

PUBLIC HEARING BY THE PIERCE COUNTY HEARING EXAMINER

In Re:)
)
Administrative Appeal: AA16-07)
Taylor Resources, Inc.)
)

Transcript of Proceeding
Before Terrence F. McCarthy
Thursday, December 13, 2007

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**Reported by: Linda M. Grotefendt, CCR
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1 **BE IT REMEMBERED** that the continuation of the
2 **Hearing of Administrative Appeal AA16-07** was held on
3 **Thursday, December 13, 2007, at 9:11 a.m., at Pierce County**
4 **Public Services Building, Public Meeting Room, 2401 South**
5 **35th Street, Tacoma, Washington, before Linda M.**
6 **Grotefendt, Notary Public in and for the State of**
7 **washington.**

8
9
10 **THE HEARING EXAMINER:** Good morning. Well, we're
11 **ready to start again on the Taylor Shellfish case, Cause**
12 **Number AA16-07. So where are we?**

13 **MR. PLAUCHE:** I believe Mr. Bricklin was about
14 **midway through presenting his case.**

15 **MR. BRICKLIN:** That's accurate. Call John
16 **McCormick.**

17 **THE HEARING EXAMINER:** Mr. McCormick.

18
19 **JOHN MCCORMICK, having been first duly**
20 **sworn upon oath by the Hearing Examiner, testified as**
21 **follows:**

22
23 **THE HEARING EXAMINER:** Please state your name for
24 **the record.**

25 **MR. MCCORMICK:** John McCormick.

1 THE CLERK: Oh, you need the microphone. You're
2 going to have to hold it.

3 MR. BRICKLIN: Thank you.
4

5 DIRECT EXAMINATION

6 BY MR. BRICKLIN:

7 Q Mr. McCormick, my name is Dave Bricklin. We know each
8 other. Just for the record. This is going to be a little
9 awkward, because I'm going to ask you the questions and I'm
10 over here, to your left, but you need to answer speaking to
11 the Examiner, Mr. McCarthy. So it's going to require you
12 to be swiveling back and forth. I'm sorry about the
13 logistics.

14 Could you start out by telling the Examiner where you
15 live?

16 A We're at 2316 215th Avenue, KPS.

17 Q And where is that in relation to the Foss geoduck site?

18 A We're right next-door to them.

19 Q And is that to the north?

20 A They would be to the south of us.

21 Q They're to the south. You're to the north of them?

22 A Right.

23 Q Could you describe your property a little bit?

24 A Sitting on a bluff, overlooking --

25 THE HEARING EXAMINER: I'm not hearing you.

1 THE WITNESS: I'm sorry. We're sitting on a bluff,
2 overlooking the farm.

3 THE HEARING EXAMINER: Overlooking the geoduck
4 farm?

5 THE WITNESS: Yes, sir.

6 Q Okay. And does your property include some beach?

7 A Yes, sir.

8 Q And how much beachfront do you have?

9 A Can't tell you that.

10 Q Several hundred feet at least?

11 A Maybe 80 or 100 feet.

12 Q Okay. And what's the condition of your beach? And, maybe,
13 as part of that, have you observed any changes in the
14 character of the beach in the time that the geoduck farm
15 has been operating next-door to you?

16 A Yes, we have.

17 Q Okay. And describe how the beach used to be and how it's
18 changed since the operation took place.

19 A My partner and I started coming up here about 10 years ago,
20 staying with family. Our families own the first three
21 homes next to the geoduck farm.

22 The ground out there used to be nice and solid. We'd
23 run up and down the beach. It was just fine. Then we went
24 through this planting and then the harvesting period. But
25 now, when we walk along that beach area that has been

1 harvested, you sink anywhere from six inches to a foot and
2 a half, immediately. So it's changed the beach in that
3 way. And plus, the wildlife and stuff that used to be on
4 the beach is no longer there. It was taken away when the
5 nets were removed.

6 THE HEARING EXAMINER: I'm sorry. Again, if you
7 don't face me, then the sound is projecting out the other
8 way.

9 THE WITNESS: All right. Our deal is --

10 Q What about the wildlife?

11 A The wildlife, the crab -- and I can't name them all. Being
12 an Arizona boy, I don't know the names of all your species
13 up here. We just noticed that everything that was under a
14 net has been cleaned away where they've taken the nets off
15 the ground.

16 Now we're looking at bowl shape where we used to look
17 at flatland. We've lost sand, from our house to past the
18 attorneys who live next-door to our third house down, which
19 is 2312 215th Avenue, KPS.

20 Q So would that be an area of several hundred feet, then?

21 A Yes.

22 Q And how large of an area is it where you are describing
23 that, what used to be firm beach, you now sink in six to 18
24 inches? How large of an area is that?

25 A Well, we haven't been able to go out to the farthest point,

1 because, during the winter, the tides aren't as low as they
2 are during the summer. But we can get 20 to 40 yards from
3 the area I'm speaking at, directly adjacent to our
4 property, in front of our bluff.

5 **Q** Have the changes in the beach impacted your use of the
6 waters, your ability to reach those waters and recreate out
7 there?

8 **A** Well, we don't let the -- the reason we bought this
9 property is my partner's grandkids all live up here, and we
10 wanted it as a place where they could come out and hang out
11 and play. We did that for the first eight, nine years.
12 Last couple years, we can't let them run around on the
13 beach by themselves. We have to keep an eye on them, as
14 far as where they step, so they don't sink and get stuck.

15 **MR. BRICKLIN:** Thank you. That's all I have for
16 this witness.

17 **THE HEARING EXAMINER:** Anybody?

18 **MR. BRICKLIN:** Mr. McCormick, the other attorneys
19 may have some questions for you.

20 **MS. GUERNSEY:** No.

21

22 **CROSS-EXAMINATION**

23 **BY MR. KISIELIUS:**

24 **Q** Mr. McCormick, my name is Tadas Kisielius, on behalf of
25 Taylor Shellfish. I have a few questions for you. You

1 were describing some changes to the condition of the beach.

2 Can you describe, a little bit more specifically, where you
3 witnessed those? Was that to your beach that's immediately
4 in front of your house?

5 A We've lost almost all the sand in front of our house, yes.

6 Q And that's where you're noticing the sinking that you
7 described, is in the beach immediately in front of your
8 house?

9 A Directly in front of our home, yes. Because we come out --
10 our property line comes at an angle, so that puts the farm
11 directly in front of us.

12 Q And I'm sorry. You might have testified to this, but I
13 want to make sure I'm clear. How long of a stretch of the
14 beach is in that condition?

