don't need to pinpoint  
23 a time.

24                   THE WITNESS:   It could have included  
25 Searsville, so yes.

1 MR. SPROUL: Q. Okay. Other than your  
2 discussions with the HCP and interim measures, have you  
3 had other discussions with NMFS representatives?

4 A. Yes.

5 **Q. And what other -- what other issues have you**  
6 **discussed with NMFS?**

7 A. There was a PG&E project in the creek that was  
8 located near Stanford lands, and I talked to Gary Stern  
9 and I was available to go take a look for him.

10 Because I couldn't make it down and PG&E was  
11 doing a project.

12 What else? Not HCP. Well, the -- the back  
13 years, the negotiations for the Los Trancos and San  
14 Francisquito pump station diversions was Gary.

15 **Q. Mm-hmm.**

16 A. So --

17 **Q. Have you seen any cost figures sport interim**  
18 **measures that we've been discussing?**

19 A. I don't remember.

20 **Q. Do you know whether cost has come up as a**  
21 **topic of discussion?**

22 A. Specifically for interim measures, I actually  
23 don't remember.

24 **Q. Okay. I'd like to direct your attention,**  
25 **please, to page 4-15 of Exhibit 2, and the second full**

1 **paragraph.**

2 A. Second paragraph?

3 MS. FLANAGAN: Partial or full?

4 MR. SPROUL: Second full, where it starts "on  
5 Lower Corte Madera Creek. "

6 THE WITNESS: Okay.

7 MS. FLANAGAN: But you want him to read that  
8 paragraph?

9 MR. SPROUL: Well, if you could. Read that  
10 paragraph and let me know when you're ready to take some  
11 questions about it.

12 THE WITNESS: (Complying) Okay.

13 MR. SPROUL: Q. Okay. So first off, are  
14 you personally familiar with the -- the Searsville  
15 diversion that's being discussed in that second sentence?

16 A. Could you be a little bit more specific?

17 **Q. Yeah. It looks like the Searsville diversion**  
18 **drops water from the reservoir from three inlets located**  
19 **one, eight and sixteen feet below the dam spillway.**

20 **Are you personally familiar with that? Is**  
21 **that right?**

22 A. I don't know.

23 **Q. Okay. And would Tom Zigterman know?**

24 A. Yes.

25 **Q. Okay. Have you ever given any thought to, if**

1     **there are bypass flows, where the water should be drawn**  
2     **from Searsville Reservoir? Like what depth, for example.**

3         A.         Given thoughts? Yes.

4         **Q.         And -- and have you ever reduced those**  
5     **thoughts to writing?**

6         A.         No. Not that I remember.

7         **Q.         Okay. And what are your thoughts?**

8         A.         That we would need to look at it. Because I  
9     don't know the -- the water quality, water  
10    characteristics.

11        **Q.         And when you say "we need to look at it," do**  
12    **you mean that Stanford should make some attempt to take**  
13    **measurements or otherwise assess water quality at**  
14    **different depths within the reservoir?**

15        A.         If the -- there was going to be a release of  
16    water into the creek from the various inlets, if --  
17    wherever they are --

18                MS. FLANAGAN: I'm sorry. Were you asking  
19    about diversion or releases?

20                MR. SPROUL: I asked him if he'd given any  
21    thought to whether -- I think he was answering the  
22    question that I -- that I asked.

23                I was asking him whether he's given any  
24    thought to whether Stanford should look into the water  
25    quality at different depths of the reservoir and

1 considering what to do with respect to future measures.

2 MS. FLANAGAN: I'm sorry. I thought you said  
3 to determine at what depth they should be diverting.

4 Was that not the question?

5 MR. SPROUL: Yeah. You could put it that  
6 way.

7 MS. FLANAGAN: Well, I think that's how you  
8 put it. I'm just trying to understand what your question  
9 is. So you're talking about diversion.

10 THE WITNESS: Yeah. Not going through the  
11 spillway. It would be going through the pipe system,  
12 through the top.

13 MR. SPROUL: No, no. Then correction. I  
14 meant water released into the creek.

15 THE WITNESS: Currently it's only released --  
16 it's not released. It overflows from the reservoir. So  
17 at the top. I'm not sure "release" is a correct term.  
18 It just goes over.

19 MR. SPROUL: Q. Right. But water -- water  
20 could be taken from this -- the inlets located one, eight  
21 and sixteen feet below the dam spillway. Water could be  
22 taken into those inlets and then put into the creek, and  
23 that's physically possible; right?

24 A. I'd have to confirm.

25 Q. **There are -- there are -- there's an outlet on**



1     **the pipe that leaves Searsville Dam that carries water**  
2     **from the dam to the booster pump; isn't there?**

3             MS. FLANAGAN:     Excuse me.     There's an outlet  
4     on the pipe?

5             MR. SPROUL:     Q.     There's an outlet on the  
6     pipe that is used to convey water from Searsville Dam to  
7     the Searsville booster pump; isn't that correct?

8     A.         No.

9     **Q.         And you seemed to hesitate when you said "no."**  
10    **Can you explain?**

11    A.         I'm listening to how you defined it.

12    **Q.         Well, maybe it's just the nomenclature thing,**  
13    **right?**

14             **The next sentence says -- well, the inlet -- a**  
15    **couple sentences down. "The inlets connect two sixteen**  
16    **inch cast iron pipelines, and these two outlet pipelines**  
17    **extend near the dam near its base."**

18             **Have you physically observed that?**

19    A.         I've seen two types.     Never measured, yes.

20    **Q.         You've seen the two pipes?**

21    A.         Yes.

22    **Q.         And then each of these two pipes is equipped**  
23    **with a slide gate at the dam's upstream face.**

24             **So I take that that there's a way to open the**  
25    **pipe and let water out through these slide gates. That's**

1     **what I've understood.**

2                     **Is that wrong?**

3             A.             I can't -- I don't know. I actually don't  
4 know what a slide gate is. You'd have to ask operations  
5 to think -- piping operations or valve operations about  
6 the utility engineers.

7             **Q.             I see. Because it says -- it goes on to say:**  
8 **"This gate valve may also be used to release water from**  
9 **Searsville Reservoir to Lower Corte Madera Creek."**

10                     **You don't have any information to suggest that**  
11 **sentence is wrong; do you?**

12             A.             No. I don't.

13             **Q.             Well, if water could be taken from the three**  
14 **inlets located one, eight and sixteen feet**  
15 **hypothetically, would it -- have you given any thought to**  
16 **which of those three depths the water should be taken**  
17 **that's going to be put into Corte Madera Creek?**

18             A.             A lot of hypotheticals. The only other thing  
19 I'd say is you'd have to check the water quality at  
20 various levels if you had that hypothetical situation.

21             **Q.             Are you aware of any data that would indicate**  
22 **what the water quality is at the different depths**  
23 **referred to in this paragraph?**

24             A.             No.

25             **Q.             Do you think Stanford should take measurements**

1 **of the water quality at those different depths?**

2 A. If they were plotting the hypothetical release  
3 that you describe, they should.

4 **Q. All right. Is the status of your knowledge**  
5 **sufficient that you would be able to agree or disagree**  
6 **with the following statement, that all things equal, the**  
7 **water temperature of -- of water in a -- a -- a lake is**  
8 **likely to decrease the deeper you go?**

9 MS. FLANAGAN: It's likely to decrease what?  
10 Sorry.

11 MR. SPROUL: The deeper you go.

12 THE WITNESS: I can't agree with that as a  
13 blanket statement.

14 MR. SPROUL: Q. Does the term  
15 "stratification" have any meaning to you?

16 MS. FLANAGAN: With respect to what?

17 MR. SPROUL: With respect to lake water  
18 temperature.

19 THE WITNESS: Yes.

20 MR. SPROUL: Q. And what's -- what's your  
21 understanding of the term?

22 A. In some situations, circumstances, a lake or  
23 reservoir can thermally stratify, meaning you'll have  
24 different bands of different temperatures and different  
25 chemical compositions, too.

1           **Q.           And it's typical in a stratified lake**  
2           **situation that the water temperature is cooler at deeper**  
3           **layers, not warmer? Isn't that true?**

4           A.           I would have to check as a general statement  
5           that that's correct. I don't know it off the top of my  
6           head, if that holds for topical temperature for everybody  
7           else. I don't know.

8           **Q.           So you don't have any information about**  
9           **whether the water temperature is cooler at depth in**  
10          **Searsville Reservoir?**

11          A.           I don't.

12          **Q.           Do you know whether anyone at Stanford does?**

13          A.           No. I don't know.

14          **Q.           I'd like to direct your attention, please, to**  
15          **page 4-17, and please, could you look at the text at the**  
16          **top of the page through just before the first full**  
17          **paragraph.**

18          A.           (Complying).

19                   MS. FLANAGAN:    What sentence?

20                   MR. SPROUL:    The -- the partial paragraph,  
21                   the whole partial paragraph that -- that starts: "Corte  
22                   Madera Creek ceases and ends with Bear Creek."

23                               Should we -- should we back up?

24                   MS. FLANAGAN:    You have him starting in the  
25                   middle of the sentence.

1 MR. COSTA: Sorry.

2 MR. SPROUL: Sorry. My mistake. Sorry about  
3 that.

4 MS. FLANAGAN: So you want him to start in  
5 the middle of the paragraph?

6 MR. SPROUL: Yeah, the text that.

7 THE WITNESS: Okay.

8 MR. SPROUL: Okay. So the first sentence  
9 says that "during mid-April through mid-June of most  
10 years, reservoir inflow from Corte Madera Creek drops off  
11 and the water surface elevation of Searsville Reservoir  
12 drops below the crest of the spillway.

13 **Q. Do you -- do you know whether that's a true**  
14 **statement?**

15 A. The -- I have not measured the inflow at Corte  
16 Madera. In general, all the creeks in our area, water  
17 flow decreases at that time.

18 The reservoir stops spilling some point  
19 virtually every year from mid-April to mid-June/July.

20 **Q. Okay. Have you made any systematic**  
21 **observation or recording of when Searsville Reservoir**  
22 **stops spilling?**

23 A. No.

24 **Q. Are you aware of whether anyone at Stanford**  
25 **has?**

1           A.           I believe Balance Hydrologic has a gauge  
2    there.

3           **Q.           A gauge there?**

4           A.           At the spillway.

5           **Q.           Have you looked at that --**

6           A.           Actually, I -- no. I have not looked at the  
7    gauge.

8           **Q.           Do you know whether anyone at Stanford has  
9    looked at Balance Hydrologic's data for this point?**

10           MS. FLANAGAN:    As to when it stops spilling?

11           MR. SPROUL:    Yeah. As to when Searsville  
12    Dam -- Searsville Reservoir stops spilling over the crest  
13    of the dam.

14           THE WITNESS:    There have been data on when  
15    the reservoir stops spilling. I don't know if those came  
16    from Balance.

17           MR. SPROUL:    Q.    And was that data gathered  
18    by Stanford?

19           A.           I don't know.

20           **Q.           You've seen the data yourself, though?**

21           A.           I have seen the table that has spill dates  
22    stopping, yes.

23           **Q.           And do you recall who produced the data?**

24           A.           No.

25           **Q.           Was the data of any relevance to you?**

1 A. No.

2 Q. Do you think that it's a true statement that  
3 in the presence of Searsville Dam, results in the flow in  
4 Upper Corte Madera Creek ceasing at an earlier time in  
5 the year than it would cease if Searsville Dam was not  
6 there?

7 A. No.

8 Q. And why do you think that's not a true  
9 statement?

10 A. Because I don't know the -- the facts. I  
11 don't know the situation.

12 Q. That could be true; it might not be true. You  
13 just don't know?

14 A. I don't know.

15 Q. Do you think that's a relevant thing to know?

16 A. Could you define the specific bit you're  
17 asking is relevant?

18 Q. Well, have you -- you assessed the habitat  
19 value of Corte Madera Creek for aquatic -- aquatic  
20 species in general from Searsville Dam to the confluence  
21 with San Francisquito Creek?

22 A. That reach has been part of the general  
23 surveys.

24 Q. Okay. And would it be fair to say that the --  
25 the survey work that -- that you've done or others have

1 done that you're familiar with has shown that that reach  
2 dries up and -- in large part in the summer months and  
3 that that's a limiting factor for -- for that reach being  
4 good habitat for steel Steelhead, for example?

5 A. It -- parts of that reach dry up most summers.

6 Is that a limiting feature of the habitat?

7 We'd need to define that more, what we're talking about.

8 Q. Well, Steelhead need to over summer -- in San  
9 Francisquito and Corte Madera Creeks, they -- they need  
10 pools of relatively cool water that lasts for the summer;  
11 correct?

12 A. They need water, yes.

13 Q. They need water.

14 So if -- at Searsville Dam -- the distance of  
15 Searsville Dam resulted in dewatering reaches of Corte  
16 Madera Creek sooner than they would otherwise be  
17 dewatered, wouldn't that be of some concern for -- for  
18 Steelhead?

19 A. If we knew that the presence of Searsville Dam  
20 dewatered that, it would be something to look at, yes.

21 Q. Yes. So it would make sense to just pose that  
22 as a -- as a question for the -- for the study process  
23 going forward; would it not?

24 A. The specific question being?

25 Q. Being does Searsville Dam cause dewatering of



1 **the reach of Corte Madera Creek between Searsville Dam**  
2 **and the confluence with San Francisquito Creek.**

3 MS. FLANAGAN: Are you talking about Bear  
4 Creek? The confluence with Bear Creek?

5 MR. SPROUL: The confluence between Corte  
6 Madera Creek and San Francisquito Creek earlier in the  
7 year than would happen in the absence of the --

8 THE WITNESS: That is a good question.

9 MR. SPROUL: Q. Is it a -- is it a question  
10 that is posed as part of the studies that we discussed as  
11 interim measures.

12 MS. FLANAGAN: You're limiting it to interim  
13 measures?

14 MR. SPROUL: Yes.

15 THE WITNESS: I don't know.

16 MR. SPROUL: Q. Do you know who would know?

17 A. We'd have to -- Tom Zigterman would likely  
18 know.

19 **Q. Okay. Do you know whether it's a -- a**  
20 **research question presented for the studies that are part**  
21 **of the -- the larger Searsville committee study process?**

22 A. It is a question, yes.

23 **Q. It is a question?**

24 A. Yes.

25 **Q. And do you have a sense of any preliminary**

1     **answers to that question?**

2           A.       No.

3           **Q.       And who has been tasked with answering that**  
4     **question?**

5           A.       That would be a combination of URS and Balance  
6     as I -- as I recall.

7           **Q.       Do you have a sense of when they will be done**  
8     **answering that question?**

9           A.       No.

10          **Q.       And do you know who at URS is working on that**  
11     **question?**

12          A.       No.

13          **Q.       And do you know who at Balance Hydrologic is**  
14     **working on that question?**

15          A.       I just know our contact people, but no.

16          **Q.       On page 4-17, the document states that**  
17     **"reservoir outflow is highly correlated with inflow" --**

18                   MS. FLANAGAN:   Where?  Oh, you're just the  
19     same paragraph?

20                   MR. SPROUL:    Yeah, same paragraph, right.  
21     Just continuing.

22                   So "reservoir outflow is highly correlated  
23     with inflow rates, but daily stream flow measurements are  
24     not available to present this relationship."

25          **Q.       Is that still a true statement -- there's two**

1 statements there. Let's take them in order. The second  
2 part.

3 "Daily stream flow measurements are not  
4 available to present this relationship."

5 Is that still true?

6 A. It's not sure what "present" means. It's not  
7 a term that I would use.

8 Q. Well, how about this? "Daily stream flow  
9 measurements are not available to correlate reservoir  
10 outflow with reservoir inflow."

11 Is that a true statement?

12 A. Could you repeat that?

13 Q. Okay.

14 A. Thank you.

15 Q. Sure.

16 A. Sorry.

17 Q. That's okay. "Daily" -- yeah. "Daily stream  
18 flow measurements are not available to correlate  
19 reservoir outflow with reservoir inflow rates."

20 A. I don't know. That's a hydrology study  
21 question.

22 Q. Well, to an -- to answer that question, would  
23 you know this -- and if you say "this is outside of my  
24 area," fair enough.

25 But to answer that question, you would need to

1 put gauges just upstream of -- of Searsville Reservoir  
2 measuring inflow and then you need to have a gauge right  
3 at Searsville Dam measuring outflow to correlate the two?

4 A. Yes, but that wouldn't be necessarily  
5 complete.

6 Q. And what else would you need to know?

7 A. Well, it's unknown about groundwater.

8 Q. Also evaporation? Yes?

9 A. Again, that's out of the area of my specialty,  
10 so you're doing better than I.

11 Q. Okay. Next, "seepage of water from the base  
12 of" -- this is at the end --

13 A. Mm-hmm.

14 Q. -- of this paragraph.

15 "Seepage of water from the base inside of the  
16 dam keep portions of the Lower Corte Madera Creek channel  
17 wet through the dry season." I'll stop right there.

18 Is that true in your personal observation?

19 A. The -- I'd have to know what the extent of the  
20 lower Corte Madera Creek channel we're talking about.

21 Q. Well, fair enough. How's this? Any portion  
22 of the Lower Corte Madera Creek channel? Any portion of  
23 that lower channel is wet through the dry season from  
24 seepage from the dam?

25 A. That's, that's through the dam.

1 Q. That's the area called the plunge pool?

2 A. Yes.

3 Q. It goes on to say: "The amount is very small  
4 and is inadequate to sustain most native fish and other  
5 aquatic biota in Lower Corte Madera Creek between the dam  
6 and the confluence with Bear Creek."

7 Would you agree with that statement?

8 A. I don't know why parts of Lower Corte Madera  
9 Creek go dry there. So I don't know if the seepage has  
10 anything to do with it.

11 Q. Well, would you agree with -- with the  
12 statement that -- thus far that whatever flow is  
13 available in the Lower Corte Madera Creek channel through  
14 the summer, from whatever source, is inadequate to  
15 sustain most native fish and other aquatic biota?

16 MS. FLANAGAN: And I'm going to ask that you  
17 just clarify where in the creek you're talking about.

18 Are you including or excluding the plunge pool  
19 in the area of the dam that he says stays wet?

20 MR. SPROUL: Let's describe the plunge pool.

21 Q. Excluding the plunge pool, the remainder of  
22 the Lower Corte Madera Creek channel from the plunge pool  
23 to the confluence with San Francisquito Creek --

24 A. Mm-hmm.

25 Q. -- is that area -- would it be a true

1 **statement to say that most native fish and other aquatic**  
2 **biota can't be sustained over the summer in that reach?**

3 A. That entire reach, no. That is not correct.

4 **Q. And can you explain why you think it's not --**  
5 **not correct?**

6 A. Because there are some pools that retain  
7 water --

8 **Q. And --**

9 A. -- typically.

10 **Q. And this is something you personally observed?**

11 A. Yes.

12 **Q. Every summer no matter how dry?**

13 A. No. I can't speak on every weather condition.

14 **Q. But you have seen summers where there was**  
15 **enough water to create pools that sustain aquatic life**  
16 **through the summer?**

17 A. Yes.

18 **Q. And did you look this -- this last summer for**  
19 **these pools?**

20 A. Yes.

21 **Q. And did you find any pools in this reach we've**  
22 **been discussing that sustained aquatic species?**

23 A. Early season meaning early summer, yes. I  
24 don't -- I didn't check since then.

25 **Q. And have you quantified the portion of the --**

1    **this channel that has pools that -- or that had pools**  
2    **that sustained aquatic life through the summer in any**  
3    **period you observed?**

4                   MS. FLANAGAN:    You're talking about the  
5    lengths of the pools?

6                   MR. SPROUL:    Yeah, quantified.  Like I  
7    measured them and added them up.

8                   MS. FLANAGAN:    The number of pools or the  
9    length?

10                  MR. SPROUL:    Either.

11                  THE WITNESS:    I have not done that.

12                  MR. SPROUL:    Q.    Okay.  Do you have any  
13    rough qualitative sense of what -- what percentage of the  
14    creek channel can sustain aquatic life through -- through  
15    the summer in any type of water year?

16                  A.            No.

17                  Q.            Okay.  Further down -- the -- the next  
18    sentence, "water withdrawals at the Searsville diversion  
19    have the effect of reducing stream flow in Lower Corte  
20    Madera Creek by two means.  One, stream flow may be  
21    reduced by up to three cubic feet per second when the  
22    reservoir is filling; and two, operation of a spillway  
23    decrease earlier in the year and then decrease the number  
24    of days in the year that water -- that water" -- I think  
25    there's a missing verb -- "water is spilling to Lower

1 **Corte Madera Creek."**

2 **Do you -- have you seen this text before?**

3 A. I don't remember reading the text, no.

4 **Q. Do you ever recall anyone at Stanford saying**  
5 **anything like this to you?**

6 A. Phrased anywhere near this, no.

7 **Q. Okay. Okay. Have you ever said anything like**  
8 **this to anyone else?**

9 A. Not that I recall in this format or any format  
10 like -- any format.

11 **Q. Do you have any opinion about whether these --**  
12 **whether this sentence observations about the two means**  
13 **that -- that Searsville diversion is reducing stream flow**  
14 **in Corte Madera Creek are -- is true?**

15 A. The first one I'm not sure I agree with.

16 A. Because you don't know the relationship  
17 between the stream flow and reservoir outflow except for  
18 right there at the plunge pool because of potential other  
19 sources of water coming and going.

20 So I don't know if that's actually true. If  
21 this is a gaining or losing creek. I actually don't  
22 know.

23 If one is true, I don't know about number two.

24 **Q. Okay. Can you please go to 4-45?**

25 A. (Complying).



1           **Q.           And so if you could please read the paragraph**  
2           **that starts with "San Francisquito watershed winter run**  
3           **Steelhead population," and that is second full paragraph.**

4                   MS. FLANAGAN:    You want him to read that  
5           paragraph?

6                   MR. SPROUL:    Please look at that paragraph  
7           and let me know when you've had a chance to look it over.

8                   THE WITNESS:    (Complying) Okay.

9                   MR. SPROUL:    Q.    Okay. Yeah. So do you  
10          have enough personal information, personal knowledge to  
11          agree or disagree with the first sentence, that "the San  
12          Francisquito Creek watershed winter run Steelhead  
13          population represents one of only a few known remaining  
14          runs in South San Francisco Bay"?

15                  A.           Direct observation, no. I don't have any  
16          basis to agree or disagree.

17                  **Q.           Have you read any other studies or have you**  
18                  **read any studies that tend to either corroborate or -- or**  
19                  **refute this observation?**

20                  A.           There's -- there are studies that tend to  
21          support this, yes.

22                  **Q.           And would that include studies authored by**  
23                  **Robert Leidy, for example?**

24                  A.           Yes.

25                  **Q.           Do you know Mr. Leidy?**

1 A. No.

2 Q. Do you have any opinion about his work?

3 A. No.

4 Q. And then the -- this paragraph goes on to  
5 observe that -- that "the main -- the main stem of San  
6 Francisquito Creek within the HCP study area is essential  
7 for the immigration of adults and immigration of smelts."

8 Would you agree with that statement?

9 A. Yes.

10 Q. And then it goes -- the final sentence in this  
11 paragraph says: "The most important spawning and rearing  
12 habitat for Steelhead in the San Francisquito Creek  
13 system is in Los Trancos Creek, San Francisquito Creek  
14 from Searsville Reservoir to JSV and Bear Creek and its  
15 tributaries."

16 My first question, do you know what "JSB"  
17 stands for in this sentence?

18 A. Junipero Serra Boulevard.

19 Q. Okay. And do you -- do you agree with that  
20 sentence?

21 A. It doesn't say much.

22 Q. Well, do you think that the -- "the most  
23 important spawning and rearing habitat for Steelhead in  
24 the San Francisquito Creek system is Los Trancos Creek,  
25 the upper portion of San Francisquito Creek and then Bear

1 **Creek and its tributaries."**

2 **Does that -- that identify correctly the areas**  
3 **that are -- that are the most important for Steelhead,**  
4 **rearing -- spawning and rearing?**

5 A. Very little of the system is excluded by that  
6 definition -- by that description.

7 **Q. Well, it excludes San Francisquito Creek below**  
8 **you Junipero Serra Boulevard.**

9 A. The way downstream portions typically dry out  
10 every summer. So in that respect, that area dries out.  
11 Those other areas have areas that don't dry out every  
12 summer.

13 So yes, I would agree with that by default.

14 **Q. And other than drying out in the summer, is**  
15 **there anything else that limits the -- the lower part of**  
16 **San Francisquito Creek as habitat for Steelhead?**

17 MS. FLANAGAN: Are you talking about below  
18 Junipero Serra Boulevard?

19 MR. SPROUL: Below Junipero Serra Boulevard.

20 THE WITNESS: I would have to do studies. I  
21 don't know offhand.

22 MR. SPROUL: This document goes on to cite  
23 papers that you've written, Launer and Spain 1998, Launer  
24 and Palter, 2000.

25 **Q. And do you recall those -- those studies?**

1 A. Yes.

2 Q. And also Jones and Stokes 2006.

3 That's a document that you've used in your own  
4 papers; isn't that right?

5 A. I don't recall using Jones and Stokes.

6 Q. Or referring to it as a reference in any of  
7 your work.

8 A. Reference to --

9 MS. FLANAGAN: Which work are you  
10 referencing?

11 MR. SPROUL: I said Jones and Stokes 2006. I  
12 mean, there's a -- I think some of the documents I've  
13 read that you've written cited that as a reference.  
14 That's all. I mean, it's not a big point.

15 THE WITNESS: No. I'm trying -- I don't --

16 MS. FLANAGAN: If you want to show him the  
17 document --

18 THE WITNESS: Yes.

19 MS. FLANAGAN: -- tell him what they are.

20 THE WITNESS: Thank you. That would be a  
21 good thing. I'm familiar with that document.

22 MR. COSTA: That's it right there.

23 THE WITNESS: That's Jones and Stokes.

24 MR. SPROUL: We'll make this an exhibit.

25 MR. COSTA: 3.

1 MR. SPROUL: We'll mark this as the next  
2 exhibit.

3 (Launer Exhibit No. 3 was  
4 marked for identification.)

5 MR. SPROUL: Okay.

6 MS. FLANAGAN: Yeah, is this a partial?

7 MR. SPROUL: I believe that's complete.

8 MS. FLANAGAN: Well then it ends in the  
9 introduction.

10 MR. SPROUL: Maybe it's just the  
11 introduction.

12 How many pages do you have?

13 MR. COSTA: It's just the introduction.

14 MS. FLANAGAN: It ends at the introduction.

15 THE WITNESS: It's a long document.

16 MS. FLANAGAN: And just before you ask your  
17 question, it's one o'clock. So just we want to have --

18 MR. SPROUL: Yeah.

19 MS. FLANAGAN: -- a lunch break for the  
20 witness and the reporter.

21 So we can do it now -- I mean, we can ask your  
22 questions about this, but we should -- we'll all want a  
23 lunch break.

24 MR. SPROUL: Let's go off the record a  
25 moment.

1 (Brief recess).

2 MR. SPROUL: So I've given you what I believe  
3 is a copy of the introduction to the paper referred to as  
4 Jones and Stokes 2006 in this Environmental Impact  
5 Statement, and I'm not asking you whether you know that  
6 the EIS is referring to the document that's in your hand.

7 What I'm asking you is whether this is a  
8 document that you're familiar with.

9 THE WITNESS: Yes.

10 MR. SPROUL: Q. And is this a document that  
11 you've referred to as a reference in some of the work  
12 you've done, if you remember?

13 A. I would have passed it on as a reference for  
14 the creek as -- to URS when they were asking for any work  
15 done on the creeks, but I don't remember using this in  
16 any specific work that I did, but I just don't remember.

17 **Q. So that next paragraph says --**

18 MS. FLANAGAN: Now we're going back to  
19 Exhibit --

20 MR. SPROUL: Yeah. Sorry. Set aside as keep  
21 it for the moment.

22 MR. COSTA: Page 4-45.

23 MR. SPROUL: Back on page 4-45 of Exhibit 2.

24 THE WITNESS: Okay.

25 MR. SPROUL: So information from habitat

1 surveys and biological monitoring between 1997 and 2006  
2 indicates that spawning and rearing habitat in San  
3 Francisquito Creek is limited and degraded for Steelhead,  
4 and then among other references, this EIS cites two  
5 papers that you've written.

6 **Q. Do you agree that the two papers that you've**  
7 **written that are referred to here support that sentence?**

8 A. No.

9 **Q. And why -- why do you disagree?**

10 A. Degraded implies a change and I have no basis  
11 to think that things have changed. None -- none either  
12 way.

13 **Q. You -- you don't think that San Francisquito**  
14 **Creek is in its current condition different from what it**  
15 **was prior to anthropogenic activities?**

16 A. In what specific ways, I don't know.

17 **Q. Well, without knowing what specific ways, do**  
18 **you have any general sense or opinion that it's different**  
19 **in ways that -- that probably make it less valuable to**  
20 **Steelhead habitat than it used to be?**

21 A. Don't know. I honestly can't tell you what it  
22 was like, because I don't know what it was like before,  
23 to compare it to what it is like now.

24 **Q. Okay. Let's mark this as the next.**

25

1 (Launer Exhibit No. 4 was  
2 marked for identification.)

3 MS. FLANAGAN: Does it have a post have the  
4 it note? I'll take that post have the it note.

5 MS. FLANAGAN: Just for point of reference,  
6 it's one o'clock. You can ask your questions about this,  
7 but we should plan on a lunch break.

8 MR. SPROUL: Let's go off the record for a  
9 moment.

10 (Discussion off the record).

11 (A luncheon recess was taken at  
12 1:00 PM to reconvene at the  
13 same location at 1:30 PM.)

14 ---o0o---

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1       DECEMBER 11, 2013                   AFTERNOON SESSION                   1:48 PM

2                   MR. SPROUL:     Back on the record.

3                   Please, I'd like to direct your attention to  
4 the document Exhibit 4, which is a report written by you  
5 and Mr. Holtgrieve, I believe.

6                   THE WITNESS:     Mm-hmm.

7                   MR. SPROUL:     -- and this is dated June 20th,  
8 2000.

9           **Q.       And is this a report that you wrote?**

10          A.       Yes.

11          **Q.       And did you actually write the text or did**  
12 **Mr. Holtgrieve or was it a joint effort?**

13          A.       It would have been a joint effort.

14          **Q.       And do you -- do you consider yourself still**  
15 **familiar with this report or is this not something you've**  
16 **looked in a long time and don't quite remember?**

17          A.       Don't quite remember.

18          **Q.       Okay. It starts out in 1997, a series of --**  
19 **under the summary, which is on page 2 --**

20          A.       Mm-hmm.

21          **Q.       -- it starts out "in 1997, a series of surveys**  
22 **to set the condition and distribution of key biotic**  
23 **resources within the San Francisquito watershed were**  
24 **initiated."**

25                   **Who initiated these series of surveys that**

1     **you're referring to here?**

2           A.           These were an outcome of the -- primarily  
3     there was a stream alteration agreement by Stanford in  
4     '97 that triggered work on the creek.

5           **Q.           That was a Streambed Alteration agreement with  
6     the California Department of Fish and Game at that point?**

7           A.           Yes.

8           **Q.           And who initiated the Streambed Alteration  
9     Agreement? Was that at Stanford's initiative or did the  
10    California Department of Fish and Game ask Stanford to  
11    apply?**

12          A.           I don't know.

13          **Q.           Do you know who would know?**

14          A.           It was 1997.

15                   MS. FLANAGAN:    If you know, tell him.

16                   THE WITNESS:    I don't know. I just don't  
17     know.

18                   MR. SPROUL:    Okay. And so the goals of this  
19     field work were first to address the issue of non-native  
20     species, specifically non-native fishes and bullfrogs.

21          **Q.           Does that conform with your memory of what one  
22     of the goals of the field work was?**

23          A.           Yes.

24          **Q.           And was that a goal that you set or is that --  
25     was that a requirement imposed by California Department**

1 of Fish and Game or did it come from some other source?

2 A. We were looking at it on the Streambed  
3 Alteration Agreement -- non-native fishes were a specific  
4 item to look for -- look at.

5 Q. Okay. And you were to gather information on  
6 the -- their distribution and abundant source, level of  
7 threat and effective test control methods.

8 All of that is with respect to non-native  
9 species; is that right?

10 A. Yes.

11 Q. And again, that was a requirement of the  
12 Streambed Alteration Agreement?

13 A. The '97 work was, and this was I think part of  
14 it.

15 Q. Okay. And then the third goal was to  
16 determine the status of native species, particularly  
17 Steelhead and California red-legged frogs.

18 Do you remember that being a goal of this 1997  
19 series of surveys?

20 A. Yes.

21 Q. And that also was part of the Streambed  
22 Alteration Agreement?

23 A. I don't remember the Streambed Alteration  
24 Agreement's specific conditions at this -- this point.

25 Q. And then your report goes on to say: "The

1 general creek surveys also generated spatially specific  
2 data used to create distribution maps and gain baseline  
3 information."

4 Was that referring to the 1997 work or was  
5 that referring to later work that's also discussed in  
6 this report? I couldn't tell.

7 A. Oh. It was '97 work.

8 Q. Okay. And all this work that's discussed in  
9 this paragraph, was that work that you did personally?

10 A. I was personally involved in it, yes.

11 Q. And there were other individuals involved, as  
12 well?

13 A. There was a field crew, yes.

14 Q. And do you remember who was in the field crew?

15 A. 1997, I'd -- I'd need to look it up.

16 Q. Were you the prime -- oh -- the prime person  
17 in charge?

18 A. Mm-hmm, yes. Yes.

19 Q. And then in 1998-1999, smaller yet comparable  
20 surveys in San Francisquito Creek were conducted using  
21 methods of collecting and analyzing data similar to those  
22 of 1997.

23 And is that field survey work that you did  
24 personally?

25 A. Again, same -- same crew.

1 Q. With you at the head?

2 A. Yes.

3 Q. And why was it smaller?

4 A. We didn't have a requirement to do the initial  
5 as we did in 1997, and so we were just expanding a little  
6 bit.

7 Q. I see. So the 1997 work was what was required  
8 by the Streambed Alteration Agreement, and that  
9 requirement was then fulfilled, so the work that  
10 proceeded thereafter was smaller; is that right?

11 A. I would have to check the specific  
12 requirements, but that sounds correct.

13 Q. Was the 1998 and 1999 work still done to meet  
14 Streambed Alteration Agreement requirements or was it  
15 done for some other reason?

16 A. I don't remember.

17 Q. Do you know who would know?

18 A. We'd have to look at the alternative  
19 alteration agreement.

20 Q. And then the next couple sentences describes  
21 the methods employed.

22 I assume that's that is for both the -- well,  
23 I don't know.

24 Is that for both the 1997 and 1998 -- '95,  
25 1999 work or were there different methods employed in

1     **those two time periods?**

2           A.           Which sentence are you talking about?

3           **Q.           Well, the sentence that says: "These methods**  
4 **included the use of GPS/GIS, night surveys for fishing,**  
5 **electrofishing, trapping and netting.**

6           A.           Same techniques were used on all three years.

7           **Q.           Okay. And then genetic samples of Steelhead**  
8 **were also taken for analysis in 1998, the results of**  
9 **which are summarized in appendix 2.**

10                   Do you -- do you recall personally taking  
11 **genetic samples of Steelhead in 1998?**

12           A.           Yes.

13           **Q.           And do you recall what the results were of**  
14 **that genetic sampling?**

15           A.           No. I'd have to refresh my memory.

16           **Q.           Well, I'll make the following statement and**  
17 **let me know if it refreshes your -- your recollection.**

18                   The -- the genetic sampling was to, among  
19 **other things, determine whether the -- the Steelhead**  
20 **were -- the O-mykiss fish that were found in San**  
21 **Francisquito Creek were genetically similar to the**  
22 **species that's listed as threatened under the Endangered**  
23 **Species Act versus being stock from hatcheries.**

24           A.           Okay.

25           **Q.           Does that refresh your recollection at all?**

1           A.           That would have been what we were looking at.

2           MS. FLANAGAN:    The witness has gone to the  
3 appendix.

4           MR. SPROUL:    Sure.  Okay.

5           THE WITNESS:   When we're referring to this --

6           MR. SPROUL:    Fine.  Look at the appendix.  
7 That's great.

8           THE WITNESS:   The material, Jennifer Nielsen,  
9 who was the specialist on homogenetics, and her  
10 conclusion was that it was not a hatchery trout stock in  
11 the system.

12           MR. SPROUL:   Q.    Yeah.  And do you have any  
13 reason to doubt Ms. Neilsen's conclusion that the  
14 Steelhead found in San Francisquito Creek are, in fact,  
15 CCC Steelhead and not hatchery fish?

16           MS. FLANAGAN:   I'm going to object to the  
17 question as phrased.

18                        Are you referring to this appendix 2 in your  
19 use of Steelhead?  She's talking about Rainbow Trout.  So  
20 are you intending to limit Steelhead to the Steelhead  
21 species or the O-mykiss that the witness --

22           THE WITNESS:    Yes.

23           MS. FLANAGAN:   -- earlier said?

24                        Just so we all have the same meanings of  
25 words.

1 THE WITNESS: She actually calls it Rainbow  
2 Trout in the last line.

3 MR. SPROUL: And so she -- but she did  
4 conclude that the O-mykiss found in San Francisquito  
5 Creek are not hatchery fish.

6 Q. She did find that? Yes?

7 A. Yes.

8 Q. And do you have any reason to doubt her  
9 conclusion in that respect?

10 A. No.

11 Q. Okay. The third paragraph on page 2 says that  
12 "high numbers of non-native fishes in San Francisquito  
13 Creek were located only in areas immediately downstream  
14 of the Searsville Reservoir dam within a thousand  
15 meters."

16 Does that comport with your recollection about  
17 what you found in -- in the survey work discussed in the  
18 summary?

19 A. Yes.

20 Q. Have you uncovered any information or  
21 generated any data since this report was written that  
22 would contradict or call into question that sentence?

23 A. No.

24 Q. Okay. I noticed in the -- the sentence that  
25 we were -- I mean, in the paragraph that we were



1 discussing about genetic sampling of Steelhead,  
2 there's -- the word here is "Steelhead," and -- and  
3 throughout your report, the term "Steelhead" is used  
4 repeatedly and not Rainbow Trout.

5 Does that comport with your recollection of  
6 what you -- what you wrote?

7 A. Yes. Just to simplify, and I would use the  
8 terms of *Oncorhynchus Mykiss*. Because I used the term  
9 "Steelhead" back there. I would now use *Oncorhynchus*  
10 *Mykiss* instead.

11 Q. So you think that you were -- you were in  
12 error in using the term "Steelhead" in this report?

13 A. At the time I thought that was the appropriate  
14 term to use. Now I would just go to species level.

15 Q. Mm-hmm. So is that because you think  
16 there's -- there's substantial doubt about whether the  
17 *O-mykiss* that are present in San Francisquito Creek are  
18 in fact Steelhead?

19 A. It's not a clear situation.

20 Q. Do you think that should be posed as a -- a  
21 research question for further study?

22 A. No.

23 Q. You are aware that -- that Steelhead are  
24 subject to protection as a threatened species under the  
25 Endangered --

1           A.           Yes.

2           **Q.           -- Species Act; right?**

3                       **And rainbow are not? Yes?**

4           A.           Yes.

5           **Q.           And it's one of your jobs at Stanford to help**

6 **Stanford prepare permits for compliance with laws that**

7 **govern wildlife? Yes?**

8           A.           Yes. I contribute to those efforts.

9           **Q.           Like, for example, you helped write the HCP.**

10 **Yes?**

11          A.           Yes.

12          **Q.           And among other things, the HCP is designed to**

13 **protect Endangered Species Act protected species? Yes?**

14          A.           Yes.

15          **Q.           So wouldn't it be pretty important to resolve**

16 **whether the O-mykiss that are found in San Francisquito**

17 **Creek are, in fact, subject to protection under federal**

18 **law versus not being subject to protection under federal**

19 **law?**

20          A.           You need to be specific, more specific.

21          **Q.           How -- how so?**

22          A.           Each and every Steelhead? Each and every

23 **Oncorhynchus Mykiss needs to be clarified? Is that your**

24 **question?**

25          **Q.           No.**

1                   **My -- my question generally is: Wouldn't it**  
2 **be important to know whether the O-mykiss that are found**  
3 **in San Francisquito Creek, whether they are Steelhead**  
4 **that are subject to protection under the Endangered**  
5 **Species Act or they're Rainbow Trout and therefore not**  
6 **subject to protection under the Endangered Species Act?**  
7 **Wouldn't that be important for you to -- to know in**  
8 **advising Stanford on how to write their HCP, for example?**

9           A.           No.

10          **Q.           And why would it not be important?**

11          A.           Because -- because we have -- there are  
12 Steelhead in the system as evidenced by the large adults  
13 occasionally seen.

14                   So you work on the assumption that --  
15 conservative assumption that if you protect biodiversity,  
16 that the Oncorhynchus Mykiss you see could be Steelhead.

17                   So if you're working on some generalized  
18 conservation plans, that's what we need to do.

19          **Q.           So you think Stanford should treat the**  
20 **O-mykiss that are found in San Francisquito Creek as**  
21 **subject to the full protection of the Endangered Species**  
22 **Act?**

23          A.           It depends on context.

24          **Q.           Well, what are the different contexts that**  
25 **come to mind for you?**

1           A.           Internal conservation planning, no. I would  
2 not think it's necessary.

3           **Q.           I'm sorry. For internal conservation**  
4 **planning, can you please explain what you mean by**  
5 **"internal conservation planning"?**

6           A.           Broad discussions about resource use at  
7 Stanford.

8           **Q.           So for internal conservation planning**  
9 **purposes, you think Stanford doesn't really need to know**  
10 **what type of trout these -- these fish are? They should**  
11 **just treat them the same either way?**

12          A.           Yes.

13          **Q.           How about for purposes of writing a habitat**  
14 **conservation plan to submit to the National Marine**  
15 **Fishery Service? Do you think it matters in that**  
16 **context?**

17          A.           If we do a HCP with them, it will matter.

18          **Q.           Does Stanford intend to -- to once again seek**  
19 **to have an HCP that -- that covers Steelhead in -- that**  
20 **are associated with -- potentially affected by Searsville**  
21 **Dam and Reservoir?**

22          A.           Don't know.

23          **Q.           Stanford does have an internal take permit**  
24 **for -- well, no. Excuse me.**

25                        Stanford does have a -- a Clean Water Act

1     **Section 4.4 permit for the San Francisco pump station and**  
2     **the Los Trancos diversion? Yes?**

3           A.           I don't know the specifics of the permits,  
4           specifically the Water Act permits.

5           **Q.           Do you know whether there's -- whether the**  
6     **National Marine Fishery Service has issued a biological**  
7     **opinion in conjunction with those two diversions I just**  
8     **mentioned?**

9           A.           Yes.

10          **Q.           And did you have any role in communicating**  
11     **with the agencies about the issuance of that biological**  
12     **opinion?**

13          A.           No.

14          **Q.           You never communicated to NMFS about anything**  
15     **related to what the biological opinion should say or**  
16     **cover?**

17          A.           No.

18          **Q.           Do you know whether anyone at Stanford did?**

19          A.           If they were writing that on a permit  
20     application, then that would have been a communication  
21     from Stanford.

22          **Q.           Do you know whether that happened?**

23          A.           Yes.

24          **Q.           And do you know who was involved in that?**

25          A.           It would have been Tom Zigterman.

1           **Q.           Did you help Tom Zigterman in any capacity**  
2 **with respect to those communications he had with the**  
3 **agencies?**

4                   MS. FLANAGAN:    You're talking about the -- in  
5 the context of the application?

6                   MR. SPROUL:    Yeah.

7                   THE WITNESS:   With the application?

8                   MR. SPROUL:    Yes.

9                   THE WITNESS:   Yes.

10                  MR. SPROUL:    Q.    And did you -- did you have  
11 any communications with Mr. Zigterman about O-mykiss in  
12 that -- with respect to the permit application that we  
13 were talking about?

14                  A.           I don't remember.

15                  **Q.           Do you recall whether Stanford made any**  
16 **representations to NMFS in this permit application**  
17 **setting for these two water diversions we're talking**  
18 **about that the O-mykiss found in either San Francisquito**  
19 **Creek or Los Trancos Creek are Steelhead and not Rainbow**  
20 **Trout?**

21                  A.           By "representations" --

22                  **Q.           Yes.**

23                  A.           -- that means?

24                  **Q           Well, that Stanford in the application**  
25 **documents or any other communications to NMFS concerning**

1 **NMFS' processing of -- of approvals for these projects**  
2 **under the Endangered Species Act, did -- in those**  
3 **communications, did Stanford call the fish, the O-mykiss**  
4 **Fish Steelhead?**

5 A. I actually don't remember that stuff that  
6 specific.

7 Q. But you -- you would agree that whether the  
8 O-mykiss in the streams that we're talking about are --  
9 are Steelhead or Rainbow Trout, it's significant for  
10 future HCP work that Stanford might do?

11 A. It's a potential consideration, yes.

12 Q. And -- and why do you think it would matter?

13 A. We would ask the agencies for guidance.

14 Q. You wouldn't develop your own opinions; you'd  
15 just simply wait to see what the agencies had to say  
16 about it?

17 A. On the definitions of O-mykiss, we would see  
18 what they said.

19 Q. And not offer an opinion until they said  
20 first?

21 A. We're talking a future event. I don't know  
22 exactly.

23 Q. Well, since it is going to be an important  
24 thing for future HCP work, if there is any, do you think  
25 it should be something that Stanford is researching now,

1     **whether the O-mykiss in San Francisquito Creek or Los**  
2     **Trancos Creek are Steelhead versus Rainbow Trout?**

3           A.           No.

4           MS. FLANAGAN:    Go ahead.

5           THE WITNESS:    I just said no.

6           MR. SPROUL:    Q.    Now, why do you think it's  
7     not important to know that?

8           A.           It's preliminary.  It's hypothetical HCP with  
9     the agencies, we would need initial discussions and  
10    guidance, which we would only know at that time.

11          **Q.           Back to Exhibit 4, page 2 --**

12          A.           4.

13          MS. FLANAGAN:    We're in Exhibit 4 --

14          MR. SPROUL:    Okay.

15          MS. FLANAGAN:    -- on page 2.

16          MR. SPROUL:    Well, I think we were in the  
17    appendix, but now we're back to page 2.

18          THE WITNESS:    Okay.

19          MR. SPROUL:    So bullfrogs -- in -- in this  
20    third sentence -- third paragraph -- excuse me -- second  
21    sentence, "bullfrogs in the creek also were clustered in  
22    the vicinity of the reservoir."

23          **Q.           Do you recall observing that in your work --**  
24    **survey work that's referred to in the summary?**

25          A.           Yes.



1           **Q.**           **Have you gathered any data or other**  
2 **information since this report was written that would**  
3 **contradict that statement?**

4           A.           No.

5           **Q.**           **Okay. The next sentence. "The 1997 through**  
6 **1999 surveys demonstrated that non-native fishes and**  
7 **bullfrogs were abundant in the Searsville Reservoir**  
8 **complex. These bodies of water therefore are likely the**  
9 **primary sources for these two groups of non-native**  
10 **species in the downstream portions of the watershed."**

11                   **Do you recall observing that in your field**  
12 **survey work in this timeframe?**

13                   MS. FLANAGAN:    Which -- which part of that  
14 sentence are you referencing?

15                   MR. SPROUL:    Well -- well, all right. We can  
16 take more time, break it down into multiple parts.

17                   MS. FLANAGAN:    I just want the record to be  
18 clear. It's compound the way you asked it.

19                   MR. SPROUL:    **Q.**    The -- the first -- the  
20 first clause, were non-native fishes and bullfrogs  
21 abundant in the Searsville Reservoir complex in your  
22 observation in 1997 through 1999?

23           A.           Yes.

24           **Q.**           **Have you acquired any information or gathered**  
25 **any data since then that would contradict that finding?**

1 A. No.

2 Q. Okay. And the next sentence. "These bodies  
3 of water therefore are likely the primary source for  
4 these inclusive non-native species in the downstream  
5 portions of the watershed."

6 Do you recall reaching that conclusion in this  
7 timeframe?

8 A. In that timeframe, yes.

9 Q. Do you have any information or data that would  
10 contradict that -- that finding today?

11 A. The -- calling it the primary source, I would  
12 switch that to a -- a source, because primary was an  
13 over-extension of what we know at the time. And then it  
14 would hold.

15 Q. Well, do you think there are other sources  
16 of -- of non-native species in the downstream portions of  
17 the watershed?

18 A. Yes.

19 Q. And what are the -- what are the other  
20 sources?

21 A. The Bear Creek system comes through  
22 residential areas and has ponds. Los Trancos does the  
23 same, residences all over the place.

24 MR. SPROUL: There you go (Indicating). Mark  
25 this as the next exhibit.

1 (Launer Exhibit No. 5 was  
2 marked for identification.)

3 MR. SPROUL: I'd like to direct your --  
4 please direct your attention to Exhibit 5.

5 THE WITNESS: Mm-hmm.

6 MR. SPROUL: Q. And is this -- is this --  
7 this graph something that you've seen before?

8 A. Yes.

9 **Q. And who -- do you know who the author is of**  
10 **this graph?**

11 A. This is part of this -- this study.

12 **Q. And by "this study" --**

13 A. This idea, Exhibit 4 -- I don't have that one.  
14 I think this is '97 data, so this may be -- let me see  
15 where.

16 Do you have dates on here?

17 I don't seem to have a date on these to figure  
18 out what tables exactly it goes into.

19 MS. FLANAGAN: If you don't know, you can  
20 just say you don't know.

21 THE WITNESS: Don't know.

22 MR. SPROUL: Q. But it looks like -- this  
23 is a graph you've seen before?

24 A. Yes.

25 **Q. And to the best of your recollection, it was a**

1 graph of 1997 data?

2 A. Yes.

3 Q. Okay. And is there any -- any information  
4 that you would have that would -- that would counter what  
5 this graph would tend to show, that you can recall?

6 A. Can you be a little more specific?

7 Q. Well, I interpret this graph as saying that  
8 the incidence of non-native fishes -- well, it graphs the  
9 relationship between the number of non-native fishes per  
10 given segment size, in this case 500 meters --

11 A. Mm-hmm.

12 Q. -- with the distance from Searsville Dam in  
13 the water course that flows down from Searsville Dam.

14 That's what I think this graph shows the  
15 representation between.

16 Is that --

17 A. Yes.

18 Q. So the first thing that jumps out at me is  
19 that the incidence of non-native fishes plummets as you  
20 go from 500 meters to 1,500 meters away from Searsville  
21 Dam.