15 A Well, the whole beach, all the way down to the end,
16 wherever they've harvested. But it's only the 20 to 40
17 yards in front of my house.

18 Q And what is your understanding of the area that they have
19 harvested?

20 A You sink.

21 Q No. I'm sorry. In respect to the location of that area.

22 A It's right in front of my place.

23 Q If I could, I'm going to put up an aerial photograph, and
24 if you could point to that, please.

25 A You bet.

1 MR. KISIELIUS: Mr. Examiner, this is Exhibit
2 Number 53, that was previously admitted into the record.

3 THE HEARING EXAMINER: Thank you.

4 (Discussion off the record.)

5 Q So just for clarity, again, if you could point to -- well,
6 first of all, do you recognize the aerial photograph?

7 A Yes, I do.

8 Q Could you point out your property?

9 A Our property is right here (indicating).

10 Q Now, you were just testifying to the area that you believe
11 to have been harvested. Could you show us where that is?

12 A This area directly in front of the house (indicating).

13 Q Were you present on November 1st and 2nd, for the earlier
14 parts of this hearing?

15 A No, sir.

16 THE CLERK: Make sure to --

17 THE WITNESS: No, sir.

18 Q Dr. Parsons had testified that you had taken him out to
19 view the harvested area. Is that the area that you
20 directed Dr. Parsons to?

21 A Yes.

22 Q Okay. You had testified, just now, to the condition of the
23 property following planting and harvesting. Approximately
24 when, in your understanding, did the planting and
25 harvesting occur that led to this condition?

1 A The planting started in 2000 -- or a little after 2000, I
2 think. And the harvesting was just this last year. Well,
3 Mr. Taylor can tell you when they harvested.

4 Q But I was asking your understanding, because you testified
5 that you noticed the condition start after the harvesting.

6 A Right.

7 Q And I'm trying to identify when you noticed the condition
8 to have started.

9 A Just right after the harvesting.

10 Q And a ballpark figure, in your estimation, when that was.

11 A Immediately after. There was no -- it didn't settle back,
12 like I was -- explained.

13 Q But in terms of the time of year: the month? The date?

14 A Partner, you're asking the wrong guy. I'm retired, so I
15 can barely tell you what today is. I don't keep track of
16 dates.

17 Q Okay. But within the last year is when you --

18 A Oh, yes.

19 MR. KISIELIUS: Thank you. I have no further
20 questions.

21 THE HEARING EXAMINER: Nothing further?

22

23 CROSS-EXAMINATION

24 BY MR. KIMBALL:

25 Q Good morning, Mr. McCormick. My name is Jerry Kimball. I

1 **represent the Foss North Bay Partners, the owners of --**

2 **THE CLERK: Mr. Kimball, you have to get right up**
3 **on it.**

4 **MR. KIMBALL: Hello. Will that work?**

5 **THE CLERK: It's working, but it's very weak.**

6 **Q I have a couple of questions for you. The harvest you're**
7 **referring to -- were you in residence there when that**
8 **occurred?**

9 **A Yes. I watched them do it.**

10 **Q So you don't live full-time --**

11 **A No, sir. We travel.**

12 **Q So do you recall what portions of 2007 you were in**
13 **residence at --**

14 **A Oh, we've been here the whole year this year. We started**
15 **remodeling one of the properties, just up from the geoduck**
16 **farm.**

17 **Q Now, how high is the bluff where your house sits?**

18 **A We're at 39 feet, directly 90-degree vertical.**

19 **Q And is there bluff behind you also?**

20 **A Yes, sir.**

21 **Q Have you put in a bulkhead at the bottom of that bluff?**

22 **A No, sir.**

23 **Q Done anything to stabilize it?**

24 **A No, sir.**

25 **Q It's a feeder bluff, isn't it? Do you know what a feeder**

1 bluff is?

2 A Partner, I couldn't tell you.

3 Q That's how sand gets to be bluff. Do you understand that?

4 A The feeder part would be down from us, because we're a
5 solid bluff.

6 Q That sand would come from the Foss property?

7 A Yes, sir.

8 Q And you are north of the Foss property. On the incoming
9 tide, the tide comes along the shore and deposits sand;
10 correct?

11 A Yes, sir. With the exception of the north property and the
12 next three properties. Only, sand no longer deposits
13 there.

14 THE CLERK: Speak up, Mr. McCormick.

15 Q So it is only as to four properties that the sand no longer
16 deposits?

17 A Sir, it goes from this area now. You can see the
18 difference in this area (indicating).

19 THE HEARING EXAMINER: You're going to have to
20 point it out to me, because I can't see.

21 THE WITNESS: Right here is our home (indicating).

22 THE HEARING EXAMINER: Yes. Uh-huh.

23 THE WITNESS: A 90-degree vertical bluff. So from
24 this point to the fourth house, that I know of, all the sand
25 has now left the beach and has been deposited on this spit,

1 which has grown quite dramatically.

2 Q How long have you been coming to this property?

3 A A little over 10 years, we've been coming to the big house,
4 we call it.

5 Q Were you on the property in 2001, when we had the February
6 2001 earthquake?

7 A No, sir.

8 Q Did you notice any changes to the beach coincident to that
9 earthquake?

10 A No, sir.

11 Q You've not done any study or measurement of sand quantity,
12 percentage of the sediment on the beach in front of your
13 house and the three or four adjoining northward lots?

14 A No, sir. I've had marine biologists out, geologists out.
15 Nobody seems to want to explain how this is happening. Or
16 they use big words that kind of don't explain anything.

17 Q Mr. Parsons is a morphogeologist, I believe, that was out
18 on the property, correct?

19 A I've had a few out there, and if you want me to remember
20 their names, it's not going to happen.

21 Q Did you take anybody, an expert-type person, onto the Foss
22 property?

23 A Yes, sir. We -- after hearing that we have permission to
24 walk the property, we went all the way up to the corner and
25 the spit.

1 Q And who did you hear you had permission from?

2 A Through our homeowners' association. And at a meeting, I
3 heard some gentleman from Taylor -- I can't tell you which
4 one that was, but, at this meeting, saying that they
5 welcomed people to walk the farm and show that it's not
6 causing any problems.