22 It goes from, you know, an incidence of 150  
23 individuals per 500 meter segment down to, you know,  
24 four, five, something like that.

25 Yes?

1 A. Yes.

2 Q. Have you seen any information that would  
3 contradict that sort of overall trend or conclusion, that  
4 if you go that far away from Searsville Dam, yes, they're  
5 still non-native fish, but their numbers plummet

6 A. So just clarify your question.

7 Q. Well, have you seen any information that would  
8 contradict or that would support a contrary conclusion to  
9 this statement: If you go 1,500 meters away from  
10 Searsville Dam, the incidence of non-native fishes  
11 plummet?

12 A. The -- again, I would like to be a little bit  
13 more specific on distance from Searsville Dam.

14 Q. Well, this -- this data that's graphed here  
15 shows the incidence of non-native fishes at different  
16 distances from the dam, and it -- it shows that there  
17 were roughly 150 non-native fishes per 500 meter segment  
18 500 meters away from the dam.

19 It shows that? Yes?

20 A. Yes.

21 Q. And then it shows that when you're 1,500  
22 meters away from the dam, the incidence of non-native  
23 fishes plummets from 150 down to -- I would eyeball  
24 around, say, four or five, something like that.

25 A. Yes.

1 Q. Yes?

2 A. Yes, mm-hmm.

3 Q. Have you seen any information which shows any  
4 different relationship or different outcome going those  
5 distances away from Searsville Dam in terms of the  
6 incidence of non-native fishes?

7 A. Those techniques were only done for a few  
8 years. There was a limit on comparisons, and in those  
9 few years, '97, '98, '99, the general pattern held.

10 Q. So would it -- would it still be a fair  
11 statement that while there are other sources of non-  
12 natives -- non-native fishes in the watershed, there  
13 are -- their contribution is very small compared to the  
14 number of non-native fishes that are seen in this reach  
15 immediately downstream of Searsville Dam?

16 A. Okay. Just rephrase that a little bit.

17 Q. Well, you -- I think you indicated that you  
18 thought Bear Creek was another source of non-native  
19 fishes in the watershed besides this reach -- this Corte  
20 Madera Creek reach below Searsville Dam.

21 Is that right?

22 A. Any -- any tributary is a potential source,  
23 has the potential of a source, yes.

24 Q. But do you have data that shows that it's an  
25 actual source?

1 A. No.

2 Q. So the only data that you have in terms of  
3 actual sources of non-native fish of any -- of any real  
4 significance is this data, this type -- this data which  
5 shows a big contribution of non-native fish into Corte  
6 Madera Creek reach immediately downstream from Searsville  
7 Dam; is that right?

8 A. Indeed on this graph, no.

9 Q. Tell me what else shows up on the graph.

10 A. The goldfish distribution.

11 Q. And what -- what does this graph show about  
12 goldfish distribution?

13 A. There's a distribution of goldfish that is  
14 apparently independent of distance from Searsville,  
15 another source.

16 Q. But it's still -- it's a much, much smaller  
17 number of goldfish as compared to the numbers of non-  
18 native fish in the reach immediately downstream of Corte  
19 Madera Creek? Yes?

20 A. Yes.

21 Q. And are goldfish a predator on Steelhead?

22 A. Not that I know of.

23 Q. Are goldfish a predator on California red-  
24 legged frog?

25 A. Not that I know of.

1           Q.           The non-native fish that you observed in the  
2 reach immediately downstream of -- of Searsville Dam  
3 included multiple species that are known to be predators  
4 on Steelhead; isn't that correct?

5           A.           I don't know that -- the literature that  
6 states they are independent predators on Steelhead. No,  
7 I don't know that.

8           Q.           Okay. Let's go back to Exhibit 4, if we  
9 could.

10          A.           Mm-hmm.

11          Q.           Okay. Your report says: "In 1998-1999, the  
12 end of the year, Largemouth Bass as well as bullfrogs  
13 and tadpoles were found within the creek, demonstrating  
14 that limited reproduction of these species can occur."

15                       Do you recall making that finding in -- when  
16 this report was written?

17          A.           I don't re -- recall the specifics.

18          Q.           Do you think -- do you think that's a true  
19 statement or do you -- do you now not know?

20          A.           In 1998?

21          Q.           Well, apart from the timeframe, do you think  
22 that there's information -- do you recall generally  
23 there's information that suggests that there's limited  
24 reproduction of -- of bullfrog and Largemouth bass in  
25 San Francisquito Creek?



1 A. Sticking with the study periods, yes.

2 Q. But was it also your conclusion that this  
3 limited reproduction was just that, it was not the -- by  
4 any way, shape or form the primary reason why there were  
5 bullfrogs and -- and Largemouth bass in the San  
6 Francisquito Creek? It wasn't because they were  
7 reproducing in the creek.

8 A. Specify the part of the creek.

9 Q. Any part of the creek.

10 A. The answer's no.

11 Q. And why is the answer no?

12 A. Because a limited reproduction can mean a few.  
13 The pattern shows a few elsewhere.

14 Q. Right. So wouldn't it be a fair statement  
15 that yes, there were a few bullfrog and a few Largemouth  
16 bass reproducing in -- in San Francisquito Creek, but  
17 most of the -- most of the bullfrog and Largemouth bass  
18 found in the creek had reproduced in Searsville Reservoir  
19 and were being transported from the reservoir downstream  
20 to the creek?

21 A. I don't know that directly.

22 Q. Again, your sentence here says: "Therefore,  
23 the Searsville Reservoir complex are likely the primary  
24 source of these two groups in the non-native species in  
25 the downstream portions of the watershed."

1           A.           Likely is different than knowing.

2           **Q.           Do you have any basis for concluding today**  
3 **that -- that it's -- that Sears -- Searsville Reservoir**  
4 **complexes is -- any reason today for not concluding that**  
5 **the Searsville Reservoir complex is likely the -- the**  
6 **source of the great majority of the Largemouth bass and**  
7 **bullfrog found in the creek below Searsville Dam?**

8           A.           Actually, that's a complex sentence.

9                        Can you rephrase this a little?

10          **Q.           Was there anything that you know today that**  
11 **would suggest to you that most of the red-legged frog --**  
12 **I mean, excuse me. Most of the bullfrogs and most of the**  
13 **Largemouth bass are coming from anywhere else but**  
14 **Searsville Reservoir?**

15          A.           Split the two.

16          **Q.           Okay. Can you take them one at a time or do**  
17 **you need me to ask it again?**

18          A.           I don't know. I was just asking him.

19                        MS. FLANAGAN: Well, it's -- it's what you  
20 understand.

21                        Are you able to understand them one at a time?

22                        THE WITNESS: Bullfrogs, unknown at this time  
23 because they travel over land. You don't know sources to  
24 have a better understanding.

25                        Bass appear to be -- this pattern holds still.

1 MR. SPROUL: Okay. You go on to state that  
2 "it is believed that non-native species, especially  
3 non-native fishes, are unable to tolerate the dynamic  
4 nature of San Francisquito Creek and are removed during  
5 winter floods."

6 Q. Do you recall that explanation -- reaching  
7 that explanation in -- when you wrote this report?

8 A. Yes.

9 Q. And is there anything you would know today  
10 that would lead you to contradict that sentence?

11 A. No.

12 Q. Okay. So "non-native crayfish" -- the last  
13 paragraph here. "Non-native crayfish was locally common  
14 in the watershed and may be negatively impacting native  
15 species."

16 Do you recall writing that sentence in this --  
17 in this report?

18 A. Specifically -- specifically, no.

19 Q. But you recall generally coming to that  
20 conclusion?

21 A. At the time, yes.

22 Q. And -- and is there any information that you  
23 have today that would contradict that sentence?

24 A. The species are both locally common, "may  
25 negatively" is not particularly strong. It means I don't

1 know.

2 Q. Well, I assume you wouldn't write that just  
3 because it -- it's conceivably possible. There would be  
4 some suggestion that that would be happening here.

5 Wouldn't that be a fair characterization of  
6 what you wrote?

7 A. Not necessarily for this specific case.

8 Q. Well, I mean, I wouldn't write, for example,  
9 common gardener -- garden snails may be negatively  
10 impacting Steelhead. I mean, I wouldn't write a sentence  
11 like that. I assume you wouldn't, either.

12 Correct?

13 A. Hopefully not.

14 Q. There must be something suggesting that  
15 crayfish are harmful. You wouldn't otherwise grab it out  
16 of thin air? Yes?

17 A. They're aquatic omnivores, but I have no data  
18 that they're actually impacting anything.

19 Q. But information that would lead to a  
20 reasonable hypothesis that they could be consuming  
21 Steelhead or red-legged frog?

22 A. Again, sorry. Rephrase that.

23 Q. Well, you -- you didn't have any info --  
24 wouldn't you have had -- wouldn't you have had  
25 information in -- in this timeframe that would have

1 **suggested to you that -- that non-native crayfish could**  
2 **be preying upon Steelhead for you -- for you to have**  
3 **written that sentence?**

4 A. Actually, it says "native species," which  
5 would --

6 **Q. I'm picking one trying not to be compound.**

7 A. Okay. And you picked Steelhead.

8 **Q. I picked Steelhead.**

9 A. And the answer is no, I would not have  
10 necessarily thought that.

11 **Q. And did you think that there was no**  
12 **information to suggest that crayfish could be negatively**  
13 **impacting Steelhead?**

14 A. That's a complex sentence. Can you restate  
15 that?

16 MS. ISAACS: Do you want to read it back?

17 MS. FLANAGAN: Could we have one person from  
18 your side of the table?

19 MR. SPROUL: I'll try again.

20 THE WITNESS: Trying to be careful.

21 MR. SPROUL: We'll just keep at it.

22 **Q. So did you have information in your possession**  
23 **that led you to think in this timeframe that crayfish**  
24 **were not adversely impacting Steelhead?**

25 A. No.

1 Q. You just had no information one way or the  
2 other --

3 A. That's right.

4 Q. -- about crayfish were hurting Steelhead?

5 A. Yes. And maybe -- yes.

6 Q. But any -- any information, even on a general  
7 level, would ind -- would indicate crayfish can adversely  
8 impact Steelhead, like crayfish are known to eat, among  
9 other things, Steelhead eggs.

10 A. I didn't have that information or don't have  
11 that information.

12 Q. You don't know what crayfish eat?

13 A. Relative to Steelhead eggs, no.

14 Q. Do you know anything about what crayfish eat?

15 A. I've kept them in an aquarium.

16 Q. And what do they eat there?

17 A. Anything that you feed them.

18 Q. Does that lead you to think that they might  
19 eat -- might eat Steelhead eggs if they'll eat anything  
20 you feed them?

21 A. If I dropped Steelhead eggs in the aquarium.  
22 That's the only thing that would eat, yes.

23 Q. Well, crayfish are -- crayfish are abundant  
24 in -- in Corte Madera Creek below Searsville Dam and in  
25 San Francisquito Creek, as well; is that right?

1 A. Yes.

2 Q. And you don't have any idea whether those  
3 crayfish are negatively impacting Steelhead? Just don't  
4 know one way or the other?

5 A. Yes.

6 Q. Do you know if anyone at Stanford knows?

7 A. No.

8 Q. Do you think that -- do you know whether any  
9 of the proposed interim studies -- and again, I'm saying  
10 interim, interim studies -- are focused on this question  
11 about whether crayfish might be adversely impacting  
12 Steelhead?

13 A. No.

14 Q. No, it's not one of the research questions, or  
15 you don't know?

16 A. I -- research questions have not been  
17 formalized, so I don't know.

18 Q. Do you think it should be one of the research  
19 questions?

20 A. For the interim?

21 Q. Yes.

22 A. No.

23 Q. And why not?

24 A. Time constraints.

25 Q. And what are the time constraints that you're

1 **thinking of here?**

2 A. Such a field study would generally take years  
3 and interim. We're supposed to be working on shorter  
4 term.

5 Q. You don't think any conclusions about whether  
6 crayfish eat Steelhead eggs could be reached in the San  
7 Francisquito Creek watershed without years of research?

8 A. A conclusive answer, no.

9 Q. Well, how about -- how about enough to guide  
10 what Stanford should do in terms of environmental  
11 management?

12 A. Guided environmental management?

13 Q. Yes, guided environmental management.

14 A. Could you explain that, please?

15 Q. Well, earlier you were talking about internal  
16 conservation planning --

17 A. Mm-hmm.

18 Q. -- efforts.

19 So I take it that Stanford undertakes some  
20 internal efforts to plan for environmental protection or  
21 conservation advancement on its own.

22 Is that -- am I right in that respect or am I  
23 wrong?

24 A. Yes. You're correct.

25 Q. Okay. And -- so Stanford makes some attempt



1 to assess environmental problems without being ordered or  
2 told to do so in coming up with plans or measures and  
3 what -- what Stanford left to its own devices thinks is  
4 good for the environment? Yes?

5 A. Yes.

6 Q. And for Stanford to be able to do that  
7 intelligently, it has to analyze environmental problems  
8 and decide what would be good for -- for wildlife  
9 resources and what would not be really good for wildlife  
10 resources? Is that right?

11 A. Yes.

12 Q. Well, to -- to know, for example, whether --  
13 whether it would make good environmental sense to try to  
14 systematically control crayfish in -- in the water  
15 reaches below Searsville Dam, shouldn't Stanford make  
16 some attempt to ask and answer the question about whether  
17 crayfish are eating Steelhead?

18 A. There's missing -- something missing. I'd  
19 like to see the '97 report.

20 Q. Well, I'm not asking you about the 1997 report  
21 at the moment. I'm just asking you about a --

22 A. No. This said no systematic control of  
23 crayfish was '98 and '99.

24 Q. Yes.

25 A. I seem to remember we attempted it in '97 and

1 found it infeasible, but I -- I would have to check the  
2 report to see if I'm not remembering that correctly.

3 **Q. Perhaps we'll -- we'll try if we can to dig up**  
4 **that -- that report, but in the meantime, I'm just -- so**  
5 **again, if you think no, there's no point in investigating**  
6 **that, that's what I'm asking for.**

7 **Like what do you think? I mean, my pending**  
8 **question is --**

9 A. No. At this point, no.

10 **Q. -- that Stanford shouldn't make any attempt to**  
11 **try to figure out whether crayfish are eating Steelhead.**

12 A. No.

13 **Q. And the reason you think that is because?**

14 A. The reason I think that we shouldn't attempt  
15 the study --

16 **Q. Yes.**

17 A. -- or -- prioritization right now and -- if --  
18 if the studies by URS on Searsville alternative studies  
19 recommends crayfish related actions, we will look at  
20 them.

21 **Q. Well, of course, URS can only recommend**  
22 **crayfish related measures if it was asked to look at**  
23 **that; right?**

24 A. They can --

25 MS. FLANAGAN: Go ahead.

1 THE WITNESS: They can recommend anything.

2 MS. FLANAGAN: And I was just wanting to  
3 object to clarify the record that you had limited him to  
4 interim measures --

5 THE WITNESS: That's true.

6 MS. FLANAGAN: -- which are not URS studies,  
7 processed in the alternative studies process. I just  
8 want to make sure we're clear here.

9 MR. SPROUL: Yeah. We'll get to that.

10 **Q. So -- well, so it's your opinion that Stanford**  
11 **shouldn't in this interim period investigate whether**  
12 **crayfish are eating Steelhead, but do you think Stanford**  
13 **should investigate whether crayfish are eating Steelhead**  
14 **as part of its longer term planning and -- and research**  
15 **effort?**

16 A. I know of no evidence to suggest that's a -- a  
17 fruitful study.

18 **Q. Are you aware of any evidence to suggest that**  
19 **it's not a fruitful study area?**

20 A. No.

21 **Q. You just really have no opinion one way or the**  
22 **other?**

23 A. I know of no studies.

24 MS. FLANAGAN: Well, he's asked you to show  
25 him his '97 study. He said he might be able to give you

1 more information, so --

2 THE WITNESS: On -- on the management control  
3 part, yes. But --

4 MR. SPROUL: Q. Has -- do you know whether  
5 URS is investigating crayfish predation on Steelhead?

6 A. I don't.

7 Q. **And you -- you don't have any opinion on  
8 whether they should?**

9 A. No.

10 Q. **Do you think crayfish predation is -- is  
11 posing risks to California red-legged frog in the waters  
12 below Searsville Dam?**

13 A. No.

14 Q. **No, you don't think it's a risk, or no, you  
15 don't know?**

16 A. No. I don't think it's a risk at this point.

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

18 A. Because we haven't seen a red-legged frog in  
19 that area for a while.

20 Q. **Well, how about in the reaches of San  
21 Francisquito Creek where California red-legged frog have  
22 been seen? Do you think predation poses a risk to red-  
23 legged frog in those areas?**

24 A. Currently?

25 Q. **Yes.**

1 A. No.

2 **Q. In the past?**

3 A. Don't know.

4 **Q. And why -- why do you think it's not currently**  
5 **a risk?**

6 A. Because we haven't seen a red-legged frog in  
7 San Francisquito Creek for a while.

8 **Q. Do you think that predation has anything to do**  
9 **with that?**

10 A. Predation from -- actually, I don't know.

11 **Q. Do you have any explanation why California**  
12 **red-legged frog are not showing up in San Francisquito**  
13 **Creek?**

14 A. No.

15 **Q. In some of your earlier field work, you did**  
16 **California red-legged frog in San Francisquito Creek;**  
17 **didn't you?**

18 A. Yes.

19 **Q. And now they've disappeared?**

20 A. Yes.

21 **Q. Is that alarming to you?**

22 A. Alarming is strong.

23 **Q. Is it concern to you?**

24 A. Yes.

25 **Q. And why is it a concern to you?**

1 A. I don't know why they disappeared.

2 **Q. When did they disappear?**

3 A. I recall the last study we had was in 2007 in  
4 San Francisquito.

5 **Q. Are they still -- are California red-legged**  
6 **frogs still showing up in Los Trancos Creek?**

7 A. No.

8 **Q. And how about in Bear Creek?**

9 A. No.

10 **Q. Have they been surveyed for in Bear Creek?**

11 A. Yes.

12 **Q. And the surveys found no frogs?**

13 A. No.

14 **Q. And have you discussed with anyone why**  
15 **California red-legged frog appears to have disappeared?**

16 A. In our creek?

17 **Q. Yes.**

18 A. Yes.

19 **Q. Who have you discussed that with?**

20 A. Many people over the years.

21 **Q. Have you discussed it with anyone recently?**

22 A. Yes.

23 **Q. And who is that?**

24 A. I talked to Sarah about it.

25 **Q. Okay. Well, other than your attorney.**

1 MS. FLANAGAN: Don't --

2 THE WITNESS: Sorry. It hasn't come up.

3 MR. SPROUL: Q. Do you recall anyone  
4 offering an explanation to you about why California  
5 red-legged frog have disappeared from the watershed we're  
6 talking about?

7 A. No.

8 **Q. Have you seen anything in writing about why**  
9 **the red-legged frog appear to have disappeared from the**  
10 **watershed?**

11 A. From our just portion. I won't say out of the  
12 watershed. Our little piece, no.

13 **Q. When you say "our little piece," can you give**  
14 **me the geographic boundaries of what you're talking**  
15 **about?**

16 A. Downstream from is cement crossing to almost  
17 280.

18 **Q. Well, when you say "downstream from the cement**  
19 **crossing to 280," that is that strikes me as just being**  
20 **San Francisquito Creek.**

21 **Am I right?**

22 A. That's where they were in San Francisquito  
23 Creek, yes.

24 **Q. I see. But have they been surveyed for -- you**  
25 **said they were surveyed for in Bear Creek.**

1 A. Yes.

2 Q. Do you know when that was?

3 A. The same time, annually. We look for them  
4 every year.

5 Q. So they've been looked for every year since  
6 you wrote this report --

7 A. Mm-hmm.

8 Q. -- in 2000?

9 A. Yes.

10 Q. And they disappeared from areas surveyed in  
11 2007 and haven't shown up since?

12 A. Yes.

13 Q. And in all those years Bear Creek was  
14 surveyed?

15 A. Yes.

16 Q. How far up into Bear Creek?

17 A. Just to Stanford property boundary.

18 Q. Do you have any information about the  
19 incidence of red-legged frog outside of Stanford's --  
20 Stanford's property boundaries?

21 A. No. You need to be more specific. Anywhere?

22 Q. Well, anywhere -- no. I'm not talking about  
23 like in the Eel River, no.

24 A. Okay.

25 Q. I'm talking about anywhere here in the Palo



1 **Alto vicinity. You know, Bear Creek, the various creeks**  
2 **up above Searsville Dam, Los Trancos Creek, tributaries**  
3 **to those waters.**

4 A. There are evidence of the Peninsula regional  
5 open space preserves, but I don't know their specific  
6 distribution, and we have them on campus on Matadero and  
7 Deer Creeks.

8 **Q. Does it seem odd to you that California red-**  
9 **legged frog would be showing up in Deer Creek and**  
10 **Matadero Creek and -- and not showing up in other creeks**  
11 **associated with San Francisquito Creek that we've been**  
12 **discussing?**

13 A. Odd? No.

14 **Q. It's what you would expect?**

15 A. I don't know what to expect. Just starting to  
16 look at these things.

17 **Q. Do you think that the reasons for California**  
18 **red-legged frog disappearance is a research question that**  
19 **should be posed as part of the interim measures?**

20 A. No.

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

22 A. Because it's after the fact. It would be hard  
23 to -- very hard if not impossible to answer.

24 **Q. So do you think it should be part of**  
25 **Stanford's long-term research questions or effort? Same**

1 **question.**

2 A. As part of the Searsville effort?

3 **Q. Yes.**

4 A. No.

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

6 A. The Searsville effort, again, we hope to have  
7 those studies concluded in two or three years if not  
8 sooner, if not -- if not a year from now.

9 **Q. Why would concluding those studies in two to  
10 three years lead you to the conclusion that research --  
11 that we shouldn't ask or Stanford shouldn't ask as a  
12 research question why did the red-legged frog disappear  
13 from our watershed?**

14 A. For the Searsville study or for Stanford?

15 **Q. Well, let's start with Searsville.**

16 A. It's not obviously linked with Searsville, so  
17 it would not necessarily be part of that study.

18 **Q. Well, California red-legged frog were found  
19 fairly close to Searsville Dam in the past; were they  
20 not?**

21 A. The majority of them were fairly far  
22 downstream.

23 **Q. The majority, but there were some that were  
24 found fairly close to the dam? Is that true?**

25 A. There were some scattered upstream and

1 downstream in kind of abundant areas.

2 **Q. But they've disappeared from those areas.**

3 A. Yes.

4 **Q. You don't think that as part of the Searsville**  
5 **effort Stanford should study why that happened?**

6 A. As part of the Searsville effort? No.

7 **Q. And again, the reason for that is?**

8 A. It's not obviously linked to Searsville.

9 **Q. But without studying it, wouldn't you say I**  
10 **don't know why they disappeared? So how do you know**  
11 **they're not linked with Stanford project or Stanford**  
12 **Searsville Dam?**

13 A. The plausibilities are low that it's linked  
14 with Searsville. The plausibilities are low.

15 **Q. Well, how do you know that?**

16 A. I don't know that.

17 **Q. Well, if you don't know that, wouldn't that**  
18 **cause you to rethink the conclusion?**

19 A. No.

20 **Q. Earlier you talked about prioritizing the**  
21 **study effort when I talked about crayfish predation**  
22 **study, for example, and you said no, prioritization was**  
23 **one of the reasons you gave.**

24 Can you -- can you elaborate on what you --  
25 what you meant by that?

1           A.           There are many, many things that could be  
2           studied in the general area, so many that they all can  
3           never be done. So we need to be a little bit focused on  
4           what you study.

5           **Q.           What do you think are the -- the most**  
6           **important things for Stanford to study as part of the**  
7           **interim measures?**

8                   MS. FLANAGAN:    So you're distinguishing  
9           between the alternative studies and the interim measures?

10                  MR. SPROUL:    Yes.

11                  THE WITNESS:   The big one is the flow -- the  
12           conditions of the creek under different flow rates.  
13           That's the main one. That incorporates almost all of  
14           them.

15                  MR. SPROUL:    Q.    I'm sorry. The flow  
16           condition of the creek under different what?

17           A.           The condition of the creek under different  
18           water flow rates.

19           **Q.           And why do you think that's important to**  
20           **study?**

21           A.           It would give us an idea of just that, what  
22           conditions are the creek at different flow rates. Then  
23           the alternatives later on can be viewed as what would it  
24           potentially do to flow rates.

25           **Q.           Because you think differences in water flow**

1 **rate in Corte Madera Creek and San Francisquito Creek are**  
2 **the -- is the most important factor for effecting**  
3 **conservation resources in the creeks?**

4 A. For the interim study, it's a -- the  
5 conditions of the interim study is being directed by the  
6 agencies to look at flow and what it does to the creek.

7 That's why I make no ratings of most important  
8 for all studies.

9 Q. Well, I'm sorry. I know you feel like you've  
10 sort of lost your train of thought because I asked you  
11 well, what -- do you think there's anything that's the  
12 most important for Stanford to do as part of this interim  
13 study and you said monitoring --

14 A. Yes.

15 Q. -- the condition of the creek under differing  
16 water flow rates, and I said, oh, so that's the most  
17 interim measure, and you said, "I have no opinion."