7 Q When was that meeting, to the best of your recollection?

8 A Partner, I have no clue.

9 Q I want to ask whether you ride horses in Arizona.

10 A Yes.

11 MR. KIMBALL: Okay. I don't have anything further.

12 MR. BRICKLIN: I have nothing further, Your Honor.

13 THE HEARING EXAMINER: Thank you, sir. I
14 appreciate your coming forward. Call your next witness.

15 MR. BRICKLIN: Bob Paradise.

16

17 ROBERT PARADISE, having been first duly sworn
18 upon oath by the Hearing Examiner, testified as follows:

19

20 THE HEARING EXAMINER: Would you state your name
21 for the record, please?

22 MR. PARADISE: Robert Paradise.

23 THE HEARING EXAMINER: Would you spell your last
24 name for the record, please?

25 MR. BRICKLIN: Pick up the microphone, please.

1 (Discussion off the record.)

2 MR. PARADISE: My name is spelled P-a-r-a-d-i-s-e.

3 THE HEARING EXAMINER: Just the way it sounds, huh?

4 Thank you.

5

6 DIRECT EXAMINATION

7 BY MR. BRICKLIN:

8 Q Mr. Paradise, same routine for you. I'm going to ask the
9 questions and, then, if you could pivot and answer in the
10 direction of the Examiner.

11 A Very well.

12 Q Where do you live, Mr. Paradise?

13 A In Gig Harbor.

14 Q And among your recreational pursuits, do you include diving
15 and sailboarding?

16 A Yes, I do.

17 Q And how long have you been diving?

18 A I've been diving for approximately 30 years; 20 years in
19 Puget Sound.

20 Q How about sailboarding?

21 A I've been sailboarding about 12 years, in Puget Sound.

22 Q Let's talk first about diving and the potential impacts of
23 geoduck aquaculture on your diving. Have you ever had
24 experiences where geoduck aquaculture has impacted your
25 diving?

1 **A** **Yes, I have. It was on a geoduck farm in Henderson Bay.**
2 **On one scuba diving outing, I became entangled in a bunch**
3 **of rope.**

4 **MR. KISIELIUS: I'm going to object. This is**
5 **irrelevant. This is testimony about a different operation**
6 **that's not the subject of this hearing.**

7 **THE HEARING EXAMINER: What's this being offered**
8 **for?**

9 **MR. BRICKLIN: Well, I don't know that the risks of**
10 **geoduck operations are different. Well, it relates to the**
11 **legal issue of whether the operation interferes with the use**
12 **of the waters. That's the legal issue. And the nature of**
13 **geoduck operations are not that unique that the impacts from**
14 **one site can't also occur in another site, unless there's**
15 **going to be -- well, unless --**

16 **THE HEARING EXAMINER: Okay. I'm going to allow**
17 **it. Overruled. Go ahead.**

18 **Q** **Mr. Paradise, can you answer, then, please, the type of**
19 **impact you were describing at that other site?**

20 **A** **Okay. I did become entangled in some ropes that were part**
21 **of that geoduck farm in that area; was able to free myself;**
22 **was close to drowning.**

23 **Q** **Pardon?**

24 **A** **I was close to drowning at that time; nearly ran out of**
25 **air.**

1 Q The geoduck operation at this site, on the Foss property,
2 has been stated to include the insertion of tubes into the
3 sand and then the area is covered with a net. Are you
4 familiar with that kind of operation?

5 A Yes, I am.

6 Q All right. And what would the dangers be for a diver
7 diving close to an operation like that?

8 A Nets would be a hazard. It's one of the main concerns of
9 divers in Puget Sound, is becoming entangled in fishing
10 gear and the type of things -- a lot of diving happens at
11 night, where you possibly could swim underneath a net that
12 was loose or rope nets and something like that.

13 Q And what's the danger of swimming under a net?

14 A You become entangled, in the dark.

15 Q All right.

16 A Divers have drowned in Puget Sound when they became
17 entangled in things.

18 Q And is this a risk just with nets that have come free, or
19 would this also be nets that have been secured in place to
20 cap the tubes?

21 A I could envision, if a net was partially loose, a diver
22 could swim underneath.

23 Q Okay. When you dive, you dive from boats; is that right?
24 Or do you approach the water from the beach?

25 A We do both. I dive primarily from the shore.

1 Q All right. When you do dive from a boat, have you ever had
2 problems with anchoring boats for your dives in close
3 proximity to geoduck operations?

4 A I was approached, while diving in Henderson Bay again, by
5 the operator there, who told me I could not moor in that
6 area for fear that my anchor would entangle his nets and
7 threatened me with sending me a bill or something if any
8 damage was done.

9 MR. KISIELIUS: I'll just state my continuing
10 objection to this testimony as irrelevant and not related to
11 the Foss farm that's the subject of this hearing or the
12 operations that are the subject of this hearing.

13 THE HEARING EXAMINER: You can have a continuing
14 objection.

15 MR. KISIELIUS: Thank you.

16 Q And given that the operations at the Foss farm include nets
17 over the tubes, would those same limitations apply in that
18 area?

19 A I could easily see an anchor becoming entangled in this
20 area.

21 Q You've dived in this area on occasion; is that right?

22 A Yes, I have.

23 Q All right. Have you noticed any loose tubes on the bottom
24 of the water, on the sediment?

25 A Yes, I have. I've noticed dozens of broken tubes washed

1 out in the deep water; maybe 30 or 40 feet deep.

2 THE HEARING EXAMINER: Is that at this site, or
3 just generally?

4 THE WITNESS: That was at this site, diving from
5 Joemma Park, which is, I believe, adjacent to the property.

6 THE HEARING EXAMINER: And these are at the bottom
7 of the sound, you say?

8 THE WITNESS: Yeah. The tubes.

9 THE HEARING EXAMINER: The tubes?

10 THE WITNESS: They don't float, I think. And
11 they've blown up on the shore; but when the current and the
12 wind takes them into the water, they sink. They're commonly
13 found in Henderson Bay. There are, I don't know, maybe
14 thousands of them out in Henderson Bay. But I've also found
15 numerous tubes in the Joemma area.

16 Q When you dove in the vicinity of this Foss property, did
17 you notice anything about sediment in the water or the
18 cloudiness of the water?

19 A I had the opportunity, one day, to dive both south and
20 north sides, very close together, while the current was
21 from south to north. The visibility was good maybe 10 or
22 15 feet on the south, but visibility was terrible, maybe
23 two or three feet, on the north.

24 Q How are the winds in that area for windsurfing?

25 A This would be a very good area to windsurf. It's exposed

1 to the south. Strong winds usually come from that
2 direction.

3 Q And what are the impacts of an operation like the one at
4 the Foss property on windsurfers?

5 A windsurfers commonly surf at the Purdy spit and have had
6 numerous injuries, equipment damaged, from striking
7 against nets, tubes.

8 MR. KIMBALL: Objection. Move to strike. That's
9 nonresponsive. He was asked about the Foss property, and
10 he's answering about Washington Shellfish.