18 A. I'm sorry that I followed your most important.  
19 Certainly it's something that the agencies have asked for  
20 and that we have and our consultants have eyed as a  
21 future to look at.

22 MS. FLANAGAN: And Chris, if I could just say  
23 separating out the interim measures the way you are for  
24 the study is I think creating some of the confusion  
25 because they're related to the study.

1 THE WITNESS: Yeah.

2 MS. FLANAGAN: The interim mission is just  
3 short-term studies that they're trying to do that bear on  
4 the actual studies.

5 So when you ask him what's the most important  
6 of the inter rims, there is only one area that really  
7 they're looking at in the interim. So that's I think  
8 some of the confusion.

9 You might want to broaden it to include  
10 studies, but -- that's up to you, but that's creating  
11 confusion.

12 MR. SPROUL: Well, let's be sure we're clear  
13 with each other about -- about that.

14 **Q. I thought that when you were talking to me**  
15 **earlier, you said yeah, there are these interim measures**  
16 **and we had this meeting in September, September 2013;**  
17 **correct?**

18 A. Again, I -- somewhere in that timeframe, yes.  
19 I don't guarantee it was September. I don't have my  
20 calendar in front of me.

21 **Q. And at this meeting, the resource agencies**  
22 **told us we -- we want Stanford to be doing some interim**  
23 **measures to -- to help species, something to that effect;**  
24 **is that right?**

25 A. No.

1 MS. FLANAGAN: That mischaracterizes the  
2 testimony.

3 THE WITNESS: It does. We were -- we went  
4 with them and have been discussing them. Nobody's  
5 telling anybody.

6 MR. SPROUL: Well, I -- when I asked you  
7 where did these interim measures ideas came from, I  
8 thought you repeatedly told me oh, that was the resource  
9 agency's idea, not Stanford's idea.

10 THE WITNESS: We had some which I mentioned  
11 that were broad and the -- the agencies, Corrine Gray  
12 focused interim measures. Let's look at flows as the  
13 primary focus.

14 MR. SPROUL: But I thought that you -- so  
15 let's be clear. I don't want to mischaracterize what you  
16 have to say or what the truth of the matter is, but I  
17 thought that you were telling me that -- that -- I said  
18 well, which of these four interim measures --

19 **Q. And we talked about four; right?**

20 **A.** We'd have to refresh what's the four.

21 **Q. Yeah. Well, in the four -- the four interim**  
22 **measures that I remember us discussing were one, some**  
23 **interim studies.**

24 **A.** Yes.

25 **Q. And the second one was screening on --**

1           A.           Mm-hmm.

2           **Q.           On Searsville Dam spillway.**

3           A.           Yes.

4           **Q.           The -- the third was -- was bypass flows.**

5           A.           Three.

6           **Q.           Right? And the -- the last one was ramping**  
7 **flows.**

8           A.           Yes.

9           **Q.           So those four ideas.**

10                    I thought when I asked you well, which of  
11 those -- which of those things is Stanford, you know,  
12 recommending and saying "we want to do those things," and  
13 you said -- I thought you said no, that's really more the  
14 agency's ideas.

15           A.           It's been a discussion with the agencies on  
16 what can be done in the interim, with the timeframe and  
17 what they would like to see, and we had discussions  
18 internally and with our consultants and Fish & Game or  
19 Fish and Wildlife had their discussions, as well.

20                    So that's -- and we're working trying -- we're  
21 working with them and made a very good effort. And so we  
22 want to do a good faith work.

23           **Q.           I'm sure you do. I have no doubt. But my**  
24 **question seems like a simple one.**

25                    Where did these four ideas originate? Did



1 they originate with the agencies or did they originate  
2 with Stanford, or was there some of the splitting up?

3 A. Undoubtedly splitting up.

4 Q. And so do -- do you know which ideas came from  
5 who?

6 A. I don't know where the screening came from.  
7 The bypass is always suggested by the agencies on every  
8 possible scenario of everything.

9 The studies would have been a combination with  
10 the metering, and the ramping, I don't know where that  
11 came from.

12 Q. I'm sorry. The studies came from?

13 A. It would have been a mix.

14 Q. Okay. Thank you.

15 So again, I don't want to confuse things about  
16 the studies. I thought in my own mind you were telling  
17 me okay. There's these short-term intermediate studies,  
18 and that's one thing. Now we got the Searsville  
19 committee process. That's another thing.

20 Those are two separate study things going on,  
21 and the -- the study for the interim measures thing,  
22 that's looking for, you know, short-term, short  
23 turnaround studies.

24 A. Right.

25 Q. And the other study is like well, those things

1 are going to take a while, and that would be maybe a  
2 different set of studies.

3 Was I wrong in that?

4 A. No, but they -- it depends on how they play  
5 out. We don't know exactly the duration of some studies.

6 Q. Right. All we can know is what we know  
7 today --

8 A. Exactly.

9 Q. -- right?

10 And so what I'm trying to figure out or find  
11 out from you is -- if you know. If you don't know, you  
12 don't know, but which -- which studies are in the  
13 short-term short turnaround interim measures camp and  
14 which studies are in the long-term camp?

15 A. The four you listed would have been in the  
16 short-term interim measure studies.

17 Q. And I suppose some might be in both  
18 conceivably.

19 A. They could conceivably blur together, yes.

20 Q. So I guess I just would ask at any point by  
21 asking about any studies and it's confusing to you  
22 whether I'm talking about the short-term short turnaround  
23 studies that are being, you know, the focus of the  
24 September meeting process versus the Searsville committee  
25 process, let me know if you don't understand that, or

1 **clarify it in your answer or both.**

2 A. Okay.

3 **Q. So back to the immediate study, the condition**  
4 **of -- the condition of the creek under differing water**  
5 **flow rates, is that an interim measure study or is that a**  
6 **long-term study or is that both?**

7 A. It's interim and I believe it's long-term, as  
8 well.

9 **Q. And is Stanford formally doing that -- that**  
10 **study or is it still in the planning stages?**

11 MS. FLANAGAN: Which -- which study?

12 MR. SPROUL: The condition of -- the  
13 condition of the creek under differing water flow rate  
14 studies.

15 THE WITNESS: The first step of putting some  
16 more meters has already happened, and then this year's  
17 complete lack of rainfall for most of the year precluded  
18 the starting of the -- of the study.

19 (Launer Exhibit No. 6 was  
20 marked for identification.)

21 MR. SPROUL: I'd like to direct your  
22 attention to --

23 THE WITNESS: Thank you.

24 MR. SPROUL: -- Exhibit 6, and let me know  
25 when you've had a chance to look at -- look over Exhibit

1 6.

2 THE WITNESS: Okay.

3 MR. SPROUL: Q. Okay. Have you seen this  
4 document before?

5 A. I don't recognize it.

6 Q. It -- it purports to be a -- a figure prepared  
7 by Balance Hydrologics --

8 A. Mm-hmm.

9 Q. -- and mapping stream monitoring locations in  
10 the San Francisquito watershed.

11 Have you seen any other documents written by  
12 Balance Hydrologics that mapped stream monitoring  
13 locations in the San Francisquito watershed?

14 A. I don't recall seeing a document from Balance  
15 that had a map. I don't remember seeing a map in a  
16 document by Balance. This is the first time I've seen  
17 this.

18 Q. Have you ever received any narrative  
19 discussion written by Balance Hydrologics or anyone else  
20 about where stream monitoring locations are situated in  
21 this watershed?

22 A. I don't remember.

23 Q. Has anyone ever told you where stream  
24 monitoring locations in the watershed are?

25 A. Yes.

1 Q. And -- and who's told you that?

2 A. It would have been part of our presentation.

3 Q. A presentation by whom?

4 A. I'm trying to remember. I don't remember.

5 Q. And do you recall the -- the context of seeing

6 this presentation?

7 A. There have been -- no.

8 Q. Nothing about it?

9 A. I'm -- I'm spacing, no.

10 Q. Do you recall anything about any -- any

11 information you've received about where -- where stream

12 gauges are located in the -- in the watershed?

13 A. These are old gauges by the date. I know

14 we've put in new ones since, but I don't know where they

15 are.

16 Q. So you had -- you had no role in designing

17 where stream gauges should go --

18 A. No.

19 Q. -- in the watershed?

20 Do you have any opinion about whether stream

21 gauging is -- is adequate in the -- in the San

22 Francisquito watershed to answer any research question

23 that you think should be posed?

24 A. No. I have no opinion.

25 Q. Well, are there -- are there any other

1     **research questions that you think should be posed as part**  
2     **of the interim measures study besides this condition of**  
3     **the creek study that we've discussed?**

4           A.           I don't know the current -- the current  
5     proposal.

6           **Q.           Well, apart from the current proposal -- I**  
7     **mean, just -- even without the proposal.**

8                       **As a -- as a conservation biologist with some**  
9     **knowledge of this area, is there anything that you'd like**  
10    **to pose as a research question?**

11          A.           So the four we have going are --

12                       MS. FLANAGAN:    You're still talking about  
13     interim measures?

14                       MR. SPROUL:    Interim measures, yeah,  
15     short-term studies.

16                       THE WITNESS:    The four we have going are  
17     ramping study, bypass study, precondition under different  
18     flow -- flows study, and the screen possible study.

19                       Those are good interim measures. I would not  
20     add to that at this time.

21                       MR. SPROUL:    Okay.

22                                       (Launer Exhibit No. 7 was  
23                                       marked for identification.)

24                       MR. SPROUL:    Okay. I'd like to direct your  
25     attention, please, to Exhibit 7, a document that purports

1 to be dated July 15th, 2013 and is titled: "Searsville  
2 Alternative Study - URS Initial Technical Studies -  
3 Additional Aspects Being Considered Based on Advisory  
4 Group Comments."

5 I'd like to ask you whether you've seen this  
6 document before.

7 THE WITNESS: No.

8 MR. SPROUL: Q. Do you know whether there  
9 was an advisory group meeting in around July 2013?

10 A. I'd have to check with the calendar.

11 Q. Um --

12 MS. FLANAGAN: Are you representing that this  
13 is a URS document?

14 MR. SPROUL: I'm representing -- I will -- I  
15 will say this for the record. I don't think it's  
16 particularly pertinent, but I don't mind saying it.

17 This is a document provided to us by the  
18 California Department of Fish and Wildlife in response to  
19 a Public Records Act request.

20 So -- so I'm wondering if you -- so apart from  
21 the document itself, it talks about various things and I  
22 just want to ask you if you recall -- as you say you've  
23 been to the advisory group -- a meeting.

24 THE WITNESS: Some.

25 MR. SPROUL: Whether you recall the --

1 there's six items listed here that are -- according to  
2 this document are being considered for additions to the  
3 studies work, and I -- I assume that -- and my questions  
4 will -- will ask you -- whether this is, you know, the  
5 long-term study work that we've been talking about, the  
6 Searsville committee work as opposed to this interim  
7 measures studies done.

8 Q. And then -- so my first question is whether --  
9 are you aware that the -- the long-term Searsville  
10 committee work study work is including a -- a gauge  
11 summary table, putting together a table of -- of the  
12 stream monitoring gauges that are identified in  
13 appropriate reports?

14 Do you know whether that's being done?

15 A. I don't know.

16 Q. And do you have any opinion about whether that  
17 should be done?

18 A. Summary tables are good.

19 Q. Okay. There -- the next item is "the  
20 information determined to be useful relevant will be  
21 incorporated into the appropriate studies, primarily to  
22 the upcoming system response studies."

23 Do you know, does that phrase have any meaning  
24 to you? Have you heard that phrase "upcoming system  
25 response studies"? Do you know what that is?



1           A.           No. I -- the phrase "system response" always  
2 turns me off. I actually don't know if its a good  
3 definition.

4           **Q.           Okay. In all caps, there's something referred**  
5 **to as being a biological conditions technical memo.**

6                       **Do you -- have you seen that term used in any**  
7 **of the meetings, Searsville meetings that you've been to?**

8           A.           There is a valid conditions technical memo,  
9 yes.

10          **Q.           Do you know who wrote that technical memo?**

11          A.           URS.

12          **Q.           Do you recall when it was written?**

13          A.           I don't know the date.

14          **Q.           June 2013? Is that -- don't know?**

15          A.           Sounds reasonable.

16          **Q.           Okay. Do you recall -- do you recall reading**  
17 **the biological conditions technical memo?**

18          A.           Yes.

19          **Q.           Do you recall discussing it with anyone?**

20          A.           Yes.

21          **Q.           And who did you discuss it with?**

22                       MS. FLANAGAN:   This is other than attorneys  
23 in that context.

24                       MR. SPROUL:   Well, except that you can  
25 identify that you talked to --

1 MS. FLANAGAN: Oh, no.

2 MR. SPROUL: -- an attorney.

3 MS. FLANAGAN: The way you've asked the  
4 question, you've identified the content.

5 MR. SPROUL: I don't -- I don't think it's an  
6 unfair question to say "did you discuss this memo with  
7 the attorney?"

8 MS. FLANAGAN: Right, and that identifies the  
9 content of the communication.

10 Did you discuss it with someone other than  
11 your attorney?

12 THE WITNESS: URS.

13 MR. SPROUL: Q. Okay. Anyone else besides  
14 URS or an attorney?

15 A. I don't recall.

16 Q. **Mm-hmm. Are you -- do you recall any -- any**  
17 **process to incorporate AG submitted documents in -- into**  
18 **these long-term studies or long-term study effort**  
19 **undertaken by Stanford?**

20 A. Yes. Documents, I don't know.

21 Q. **Would that be something that URS would --**  
22 **would be doing?**

23 A. URS would know.

24 Q. **Okay. Do you know who at URS would know?**

25 A. Seth is the contact person.

1 Q. Okay. The next item is "assess sediment  
2 management. The study on sediment removal/disposal  
3 options will be expanded to include qualitative  
4 information on sediment management."

5 Do you recall any discussion within the  
6 Searsville committee process of expanding the study to  
7 include information on sediment management?

8 A. Some sediment management was always part of  
9 the study.

10 Q. But there's a discussion here or mention of it  
11 being expanded, I mean, as opposed to -- do you have any  
12 remembrance of the discussion about "oh, we need to  
13 expand" --

14 A. I don't remember that -- that aspect.

15 Q. Do you have any opinion about whether the --  
16 the sediment study needs to be expanded beyond what  
17 Stanford was doing prior to July 2013?

18 A. I have no opinion.

19 Q. Okay. The next item is "characterize upstream  
20 fish habitat. Limited upstream field visits on Stanford  
21 property and selected publicly accessible upstream  
22 locations will be conducted."

23 Do you recall discussion about such upstream  
24 field visits?

25 A. Yes.

1           **Q.           And were -- were you one of the people**  
2 **targeted or singled out for conducting these upstream**  
3 **field visits?**

4           A.           No. This is URS.

5           **Q.           So were you going to participate in these**  
6 **upstream field visits or was this just going to be URS**  
7 **people?**

8           A.           I met them about three weeks ago, four weeks  
9 ago. They started this.

10          **Q.           Okay. But you're not participating in it?**

11          A.           No.

12          **Q.           Is anyone at Stanford participating?**

13          A.           No.

14          **Q.           So -- but you did meet and discuss these**  
15 **upstream field visits with URS people?**

16          A.           Yes.

17          **Q.           And who were those URS people?**

18          A.           Jonathan Stead, Jon Stead and a second person  
19 whose name I forget.

20          **Q.           And did you exchange e-mails with Mr. Stead**  
21 **and the other person about these upstream field visits?**

22          A.           Jon Stead, yes.

23          **Q.           More than one e-mail?**

24          A.           Yes.

25          **Q.           Was the other person Cosmo by any chance?**

1 A. It was not Cosmo.

2 Q. And do you recall the substance of your e-mail  
3 communications about these upstream field visits?

4 A. Timing, asking about weather conditions.

5 Q. Then there's a reference to "visiting selected  
6 publicly accessible upstream locations."

7 Do you know what those upstream locations are?

8 A. No.

9 Q. And then "relevant information by others would  
10 be reviewed."

11 Do you know what information was being  
12 referred to there? Do you recall any discussion about  
13 upstream fish habitat and information to be provided by  
14 others?

15 A. The marine fisheries has a model. That was  
16 going to be reviewed, and anybody that sent in any  
17 information then would be reviewed.

18 Q. Do you know whether that includes information  
19 from Matt Stecker?

20 A. Not specifically.

21 Q. Do you know if he sent in relevant  
22 information?

23 A. Not specifically.

24 Q. Not specifically, he didn't?

25 A. I don't know if he did.

1           **Q.**       **The NMFS model that you were referring to,**  
2 **what model is that?**

3           A.        I don't know the name of it.

4           **Q.**       **Have you used it before?**

5           A.        I've never used it before.

6           **Q.**       **Have you heard of it before?**

7           A.        Not before this process.

8           **Q.**       **And then there's an observation that**  
9 **"quantitative statements will be compiled on upstream**  
10 **habitat and passage barriers."**

11                   **Do you -- you recall discussion about**  
12 **gathering additional information about upstream habitat**  
13 **and passage barriers? In the advisory group process.**

14           A.        In the advisory group process, no. I don't  
15 remember that.

16           **Q.**       **Or the Searsville committee as a whole?**

17                   MS. FLANAGAN:   And then on that, I just have  
18 to caution you again if anything is attorney/client or  
19 work -- attorney work product, do not reveal the content.

20                   THE WITNESS:   I don't know how to separate  
21 those apart, so no.

22                   MS. FLANAGAN:   If you're talking to the  
23 advisory group, it's not.

24                   THE WITNESS:   Right, right. I don't remember  
25 talking to the advisory group about that. The working

1 group.

2 MS. FLANAGAN: Okay.

3 MR. SPROUL: And then it says: "This  
4 information will be documented in relevant reports."

5 **Q. So do -- do you recall any discussion within  
6 the committee process about URS preparing some additional  
7 reports that discussed upstream fish habitat?**

8 A. I don't know specifics, no.

9 **Q. You don't recall that -- any discussion about  
10 that?**

11 A. Additional reports, no.

12 **Q. Okay. Are you aware of any information about  
13 upstream passage barriers? And I assume in this context,  
14 "upstream" means upstream of Searsville Dam, but you can  
15 tell me if you have a different understanding.**

16 MS. FLANAGAN: If you know the context.

17 THE WITNESS: To answer your question, no.

18 MR. SPROUL: Yeah. Well, again, I'm only  
19 asking --

20 THE WITNESS: Yeah.

21 MR. SPROUL: -- in the context of what you  
22 heard or know in part -- participating with this  
23 Searsville committee process and discussions with URS.

24 **Q. Have you -- in that context, has there been a  
25 general understanding about whether we say upstream, we**

1     **mean this and when we say downstream, we mean that?**

2           A.           Downstream is easier. Downflow of the dam.  
3     Upstream has caused confusion, and so there actually  
4     is -- I'm not actually quite sure because there's  
5     upstream of the dam, upstream of the reservoir, upstream  
6     of the wetlands.

7                    They're all been called upstream. And so it  
8     actually does cause confusion.

9           **Q.           Okay. Do you have any opinion about where --**  
10    **what areas upstream of Searsville Dam should be looked at**  
11    **for further study and evaluation?**

12          A.           There is a document from the Watershed  
13    Council, I believe --

14                    MS. FLANAGAN:    He's asking do you have an  
15    opinion --

16                    THE WITNESS:    No.

17                    MS. FLANAGAN:    So stick with his question.  
18    Do you have an opinion?

19                    THE WITNESS:    On -- can you restate the  
20    question, please?

21                    MR. SPROUL:    Yeah.

22          **Q.           Do you have an opinion about whether there are**  
23    **areas upstream of Searsville Dam, so we'll just pick a**  
24    **fixed point.**

25          A.           Okay.



1 Q. Searsville Dam, upstream of that that should  
2 be looked at as part of the long-term study efforts, that  
3 Searsville committee study effort?

4 A. Yes.

5 Q. And what -- what is your opinion?

6 A. I think there are areas that need study.

7 Q. And what are those areas?

8 A. The reservoir itself, the wetlands upstream of  
9 the reservoir and then the creeks is already covered.

10 Q. And the creeks upstream of the wetlands?

11 A. Is -- just reading this Number 4, which is  
12 roughly describing what's going on right now.

13 Q. Yeah -- yeah, but apart from what they're  
14 describing here -- I guess -- I don't want to confuse  
15 you, but I'm sort of asking a different question.

16 Just your opinion -- apart from what's written  
17 here -- you know, do you think that there's areas  
18 upstream of Searsville Dam that Stanford should be  
19 looking at as part of its long-term study effort?

20 You told me the reservoir, wetlands.

21 A. Yep.

22 Q. And what I wasn't clear about is what about  
23 the creeks upstream of the wetlands, Alambique, Dennis  
24 Martin, Sausal, et cetera.

25 A. As part of --

1 Q. Corte Madera.

2 A. As part of the --

3 Q. As part of the long-term Searsville committee  
4 study process, whatever the -- the objectives of that  
5 study process are.

6 A. Things are getting a little confused. The  
7 question is?

8 Q. Do you think that there's any areas up above  
9 the wetlands that are above Searsville Dam that Stanford  
10 should be looking at or studying now and going forward as  
11 part of the Searsville committee process?

12 A. Define "study."

13 Q. That -- that term doesn't have any meaning to  
14 you?

15 A. It has a lot of meanings to me. That's the  
16 problem.

17 Q. Well, how would you use it?

18 A. I would define the kind of study we're talking  
19 about. The National Marine Fisheries model can be called  
20 a study. That's being looked into. URS is -- visiting  
21 these sites is a study. That's being done.

22 More than that, I have no opinion.

23 Q. Okay. And then the next item, "characterize  
24 downstream limiting passage reaches."

25 "Based on previous reports and limited field

1 visits, limiting passage conditions, natural and  
2 constructed, will be identified and described, including,  
3 for example, the transition reach from canyon to alluvial  
4 fan and other known reaches where flow goes subsurface."

5 So do you recall any discussion within the  
6 Searsville committee process of this downstream limiting  
7 passage reach topic as a topic of further study?

8 A. I don't remember limiting -- limited passage  
9 conditions mentioned as such.

10 Q. The -- the language here talks about a  
11 transition reach from canyon to alluvial fan.

12 Based on your participation in this meeting  
13 process, does this phrase have meaning to you? Do you  
14 remember that being identified?

15 A. I -- I remember seeing that, and I don't know  
16 exactly where or what it is.

17 Q. Okay. Do you know areas where flow goes  
18 subsurface in Corte Madera Creek? Just take them one at  
19 a time, Corte Madera Creek.

20 A. Is the question of where it dries out?

21 Q. Yeah. Do you know of reaches where -- within  
22 Corte Madera Creek where flow goes subsurface at least  
23 part of the year?

24 A. Yes.

25 Q. And do you know reaches in the San

1 **Francisquito Creek where the flow goes subsurface at**  
2 **least part of the year?**

3 A. Any given year typically is not in the same  
4 place.

5 Q. **But probably not so radically different year**  
6 **to year that there isn't a general area where the -- the**  
7 **stream typically goes subsurface than another; right?**

8 A. There are some general areas. There are some  
9 specific areas that do change quite a bit.

10 Q. **I mean, in general, stream flow goes**  
11 **subsurface where there's alluvial deposit as -- as**  
12 **streambed? Yes?**

13 A. My observation, that is one -- certainly one  
14 type of a place, yes, the ground wet.

15 Q. **And where there's -- where there's bedrock at**  
16 **or close to the surface, that -- that tends to be areas**  
17 **where stream flow ponds and makes it through the summer?**  
18 **All things equal.**

19 **Would that be a fair statement?**

20 A. I would not be the one to ask about it.

21 Q. **Is there someone at Stanford who would be the**  
22 **person to ask?**

23 A. No. Probably URS.

24 Q. **So you don't recall in the committee meeting**  
25 **process whether there's been any specific study of -- or**

1 specific discussion of let's map out and identify where  
2 there's reaches that are substrate is as more  
3 characterized by bedrock versus areas of the creek where  
4 substrate is more characterized by more, you know, porous  
5 material like alluvial fan material?

6 A. I don't remember that discussion.

7 Q. Do you think that's something that should be  
8 studied and mapped?

9 A. I would defer to the hydrologist and geo-  
10 morphologist.

11 Q. And the last item is a Searsville Reservoir  
12 water budget.

13 In all your work with Stanford, have you ever  
14 come across something that you would identify as a  
15 Searsville Reservoir water budget?

16 A. No.

17 Q. So to the best of your knowledge, that doesn't  
18 exist currently?

19 A. Yes.

20 Q. Who would be the person most knowledgeable  
21 at -- at Stanford about whether -- about Searsville  
22 Reservoir water budgets related issues?

23 A. I don't know.

24 Q. Now, do you recall in the committee meeting  
25 process any discussion about inflows and outflows into

1 **the reservoir being identified and estimated as a topic**  
2 **of study?**

3 A. Again, which process?

4 **Q. In the Searsville committee meeting process.**

5 A. Yes.

6 **Q. And what do you recall at the time with**  
7 **respect to that discussion?**

8 MS. FLANAGAN: Again, excluding any  
9 conversations that are privileged. So discussions that  
10 you had in the advisory group or with the advisory group.

11 THE WITNESS: I don't remember anything with  
12 the advisory group. I'd have to leave it at that.

13 MR. SPROUL: Q. Okay. And do you recall  
14 any discussion about the effect of evapotranspiration  
15 in -- in the watershed on levels of water in Corte Madera  
16 Creek or San Francisquito Creek?