11 THE HEARING EXAMINER: Sustained.

12 Q what are the types of hazards that a geoduck operation
13 poses to a wind surfer?

14 A Any obstruction in the water is a hazard to windsurfing.
15 In Puget Sound, that's primarily the only way of being
16 injured, is hitting something in the water.

17 Q Is this a theoretical concern, or is this based in some
18 real occurrences that have transpired?

19 A Several people were injured in Henderson Bay, striking
20 rogue equipment.

21 Q And from what you know about the Foss operation, would
22 those same hazards be associated with this operation?

23 A They have the same equipment, I guess.

24 THE HEARING EXAMINER: You guess?

25 THE WITNESS: I guess.

1 THE HEARING EXAMINER: Do you know?

2 THE WITNESS: I -- I wouldn't dare go on their
3 property and look around.

4 Q well, let me --

5 A I've seen the nets from a distance.

6 Q okay. So you're not guessing about that?

7 A Right.

8 Q And do you know that there are tubes under those nets?

9 A I have seen tubes.

10 Q So we can take that out of the guesswork category, right?

11 A Yes. There is equipment out there that would pose a
12 hazard.

13 MR. BRICKLIN: All right. That's all I have for
14 this witness. Thank you very much.

15

16 CROSS-EXAMINATION

17 BY MR. KISIELIUS:

18 Q Mr. Paradise, my name is Tadas Kisielius. I'm here on
19 behalf of Taylor Shellfish, and I'll have just a few
20 questions for you.

21 A Sure.

22 Q You were testifying about operations in various locations,
23 and I think, at one point, you said you had dived in this
24 area. Had you been to the Foss site before?

25 A Could you clarify "this area"?

1 Q well, I guess I'd ask you to describe where you've actually
2 been diving in the vicinity of the Foss farm.

3 A The homeowners have invited me out to scuba dive. It's a
4 place I can get to the beach easily. So I dove directly
5 north. I believe it would be on John -- he just testified.
6 I don't -- McCormick's property. I've also dove, several
7 times, from Joemma Park, which I believe is adjacent, to
8 the south of the Foss property.

9 Q Could you show us, on the aerial photograph, the areas
10 where you were in the water?

11 A (Witness peruses photograph.)

12 MR. BRICKLIN: I don't think the witness normally
13 has this view.

14 THE WITNESS: Yeah. I don't see the bird's-eye
15 view much. I believe this may be the -- the pier at Joemma,
16 so I'd be diving near the pier, in this area (indicating),
17 and off the boat moorings. And John's property is, I
18 believe, in this area, but I can't pick anything out of --

19 Q But your testimony is that, at least at Joemma, you dove
20 between the pier and the buoys?

21 A There's mooring buoys for boats that stay at the park, and
22 I dove in that area, yes.

23 Q And then, to the north, you were in front of the
24 residential properties?

25 A Correct.

1 Q okay. Did you ever dive in the vicinity of the actual
2 aquacultural gear at the Foss farm?

3 A I never dove directly over the top of that area.

4 Q You had testified that, at Henderson Bay, you had had an
5 experience of getting entangled in ropes and that you were
6 close to drowning. Have you had a similar experience in
7 your diving here?

8 A I have not at the Foss property, at Joemma, no.

9 Q You testified to the possibility of the dangers of nets.
10 Have you ever personally been entangled in a net or --
11 generally, first.

12 A Yes, I have been tangled in nets.

13 Q Of geoduck gear net?

14 A Geoduck nets, yes.

15 Q Okay. And have you done that, ever, at the Foss farm?

16 A I have not encountered a geoduck net in that area. It's
17 something we try to avoid.

18 Q You testified that you have seen the nets, from a distance,
19 at the Foss site?

20 A Yes.

21 Q Are you aware that there are different types of netting
22 that are used by geoduck operations?

23 A I'm not an expert at geoduck farming, no.

24 Q okay. So you wouldn't be able to distinguish between the
25 types of nets that are being used on any particular

1 operation?

2 A I've not had my hands on the nets at the Foss area. I've
3 pulled many of them out of the water at Henderson Bay.

4 Q You testified to seeing some loose tubes on the bottom of
5 the water.

6 A Correct.

7 Q Could you show us where, exactly, you saw those?

8 A Again, am I correct that this is the (indicating to aerial
9 photo) -- okay. So this is Joemma Park, and this would be
10 the pier, and I would be diving out in this area, to the
11 north of the pier.

12 Q Diving in this vicinity, is that the only place that you
13 saw loose tubes on the bottom?

14 A That's the only place I dove in that area.

15 Q I'm going to ask you to take a look at an exhibit that was
16 previously admitted into the record. It is Exhibit 150,
17 one, five, zero. And I'm going to direct you to Photograph
18 30 of that set.

19 And, Mr. Examiner, for your reference, these are
20 exhibits that were added. I don't know if they were
21 accumulated into a binder, but they were added by the
22 Interveners. It's a series of photographs.

23 THE HEARING EXAMINER: That's Exhibit Number 50?

24 MR. KISIELIUS: One, five, zero, 150.

25 THE HEARING EXAMINER: I'm sorry. I misunderstood.

1 **Number 150, right?**

2 **THE CLERK: It's listed here.**

3 **THE HEARING EXAMINER: Okay. I'll take a look at**
4 **this one.**

5 **Q Mr. Paradise, do you need to look at a copy for yourself,**
6 **for your testimony?**

7 **A Possibly.**

8 **(Discussion off the record.)**

9 **Q Mr. Paradise, is that what you saw when you were diving?**

10 **A This would be typical of a broken tube, yes.**

11 **Q Okay. Mr. Paradise, I still have a couple more questions,**
12 **but Mr. Kimball is wondering if he could have his exhibit**
13 **back.**

14 **A (Witness complies.)**

15 **Q A couple more questions, to clarify your testimony. You**
16 **testified to some observations about the condition of the**
17 **sediment during your dives. Can you, again, show us where**
18 **you noticed the sediment differences?**

19 **A I was diving -- there's no scale on here, but in this area**
20 **(indicating), probably to, maybe, a third of a mile from**
21 **the shore, and then again, on diving from John's property,**
22 **and John's property must be in this area; is that correct?**
23 **Okay. So...**

24 **Q And just to clarify again, your testimony was you were**
25 **clear at one location, and there was some sediments in**

1 another. Could you describe again where that happened?
2 where you noticed the distinctions in sediment.