17 A. In the advisory group?

18 **Q. Or -- yeah -- well, in -- say in the**  
19 **committee process. If it involved just an attorney, then**  
20 **you can say no.**

21 MS. FLANAGAN: Well, not just an attorney,  
22 but there's an attorney present such that there's an  
23 attorney communication going on.

24 THE WITNESS: No.

25 MR. SPROUL: Q. Do you have any opinion

1 about whether the -- performing a water budget for  
2 Searsville Reservoir is a good idea or a bad idea?

3 A. As a layman, good idea, but I would defer to  
4 the hydrologist and geomorphologist, yeah, to see if the  
5 two are possible.

6 MR. SPROUL: This is going to be 8.  
7 (Launer Exhibit No. 8 was  
8 marked for identification.)

9 MR. SPROUL: Okay. I'd like to direct your  
10 attention to Exhibit 8.

11 MS. FLANAGAN: This has Stanford production  
12 number written on it.

13 MS. ISAACS: Because it didn't print.

14 MR. SPROUL: I'd like to direct your  
15 attention to Exhibit 8.

16 MS. ISAACS: It was produced to us as an  
17 Excel spreadsheet. It depends on how you print it. It  
18 doesn't print properly.

19 MS. FLANAGAN: So you're representing that --

20 MS. ISAACS: I'm representing that that was  
21 what it was.

22 MS. FLANAGAN: And is this an excerpt? Wait  
23 a minute.

24 MS. ISAACS: This is the entire thing. If  
25 you wanted to see it as -- we produced it in two

1 different ways. If you want to see the entire  
2 spreadsheet with all columns, you can, but you may need  
3 some magnification because it's quite small.

4 So we also produced it in a way that was more  
5 readable. Pages 1 through 5 represent the first, you  
6 know, ten columns and then the remaining columns are  
7 produced on pages 6 through 10.

8 MS. FLANAGAN: And 6 corresponds to 1, 7  
9 corresponds to 2?

10 MR. COSTA: Here's copies of them all  
11 together, but they're small.

12 MS. FLANAGAN: Are you going to be asking him  
13 about the last two columns?

14 MR. SPROUL: Possibly.

15 MR. COSTA: Just in case.

16 MS. FLANAGAN: Just if we need to line them  
17 up.

18 MR. COSTA: That's not for the exhibit, but  
19 just for you.

20 MS. FLANAGAN: Look off of this one and we'll  
21 go to this one if we need to for the last two columns.

22 THE WITNESS: I'm not sure if I can read  
23 that.

24 MR. COSTA: It's pretty small.

25 MR. SPROUL: Yeah. It's pretty small.



1 MS. FLANAGAN: And this has more lines per  
2 page.

3 MR. SPROUL: Q. Okay. Have you had a  
4 chance to look over this Exhibit 8?

5 MS. FLANAGAN: Well, what do you want him to  
6 do should? This is a long complicated spreadsheet.

7 MR. SPROUL: Just to -- sorry.

8 **Q. Just have you had a chance to look at it**  
9 **enough to answer this question: Is this a document**  
10 **you've seen before?**

11 A. Yes.

12 **Q. And -- and it is a document you've seen**  
13 **before?**

14 A. Yes.

15 **Q. Okay. Great. My understanding is that this**  
16 **is a -- a spreadsheet produced -- an Excel file in Excel**  
17 **file format that was produced by the San Francisquito**  
18 **Creek Watershed Council.**

19 **Is that your understanding?**

20 A. Yes.

21 **Q. And I'd like to --**

22 MS. FLANAGAN: Excuse me. Where do you see  
23 that?

24 MS. ISAACS: It's in the column A, row 1.  
25 These are Watershed Council, migration barrier

1 spreadsheet.

2 MS. FLANAGAN: Okay. I see Matt Stecker on  
3 the right-hand side. That's why I'm asking.

4 MR. SPROUL: Yes. I was going to get to  
5 that.

6 MS. FLANAGAN: This is talking about a  
7 migration barrier. I'm just trying to understand the  
8 source of the document.

9 MR. SPROUL: Right. Well, here's -- we'll  
10 represent that for the record. This is a document that  
11 Stanford provided to us in response to a discovery  
12 request along with no explanation about what the document  
13 was, but --

14 MS. FLANAGAN: So why don't we ask the  
15 witness then instead of telling the witness who prepared  
16 it.

17 MS. ISAACS: He just asked us what it was and  
18 we were trying to explain it.

19 MR. SPROUL: So we'll get there. Maybe if  
20 you'll just a little bit patient.

21 So again, this is a document that Stanford  
22 gave to us and I was asking you whether this is a  
23 document you've seen before, and your answer was "yes,  
24 I've seen this before."

25 Q. That's where we are, right?

1           A.           Yes.

2           **Q.           Okay. So it looks to me like it's a**  
3 **spreadsheet prepared by the San Francisquito Council --**  
4 **Watershed Council and, you know, it's a barrier**  
5 **spreadsheet they titled it, and it looks to me like there**  
6 **were some notes to the spreadsheet that either they added**  
7 **or that Matt Stecker added, but somehow Stanford ended up**  
8 **with the document and then Stanford gave it to us.**

9                       **Do you have any further explanation how Matt**  
10 **Stecker's notes ended up on this document?**

11                   MS. FLANAGAN:    So first of all, that's a very  
12 compound question that assumes four different things in  
13 it.

14                   So I think you need to go step by step with  
15 him as to who he believes authored it, what he believes  
16 the Matt Stecker reference is, et cetera.

17                   He can't answer the question as posed because  
18 there are four different assumptions in it. It's  
19 compound.

20                   MR. SPROUL:    Q.    Do you know how Stanford  
21 acquired this document?

22           A.           It was distributed via the Watershed Council.

23           **Q.           Do you know how Matt Stecker's notes ended up**  
24 **on it?**

25           A.           Matt was employed at the Watershed Council, as

1 I recall.

2 Q. Okay. So I'd like to direct your attention  
3 to -- there's -- well, let me -- let me ask this: My  
4 understanding is that this was an attempt to compile  
5 information about all of the barriers that are in San  
6 Francisquito Creek, barriers to Steelhead passage.

7 Was that your understanding of what this  
8 document was?

9 MS. FLANAGAN: Steelhead or salmon? Are you  
10 distinguishing?

11 MR. SPROUL: Q. Well, all right. All  
12 right. Are there any other salmonid in San Francisquito  
13 Creek besides O-mykiss?

14 A. Not that I know of.

15 Q. So this is an attempt to gather information  
16 about barriers to O-mykiss passage in San Francisquito  
17 Creek? Yes?

18 A. Yes.

19 Q. And tributaries to San Francisquito Creek?  
20 Yes?

21 A. Yes.

22 Q. When did you first see this document?

23 A. I don't know.

24 Q. Have you discussed it with anyone other than  
25 your attorney?

1 A. Discussed it? I don't remember discussing it.

2 Q. Okay. Do you recall anyone sending you any  
3 e-mail communications about this -- this document?

4 A. Yes.

5 Q. Who sent you such e-mails?

6 A. I don't remember.

7 Q. Do you recall about when those e-mails would  
8 have been?

9 A. It would have been more than five years ago.

10 Q. Have you -- have you ever used this  
11 spreadsheet in -- for any purpose?

12 A. I've looked at it.

13 Q. Other than looking at it, have you used it  
14 for -- for any reason?

15 A. I think I added up the barriers once.

16 Q. And so there are several barriers that are  
17 identified as being on Stanford University property, so  
18 if you look at -- so I'd like to ask you some questions  
19 about those barriers.

20 So the first barrier is SF4. So if you can  
21 find where that is in the column. I realize that there's  
22 a lot of columns.

23 A. Mm-hmm.

24 Q. Got it?

25 A. Mm-hmm.

1 Q. Thank you.

2 This is identified as the Stanford golf cart  
3 crossing.

4 A. Yes.

5 Q. And is the location accurately described here,  
6 300 feet downstream at Junipero Serra crossing?

7 A. Oh, I don't know the specifics, if 300 feet is  
8 accurate.

9 MS. FLANAGAN: Are you asking whether this is  
10 accurate as of today or accurate as of the date that's up  
11 along the document?

12 MR. SPROUL: As of the date of the document.

13 Q. Was this an accurate information then? But he  
14 already said he doesn't know, right?

15 A. I don't know if 300 was accurate.

16 Q. But it was somewhere downstream in the  
17 Junipero Serra crossing.

18 Is that true?

19 A. Yes.

20 Q. And has this golf cart crossing been removed  
21 by Stanford?

22 A. Yes.

23 Q. And when was it removed?

24 A. I don't remember the specific date.

25 Q. The note in column V says that the barrier was

1 completely removed and the adjacent area restored."

2 So as far as you know, that notation is  
3 accurate?

4 A. Yes.

5 Q. Do you know what the restoration work  
6 consisted of?

7 A. Plantings and stabilizations.

8 Q. Do you help design that in any way?

9 A. Not that I remember.

10 Q. Do you know who did?

11 A. No.

12 Q. Do you have any opinion about -- well, let me  
13 back up.

14 Do you know why this crossing was -- golf cart  
15 crossing was removed?

16 MS. FLANAGAN: I'm going to object to the  
17 line of questioning as -- as irrelevant.

18 Go ahead.

19 THE WITNESS: I don't know the exact reason  
20 why the golf cart crossing was removed.

21 MR. SPROUL: Q. Do you know anything about  
22 the reason why it was removed?

23 A. There was work in the area with a major road  
24 bridge, but I don't know if the two were linked.

25 Q. Removal of the crossing had nothing to do with

1 **improving Steelhead or O-mykiss passage conditions?**

2 A. I don't know the design considerations.

3 Q. Do you have any opinion about whether the golf  
4 cart crossing was a barrier to fish passage before it was  
5 removed?

6 A. No.

7 Q. Okay. The next item is SF7, if you can find  
8 that.

9 A. Mm-hmm.

10 Q. And that is -- whoops. If you can hold on a  
11 second. I've lost my place. There we go.

12 That was the Lake Lagunita -- or that is the  
13 Lake Lagunita Diversion Dam.

14 Have you -- and it describes the lake Lagunita  
15 Diversion Dam as being .3 miles downstream of the Los  
16 Trancos confluence.

17 Do you know whether that's an accurate  
18 description of where the Lake Lagunita Diversion Dam is  
19 located?

20 A. Again, I don't have the exact numbers.

21 Q. Well, apart from the -- the exact numbers,  
22 it's some distance downstream of the confluence --

23 A. Yes.

24 Q. -- between Los Trancos Creek and San  
25 Francisquito Creek?



1 A. Yes.

2 Q. And Stanford -- do you know whether Stanford  
3 uses the Lake Lagunita Diversion Dam currently for any  
4 purpose?

5 A. Yes.

6 Q. What purpose is that?

7 A. I know that -- I know if they use it for a  
8 purpose. It has no purpose. It's not being used.

9 Q. There's -- in the column P and -- well, in the  
10 column P --

11 MS. FLANAGAN: The letters don't show up.

12 THE WITNESS: It's the header.

13 MR. SPROUL: Oh, the header is severity.

14 THE WITNESS: Okay.

15 MR. SPROUL: There's a -- a grade given or a  
16 number assigned or value assigned. It says: "1 to 2"  
17 and "then (3 to 4)."

18 Q. Do you recall looking at this grading system  
19 for any purpose in the past?

20 A. I don't recall looking at the grading system.

21 Q. And then there's a -- would the same be true  
22 for biological benefit in the grading that's in that box  
23 under biological benefit?

24 A. Yes.

25 Q. Okay. And then for recommended action,

1     **there's the notation "assess alternatives for improving**  
2     **fish passage."**

3             **Do you -- do you recall hearing any discussion**  
4     **at Stanford or anywhere else about assessing alternatives**  
5     **for improving fish passage past the Lake Lagunita**  
6     **Diversion Dam?**

7     A.        Yes.

8     **Q.        And who -- who were those discussions with?**

9     A.        Tom Zigterman.

10    **Q.        Anybody else?**

11    A.        I don't remember. Jean McGowan. I remember  
12    Jean McGowan, but I don't remember specifically anybody  
13    else.

14    **Q.        Do you recall whether you had discussions with**  
15    **Mr. Zigterman?**

16    A.        It's been ongoing for -- I am not quite sure  
17    how many years, more than four, more than five years.

18    **Q.        And are you discussing that matter with him**  
19    **currently?**

20    A.        Yes.

21    **Q.        And when was the last time you discussed it**  
22    **with him?**

23    A.        Casual discussion? Last week.

24    **Q.        Have you traded e-mail communications with him**  
25    **about Lake -- Lake Lagunita -- about -- yeah. Lake**

1 **Lagunita Diversion Dam?**

2 A. I don't recall.

3 **Q. Do you recall the -- the substance of any**  
4 **communications with -- with Tom with the diversion dam?**

5 A. Can you specify?

6 **Q. Well, just do you recall -- you said you've**  
7 **talked to him recently, for example. What did you --**  
8 **let's start with that.**

9 **What did you talk about with respect to the**  
10 **dam?**

11 A. It would be more plan of attack.

12 **Q. And what do you mean by "plan of attack"?**

13 A. Timing.

14 **Q. Is that the time to do some remedial effort**  
15 **with respect to the diversion dam?**

16 MS. FLANAGAN: Is this still about fish  
17 passage?

18 MR. SPROUL: It is.

19 MS. FLANAGAN: Yeah.

20 THE WITNESS: It's timing to do -- look at  
21 the dam as a whole, the weir as a whole.

22 MR. SPROUL: Q. Do you have any -- do you  
23 have any opinion about whether the Lake Lagunita  
24 Diversion Dam blocks migration of -- or movement of  
25 O-mykiss on San Francisquito Creek?

1 A. No.

2 Q. Other than improving movement of -- of  
3 O-mykiss on -- on San Francisquito Creek, can you think  
4 of any other reason why Stanford should modify or would  
5 want to modify the Lake Lagunita Diversion Dam?

6 A. Yes.

7 Q. And what -- what is that?

8 A. It's a maintenance liability.

9 Q. And can you explain by that -- what you mean  
10 by that?

11 A. It's not used in the diversion. So the fish  
12 ladder needs to be maintained that's on it. So if  
13 there's a way to fix it so it requires less maintenance.

14 Q. The note here under column -- the last  
15 column -- I guess notes, notes updated column.

16 MS. FLANAGAN: Is that the last two? Does  
17 that go to the other page?

18 MR. SPROUL: Yeah, yeah. It's the last  
19 column.

20 MS. FLANAGAN: SF --

21 MR. COSTA: That's going to be out of order  
22 because we didn't -- just look for SF7. We didn't --

23 THE WITNESS: It's this one, though.

24 MR. COSTA: Here.

25 MS. ISAACS: This is easier to read

1 (Indicating).

2 MR. COSTA: This one's easier because this  
3 one's same order.

4 THE WITNESS: Oh.

5 MS. FLANAGAN: Okay.

6 MR. COSTA: Doesn't have the Bates number on  
7 here.

8 MS. FLANAGAN: So we're just accepting that  
9 these are copies of --

10 MS. ISAACS: Yeah.

11 MS. FLANAGAN: Was evaluated. That's the  
12 comment?

13 MR. SPROUL: Was evaluated.

14 MS. FLANAGAN: Can you read that okay?

15 THE WITNESS: I can read that.

16 MR. SPROUL: So the remarks in that column  
17 say that "Lagunita diversion dam was evaluated."

18 **Q. Do you -- do you have any sense of what --**  
19 **what evaluation of the diversion dam took as -- took**  
20 **place in this timeframe?**

21 A. No.

22 **Q. Do -- it goes on to say: "The fishway was**  
23 **modified or extended to improve fish" -- I think that's**  
24 **fish passage. I think the P got left out.**

25 **Is -- do you recall or do you know whether the**

1 **fishway on Lagunita diversion dam was -- was modified?**

2 A. Yes.

3 **Q. And was that in 2006?**

4 A. I don't know the date.

5 **Q. And it -- was it Stanford that did the**  
6 **modification?**

7 A. Yes.

8 **Q. And do you know why Stanford did the**  
9 **modification?**

10 A. We were working with Fish & Game and NOAA.

11 **Q. And did you -- did you do any work in getting**  
12 **the permits for that fish passage modification project?**

13 A. Not that I recall.

14 **Q. Do you know whether Stanford got permits for**  
15 **it?**

16 A. No. I don't know.

17 **Q. And there's a further notation here in this**  
18 **box that "BFG and NOAA along with Stanford have agreed to**  
19 **remove this dam completely and plans for studies are**  
20 **underway presently."**

21 **Do you know whether that's a true statement?**  
22 **Say today, is that a true statement?**

23 A. No. I don't know.

24 **Q. Do you know who would know at Stanford?**

25 A. No.

1 Q. Do you have any opinion about whether the  
2 diversion dam should be removed?

3 A. Can you clarify or be a little more specific?

4 Q. Well -- well, you just had a talk with -- with  
5 Tom Zigterman very recently about a plan of attack --

6 A. Mm-hmm.

7 Q. -- with respect to the diversion dam.

8 A. Yes.

9 Q. And was that plan of attack including removal  
10 of the -- of the diversion dam?

11 A. It would have been looking at options.

12 Q. And what options?

13 A. Removal could be one.

14 Q. So your conversations with Tom Zigterman would  
15 it be fair to say did not assume that the options had  
16 been chosen and that option was removal of the diversion  
17 dam?

18 A. Yes.

19 Q. So it's still up in the air?

20 A. Yes.

21 Q. You also had conversations with Jean McGowan  
22 about -- about the Lake Lagunita Diversion Dam?

23 A. Yes.

24 Q. And when was the most recent conversation?

25 A. I don't recall that one.

1 Q. Was it within the last year?

2 A. I don't recall.

3 Q. It was quite -- it was some time ago. It  
4 wasn't last week?

5 A. Yeah. I don't recall talking to Jean last  
6 week about this.

7 Q. Do you recall the substance of your  
8 conversation with her?

9 A. The dam is located in an area that there are  
10 private non-Stanford residences both upstream and  
11 downstream, and that would be Jean's area of expertise.

12 Q. And why would that be her area of specialty?

13 A. Because it's community relations.

14 Q. And that's her area of -- of work  
15 concentration at Stanford is community relations?

16 A. I don't know her precise job description.

17 Q. But in -- in general, that's what she does?

18 A. That's what I have interacted with her with,  
19 about.

20 Q. Does she have any -- any science training?

21 A. I don't know.

22 Q. Do you -- do you know whether Tom Zigterman  
23 has had conversations with other people at Stanford about  
24 the plan of attack for Lagunita Diversion Dam?

25 A. Oh, I don't know.



1           **Q.           Has -- has he expressed to you any -- any**  
2           **opinion about which -- which option should be chosen as a**  
3           **plan of attack?**

4           A.           No.

5           **Q.           What are the other options that are currently**  
6           **on -- on the table for Lake Lagunita Diversion Dam**  
7           **besides removal?**

8                       MS. FLANAGAN:   And I'm going to object to  
9           this whole line of questioning about this dam which isn't  
10          even in this case.  It's irrelevant.

11                      Go ahead.  Answer.

12                      THE WITNESS:   The answer is that it's in the  
13          planning stage.  There's nothing -- a loose planning  
14          stage.  There are no alternatives on the table.

15                      MR. SPROUL:   Q.   Do you have any sense of  
16          when Stanford might decide the final plan of attack or is  
17          that just completely unknown?

18           A.           It's unknown.

19           **Q.           Okay.  I'd like to direct your attention to**  
20           **SF8 on this spreadsheet.**

21           A.           Mm-hmm.

22           **Q.           Okay.  And that is named -- it says under**  
23           **common -- the common name column the Jasper Ridge Fire**  
24           **Road Crossing.  I think we were -- earlier we were**  
25           **calling it the concrete crossing.**

1 MS. ISAACS: Cement.

2 MS. FLANAGAN: Or cement or concrete.

3 MR. SPROUL: Cement crossing.

4 THE WITNESS: Yes.

5 MR. SPROUL: Q. Are we talking about the  
6 same thing?

7 A. Yes.

8 Q. **And -- and it says here that it's located**  
9 **about 300 feet downstream of Bear Creek confluence on the**  
10 **Jasper Ridge Biological Preserve.**

11 **Do you think that's an accurate description of**  
12 **where it is?**

13 A. Again, approximately without checking the  
14 numbers.

15 Q. **Okay. And it -- it indicates that there**  
16 **was -- that this is -- under the status column, it says**  
17 **that this was a culvert crossing replaced with a notched**  
18 **weir in the early 1990s.**

19 **Do you - do you know whether that's true?**

20 A. No.

21 Q. **You don't know whether there's a notched**  
22 **weir --**

23 A. Well, there's a notched weir there. I don't  
24 recall the previous structure.

25 Q. **Okay. You don't -- you don't recall seeing it**

1     **before it was notched?**

2           A.           I don't recall the structure that was there  
3 prior to what's there now.

4           **Q.           Okay. So I take it you had -- you had no role**  
5 **in advising Stanford on how to address this weir?**

6           A.           I remember nothing of that project.

7           **Q.           Okay. And under the recommended action**  
8 **column, there's a recommendation to monitor during winter**  
9 **flows to evaluate fish passage.**

10                        Do you -- do you recall hearing that as a  
11 **recommendation from anyone?**

12           A.           No.

13           **Q.           Do you have any opinion about whether that's a**  
14 **good recommended action?**

15                        MS. FLANAGAN:    Are you asking as of this time  
16 period or now?

17                        MR. SPROUL:    Now.

18           **Q.           Do you think that monitoring winter flows to**  
19 **evaluate fish passage past the cement crossing is a -- is**  
20 **a good idea?**

21           A.           Yes.

22           **Q.           Do you -- do you know whether that's being**  
23 **done as part of the interim measure studies that we were**  
24 **discussing?**

25           A.           I don't know.

1 MS. FLANAGAN: And you're limiting that to  
2 the interim measures again?

3 MR. SPROUL: Yeah, yeah.

4 Q. So then, do you think whether it's being done  
5 as part of the long-term study effort?

6 A. No. I don't know.

7 Q. Okay. Do you have any opinion about whether  
8 the cement crossing is an impediment to the passage of  
9 O-mykiss or movement of O-mykiss on San Francisquito,  
10 Bear Creek or Corte Madera Creek?

11 A. I don't know except for dry season, summer,  
12 which are picture head.

13 Q. As it appears -- at least as it appeared in  
14 this dry season, an O-mykiss couldn't have crossed over  
15 the cement -- cement crossing; correct?

16 A. I liked your earlier words.

17 Q. Okay. You put it in your words.

18 A. Reason -- reasonable fish or something.  
19 Biologists never say "impossible."

20 Q. Do you know how -- how high an O-mykiss can  
21 jump?

22 A. Off the top to have my head, no.

23 Q. Is that information that you've looked up?

24 A. Yes.

25 Q. But you've never applied the information you

1     **looked up to the dimensions of the cement crossing and --**  
2     **and analyzed whether a Steelhead could jump that far?**

3           A.           No.

4           **Q.           Okay. The next, it says: "CM1."**

5                   MS. FLANAGAN:    Do you know what page that's  
6     on?

7                   MR. SPROUL:    Well, let's see.

8                   THE WITNESS:   Searsville Dam.

9                   MR. SPROUL:    Did you find it?

10                  MS. FLANAGAN:    CM1, Corte Madera?

11                  THE WITNESS:    Yeah.

12                  MS. ISAACS:    Close to the bottom.

13                  MR. SPROUL:    It's slightly different than my  
14     screen because of how we --

15                  MS. FLANAGAN:    Okay.

16                  MR. SPROUL:    And yeah, I'd like to direct  
17     your attention to the notes column, the notes updated.

18                  MS. FLANAGAN:    Okay. So that's the other  
19     document. The updated comments?

20                  MR. SPROUL:    Yeah. Notes updated 4-7-10.

21                  MS. FLANAGAN:    Let's look at this.

22                  THE WITNESS:    Okay.

23                  MS. FLANAGAN:    Okay.

24                  MR. SPROUL:    Okay. So it -- this note says  
25     that "completely impassable. Prevents access to

1 approximately ten miles of habitat."

2 **Q. Do -- do you recall hearing any discussion**  
3 **about whether Searsville Dam is completely impassable to**  
4 **O-mykiss?**

5 MS. FLANAGAN: Going up or coming down?

6 MR. SPROUL: Well, yeah. Let's start with  
7 up -- upstream -- upstream movement.

8 **Q. Is it -- do you recall any discussion about**  
9 **whether O-mykiss can pass upstream of Searsville Dam?**

10 MS. FLANAGAN: Can move upstream?

11 MR. SPROUL: Can move upstream.

12 THE WITNESS: No.

13 MR. SPROUL: Q. Don't recall any discussion  
14 of that topic?

15 A. Discussion, no.

16 **Q. Do you recall seeing any documents that**  
17 **discuss whether that's true?**

18 A. That I don't remember.

19 **Q. Okay. Do you -- do you have any opinion about**  
20 **whether O-mykiss could move from the Corte Madera reach**  
21 **below Searsville Dam upstream into Searsville Reservoir?**  
22 **Do you have any opinion about whether that's possible?**

23 A. Yes.

24 **Q. And what is your opinion?**

25 A. Not likely.

1 Q. Not likely? Meaning there's some possibility?

2 A. Again, biologists don't say -- they can be  
3 grabbed by osprey and dropped, yes.

4 Q. But not a -- not a -- not full fish passage?

5 A. No.

6 Q. And then "prevents access to approximately ten  
7 miles of habitat."

8 Have you -- have you undertaken any -- any  
9 study or assessment of how much O-mykiss habitat is  
10 located upstream of Searsville Reservoir?