3 A Sure. Seemed to me that the tide was moving in a
4 northwesterly direction and, this area, the water was quite
5 clear; and up here, at John's, the water was quite cloudy.

6 Q And do you remember the day on which you were doing these
7 dives?

8 A I can't remember, but I have notes. Possibly on or about
9 May 17th, 2007.

10 Q Okay. You had testified about windsurfing at this
11 location. Have you ever windsurfed at this location?

12 A I have not.

13 MR. KISIELIUS: Those are all the questions I have
14 for you. Thank you.

15 THE WITNESS: Thank you.

16

17 CROSS-EXAMINATION

18 BY MR. KIMBALL:

19 Q Mr. Paradise, my name is Jerry Kimball. I represent the
20 North Bay Partners, the owners of the property on which
21 Taylor is farming geoducks. Have you testified, at any
22 prior hearings, regarding other geoduck operations?

23 A I testified at a hearing regarding Washington Shellfish and
24 Henderson Bay.

25 Q Any others?

1 A I testified briefly at a hearing in front of the Pierce
2 County Council, and I believe it was regarding interim
3 regulations for geoduck farming in Pierce County.

4 Q You oppose geoduck farming in Pierce County generally?

5 A I believe that geoduck farming should be regulated. I've
6 seen the unregulated mess that happened on Henderson Bay,
7 and I believe that there should be some oversight.

8 Q Henderson Bay was a major problem, correct?

9 A Henderson Bay was a major problem.

10 Q Okay. You live at Point Fosdick?

11 A Correct.

12 Q In the development down there, new development, Point
13 Fosdick Estates?

14 A Is my exact address relevant? I live near Tacoma Community
15 College, Gig Harbor branch campus. Is that close enough?

16 Q That's close enough. What caused you to make this dive on
17 May 17th of 2007?

18 A It's possible that John had asked me to come out and look
19 around in his area and see if I found rogue equipment. I
20 do dive a lot, recreationally. I dive several times a
21 week.

22 Q Had you ever made a dive at Joemma Park prior to May 17th?

23 A Yes, I have.

24 Q How frequently? How many times?

25 A Infrequently. I would say maybe 10 dives, total.

1 Q Pretty uninteresting place to dive, correct?

2 A It's a very good place to take beginners. The bay is very
3 enclosed, it's safe, it doesn't get deep very quickly, so
4 we take newly certified divers. It's a good place.

5 Q There's kind of a sand bottom, not a lot of sea life?

6 A There's some life in the area. It's not a top dive site in
7 the Sound, no.

8 Q Who maintains the mooring buoys in that area?

9 A I don't know. I would guess the Parks Department, but I
10 don't know.

11 Q And those mooring buoys are a float at the top of the water
12 connected by a chain or rope to an anchor?

13 A To an anchor, correct.

14 Q And go --

15 MR. BRICKLIN: Objection -- well, go on and ask
16 your question.

17 Q There's slack in that chain so that the buoy can stay at
18 the surface of the water during the intertidal changes,
19 correct?

20 MR. BRICKLIN: Relevance, Your Honor.

21 THE WITNESS: Correct.

22 Q Do divers ever get tangled up with buoys?

23 MR. BRICKLIN: Relevance, Your Honor.

24 THE HEARING EXAMINER: Overruled.

25 MR. BRICKLIN: We're not seeking to permit buoys

1 **here.**

2 **THE HEARING EXAMINER: Overruled.**

3 **THE WITNESS: We clearly know where those are at,**
4 **and it's simply one rope that would come up to, maybe, a**
5 **primary float. And in Henderson Bay, I was tangled in rope,**
6 **and I got it out and measured it. It was over an eighth of**
7 **a mile.**

8 **Q You took that rope out of Henderson Bay?**

9 **A Yes, I did.**

10 **Q And that was what you described as "a real mess"?**

11 **A There were also nets that were a problem.**

12 **Q Uh-huh. You did not encounter any floating rope or**
13 **submerged rope in Case Inlet adjacent to the North Bay**
14 **property?**

15 **A There was one small piece of rope. I believe it was**
16 **probably an old boat anchor or something, but just a small**
17 **piece.**

18 **Q And that was down by the park?**

19 **A I think that would have been off John's property. I don't**
20 **recall.**

21 **Q And it could have been an anchor from one of John's boats**
22 **or one of his neighbors' boats that was lost over the**
23 **years?**

24 **A I have no idea where it came from. None of the equipment**
25 **is marked.**

1 Q The tubes are marked, aren't they?

2 A To my knowledge, the tubes are not marked.

3 Q Did you recover any tubes?

4 A I have recovered many tubes. I've never seen one that was
5 marked.

6 Q Specifically on the May 17th dive, did you recover any
7 tubes?

8 A I did not recover any tubes on May 17th.

9 Q You could have?

10 A I could have picked up a tube.

11 Q So John asked you to come out and dive both ends of this
12 for purposes of seeing what was there?

13 A John asked me to come out and dive near his property. I
14 was going to make a second dive in the area. I thought I'd
15 dive Joemma, look around, and see if tubes I'd previously
16 seen in that area were still there.

17 Q Which place did you dive first: John's property, or
18 Joemma?

19 A I could not guarantee. I believe I dove Joemma first. I
20 don't know.

21 Q Okay. How much time would elapse between when you did the
22 Joemma dive --

23 THE CLERK: Speak into the microphone, please.

24 THE HEARING EXAMINER: Mr. Kimball, she needs you
25 to get closer to the microphone.

1 Q How much time elapsed between when you dove at Joemma and
2 when you dove at John McCormick's?

3 A I would say about an hour.

4 Q Okay. What was the state of the tide at the time you
5 entered the water at Joemma?

6 A I think it was slightly incoming.

7 Q And it had increased in incoming velocity by the time you
8 got down to John's?

9 A I do not recall exactly.

10 Q Okay. You have no educational training regarding geoduck
11 aquaculture?

12 A No, sir.

13 Q What is your vocational background?

14 A I'm a math teacher.

15 MR. KIMBALL: Okay. I don't have anything further.
16 Thank you, Mr. Paradise.

17 THE WITNESS: Thank you.

18 MR. BRICKLIN: Mr. Paradise, I just have one more
19 question. My son, last night, had this quadratic equation
20 he couldn't solve, and I couldn't help him.

21 (Laughter.)