11 A. I have not.

12 Q. Are you aware of reading any such assessments?

13 A. I've heard numbers on web pages and such.

14 Q. But you haven't systematically studied that --

15 A. No.

16 Q. -- or evaluated it on your own?

17 A. No.

18 Q. This note identifies long -- several long-term  
19 management complexities, and I'm wondering whether you've  
20 had any discussions or been involved in any discussions  
21 at Stanford with people other than your attorney or in  
22 conversations that didn't include your attorney that  
23 discussed long-term management complexities associated  
24 with Searsville.

25 A. Yes.

1           **Q.           And that's -- that's the source of ongoing**  
2           **discussion within the Searsville steering committee that**  
3           **you're a member -- working group that you're a member of;**  
4           **right?**

5                   MS. FLANAGAN:   Now again, we're getting into  
6           areas that are privileged.  Advisory group --

7                   THE WITNESS:   Yes.

8                   MS. FLANAGAN:   -- is completely open, so you  
9           can answer.

10                  THE WITNESS:   It was talked about in the  
11           advisory group, yes.

12                  MR. SPROUL:   Q.    Okay.  And what -- what  
13           discussions within the advisory group have there been  
14           about the sediment issue as it applies to Searsville  
15           Reservoir?

16                  A.           What is the sediment issue?

17                  **Q.           Well, yeah.  That's probably a fair question.**  
18                               **Is there a -- is there a sediment issue that's**  
19           **being discussed?**

20                  A.           Yes.

21                  **Q.           Okay.  What -- what is the sediment issue**  
22           **that's being discussed?**

23                  A.           The volume of sediment coming into that part  
24           of the system, watershed.

25                  **Q.           Is the -- is the main focus in that discussion**



1 the fact that Searsville Reservoir, if -- if nothing is  
2 done to change what's happening now, is going to  
3 completely fill in with sediment in the relatively near  
4 future? Is that the main topic of discussion with  
5 respect to sediment?

6 A. I don't know how to characterize the -- if  
7 it's the main topic or not.

8 Q. It's a topic?

9 A. It's a topic.

10 Q. Are there other topics with respect to  
11 sediment that are being discussed in the Searsville  
12 committee process?

13 A. Yes.

14 Q. And what are those other sediment issues?

15 A. Ongoing sediment downstream. Potential means  
16 of removal of sediment.

17 Q. Do you know whether -- whether fairly solid  
18 conclusions -- conclusions have been reached about how  
19 long before Searsville is likely to fill up completely  
20 with sediment or is that still unknown?

21 A. It's unknown.

22 Q. Okay. This last line indicates that a culvert  
23 was removed and a new natural bottom culvert installed.

24 Do you -- I know you didn't write this, but do  
25 you have any sense of what might have been referred to --

1 **what might be being referred to in -- in this sentence?**

2 A. None whatsoever.

3 **Q. Okay.**

4 MS. FLANAGAN: If you're going to be moving  
5 to another line, we've been going over two hours.

6 MR. SPROUL: Okay.

7 MS. FLANAGAN: It's probably time to take a  
8 break.

9 MR. SPROUL: Yeah. Let's take a break.

10 (Brief recess).

11 MR. SPROUL: Back on the record.

12 (Launer Exhibit No. 9 was  
13 marked for identification.)

14 MR. SPROUL: So if you could please look over  
15 this document and let me know when you've had a chance to  
16 finish looking at it.

17 THE WITNESS: (Complying) Okay.

18 MR. SPROUL: Okay. Have you seen this  
19 document before?

20 A. No.

21 **Q. It purports to be an e-mail message from**  
22 **Catherine Palter to Sheila Larsen at the Fish and**  
23 **Wildlife Service.**

24 **Do you ever recall -- do you recall talking to**  
25 **Catherine Palter about communication that she made to**

1     **Sheila Larson along the lines that are outlined in this**  
2     **e-mail message?**

3         A.         Not specifically.

4         **Q.         Any memory whatsoever of a conversation you**  
5     **had with Catherine Palter about additional information to**  
6     **provide to the Fish and Wildlife Service about species**  
7     **take estimates?**

8         A.         Again, not specifically.

9         **Q.         Do you -- the -- the e-mail message says that**  
10     **"after considering all of the covered activities, we**  
11     **estimate that 120 juvenile Steelhead could take in each**  
12     **year" -- I guess the "be" is missing. "Could be taken**  
13     **each year."**

14                 **Do you recall Catherine Palter saying**  
15     **something like that to you or you saying something like**  
16     **that to Catherine Palter?**

17         A.         Again, I -- I just don't remember.

18         **Q.         Do you -- do you recall doing any work to**  
19     **estimate take of -- of Steelhead for the HCP process?**

20         A.         Yes.

21         **Q.         And do you recall when you did that work?**

22         A.         Specifically, no.

23         **Q.         Any rough timeframe?**

24         A.         Early/mid 2000s.

25         **Q.         Have you done any estimates of -- well, let me**

1 back up.

2 Did you provide the take estimate of 120  
3 juvenile Steelhead or did you provide a take estimate of  
4 120 juvenile Steelhead to anyone? Did you ever tell  
5 anyone "that's my estimate of juveniles that take"?

6 A. I would have to look at the documents from  
7 back then.

8 Q. Do you recall -- you did recall that you had  
9 done some work in estimating Steelhead -- juvenile  
10 Steelhead take for the HCP process.

11 You do recall that?

12 A. Yeah. The gross estimate of take. So you get  
13 a -- so you get covered activities, yes.

14 Q. And did anybody help you in -- in preparing  
15 estimates of juvenile Steelhead take for the HCP process?

16 A. I don't remember.

17 Q. Do you recall what methodology you employed to  
18 estimate juvenile Steelhead take for the HCP process?

19 A. I would have dealt with presence. Again, this  
20 is -- the Steelhead take for the HCP process was a worst  
21 case scenario, really an over-exaggeration, if you will,  
22 of the possibilities.

23 And take in this case also is not just people  
24 take. A fish could be scared.

25 And I -- I don't remember the assumption I

1 made about numbers of Steelhead in an area, but that  
2 would be part of it.

3 **Q. So to your understanding, does scaring a**  
4 **Steelhead constitute take of Steelhead?**

5 A. It could fall under the definition, yes.

6 **Q. Could, but might not?**

7 A. I --

8 **Q. Can you explain?**

9 A. The lengthy list of -- of actions that go  
10 under the take definition can include harassment.

11 **Q. So it's your opinion that -- that scaring a --**  
12 **a Steelhead in San Francisquito Creek constitutes**  
13 **harassment with the meaning of the word "take"?**

14 MS. FLANAGAN: I think you're  
15 mischaracterizing the witness.

16 MR. SPROUL: He can explain -- he can  
17 explain.

18 MS. FLANAGAN: Don't mischaracterize the  
19 testimony. Just ask the question.

20 MR. SPROUL: I did ask the question.

21 MS. FLANAGAN: You said "so it is your  
22 opinion."

23 MR. SPROUL: That's what I heard.

24 MS. FLANAGAN: Well, mischaracterized it. So  
25 just ask him questions. Don't tell him what his answers

1 were.

2 THE WITNESS: So can I have a question now?

3 MR. SPROUL: Yes.

4 Q. So is it your opinion that scaring a Steelhead  
5 in San Francisquito Creek constitutes take of -- of  
6 Steelhead?

7 A. That determination, I don't think I can  
8 actually make that determination.

9 Q. Well, you have to make some determination of  
10 what constitutes take to give us a number; right?

11 A. As a broad overestimate, I included it, but I  
12 don't know if it's actually a real -- really could  
13 constitute take.

14 Q. Well, when I look at Catherine Palter's  
15 language about what she -- how she characterizes the --  
16 the take estimate provided here, she notes: "Well, there  
17 is some additional thoughts from Alan:" And then she  
18 says that among your additional thoughts, she was  
19 relaying to Sheila Larsen. It said: "Even if the  
20 percentage taken stays the same and more individuals are  
21 taken, there will be some substantial conservation  
22 benefits (losing ten percent of 100 individuals leaves  
23 ninety percent surviving."

24 Doesn't it seem like, you know, she's telling  
25 Sheila that these take estimates of going to be valid?

1           A.           That could be a worst case statement, but  
2           that's not necessarily.

3           **Q.           Have you done any estimates of juvenile**  
4           **Steelhead take since the time this e-mail message was**  
5           **written in 2010?**

6           A.           No.

7           **Q.           Do you know whether study of the amount of**  
8           **juvenile -- or the amount of Steelhead -- the amount of**  
9           **Steelhead take perpetuated by Stanford's covered**  
10          **activities is one of the interim measures -- study**  
11          **measures?**

12                   MS. FLANAGAN:    I'm going to object to the  
13           word "perpetuated" as vague and ambiguous.

14                   If you understand it, you can answer.

15                   THE WITNESS:    No.  I was going to ask for  
16           clarification of the sentence.

17                   MR. SPROUL:    Well, Catherine Palter uses the  
18           language "juvenile Steelhead could be taken," okay.  So  
19           I'm using it the way she's using it here.

20                   She also attributes thoughts to you about  
21           estimating the number of individual -- individual taken  
22           each year.

23                   So I'm using it in that -- so whatever  
24           thoughts were attributed to you and whatever Catherine  
25           Palter was expressing take, that's what I'm trying to do

1 here.

2 **Q. Is that understandable to you or do you still**  
3 **use further clarification?**

4 A. Actually, I still need more clarification.

5 MS. FLANAGAN: I object to the word  
6 "perpetuated" if that's Catherine's words. I don't see  
7 it.

8 MR. SPROUL: Well, I take it that the -- from  
9 this e-mail and from my look at the HCP that there's --  
10 there's discussion of this is how many Steelhead --  
11 juvenile Steelhead could be taken by the covered  
12 activities, meaning activities being conducted by  
13 Stanford. That's my understanding.

14 **Q. Is that -- am I wrong in that respect, and if**  
15 **so, why?**

16 A. This e-mail's a little hard for me to  
17 interpret, so I'd ask you to rephrase the question again.

18 **Q. Well, as part of the HCP work, you -- you did**  
19 **an estimate of how many juvenile Steelhead could be taken**  
20 **by Stanford's covered activities? Yes?**

21 A. Yes.

22 **Q. And you haven't done any study of how many**  
23 **juvenile Steelhead could be taken by Stanford's covered**  
24 **activities since then?**

25 A. Correct.



1 Q. Okay. And so my question is: Do you think  
2 that study of how many juvenile Steelhead could be taken  
3 by Stanford's current activities is something that should  
4 be -- no. Excuse me. Is something that is included in  
5 the interim measure study?

6 A. No.

7 Q. It's not included?

8 A. I don't -- no, it's not included.

9 Q. Okay. Do -- do you know whether there's been  
10 any discussion about whether that should be included that  
11 you're aware of?

12 A. I am not aware.

13 Q. Okay. Do you have any opinion about whether  
14 that should be part of the interim measure study?

15 A. What should be?

16 Q. How many juvenile Steelhead could be taken by  
17 Stanford's covered activity.

18 A. And the question is do I?

19 Q. Do you have an opinion?

20 MS. FLANAGAN: As to whether that should be  
21 an interim study?

22 MR. SPROUL: Yes.

23 THE WITNESS: No.

24 MR. SPROUL: Q. Do you know whether how  
25 many juvenile Steelhead could be taken by Stanford's

1 covered activities is a topic of study for the long-term  
2 Searsville committee study process that we've been  
3 discussing?

4 A. Can you slightly clarify the question? It --

5 MS. FLANAGAN: Yeah. One of the areas of  
6 confusion might be there are different geographic areas  
7 being discussed.

8 I mean, the HCP is a much larger area, so  
9 you're asking should one be done just limited to  
10 Searsville?

11 MR. SPROUL: As part of -- no. I'm asking a  
12 broader question.

13 **Q. Should the amount of juvenile Steelhead that**  
14 **could be taken by Stanford's covered activities be part**  
15 **of the long-term Searsville study?**

16 A. No.

17 **Q. And -- you don't -- you don't think it should**  
18 **be?**

19 A. Right.

20 **Q. Okay. Do you know whether it is?**

21 A. No.

22 **Q. You don't know?**

23 A. I've never heard of it, though.

24 **Q. And -- and why do you think it should not be**  
25 **part of the long-term Searsville study?**

1 A. Why? Would you rephrase the whole question?

2 Q. Yeah.

3 Should the study of how many juvenile  
4 Steelhead could be taken each year by Stanford's covered  
5 activities be studied as part of the long-term Searsville  
6 committee process?

7 A. The answer -- I said no.

8 Q. Yes, and I said why?

9 A. Because the covered activities covered by HCP  
10 at this point have nothing to do with Steelhead.

11 Q. Okay. Let's -- how about the -- should --  
12 should the amount of take that Searsville Dam and  
13 Reservoir and Stanford's water diversions from the  
14 Searsville Reservoir, the amount of take those activities  
15 could perpetuate or -- the amount of Steelhead that could  
16 be taken as a result of those activities, should that be  
17 part of the long-term Searsville study?

18 A. The -- can you rephrase a little bit more?

19 Q. I don't quite understand why it's so  
20 difficult.

21 A. Well --

22 MS. FLANAGAN: I tried to explain to you that  
23 he's linking up the take analysis under the HCP and he  
24 just said well, the covered activities under the HCP  
25 aren't relevant.

1                   This is an area of confusion, but when I try  
2 to clarify, you don't want to hear me, so that's fine.  
3 That's why we're having a problem.

4                   THE WITNESS: I'm not trying to be difficult.  
5 I'm sorry.

6                   MR. SPROUL: We'll try to get as simple as  
7 possible.

8                   So Searsville Dam and Searsville Reservoir and  
9 the diversions from Searsville water, pumping water out  
10 of Searsville Reservoir, that activity.

11           **Q.           With me so far?**

12           A.           The -- yes.

13           **Q.           Okay. Should that activity -- should the --**  
14 **the amount of Steelhead that could be taken by that**  
15 **activity be studied as part of the long-term Searsville**  
16 **process?**

17           A.           I'm working my way through it. It's not as  
18 simple as it sounds. No.

19           **Q.           And why? Why not?**

20           A.           Because there are many possibilities in the  
21 Searsville process, and -- and a take analysis would be a  
22 more -- as -- as with HCP was a more pointed analysis.  
23 So you need something to work with.

24           **Q.           Well, Stanford -- Stanford was attempting to**  
25 **get an incidental take permit and approved HCP for**

1     **Searsville Dam, Searsville Reservoir and the water**  
2     **diversions out of Searsville? Yes?**

3           A.        Yes.

4           Q.        Well, as part of that, Stanford would have had  
5     to do the same take analysis -- would have had to have  
6     analyzed the take of those activities, potential or  
7     otherwise, on -- on Steelhead? Yes?

8           A.        Yes.

9           Q.        So in the future, if Stanford is going to once  
10    again seek incidental take permit authorization for those  
11    three items, Stanford is once again going to have to do  
12    Steelhead take analysis; correct.

13          A.        Go ahead.

14                MS. FLANAGAN:    I'm just going to object  
15    because this is now a brand new question. I just want to  
16    make sure that you're asking him now if Stanford takes an  
17    HCP as to the dam and the reservoir, will they need to do  
18    a take analysis.

19                Earlier you were saying should it be part of  
20    the Searsville alternative study.

21                MR. SPROUL:    You're right.

22                MS. FLANAGAN:    I just want to make sure that  
23    we're changing the question.

24                MR. SPROUL:    We are.

25                MS. FLANAGAN:    Okay.

1 MR. SPROUL: That's the question I asked.

2 THE WITNESS: You're asking about future, how  
3 we would conduct and apply for a permit in the future.

4 I -- I'm not that good at foreseeing the  
5 future.

6 MR. SPROUL: Q. So is it a fact that you  
7 don't think that Stanford should -- should be now  
8 analyzing whether Searsville Dam, Searsville Reservoir  
9 and diversions from Searsville are taking Steelhead is  
10 simply because there's no pending ITP or HCP? Is that  
11 the reason?

12 A. The regional analysis study is looking at  
13 creek flow and that is a -- partially addresses your  
14 question. So partially it's being done.

15 So you need the results of those to actually  
16 do that study that you're saying, the estimation on the  
17 ITP or for the ITP, a potential ITP.

18 Q. **And so if I understood you correctly -- I'm**  
19 **trying to put it to get here -- is that you're saying**  
20 **well, we are doing this creek -- this condition of creek**  
21 **analysis under -- under differing water flow rates or --**  
22 **well, we're analyzing creek flow conditions.**

23 A. Mm-hmm.

24 Q. **And that's going to tell us information about**  
25 **how Steelhead are likely impacted because differing water**

1 flow rates affect Steelhead.

2 A. O-mykiss.

3 Q. O-mykiss, yes. And using that analysis, one  
4 could estimate rates of take of O-mykiss below Searsville  
5 Dam? Is that true?

6 A. I don't know.

7 Q. Yeah. Exhibit 4, please. Yeah. Page 3. So  
8 the second full paragraph, "native fishes in California  
9 red-legged frogs generally appear to be doing well in San  
10 Francisquito Creek."

11 The -- the second part of that statement isn't  
12 true anymore in your opinion; right? "California red-  
13 legged frogs appear to be doing well in San Francisquito  
14 Creek."

15 A. In that study area portion of San Francisquito  
16 Creek is all I know about, yes.

17 Q. How about native fishes in the area -- area  
18 studied? Do you think they still are -- generally appear  
19 to be doing well?

20 A. Yes.

21 Q. And you want to say: "Both native creek" --  
22 excuse me.

23 "Both native fishes and California red-legged  
24 frogs successfully reproduced in the creek in 1988 and  
25 1989 and were found in moderate to high numbers."

1                   Do you recall reaching that conclusion at the  
2 **time you wrote this report?**

3       A.           Not specifically.

4       **Q.           Do you have any reason to think that that was**  
5 **an inaccurate statement at that time?**

6       A.           No.

7       **Q.           Is it -- what did you mean by "moderate to**  
8 **high numbers"? Do you recall?**

9       A.           I would have to look at them.

10       **Q.           Do you think that native fishes are found in**  
11 **moderate to high numbers in San Francisquito Creek today?**

12       A.           These techniques have not been replicated, so  
13 I can't conclusively say.

14       **Q.           Would it be -- would it be accurate to say I**  
15 **just don't know what the abundance is of native fishes in**  
16 **this study area today?**

17       A.           Yes.

18       **Q.           Okay. The next paragraph down, there's a**  
19 **discussion about California red-legged frogs doing**  
20 **exceptionally well within the Matadero Creek watershed.**

21                   Do you recall reaching these conclusions at  
22 **the time of this report?**

23       A.           Again, not specifically.

24       **Q.           No reason to think that these statements**  
25 **weren't true when you wrote them?**



1 A. Yes.

2 Q. Okay. And do you know whether this -- whether  
3 this is true today?

4 A. I don't particularly like the word  
5 "exceptionally." If I was writing this now, I probably  
6 wouldn't have used that. But there are red-legged frogs  
7 in the Matadero watershed.

8 Q. Is that all you would say "today, there are  
9 frogs in the Matadero watershed and you wouldn't add any  
10 qualitative description about the nature of their  
11 population?"

12 A. I would have to go through it and look at  
13 numbers.

14 Q. So at the moment, you have no opinion about  
15 frogs in the Matadero Creek watershed other than they're  
16 there?

17 A. I would say doing well.

18 Q. Okay.

19 A. With the exception of "exceptionally." Not a  
20 very good term to use.

21 Q. Okay. And then there's a series of  
22 recommendations about helping to preserve the native  
23 species of concern starting on the bottom here and then  
24 there's more discussion later in your report.

25 But my question I wanted -- I'd like to ask

1 you to go through these with me and ask whether --  
2 whether these were -- whether these recommendations have  
3 been implemented since the time of this report.

4 So first "the current trapping regime and  
5 surveys help limit the spread of non-native species in  
6 San Francisquito Creek as well as monitor for any  
7 changes. These efforts should be continued."

8 Do you recall what the trapping regime was  
9 that you were discussing in this summation?

10 A. Not specifically.

11 Q. Or what the surveys were?

12 A. The surveys were the -- this was the electro-  
13 fishing era and I -- so we're doing a lot of electro-  
14 fishing in the creek.

15 Q. Mm-hmm. When was the last time you did any  
16 electrofishing in -- when's the last time you did any  
17 electrofishing anywhere in this area? Not like you did  
18 it up in the Eel River, but in this area.

19 A. It's been years. I'm not quite sure.

20 Q. Do you recall whether you did any electro-  
21 fishing after this report was written?

22 A. Not specifically, no.

23 Q. When you say "it's been years since you've  
24 done any electrofishing, is that in the sense of three  
25 years, five years, ten years? Any sense at all beyond

1     **just it's been years?**

2           A.           No.

3           **Q.           Your -- your survey work has also included**  
4 **over the years snorkel surveys; right?**

5           A.           Yes.

6           **Q.           And when was the last time you did a snorkel**  
7 **survey in the San Francisquito Creek watershed?**

8                   MS. FLANAGAN:     Just to clarify here, there's  
9 snorkeling and then there's sort of an organized  
10 snorkeling survey.

11                   They're always doing snorkeling, so you may  
12 want to specify what you mean by a snorkeling survey.

13                   MR. SPROUL:     Okay.

14                   MS. FLANAGAN:     I'm sure they do a lot of  
15 snorkeling.

16                   MR. SPROUL:     Okay. In the documents  
17 attributed to you, I've seen the term "snorkel survey."

18           **Q.           Is that -- was that a term -- a term that you**  
19 **use?**

20           A.           I think I may have.

21           **Q.           Well, does that term have a meaning to you?**

22           A.           Well, for a survey, the simplest means you  
23 were snorkeling. Some set of creek.

24           **Q.           Well, to do a snorkel survey, I assume that**  
25 **there's some systematic effort to -- to cover a specified**

1 area and count fish in that -- in that specified area.

2 Would that -- or am I wrong?

3 A. The -- 2006 was that kind of a full -- tried  
4 and technique survey. Since then, it's been more spot  
5 checks.

6 Q. Okay. So 2006 was the last time you did a  
7 systematic snorkel survey as I was just defining it?

8 A. Yes.

9 Q. Did you -- have you done any -- did you do any  
10 snorkel surveys in this sense of the term before 2006?

11 A. In this sense, the full --

12 Q. The full-on --

13 A. No.

14 Q. So you've done just one snorkel survey and  
15 that was in 2006?

16 A. Yes.

17 Q. The other snorkeling that you've done in the  
18 San Francisquito watershed, have you -- did that generate  
19 data? Did you keep track of data?

20 A. It was more anecdotal.

21 Q. And when was the last time you did this type  
22 of anecdotal snorkeling?

23 A. Last summer.

24 Q. And has that anecdotal snorkeling provided  
25 useful information to you, in your opinion?

1 A. Sometimes.

2 Q. **And then sometimes not?**

3 A. Yes.

4 Q. **Any rough sense of how often it's useful**  
5 **versus how often it's not useful?**

6 A. No.

7 Q. **Since 2006, can you give me a rough sense of**  
8 **how many spot check snorkelings you've done?**

9 A. Oh --

10 MS. FLANAGAN: Just a clarification. Him  
11 personally or his team?

12 MR. SPROUL: Or let's start with you  
13 personally.

14 THE WITNESS: I would have to check the  
15 records.

16 MR. SPROUL: Q. Well, are they once every  
17 two years? Once every week? Any -- somewhere in  
18 between?

19 A. Several times a year.

20 Q. **Several times a year?**

21 A. Yeah.

22 Q. **And has anyone other than you done a snorkel**  
23 **survey in the San Francisquito Creek watershed that you**  
24 **are aware of?**

25 A. That's --

1 MS. FLANAGAN: And that's again in the full-  
2 on survey context -

3 MR. SPROUL: Yeah.

4 MS. FLANAGAN: -- not the spot check?

5 MR. SPROUL: The full-on survey context.

6 THE WITNESS: There was a snorkel survey in  
7 Los Trancos in the early 2000s.

8 MR. SPROUL: Q. And who did that?

9 A. A consultant by the name of Vogel.

10 **Q. And did they do that for Stanford?**

11 A. Yes.

12 **Q. And why?**

13 A. We were looking for more information because  
14 we hadn't done a full survey in a while.

15 **Q. And what more information were you looking  
16 for?**

17 A. Just -- twofold. Wanted to check techniques  
18 since he was doing to survey and I had never seen it  
19 done. I wanted to see.

20 And two, just to potentially update some of  
21 the creek numbers in more systematic fashion.

22 **Q. And -- and do you recall whether the Vogel  
23 survey made an attempt to differentiate O-mykiss that are  
24 Rainbow Trout versus Steelhead?**

25 A. Oh, I don't remember.

1 Q. As part of your snorkel survey, did -- did you  
2 make an attempt to differentiate the two?

3 A. No.

4 Q. In any of your spot checks, have you made an  
5 effort to differentiate the two?

6 A. No. All we were seeing was small individuals.  
7 Had we seen a two foot fish, we would have conclusively  
8 written that down. But otherwise, no.