22 MR. BRICKLIN: I don't have anything further, Your
23 Honor.

24 THE WITNESS: That's something I know about.

25 THE HEARING EXAMINER: May this witness be excused?

1 **You are excused. Thank you for coming forward, Mr.**
2 **Paradise.**

3 **MR. BRICKLIN: Call Janie Pinneo.**

4
5 **JANE PINNEO, having been first duly sworn**
6 **upon oath by the Hearing Examiner, testified as follows:**

7
8 **THE HEARING EXAMINER: State your name for the**
9 **record, please.**

10 **MS. PINNEO: Jane Pinneo. I go by Janie.**

11 **THE HEARING EXAMINER: How do you spell your last**
12 **name?**

13 **MS. PINNEO: P-i-n-n-e-o.**

14 **THE HEARING EXAMINER: Thank you.**

15
16 **DIRECT EXAMINATION**

17 **BY MR. BRICKLIN:**

18 **Q Thank you, Ms. Pinneo. Same routine here, with the pivot**
19 **required.**

20 **A Uh-huh.**

21 **Q Where do you live, Ms. Pinneo?**

22 **A Our permanent residence is in Issaquah, but we own a beach**
23 **house along the strip of homes here (indicating).**

24 **Q So that's just north of Mr. McCormick's property?**

25 **A Yes.**

1 Q All right. And how often do you get out to your beach
2 property?

3 A As often as we can, which is limited by our -- as often as
4 we can, which is limited by our jobs, but we are in the
5 process of rebuilding for retirement-type -- something more
6 than 676 square feet, Ty.

7 Q All right. And you're getting all the County's permits
8 required?

9 A We are, absolutely.

10 (Laughter.)

11 THE WITNESS: That's why I know Ty very well.

12 Q I just wanted to have you testify regarding a few things
13 that were mentioned during the testimony last time we all
14 got together. There was testimony last time, I believe,
15 from one of Taylor's witnesses, that they have had few, or
16 maybe no, complaints about operations at this site. Is
17 that consistent with your recollection?

18 A No. No, it is not.

19 Q And could you elaborate on that, please?

20 A Yeah. I don't know how many complaints they've had, but I
21 do know that Sherilee Luedtke has had contact with, I
22 believe, Diane Cooper. She's made calls and that. And
23 then I actually had an email that I sent out after the
24 experience I had down on the property in July, that I
25 emailed to Diane. And I spoke to the foreman at the site.

1 And that was my complaint, so I was surprised to hear that
2 there have been no complaints.

3 Q And what were you complaining about at that time?

4 A Well, at that time -- I had been at the interim-regulation
5 hearings. Not all of them. But I was under the
6 impression, ignorantly, that they had been approved, so I
7 was surprised, when I was kayaking down there, that they
8 were planting, number one, because I was under the
9 impression the permit was expired. And I also was looking
10 for markings on the tubes, that I thought had been
11 approved, and did not find any of that.

12 Q And there was testimony last time about a large net that
13 was found -- a loose net found on the beach. Do you have
14 any knowledge about that?

15 A That was my photo.

16 Q That was your photo. Okay. And was it also your photo,
17 the one --

18 MR. KISIELIUS: Objection. I'm not sure that
19 that's what the testimony was. This is lack of foundation.

20 THE HEARING EXAMINER: What are you talking about?

21 MR. KISIELIUS: Mr. Bricklin just described the
22 situation that there was testimony that a net washed up
23 somewhere along the beach, and I don't recall that--

24 THE HEARING EXAMINER: I don't either.

25 MR. KISIELIUS: --in the least.

1 THE HEARING EXAMINER: Truthfully, I don't recall
2 that testimony.

3 Q well, have you ever discovered a net on the beach?

4 A Yes.

5 Q why don't you tell the Examiner about that.

6 A well, many of the small nets that used to be over the
7 individual PVC pipes. But the one that Dave is referring
8 to was this long -- it was actually a different company's
9 label on it. I was the one that took the photo and
10 reported it and called the number on it.

11 And then I also, that same day that's in my email,
12 found a large canvas sack that had four numbers on it but
13 no company name. And it was the sacks that they used, that
14 full -- I believe they're the sacks that hold all the PVC
15 pipes when they're installing them. And that was about a
16 mile north of Camp Gallagher.

17 THE HEARING EXAMINER: And where is that in
18 relation to Joemma Park?

19 THE WITNESS: well, Joemma is down here, we are all
20 here (indicating). The Catholic Camp is here, and it was
21 about --

22 THE HEARING EXAMINER: Okay.

23 THE WITNESS: That's how far the net had floated.
24 It was actually caught up in a tree, and I had photos of
25 that.

1 THE HEARING EXAMINER: I know the area.

2 Q Caught up in a tree that overhangs the beach?

3 A Well, it was caught on the driftwood debris, the natural
4 stuff.

5 Q Okay. I'm looking to see if we have a picture of that in
6 the stuff we submitted. Let me go on for a moment. You
7 then said it was your picture of the sea otter?

8 A Yes. It was on my lawn.

9 THE HEARING EXAMINER: Really?

10 THE WITNESS: Uh-huh.

11 Q And just so we can make a record on that --

12 THE CLERK: You know, we can't hear you.

13 THE HEARING EXAMINER: And also, I don't know what
14 exhibit you're referring to.

15 MR. BRICKLIN: Yes. That's just what I was going
16 to do.

17 Q Exhibit 150, Photograph Number 9. Is that the picture of
18 the otter that you were referring to?

19 A Yes, it is.

20 Q All right. And because the photo is not particularly
21 clear, could you describe what you saw that day?

22 A We were down at our property with another couple, and it
23 was a cool, stormy night, and we saw something out on the
24 lawn, in the moonlight, kind of squirming around and all
25 that. So I -- we went to check what it was, and we could

1 see this baby otter that was rolling around and trying to
2 get something -- like it was trying to get something off of
3 it. And you could see the band. I'm a nurse. It was like
4 a tourniquet around his torso.

5 And, at first, we didn't know what it was, and then we
6 realized it was one of those black bands that he had to
7 have gotten on when he was smaller and then grown. That's
8 the only thing I can assume. I don't know that for a fact,
9 but, otherwise, it couldn't have gotten over his shoulders.
10 And it was tight around his torso, so he must have gotten
11 it on when he was smaller and then grew, and it was tight,
12 and he was squirming around, and he wouldn't let us get
13 near him.

14 MR. BRICKLIN: Mr. Examiner, if I recall, last
15 time, when we attempted to submit our photo package, Exhibit
16 150, there was an objection, and you said you were going to
17 only admit them on a photo-by-photo basis, so I'm going to
18 actually ask this witness to identify some of these
19 photographs since there was an -- am I right about that, Ms.
20 Guernsey?