9 Q. Conclusively written that down as a Steelhead?

10 A. As an adult migratory form, yes.

11 Q. Did the Vogel snorkel survey produce a written  
12 report?

13 A. Yes. I believe so.

14 Q. And was -- was this Vogel survey done at your  
15 direction?

16 A. No.

17 Q. Whose direction was it done at?

18 A. I don't recall specifically.

19 Q. Okay. The -- did the -- do you recall placing  
20 traps in Corte Madera or San Francisquito Creek to try to  
21 trap or net fish? Do you recall doing that?

22 A. Yes, in the '97 study period.

23 Q. And do you -- did you design the -- the  
24 netting or trapping effort?

25 A. Yes.

1 Q. So you thought you had enough expertise to be  
2 able to design a -- a fish netting or trapping effort  
3 that would, you know, trap the fish that you were  
4 targeting?

5 A. Yes.

6 Q. And do you -- was it your idea to do this  
7 trapping regime?

8 A. I don't remember.

9 Q. And do you recall anything about the rationale  
10 for having a trapping regime?

11 A. Somewhat testing methodology.

12 Q. And why would you want to test methodology?

13 A. See if it's an effective means for the system.

14 Q. Effective means for the system to accomplish  
15 what?

16 A. Catch organisms.

17 Q. Why would you want to catch organisms?

18 A. As part of long-term monitoring, always  
19 looking for new techniques.

20 Q. And why would you want to engage in long-term  
21 monitoring of organisms? Why is that useful?

22 A. Oh, just -- it would be a -- a useful feature  
23 for conservation planning.

24 Q. And how would it be used?

25 A. Depends on the situation.



1           **Q.           So what -- what you wrote, though, you wrote**  
2           **that "the current trapping regime and surveys helped to**  
3           **limit the spread of non-native species in San**  
4           **Francisquito Creek."**

5                   MS. FLANAGAN:   Where are you reading that?

6                   MR. SPROUL:   I'm reading from his summary  
7           report of Bates 542, page 3.

8                   MS. FLANAGAN:   Which paragraph?

9                   MR. SPROUL:   Same paragraph we were looking  
10          at, bottom paragraph.

11                  MS. FLANAGAN:   Okay.

12                  MR. SPROUL:   So -- that's where you wrote.

13           **Q.           Wasn't that a purpose of the trapping?**

14           A.           I actually don't agree with that statement  
15          anymore, that actually we did help limit the spread of  
16          non-natives, but that would have been a -- one of the  
17          reasons you trap is to try and see if you could catch  
18          non-natives or if you were catching something else.

19           **Q.           Well, my reading of your -- your paper, you**  
20           **were pretty successful at catching non-natives.**

21                   **Is that -- is that not true?**

22           A.           I'd have to check. We didn't eliminate  
23          anybody.

24           **Q.           Well -- we'll get there, perhaps.**

25                   **But you -- you wrote that this is something**

1     **you recommended should be continued.**

2                     **And would you still recommend that today?**

3     A.             Not necessarily.

4     **Q.             And -- and why?**

5     A.             Because as I said, this statement, hindsight  
6     was a little wishful thinking. I'm not sure we did  
7     actually any good trapping.

8     **Q.             Well, how -- how do you know that? Because**  
9     **your report says -- well, it's got some numbers. We can**  
10    **look at them. "I captured so many natives."**

11    A.             We have the number of fishes. If you do it in  
12    '98 and you have the same number in there '99, so you  
13    haven't really made a dent in anything.

14    **Q.             Oh, do you have any opinion about how you**  
15    **might make a real dent in -- in non-native?**

16    A.             I wish I knew.

17    **Q.             You don't know?**

18    A.             Don't know.

19    **Q.             Do you -- do you know whether -- how to make a**  
20    **real dent in non-native predators is something that's**  
21    **being studied as an interim measure?**

22    A.             No.

23    **Q.             You don't know?**

24    A.             I don't know.

25    **Q.             Do you have an opinion about whether it should**

1 **be studied as an interim measure?**

2 A. No.

3 **Q. But it seems like you had enough of an opinion**  
4 **about going after non-native predators that you designed**  
5 **a trapping program back in the late 1990s.**

6 **Why not today?**

7 A. I was perhaps more confident in the ability  
8 back then. So study more and change opinions.

9 **Q. Well, it's -- has your opinion evolved so much**  
10 **that you think we should just give up about trying to**  
11 **study what to do about the non-native predators? Has it**  
12 **come that far?**

13 A. No.

14 **Q. So you -- you do think that we should -- we**  
15 **should be studying how we might effectively deal with**  
16 **non-native predators in the San Francisquito Creek**  
17 **watershed?**

18 MS. FLANAGAN: I'm going to object the way  
19 you phrased that. You should ask whether it should be an  
20 interim measure.

21 MR. SPROUL: Okay.

22 MS. FLANAGAN: You didn't ask --

23 MR. SPROUL: You're right. You're right. I  
24 meant -- I meant my last question to be so do you think  
25 it should be studied as an interim measurement. I'm

1     sorry if the context wasn't clear.

2                   THE WITNESS:   Interim measure, no.

3                   MR. SPROUL:   Q.    And why not as an interim  
4     measure?

5           A.        Again, time, time scale.

6           **Q.        And what is the time scale for interim  
7     measures in your opinion?  What are we looking at?**

8           A.        I'm actually not sure.  The time scale hasn't  
9     been determined, but short-term.  But I don't know --  
10    have a definition of that.

11          **Q.        Well, if you don't have a definition of what  
12    the time period is, how do you -- how can you rule out  
13    something that would fit within the time period we're  
14    talking about?**

15          A.        I don't know.

16          **Q.        Okay.  How about in the long-term?  Should --  
17    in the long-term, is Stanford studying what to do about  
18    non-native predators in the watershed we're talking  
19    about?**

20          A.        As part of the Searsville alternative study,  
21    yes.

22          **Q.        And are -- do you have any role in designing  
23    that -- that work?**

24          A.        No.

25          **Q.        Do you have any opinion about the nature of**

1 the study that's being done, whether it's adequate, not  
2 adequate?

3 A. No.

4 Q. Do you have an opinion about whether the  
5 impact of non-native predators in the watershed we're  
6 discussing should be studied in the long-term? Do you  
7 have an opinion about whether that should be studied?

8 A. Is there a project involved?

9 Q. Well, I don't know. I mean, just everything  
10 that you know sitting here in this room -- you know, room  
11 right now.

12 In walks the provost and he asks you  
13 "Mr. Launer, should -- should I spend Stanford's money on  
14 studying in the long-term predators in the San  
15 Francisquito Creek watershed or the Stanford portion of  
16 the watershed?"

17 A. Right.

18 MS. FLANAGAN: I'm going to ask for  
19 clarification.

20 Are you saying in addition to the study that  
21 he's already told you is being done in the alternative  
22 study?

23 MR. SPROUL: No, just a study, just any  
24 study.

25 MS. FLANAGAN: Including that one?

1 MR. SPROUL: Just that one. Just  
2 generically, should that be something we're doing? Maybe  
3 Alan thinks for example that Stanford's wasting its money  
4 studying this.

5 THE WITNESS: I'm not going to address that.  
6 I am going to say no.

7 MR. SPROUL: Q. No, you wouldn't give him  
8 any advice? You would say no, we shouldn't study it --

9 A. No.

10 Q. -- or no, you have no opinion?

11 A. No. I have no opinion.

12 Q. Okay.

13 A. Yes, I have no opinion, no. I have no  
14 opinion. Something like that. Sorry.

15 Q. Okay. Your -- your second recommendation for  
16 preserving native species of concern is that "structures,  
17 trails and questionable land use practices should be  
18 relocated away from local creeks whenever an opportunity  
19 presents itself."

20 Do you recall what you had in mind when you  
21 wrote -- when you wrote that sentence?

22 A. Trails was a horse trail. Structures and  
23 questionable land use practices, no, I don't recall.

24 Q. Okay. Are there -- are there any structures,  
25 trails or questionable land use practices in existence

1 **today that you think should be relocated away from local**  
2 **creeks in the Stanford area?**

3 MS. FLANAGAN: Was this just the San  
4 Francisquito Creek? You should define --

5 MR. SPROUL: Well --

6 MS. FLANAGAN: -- the -- there's residences.

7 THE WITNESS: I would say get rid of 280,  
8 but --

9 MR. SPROUL: All right. I'm just asking you  
10 what you had in mind.

11 THE WITNESS: I know.

12 MS. FLANAGAN: What geographic area are you  
13 referring to?

14 MR. SPROUL: Q. Well, what geographic area  
15 were you referring to?

16 A. I actually don't remember.

17 **Q. Okay.**

18 A. It's kind of a blanket all throw-out  
19 statement, reading it thirteen years later.

20 **Q. Anything on Stanford property that is -- is**  
21 **there anything on Stanford property that you think is a**  
22 **questionable structure or land use practice that should**  
23 **be relocated away from San Francisquito Creek, Los**  
24 **Trancos Creek or Corte Madera Creek?**

25 A. Again, you haven't narrowed it down in a

1 realistic construct.

2 As a theoretical -- in conversation biology  
3 theoretically, I would like every frigging thing removed.

4 That can't happen. So there are structures  
5 that are close to the creek. Whether or not they're  
6 impacting it, I actually can't say.

7 But just -- so -- I'm not being difficult.  
8 And I don't like 280.

9 **Q. Well, I don't like it so much, either.**

10 A. I know. I'm sorry.

11 **Q. I'm just trying to get at what you --**

12 A. I know. I --

13 **Q. Do you have anything, you know, to really**  
14 **offer today along the lines of what you were suggesting**  
15 **in your article? And I guess the answer is no.**

16 A. No.

17 **Q. Okay. Third, "in stream channels and downed**  
18 **woody debris are likely important for native species**  
19 **survival and reproduction. Measures to preserve downed**  
20 **vegetation in the creek, areas suitable for spawning and**  
21 **breeding should be considered."**

22 Do you recall coming to that conclusion when  
23 you wrote this?

24 A. Not specifically.

25 **Q. But again, no reason to say "well, when I**



1 **wrote that, actually that was wrong at the time"?**

2 A. No. That's a generic good thing.

3 **Q. Okay. Have -- since you wrote in, are you**  
4 **aware of Stanford undertaking any measures to preserve**  
5 **downed vegetation?**

6 A. Yes.

7 **Q. What -- what are those measures?**

8 A. Typically if there's a -- some downed branches  
9 or trees in an area that's not deemed a flood risk, it's  
10 left there.

11 **Q. But if it's deemed a flood risk, it's removed?**

12 A. We ask agencies, and depending on where it is,  
13 it's removed.

14 **Q. Do you know what the rough percentage is of**  
15 **amount of downed vegetation left versus not removed?**

16 A. No.

17 **Q. And this select -- selective removal/leaving**  
18 **in place, does that happen throughout Stanford property?**

19 A. Yes. The -- the -- yes, it does.

20 **Q. So that's an ongoing management measure that**  
21 **Stanford is implementing now?**

22 A. Yes.

23 **Q. And -- and since when?**

24 A. They may have been doing this before. I don't  
25 know when.

1           **Q.           Okay. And then has -- has Stanford actually**  
2 **added any -- any vegetation that didn't, you know, simply**  
3 **fall in place to the creek or any of the creeks?**

4           A.           There was -- there has been debris placed in  
5 the creek in some projects engineered and cabled in, yes.

6           **Q.           Do you know where those projects were located?**

7           A.           The golf cart crossing project that we  
8 discussed earlier had some wood cabled in, and on Los  
9 Trancos Creek, there was a bank stabilization project  
10 that had wood cabled in and anchored in.

11                   MS. FLANAGAN:    What was the second one?

12                   THE WITNESS:    Los Trancos Creek, City of  
13 Portola Valley.

14                   MR. SPROUL:    Q.    Do you know if Stanford got  
15 permits for those -- those projects?

16           A.           I wasn't involved with the golf cart crossing  
17 project, but yes, absolutely with the other one. Okay.  
18 No. We didn't get the permit. Portola Valley got the  
19 permit.

20           **Q.           Okay. And other than those two woody debris**  
21 **augmentation projects, are there any others that you're**  
22 **aware of?**

23           A.           No.

24           **Q.           Okay. Do you know whether those woody debris**  
25 **augmentation projects were successful?**

1           A.           The Portola Valley one looks successful, yes.  
2   I have not quantified or evaluated it.

3           **Q.           The Portola Valley project is the one with the**  
4 **golf cart crossing?**

5           A.           No. The Portola Valley is the Alpine Road  
6 bank stabilization.

7           **Q.           And that's the one that you know is**  
8 **successful?**

9           A.           It looks good.

10          **Q.           And the other project, you don't know whether**  
11 **it was successful or --**

12          A.           I haven't checked of late.

13          **Q.           Okay. Do you know whether Stanford is**  
14 **studying as part of the interim measure study whether**  
15 **there should be any additional woody debris augmentation**  
16 **or preservation woody debris preservation effort**  
17 **undertaken?**

18          A.           I don't know.

19          **Q.           And do you know whether Stanford is studying**  
20 **whether any woody debris augmentation program should be**  
21 **done as part of the long-term management effort that's**  
22 **coming out of the Searsville --**

23          A.           I don't know.

24          **Q.           -- committee process?**

25          A.           I don't know.

1 Q. Okay. And there's also discussion about "pre-  
2 areas suitable for spawning, breeding habitat," and in  
3 the context, the preceding sentence talks about in-stream  
4 channels.

5 And putting those two together, it seems to me  
6 you were talking about geo -- geomorphology changes, like  
7 reengineering parts of the creek bed.

8 Is that what you were talking about?

9 A. I'm actually not quite sure what I was talking  
10 about. I'm sorry.

11 Q. Okay.

12 A. It was so long ago.

13 Q. Okay. Do you know -- do you know whether  
14 Stanford is studying and as a short-term measure any  
15 stream geomorphology work?

16 A. Manipulation?

17 Q. Yes.

18 A. No. I don't know.

19 Q. Do you know whether Stanford is studying any  
20 stream geomorphology work as part of the long-term  
21 work -- long-term study?

22 A. Yes, in that the alternatives could involve  
23 the channel modification.

24 Q. Channel modification, does that mean like  
25 reconfiguring what Searsville Reservoir currently

1 occupies? Is that what we're talking about?

2 A. Potentially as an alternative, yes.

3 Q. Any other geo -- geomorphology work besides  
4 that?

5 A. I don't know. I would have to ask the -- the  
6 Balance and URS --

7 Q. Okay.

8 A. -- to see if they're doing that.

9 Q. Okay. Your last -- your last recommendation  
10 was that "research should be undertaken to determine  
11 these patterns," and in context, patterns seems to be  
12 talking about life history, migration patterns of  
13 Steelhead, red-legged frog and mitten crabs.

14 But "identify these patterns and identify  
15 potential negative impacts to native species."

16 Do you recall coming to that conclusion in  
17 that timeframe?

18 A. No.

19 Q. Do you -- the research work that's identified  
20 or discussed in this paper, I've noticed it cited in  
21 several places since then, more recent -- more recent  
22 documents.

23 Are you aware that this work has gotten cited  
24 in other -- other documents?

25 A. I can't think of the specific example, but I

1 suppose yes --

2 **Q. Okay.**

3 A. -- but --

4 **Q. Do you recall anyone coming to you and talking**  
5 **to you in recent years about this paper and asking you**  
6 **about your -- you know, your study work that you did?**

7 A. We would have given this to --

8 MS. FLANAGAN: Just do you recall.

9 THE WITNESS: Yes.

10 MR. SPROUL: Q. And who would you have  
11 given this to?

12 A. Certainly the agencies while working on their  
13 HCP and URS.

14 **Q. Okay. When I've looked, I -- I haven't found**  
15 **any more recent data gathered by Stanford or Stanford**  
16 **consultant on incidence of O-mykiss in the -- the San**  
17 **Francisquito Creek watershed than this.**

18 **Are -- am I missing something that you're**  
19 **aware of?**

20 A. In the watershed itself, I don't know. I  
21 don't think you're missing.

22 There were the Vogel study, which was Los  
23 Trancos, which is the watershed.

24 **Q. Mm-hmm.**

25 A. But a generalized survey, no, there is none,

1     there are none.  Is none.

2                   MS. FLANAGAN:  You're limiting it to a full-  
3     on survey, not the surveys -- we gave you a lot of  
4     survey.

5                   MR. SPROUL:  Yes.

6                   MS. FLANAGAN:  It's more the anecdote.

7                   THE WITNESS:  Exactly.

8                   MR. SPROUL:  Q.  No systematic data  
9     compilation other than what's reflected in this paper?

10                  A.  No.

11                  **Q.  Do you know whether -- whether URS is**  
12     **currently doing anything comparable to the field survey**  
13     **work that is -- that you did in this paper, like -- let's**  
14     **take a concrete example.**

15                   **Like electrofishing in San Francisquito Creek.**

16                  A.  I'm not aware of that.

17                  **Q.  Or anyone at URS doing the full-on complex**  
18     **snorkel survey work that we've referred to.**

19                  A.  I'm not aware of that.

20                  **Q.  Okay.  I'd like to direct your attention,**  
21     **please, to page 6.  And towards the bottom of that first**  
22     **paragraph, there's the statement that "also given the**  
23     **long history of human manipulation of the watershed and**  
24     **ever increasing problems associated with urbanization, a**  
25     **comprehensive survey, essentially a status report of the**

1 native biotic diversity, was considered long overdue."

2 Do you recall hearing any conversation or  
3 receiving any communications from anyone to the effect of  
4 this type of comprehensive survey being long overdue?

5 A. No. I don't remember.

6 Q. Do -- would you say that that statement is  
7 true today, that given that it's been since 1999 or maybe  
8 even 1997, that a comprehensive survey has been done,  
9 that it's now once again long overdue?

10 A. No.

11 Q. And why -- why would that be your conclusion?

12 A. At this point, I would need a specific reason  
13 to recommend a very in-depth -- like the work we did in  
14 the late '90s. I don't have that reason at this point.

15 Q. And what was the specific reason in the late  
16 1990s that drove this?

17 A. Oh, I remember it was a -- started with a  
18 stream alteration agreement, and that kind of triggered  
19 this -- this effort.

20 Q. So this effort was triggered by regulatory  
21 action? Yes?

22 A. Some of it.

23 Q. What part was?

24 A. I would have to go back to the late '90s and  
25 see if I can find a document, the agreement.



1 Q. Mm-hmm. But there's no regulatory matter now  
2 that's -- that's driving Stanford in your opinion to do a  
3 biotic survey along the lines of what was done in this --  
4 that was documented in this report?

5 A. No.

6 Q. And such a biotic -- such a driver would need  
7 to be a regulatory matter or was there something else  
8 that could be a driver?

9 A. No. If we were developing again a habitat  
10 conservation plan for the watershed, you would want to  
11 start up with some new and comprehensive information.

12 Q. But that's not something you're doing at the  
13 moment?

14 A. No.

15 Q. Okay. I'd like to direct your attention to  
16 page 7. And the first full paragraph.

17 MS. FLANAGAN: Systematic control?

18 MR. SPROUL: Yeah. "Systematic control  
19 efforts for non-native fishes and bullfrogs were not  
20 attempted in 1998 or 1999. However, during normal survey  
21 activities, any non-native fish or amphibian counter was  
22 euthanized." There's no dreaded word "euthanized."

23 A. Yes.

24 Q. You wouldn't use that word today, but you did  
25 then?

1 A. Probably not, no.

2 Q. And so any reason to doubt the veracity of  
3 this observation about "no systematic control efforts for  
4 non-native fishes and bullfrogs for 1998 and 1999"?

5 A. No.

6 Q. Was -- do you recall whether there was some  
7 systematic effort in 1997?

8 A. I don't remember specifically.

9 Q. Like fish trapping, for example, in 1997?

10 A. I don't -- don't remember it specifically.

11 Q. Okay. Well, it goes on to say: "Fish  
12 trapping efforts were generally centered on known hot  
13 spots of non-native fish and certainly helped to reduce  
14 their abundance, especially near Searsville Dam."

15 So I read that sentence and it sounds like you  
16 felt you were pretty successful at getting non-native  
17 fish abundance down.

18 As you sit here today, any reason to doubt  
19 their -- that conclusion?

20 A. I'm sure I believed that at the time, but I  
21 don't know the -- that I would make that conclusion now.

22 Q. And that's simply because they -- they grow  
23 back?

24 A. Yes.

25 Q. And if they grow back, that's because they're

1 coming from some source that you're not targeting; is  
2 that right?

3 A. Unknown where they come from.

4 Q. Well, do you have any hypothesis if you got  
5 their numbers way down, where they came back from? No  
6 ideas?

7 A. I -- don't know. I don't remember a  
8 qualification of what "way down" meant. So I don't -- I  
9 can't really discuss that particularly well.

10 MS. FLANAGAN: Are those numbers in here,  
11 Chris, that you can refer to?

12 MR. SPROUL: Yeah. There are --

13 THE WITNESS: There's numbers, but --

14 MR. SPROUL: Let me see.

15 THE WITNESS: But they would not before or  
16 after or anything like that.

17 MR. SPROUL: I would have to go through it.  
18 As time permits, we'll --

19 MS. FLANAGAN: The before and after non-  
20 natives.

21 THE WITNESS: Which we don't have.

22 MR. SPROUL: We'll come back to if we have  
23 time.

24 So you write here about known hot spots of  
25 non-native fish.

1 Q. How did you -- how did you know that there  
2 were hot spots of non-native fish?

3 A. I don't remember how I defined "hot spots"  
4 back then.

5 Q. And does that term have any meaning to you  
6 today, "hot spots" in this context?

7 A. In this particular context? No. I don't know  
8 what it means here.

9 Q. Do you use that term now?

10 A. I don't remember using that term recently.

11 Q. Well, when I -- in context, it seems pretty  
12 clear to me. It doesn't look like it's very difficult to  
13 assign a meaning to it. "Hot spots of native fish:  
14 Areas where there are a lot of non-native fish."

15 Do you have any idea what I'm talking about?

16 A. The known part. I'm not quite sure what that  
17 means.

18 Q. Are there areas in Corte Madera or San  
19 Francisquito Creek that you know are areas where non-  
20 native fish tend to be present in elevated numbers?

21 A. No.

22 Q. Well, you just, you know, participated in a  
23 plunge pool draining --

24 A. Mm-hmm.

25 Q. -- not very long ago.

1 A. Yes.

2 Q. And there were a lot of non-natives in that  
3 plunge pool; weren't there?

4 A. There were, yes.

5 Q. So that -- that's an area that's in Corte  
6 Madera Creek that has a lot of non-natives in it? Yes?

7 MS. FLANAGAN: Didn't you just say San  
8 Francisquito Creek?

9 MR. SPROUL: Q. It's in Corte Madera Creek,  
10 plunge pool?

11 A. Plunge pool's in Corte Madera Creek.

12 Q. Yes.

13 A. The question is if I know if I go there next  
14 year are they going to be there, and I don't know.

15 Q. Really?

16 A. I -- I've been surprised too many times, too  
17 many places.

18 Q. Well, would it be better to say suspected hot  
19 spots?

20 A. Oh, for here? Here, I'm sure I could rewrite  
21 this entire thing. Even without this, just reading it,  
22 it's like oh, God.

23 So yeah, my guess is it -- I don't know what I  
24 meant. The known part, it looks like that I don't know  
25 what I meant by the known part.

1           **Q.**           Well -- so you -- just no idea? Like if I  
2 came to you and I'm the provost and I say, "Hey, can you  
3 tell me any sense of where there might be any more non-  
4 native fish in Corte Madera Creek or San Francisquito  
5 Creek? And I know you can't tell me with certainty, but,  
6 you know, any sense of whether there might be more?" I  
7 have no idea.

8           A.           I could give you some idea.

9           **Q.**           Where would those be?

10          A.           Plunge pool.

11          **Q.**           Anywhere else?

12          A.           What do you want to see?

13          **Q.**           Just areas where there's -- that you -- you  
14 would identify as there are areas where I think there's  
15 going to be more non-native fish than another -- than  
16 other areas.

17                   MS. FLANAGAN:   Which non-native he's asking?

18           MR. SPROUL:   **Q.**   Well, I mean, just -- in  
19 some of your data, you just present non-native fish at a  
20 whole; correct?

21          A.           Yes.

22          **Q.**           Like that graph?

23          A.           Goldfish.

24          **Q.**           Yes.

25          A.           You had goldfish and all other non-natives.

1           A.           Yes.

2           **Q.           Let's look for simplicity at that level of**  
3 **generality.**

4           A.           Interesting.  If you asked that question five  
5 years ago, I would have said yes, but those areas have  
6 changed.  Yes.  Plunge pool.

7           **Q.           Okay.  Okay.  So page 10, please.  Yeah.  So**  
8 **at the bottom of page 10, that paragraph and then**  
9 **spilling over to the top of page 11, there's a listing of**  
10 **non-native species that are present in the watershed.**

11                       **Do you know whether the species that you list**  
12 **here are still all present in the --**

13          A.           No.

14          **Q.           You don't know?**

15          A.           I don't know.

16          **Q.           In your 2006 snorkel survey, did you make some**  
17 **attempt to evaluate whether there were non-native fish in**  
18 **-- in the watershed?**

19          A.           Yes.

20          **Q.           So you confirmed the presence of some non-**  
21 **native fish?**

22          A.           Yes.

23          **Q.           Like large -- Largemouth bass.  You confirmed**  
24 **the presence of Largemouth bass?**

25          A.           In the 2006 snorkel survey?  I would have to

1 go back and look at data on that one.