21 MS. GUERNSEY: I think so.

22 THE HEARING EXAMINER: I have to tell you, I do not
23 have Exhibit 150 with me.

24 MR. BRICKLIN: I have an extra copy.

25 THE HEARING EXAMINER: Excellent.

1 MR. BRICKLIN: (Produces exhibit to Hearing
2 Examiner.)

3 THE HEARING EXAMINER: Thanks. I should tell all
4 of you, I must have left them at the office. My exhibits
5 stop at Number 148. So over lunch, I'll see if I can get
6 another book.

7 Q So, Ms. Pinneo, I'm just going to quickly take you through
8 these, because there has been an objection as to, sort of,
9 the identification and authenticity of these. So on
10 Exhibit 150, on the cover sheet, Page 1, do you recognize
11 that view?

12 A Yes.

13 Q And where is that taken?

14 A That is just south of that -- that point is just south of
15 -- it's part of Foss. Actually, I should probably say I
16 don't know this exact part here. That's Hartstene Island.
17 That's our island. Not ours, but...

18 Q And on Page 2, do you recognize that scene?

19 A That's our photo. My husband took that from our kayak, and
20 our house is the littlest one there.

21 Q The gray one, about a third of the way and on the left?

22 A Yes.

23 Q All right. Photograph 3. Do you recognize that scene?

24 A Absolutely. It's not my photo, but I recognize it.

25 Q And what is that?

1 A That is the Foss/Taylor farm.

2 Q All right. Looking north, towards your property?

3 A Yes.

4 Q Photograph 4. Do you recognize that?

5 A Same spot.

6 Q All right. Closer shot?

7 A Uh-huh.

8 Q Photograph 5. The same?

9 A I -- this looks the same to me, from that point up on the
10 right. But, again, that's not my photo.

11 Q All right. Skip ahead. Photograph 7. Let me ask you:
12 Have you had an opportunity to observe wildlife entangled
13 in the nets?

14 A Absolutely. The day that I was there, when I wrote this
15 email, I was speaking to Anthony, who was at the site, and
16 there were little things. I was commenting to him how it
17 wasn't secured tight, so things could get in and get
18 trapped and not find their way out. But I didn't sit there
19 all day and watch to see if the crabs got out. I just
20 noted that it wasn't secured.

21 Q Meaning the net?

22 A Meaning the net.

23 Q Okay. And is Photograph 7 an example of that sort of a
24 scene that you observed?

25 A Yeah. I actually meant more under the net, because there

1 are places where it's seamed, but it's not totally seamed.

2 Q How about -- more like Photograph 8?

3 A Yes.

4 Q Okay. Then Photograph 9 is the otter we talked about?

5 A Uh-huh.

6 Q Have you ever observed Taylor workers out there on site?

7 A Absolutely.

8 Q And is Photograph 10 typical of what you've seen?

9 A Yeah. I've seen that.

10 Q All right. And are Photographs 11 and 12 also typical of

11 what you've seen on the site?

12 A Uh-huh.

13 Q And 13 as well?

14 A Uh-huh.

15 Q And just do these all -- 14, 15, 16, 17, 18. Are those all

16 typical of what you see?

17 A Yes.

18 Q All right. And then 19, 20, 21, 22, 23, 24. This will

19 probably make a great transcript. 25. Let's stop at 24.

20 So those are all typical of what you see at the site?

21 A Yes.

22 Q All right. When you've been on the beach, have you noticed

23 differences in the beach after the geoduck harvest has been

24 taking place?

25 A Yes. You definitely do sink down more there. I don't -- I

1 have not seen a harvest. I actually would like to see one.

2 I don't know the exact dates and I have missed it, but it
3 would be interesting to compare right after that.

4 That's my neighbor's leg (indicating to photo).

5 Q 26?

6 A It's Mark Kettering.

7 Q I'm not going to ask how you know that.

8 THE HEARING EXAMINER: Is there a 25?

9 MR. BRICKLIN: Yeah, I'm going to skip by it.

10 THE WITNESS: I believe that's their photo also.

11 Q All right. And what was the consistency of the beach at
12 this time that you took the --

13 A I was not there when they took that, but you can see
14 it's --

15 Q Soft?

16 A Yeah.

17 Q Okay.

18 A That's --

19 Q Yes?

20 A That's just one of our neighbor's dogs.

21 Q 27? Not sure how he earned his debut there. Do you
22 recognize the scene in Exhibit 28?

23 A Uh-huh.

24 Q And what is that?

25 A That's also the Foss netting, and that's an example of the

1 -- how there are gaps where little creatures can get in and
2 maybe not out.

3 Q All right. The prior witness talked about 29 and 30. Do
4 you recognize 31?

5 A Not that specific rebar, but I have seen that down there,
6 and that's one our neighbor's boats.

7 Q You've seen rebar like that sticking out like that?

8 A Yes.

9 Q And do you recognize 32?

10 A I recognize the photo. I have not seen those. I can only
11 assume they were there, because I doubt that my neighbor
12 carried them there.