2 **Q. Okay. In your more recent snapshot snorkel**  
3 **work, have you made an attempt to record the presence of**  
4 **non-native fishes in the watershed?**

5 A. At the specific spots, if one was seen, it was  
6 noted on the data sheet.

7 **Q. Okay. Do you recall anything different in**  
8 **your observations of -- of non-native fish from your work**  
9 **that's documented in the 2000 report versus the 2006**  
10 **snorkel survey?**

11 A. Comparing the 2006 results to the other  
12 results?

13 **Q. Yes. Do you recall any differences?**

14 A. There were differences that I couldn't  
15 attribute to actual differences or differences in using a  
16 different technique.

17 **Q. So I note earlier today, we said you noticed**  
18 **something pretty remarkable. California red-legged frog**  
19 **disappeared, but nothing like as remarkable as that with**  
20 **respect to non-native fish comes to mind?**

21 A. No.

22 **Q. Okay. Then on page 11, the last paragraph**  
23 **before the Matadero Creek watershed heading, you said:**  
24 **"A substantial amount of research has been or is**  
25 **currently being conducted in this watershed. This**



1 research includes," and then you list some things.

2 What did you mean by the -- do you recall what  
3 you meant by "the extensive and ongoing hydrologic  
4 assessments of the watershed sponsored by Stanford  
5 University"?

6 A. In 2000, I'm not quite sure what I was  
7 referring to there. The --

8 Q. Okay. Do you recall any -- any extensive or  
9 ongoing hydrologic assessment by Stanford since you wrote  
10 this report?

11 A. There have been studies of the watershed, but  
12 I can't -- don't know what this was referring to.

13 Q. Okay. How about a hydrologic assessment of  
14 Los Trancos Creek done by Stanford University.

15 Do you recall what that was?

16 A. Balance Hydrologic was doing some work on Los  
17 Trancos Creek.

18 Q. Did that work continue after you wrote this  
19 report? Do you know?

20 A. I don't know.

21 Q. And the pilot inventory monitoring program  
22 using supervised volunteer workers at Coyote Creek  
23 Riparian Station, do you recall what that -- what that  
24 refers to?

25 A. I remember that project.

1           **Q.           And what was that project?**

2           A.           Coyote Creek Riparian Station used a  
3 program -- had a pilot program to test out to see if they  
4 could use supervised volunteers to monitor biodiversity  
5 and problems.

6           **Q.           And where is Coyote Creek?**

7           A.           It's no longer in existence. By the riparian  
8 station. It used to be in San Jose or Alviso.

9           **Q.           That's outside of Stanford property?**

10          A.           Yes.

11          **Q.           Quite a ways from here?**

12          A.           It's a little ways.

13          **Q.           Okay. And then -- and fish inventories, and  
14 there's references to several -- several sources, and the  
15 last one is you allowing personal record since 1989.**

16                        **Do you know what -- do you recall what "fish  
17 inventories" meant here?**

18          A.           No. They were -- in that time, I certainly in  
19 hindsight would not have called them the extensive  
20 research or substantial research my personal records in  
21 '89.

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

23          A.           I don't remember having many before these  
24 studies started, the '96, '97, '98.

25          **Q.           Okay. On page 15, please.**

1 A. Mm-hmm.

2 **Q. 13.**

3 MR. COSTA: 13.

4 MS. FLANAGAN: 13?

5 MR. SPROUL: Yes, 13. Yeah, so -- so on the  
6 top of page 13, there's the observation "one of the main  
7 goals of the 1998 and 1999 studies was to determine the  
8 distribution and abundance of native and non-native fish  
9 species in San Francisquito Creek and compare those with  
10 the results -- with the findings from 1997."

11 **Q. So is that a -- do you think that's a fair**  
12 **summation of the work here?**

13 A. I would -- I don't know the specific main  
14 goals of '98 and '99.

15 **Q. Okay. And then the -- you go on to say that**  
16 **"the impact of non-native species is considered a major**  
17 **threat of aquatic biotic diversity" and you cite some**  
18 **references.**

19 **Do you recall anything about having that**  
20 **conclusion or opinion in this timeframe?**

21 A. It's a generic statement. I don't  
22 specifically remember making that, but --

23 **Q. Would you make that statement again today?**

24 A. Given there's no specificity, it depends on  
25 the context.

1 Q. So you go on to say: "Therefore, the surveys  
2 were designed to assess whether Searsville Reservoir was  
3 an active source of non-native fish species to the system  
4 and whether non-native fishes pose a significant threat  
5 to the native species found in the watershed."

6 It sounds like it wasn't sort of an abstract  
7 proposition. It was discussing very specific aquatic  
8 animals. One are predators, and two, that are protected  
9 target.

10 Am I wrong?

11 A. Are you wrong about what?

12 Q. Well, am I wrong that this is --

13 A. This --

14 Q. -- what your concern was and what you were  
15 attempt go to study?

16 A. This is what I say here. I don't remember the  
17 specifics of this initial project back then.

18 Q. And well, you don't recall trying to design a  
19 study that was specifically meant to determine or assess  
20 whether Searsville Reservoir was acting as a source of  
21 non-native fish species?

22 A. Well, we were monitoring the creek downstream  
23 of Searsville. That's what we did. We would not have  
24 tracked species from Searsville specifically, individuals  
25 from Searsville specifically.

1           **Q.           So you say this is not a true statement, that**  
2           **the surveys were designed to assess whether Searsville**  
3           **Reservoir was acting as a source of non-native?**

4           A.           Again, I -- it's hard to trace back what  
5           exactly the -- the project design was back then. I just  
6           don't quite remember.

7           **Q.           So the next paragraph, you state that**  
8           **"crayfish distribution in abundance was also determined."**

9                       **So do you recall a conclusion that crayfish**  
10           **distribution in abundance was determined in your study?**

11          A.           The -- I don't specifically remember the --  
12          I'd have to look to see if the tables we had the  
13          distribution of crayfish table.

14                   MS. FLANAGAN:   Do you want him to look at a  
15          table?

16                   MR. SPROUL:   No, it's okay.

17                   Let's go to -- okay. Let's go to page 15,  
18          please.

19                   So at the bottom here, there's a section  
20          entitled: "Fish Trap or Trapping" and there's a  
21          discussion here about your fish trapping effort, and it  
22          describes how fish trapping was completed in the areas  
23          found to be non-native hot spots, and -- and it describes  
24          the transportation that were used and employed.

25           **Q.           Is there anything about the -- looking over**

1 **what you -- what you did, anything that you would change**  
2 **that -- about how you designed the traps?**

3 MS. FLANAGAN: Sorry. Are you asking him  
4 would he design them differently now?

5 MR. SPROUL: Yeah.

6 **Q. Would you design them differently now?**

7 A. Oh, I would probably would, yes. And I don't  
8 know -- I would have to read through the new literature  
9 on traps.

10 **Q. Okay. And then on the next page, page 16, you**  
11 **indicated that "trapping efforts remain close to**  
12 **Searsville Reservoir for two reasons: One, non-native**  
13 **fish concentrations were higher near the dam; and two,**  
14 **red-legged frogs were known to inhabit downstream areas**  
15 **and the submerged traps tend to kill adult juvenile**  
16 **frogs."**

17 **Do you -- do you recall adopting or designing**  
18 **your trapping efforts for those two reasons in mind?**

19 A. I don't specifically recall that, no.

20 **Q. If you were to design a trapping effort today,**  
21 **is that what you would do?**

22 A. The -- if there -- setting tr -- you should  
23 not set traps where they are red-legged frogs because  
24 that is a real risk or you set traps that have part of  
25 the trap out of the water. Otherwise, they'll drown.

1 Q. Mm-hmm.

2 A. And depending on what the effort -- what the  
3 focus was, where I would set the traps would be  
4 determined at that point.

5 Q. Okay. Page 18, please. And there -- there's  
6 a discussion of -- of encounter rates of Steelhead. It  
7 actually starts -- excuse me -- on the bottom of 17.

8 Why don't you look at that, the beginning  
9 sentence.

10 A. (Complying).

11 Q. And so I note the differing encounter rates  
12 here, and I take it that there really isn't any data -- I  
13 just drop the really.

14 There isn't any data that postdates this that  
15 gives us any better shot of relative distribution of O-  
16 mykiss in San Francisquito Creek than this? Yes?

17 A. Correct.

18 Q. And do you have -- do you have any explanation  
19 as to a differing encounter rates for the different  
20 reaches?

21 A. No. I'd have to -- right now, I don't, and I  
22 would have to look through here to see if I made a  
23 conclusion back then.

24 Q. You did stay at the bottom of this paragraph  
25 "however, in 1997, low encounter rates often coincide in

1 areas of poor water quality. Such areas were not as  
2 prevalent in 1998-1999. Thus, survivability may have  
3 been increased."

4 Other than that statement, anything come to  
5 mind about, you know, information or explanation or  
6 conclusions that you would have today about why we would  
7 expect varying distribution of -- of O-mykiss in San  
8 Francisquito Creek and Corte Madera Creek?

9 A. So the question is why do they vary?

10 Q. Yes, yes.

11 Do you have any explanation?

12 A. No.

13 Q. Okay. Do you know -- have you heard anybody  
14 give an explanation?

15 A. Specifically for this system, no.

16 Q. Mm-hmm. I mean, in 19 -- in 2000, you were  
17 able to say well, water quality, some explanation factor,  
18 but not today.

19 You wouldn't be able to do that?

20 A. I would need to go and actually do a better  
21 job at quantifying water quality before I just launch and  
22 drop a poor water quality. I don't quite remember what  
23 that was measuring at the time.

24 Q. Okay. And -- and then -- yeah. Page -- the  
25 bottom of page 18, electrofishing, non-native fishes, and



1 you observed that "non-native fishes are found throughout  
2 the San Francisquito Creek watershed" and you say "their  
3 numbers are greatest immediately downstream from  
4 Searsville Dam and decline dramatically as distances away  
5 from the dam increase."

6 And any -- any data -- is there any data that  
7 you have that's been generated since this report was  
8 written that would change the conclusion that you -- that  
9 you've entered or made in this report on page 18?

10 A. The -- the conclusion that the greatest  
11 numbers are immediately downstream from the dam and  
12 decline dramatically as distances from the dam increase?

13 Q. Yes.

14 A. No.

15 Q. Okay. Yeah. On page 20 of -- that last full  
16 paragraph towards the bottom, "in pools immediately below  
17 Searsville Dam, Louisiana red swamp crayfish are much  
18 more abundant than signal crayfish. Based on limited  
19 trapping and electrofishing, it appears that Searsville  
20 Reservoir contains only Louisiana red swamp crayfish.  
21 Therefore, the reservoir is likely acting as the source  
22 for crayfish in the upstream portion of the San  
23 Francisquito Creek," all of which I have to say strikes  
24 me as a very logical conclusion.

25 A. Not well substantiated, though, because the

1 red crayfish actually do reproduce in the creek.

2 And so do -- have I seen -- I've never seen a  
3 crayfish crawl out of Searsville Dam or flop down and go  
4 there.

5 **Q. So that's what you would need to see before**  
6 **you would reach the same conclusion you reached in this**  
7 **report?**

8 A. I would need to see a little bit more, yeah,  
9 see if -- see if they're actually doing that, that I  
10 applied here. A little more confident back then.

11 **Q. Anything that explains your change in**  
12 **confidence over the years?**

13 A. No.

14 MS. FLANAGAN: Let's go off the record for a  
15 moment.

16 (Discussion off the record).

17 MR. SPROUL: Back on the record.

18 Page 26, please, of this.

19 THE WITNESS: 26. I'm going to lose my voice  
20 again.

21 MR. SPROUL: And so at the bottom of page 26,  
22 you state that no -- that "non-native fish or crayfish  
23 were not encountered at Bear Creek during the '98-'99  
24 surveys, and these results agree with the findings on the  
25 '97 survey and strongly suggest that non-native fishes

1 and crayfish are unable to successfully colonize the  
2 lower portion of Bear Creek."

3 **Q. Do you recall reaching that conclusion when**  
4 **you wrote this report?**

5 A. Not specifically, no.

6 **Q. And have you become aware of or developed any**  
7 **data since this report was written that -- that**  
8 **contradicts that -- those statements?**

9 A. I would have to check my data files. In  
10 general, no -- well, the -- defining that they aren't in  
11 our part of Bear Creek, I don't have any recollection.  
12 I'd have to check our data files on that.

13 The part about the unsuccessful -- unable to  
14 successfully colonize the lower portion of Bear Creek, I  
15 don't even know quite how to address that. That was a  
16 really bold statement.

17 **Q. On page 27, next page. "In summary, Bear**  
18 **Creek appears to be an important spawning ground**  
19 **Steelhead and native fishes in general. This is likely**  
20 **due to a combination of generally excellent water**  
21 **quality, year-round flows and lack of invasive**  
22 **predators."**

23 **Do you -- do you recall coming to those**  
24 **conclusions when you wrote this report?**

25 A. No. Specifically, no.

1           **Q.           Do you have any information today that would**  
2 **contradict those -- those statements?**

3           A.           Neither contradict nor support, no.

4           **Q.           So just the complete absence of any**  
5 **information about what's going on in Bear Creek at all**  
6 **since then or is there something you've got?**

7           A.           Any quantitative comparison, yeah.

8           **Q.           But you've got some qualitative info?**

9           A.           Oh. We walked through those areas. Although  
10 the first thing I'd do is why in '99, Bear Creek was  
11 unusually turbid. I don't know what that means.

12          **Q.           I don't know, either. The only person I could**  
13 **ask is you.**

14          A.           I obviously didn't know here, either.  
15 Unknown, but must have, which again is like no, I didn't  
16 must have come from there. It was probably a possible  
17 choice, but "must have" is way too strong.

18                       But it's -- so there's something going on with  
19 Bear Creek just reading this report, and I can't tell you  
20 what.

21          **Q.           And -- well --**

22          A.           Geez.

23          **Q.           -- do you have any information about Bear**  
24 **Creek being a spawning ground for Steelhead?**

25          A.           Since this report? No.

1 Q. Well, you say you've walked that area.

2 Is that true, you've walked Bear Creek?

3 A. Yeah.

4 Q. When you've walked Bear Creek, have you seen  
5 any O-mykiss?

6 A. I'd have to look at the records.

7 Q. Have you done any spot snorkeling in Bear  
8 Creek since this report was written?

9 A. I don't recall any snorkeling at Bear Creek.  
10 That's a small creek. I don't fit. I don't fit.

11 Q. Do you -- can you tell by visual observation  
12 what -- whether an area is good spawning habitat for  
13 O-mykiss?

14 MS. FLANAGAN: Visual alone?

15 MR. SPROUL: Visual alone.

16 THE WITNESS: No.

17 MR. SPROUL: Q. Do you know anything about  
18 what visually -- what visual appearance good O-mykiss  
19 habitat has? Anything at all?

20 A. Yes.

21 Q. And what do you know about that?

22 A. Clear water, gravel, nice flow, cool.

23 Q. Anything else? Earlier we said pool and  
24 riffle complex.

25 A. They can be part of that, yes. By "this," I

1 mean spawning. A pool with O-mykiss habitat in general.

2 **Q. Can it be covered?**

3 A. Can be.

4 **Q. And refuge --**

5 MS. FLANAGAN: You're talking about a  
6 spawning ground now? Because that's what this is.  
7 That's what he pointed out.

8 THE WITNESS: That was the question.

9 MR. SPROUL: Spawning habitat. Quiescent  
10 pools and deep water.

11 THE WITNESS: There's typically a pool  
12 nearby.

13 MR. SPROUL: Q. Mm-hmm. Presence of woody  
14 debris?

15 A. I don't know about a spawning site.

16 **Q. Well, could -- have you made any observations**  
17 **about whether Bear Creek has got these features that**  
18 **we've just been discussing?**

19 A. Not quantitatively, no.

20 **Q. Have you taken any water temperature**  
21 **measurements of Bear Creek?**

22 A. I actually don't recall.

23 **Q. And your -- your report also notes that**  
24 **"Steelhead are highly abundant throughout Los Trancos**  
25 **Creek," and "in 1998, only a small portion of Los Trancos**

1 Creek was electrofished. However, in 1999, the entire  
2 stretch of creek from the Felt Lake Diversion to the  
3 confluence was surveyed, and the results confirm that Los  
4 Trancos Creek is excellent habitat for Steelhead and  
5 year-round resident trout" and then you talk about the  
6 encounter rate.

7 Do you recall coming to these conclusions  
8 about Los Trancos Creek at the time?

9 A. Again, I don't specifically remember coming to  
10 those conclusions.

11 Q. Okay. When I looked at your report overall,  
12 it seemed to say that the greatest abundance of O-mykiss  
13 was in Bear Creek and in Los Trancos Creek and that the  
14 abundance levels of O-mykiss in San Francisquito Creek  
15 were lower.

16 Do you -- do you recall whether that's what  
17 you found as part of your work?

18 A. I would have to look at the specific results,  
19 which may be in here.

20 MS. FLANAGAN: Do you want him to look at the  
21 table?

22 MR. SPROUL: No, no. Hold on. We'll see if  
23 we get there.

24 Like today, if I walked in the room and I'm  
25 the provost and I said, "I don't need an exact numbers.

1 Just tell me generally where are the most O-mykiss in --  
2 in these waters? San Francisquito Creek, Los Trancos  
3 Creek, Bear Creek, Lower Corte Madera Creek? Do you know  
4 or do you not know?"

5 A. The likely -- general likelihood that I may be  
6 wrong by specific years. I would say Los Trancos has  
7 more per mile fish than San Francisquito.

8 **Q. Okay. Any rough qualitative opinion about**  
9 **Bear Creek?**

10 A. Probably Bear Creek is -- our reach of Bear  
11 Creek is very small, so you kind of don't have a good  
12 chunk to work with on our property.

13 If you set it up a mile, you could actually  
14 start looking at some numbers that mean something.

15 **Q. Mm-hmm. Do you have any explanation why Los**  
16 **Trancos Creek has greater O-mykiss abundance than the**  
17 **other water bodies we just talked about?**

18 A. No.

19 **Q. Do you think that's a question that should be**  
20 **researched, either long-term or short-term?**

21 A. No.

22 **Q. It's not a question?**

23 A. It's not something I would do right now.

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

25 A. Again, any priorities and they're not -- they



1 are what they are. The creeks are the creeks, so --

2 **Q. You don't think, for example, that could give**  
3 **you useful information about wow, Los Trancos Creek is**  
4 **succeeding. That is, let's figure out what's going on**  
5 **good there and try to replicate it elsewhere?**

6 A. I don't think that's a plausible, no.

7 **Q. Do you know whether -- do you know whether**  
8 **sunfish eat California red-legged frog?**

9 A. I don't.

10 **Q. Do you recall whether you reached any**  
11 **conclusions about that in your report?**

12 A. No. I don't recall.

13 **Q. Actually, you did, on page 34.**

14 A. Okay. I didn't recall. Well, I said the  
15 capacity is certainly there. I didn't actually didn't --  
16 did not know.

17 **Q. Oh.**

18 A. So --

19 MS. FLANAGAN: So where's the sentence you're  
20 saying, Chris?

21 MR. SPROUL: Oh, all right. All right. I  
22 take it back. "Whether direct predation of CRLF larvae  
23 by green sunfish is occurring is not known, but the  
24 capacity is certainly there."

25 So when I read that sentence, this is how I

1 read it. It's like yeah, it's known that sunfish eat  
2 California red-legged frog, but whether that's actually  
3 happening here, we don't know because we haven't made an  
4 observation of that.

5 **Q. Is that wrong?**

6 A. I don't know of any information that say it's  
7 occurring anywhere. Direct Predation of larvae by  
8 sunfish. Whether it's known -- it's an awkwardly written  
9 sentence. To me, that means it's not known anywhere.

10 **Q. You indicated you've got some specialty in**  
11 **California red-legged frog.**

12 A. I've never heard it documented that sunfish  
13 will eat them.

14 **Q. But yet the capacity is certainly there.**

15 A. Again, overstatement at the time.

16 **Q. Okay.**

17 MS. ISAACS: Five.

18 MR. SPROUL: Five minutes.

19 Okay. Page 37, please. And in your  
20 discussion here on this page, you -- you had some  
21 discussion about the need to go after -- to eradicate  
22 bullfrogs.

23 MS. FLANAGAN: Which paragraph?

24 MR. SPROUL: It's the first full paragraph.

25 MS. FLANAGAN: So that's observation.

1 THE WITNESS: Mm-hmm.

2 MR. SPROUL: I --

3 MS. FLANAGAN: Do you want him to read it?

4 MR. SPROUL: Well, here. Let me direct you  
5 to exactly what I'm saying.

6 So you had some discussion here about the  
7 presence of non-native fishes in Searsville Reservoir  
8 apparently limiting bullfrog abundance through predation.

9 **Q. Do -- is that a conclusion you would reach**  
10 **today, that non-native fishes are controlling bullfrog by**  
11 **predation?**

12 A. I don't know. It's not -- I had apparently  
13 back then and apparently might be. It's not clear that  
14 that's actually the case.

15 **Q. So you've gone to efforts to remove non-native**  
16 **fishes from Searsville Reservoir to potentially release**  
17 **bullfrogs and create a population explosion.**

18 **Is that a conclusion you would make today?**

19 A. The wording is okay, "potentially." I would  
20 emphasize potentially.

21 Do I think this is a likelihood? I don't  
22 know. I think I overstated that non-natives were  
23 limiting bullfrogs, and redo the line above it.

24 So are the non-native fishes impacting  
25 bullfrogs in the reservoir? Don't know.

1                   If you got rid of the -- if you eliminate non-  
2 native fishes, we'd have an explosion of bullfrogs?  
3 "Potentially" is a very weak word.

4       **Q.       Do you think this is something that Stanford**  
5 **should study?**

6       A.       Um --

7       **Q.       Either short-term or long-term.**

8       A.       No.

9       **Q.       And why do you think Stanford shouldn't study**  
10 **it in either the short-term or the long-term?**

11       A.       I don't know of a way to get rid of non-native  
12 fishes in the reservoir.

13       **Q.       Have you ever heard of rotenone?**

14       A.       Yes.

15       **Q.       Couldn't rotenone application get rid of the**  
16 **non-native fishes? Just talking hypothetically. That**  
17 **could be done. Whether it should be done is another**  
18 **question.**

19       A.       It has been discussed -- discussed at  
20 Searsville.

21       **Q.       Has it?**

22       A.       Yes. In the '90s like Cal Fish & Game, and  
23 loosely determined that the -- it perhaps would not be  
24 effective.

25       **Q.       Have you ever used rotenone?**

1 A. Not in California.

2 Q. And do you consider yourself as having any  
3 expertise in whether rotenone should be used or can be  
4 used in a fishery situation?

5 A. No.

6 Q. Do you know whether Stanford is studying the  
7 use of rotenone in Searsville reservoir now?

8 A. I do not know specifically.

9 Q. Do you think it should be studied?

10 A. No.

11 Q. And why is that?

12 A. I don't believe it's an option.

13 Q. And why do you think it's not an option?

14 A. Political reasons, but I don't know.

15 Q. What about draining Searsville Reservoir?  
16 Wouldn't that be a way to get rid of non-native fishes?

17 A. It would certainly reduce the non-native  
18 fishes. There would be questions of the connections, the  
19 tributaries that feed it, whether you could get rid of  
20 them there or they would recolonize instantly.

21 So the part that you actually dry, yes,  
22 there's nothing left there, but what you could do with  
23 that is another story.

24 Q. Okay. Well, I have 5:55, so I guess you get  
25 the last word.

1           A.           Oh.

2                       MS. FLANAGAN:    Which will be goodbye.

3                       THE REPORTER:    Are you ordering a copy of the  
4 transcript?

5                       MS. FLANAGAN:    Yes.  And I submitted the  
6 specifics on the last deposition of how I like it, so you  
7 guys should have it.  They asked me for the info on my  
8 order, so I sent them an e-mail.

9                       (The deposition concluded at 5:55 PM).

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1 STATE OF CALIFORNIA )

2 COUNTY OF SAN FRANCISCO )

3 I, the undersigned, hereby certify that the witness in  
4 the foregoing deposition was by me duly sworn to testify  
5 the truth, the whole truth and nothing but the truth in  
6 the within-entitled cause; that said deposition was taken  
7 at the time and place therein stated; that the foregoing  
8 is at the time and place therein stated; that the  
9 foregoing is a full, true and complete record of said  
10 testimony; and that the witness was given an opportunity  
11 to read and correct said deposition and to subscribe the  
12 same. Should the signature of the witness not be affixed  
13 to the deposition, the witness shall not have availed  
14 himself/herself of the opportunity to sign or the  
15 signature has been waived.

16 I further certify that I am not of counsel or attorney  
17 for either or any of the parties in the foregoing  
18 deposition and caption named, or in any way interested in  
19 the outcome of the cause names in said action.

20 IN WITNESS WHEREOF I have  
21 hereunto set my hand this  
22 31st day of December 2013  
23 (SIGNED ELECTRONICALLY)

24 \_\_\_\_\_  
25 MARK I. BRICKMAN CSR 5527

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A C K N O W L E D G M E N T

STATE OF \_\_\_\_\_:

COUNTY OF \_\_\_\_\_:

I, ALAN E. LAUNER, PHD., 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.

\_\_\_\_\_  
ALAN E. LAUNER, PHD.

Signed and subscribed to before me this \_\_\_\_\_ day of \_\_\_\_\_ 20\_\_\_\_.

NOTARY PUBLIC