13 THE HEARING EXAMINER: Your neighbor carried them
14 there?

15 THE WITNESS: Uh-huh. I said I doubt that our
16 neighbor carried them there, but I have not seen those.

17 Q Who is your neighbor, by the way, that you're referring to?
18 Mr. Kettering?

19 A I believe these were Sherilee's.

20 Q Sherilee Luedtke?

21 A Yeah.

22 Q And same thing as in 33?

23 A Uh-huh.

24 Q 34 shows a dead fish left in the net after tube removal.
25 Have you seen things like that, yourself, out there?

1 A I have not seen a dead fish lying on top of the net.

2 Q All right. 36 is another --

3 A That, I've definitely seen.

4 Q You've seen that? Meaning a crab, dead, under the net?

5 A Under the net.

6 Q And 37 as well?

7 A (Witness nods head affirmatively.)

8 THE CLERK: You need to answer. I'm sorry.

9 THE WITNESS: Yes. Sorry. That was an example of
10 loose netting that could drift up and things could get under
11 it.

12 Q You're looking at 39 now?

13 A 39.

14 Q All right.

15 A I don't know whose photo that is, but I think that was--

16 Q 40?

17 A --to show the distancing of the tubing.

18 Q Meaning at --

19 A The placements.

20 Q -- at one-foot intervals?

21 A Uh-huh.

22 Q All right.

23 A That's my photo.

24 Q 41 is?

25 A Uh-huh.

1 Q All right. And is this taken close to your property there,
2 or on the Foss property?

3 A Yes.

4 Q On the Foss property, not far from your property?

5 A (Witness nods head affirmatively.)

6 Q All right. Is 42 your photo also?

7 A I'm pretty sure those are mine. They all start looking the
8 same, but I know that date is my date.

9 Q Right. Okay. And is this, again, a typical depiction of
10 what it looks like out there?

11 A (Witness nods head affirmatively.) That's actually tidier.
12 That's an earlier placement.

13 Q What do you mean: "tidier"?

14 A I would guess that that's a newer planting, because there's
15 vertical -- tidier.

16 Q Okay. And, in fact, is 43 also a photograph that you took,
17 do you believe?

18 A No. I think that those dates are -- I can't say that on
19 that, because I don't remember that big grouping.

20 Q Okay. Regardless of whether it's your photograph or not,
21 is that typical of what things look like?

22 A That's what you see when they're doing the big planting.

23 Q And is 44 typical of that as well?

24 A Uh-huh.

25 Q And 45. Did you have a question?

1 MR. KIMBALL: Objection.

2 THE WITNESS: I have not seen that boat, that I --

3 I don't know if I've seen that boat.

4 Q Okay. 45?

5 A Uh-huh.

6 Q All right.

7 A One of my neighbors found one of these orange crates.

8 Q That is shown on 46?

9 A Uh-huh.

10 Q And have you seen operations like that underway?

11 A I have not. I would like to witness that.

12 Q You have not been there when they were planting?

13 A No. I have not witnessed that.

14 Q we'll skip those last few there. All right. Thank you
15 for --

16 A well, those were -- no, never mind. That's --

17 Q All right. Thank you for helping us out with that.

18 A Uh-huh.

19 MR. BRICKLIN: Your Honor, we'd move the admission
20 of those photographs.

21 MR. KIMBALL: which?

22 MR. BRICKLIN: well, if you're going to continue
23 to --

24 MR. KIMBALL: Up to 44?

25 MR. BRICKLIN: Yes, up to 44.

1 MR. KIMBALL: Except for 29 and 30, that --

2 THE CLERK: I can't hear you. Will you please make
3 it clear? I'm sorry.

4 MR. KIMBALL: You're offering up to 44, except for
5 29 and 30 that the doctor just spoke about?

6 MR. BRICKLIN: Correct, and I'm offering those,
7 too, since the doctor spoke about those.

8 THE HEARING EXAMINER: well, he didn't identify 6.

9 MR. BRICKLIN: 6?

10 THE HEARING EXAMINER: Photograph Number 6 wasn't
11 discussed.

12 MR. BRICKLIN: Then -- well, let me see.

13 THE HEARING EXAMINER: That's what my notes
14 reflect.

15 Q Let me ask -- when you have been on the beach, have you
16 observed scenes like what is depicted in Number 6?

17 A Yes.

18 Q All right. Thank you.

19 MS. GUERNSEY: And, Mr. Bricklin, we'd just like a
20 copy, if you have one.

21 MR. BRICKLIN: Yes.

22 THE HEARING EXAMINER: Exhibit 150?

23 MS. GUERNSEY: Yes.

24 MR. BRICKLIN: 150. I gave my extra one to the
25 Examiner. Maybe we could --

1 MS. GUERNSEY: After lunch?

2 MR. BRICKLIN: After lunch, get that sorted out.

3 MS. GUERNSEY: Okay.

4 MR. BRICKLIN: So again, Your Honor, I'd move
5 everything up to 44.

6 MR. KISIELIUS: We have no objection. Thank you
7 for explaining those.

8 MR. KIMBALL: No objection, now that they're
9 identified.

10 THE HEARING EXAMINER: Exhibit 150, through 44,
11 will be admitted into evidence; through 44 only. And the
12 record should reflect that there are 53 photos.

13 Q Ms. Pinneo, you mentioned, earlier, that some of those
14 pictures were taken when you'd been kayaking?

15 A Yes.

16 Q So do you kayak along that area?

17 A Yes. That's a new thing for us. Yes.

18 Q And does the geoduck operation interfere with your ability
19 to use any part of the water?

20 A The rebar would, definitely, and the netting. I mean -- or
21 the paddle wouldn't get caught in the net, but it's
22 definitely different than -- the thing that it does affect
23 is that you can't push off the sand -- push off the same as
24 you would on a normal beach.

25 THE HEARING EXAMINER: I have a kayak, because I

1 kayak.

2 THE WITNESS: Yeah. And we are newer kayakers.
3 Especially if I'm alone, my husband doesn't want me out in
4 the middle. He wants me along the shore. So that's the
5 effect.

6 Q When you've been out there, have you seen windsurfers?

7 A I have not seen windsurfers. So I hope to have
8 grandchildren who would do that.

9 Q Has Taylor ever invited you--generally, you, as it were;
10 the public--onto their property to inspect their operation?

11 A Absolutely. It was Bill Dewey, at the interim-regulation
12 hearings, had a direct invitation to all of us to come
13 anytime, onto the site, as long as we didn't destroy it.

14 Q And in turn, have you opened your property to Taylor, to
15 come up to pick up litter and debris?

16 A I have not given them an invitation, but I know that that's
17 part of their -- I would welcome them picking up the
18 debris. And I've never said, to anybody walking on my
19 beach, that "you can't walk on my beach"; a horse or
20 anything. I've never said that.

21 Q All right. Did you have a conversation with Mr. Kingman
22 where you talked about the purpose of the netting?

23 A Yes.

24 Q Do you recall what he told you? Is he somebody who works
25 for Taylor?

1 A I don't believe he works for him. I think he's, like -- I
2 call him "the dealmaker."

3 THE HEARING EXAMINER: Which means?

4 THE WITNESS: Which means that he's the one that
5 made -- I don't know who approached Foss -- the Foss family,
6 but he's, I believe, the one that was the dealmaker with --
7 somebody else referred to him too -- where he is the liaison
8 with Taylor and...

9 Q So maybe he's an agent or a broker or something?

10 A I don't know how it works. I know that he's working on
11 this type of thing on his own property and doing lots of
12 experimenting.

13 Q with geoduck aquaculture?

14 A (Witness nods head affirmatively.) Yes.

15 Q You have to answer orally. What did he describe, the
16 purpose of the nets?

17 A You're talking about the blanket net?

18 MR. KIMBALL: Objection; seems to me we're pretty
19 far afield from the Foss operation at this point.

20 THE HEARING EXAMINER: Sustained.

21 Q Does he use blanket netting the way the Foss operation
22 does?

23 A At his own property?

24 Q Yes.

25 MR. KISIELIUS: I'm going to object. This is

1 testimony about a different operation, not the Foss farm
2 that's the subject of this hearing.

3 THE HEARING EXAMINER: You're getting a little bit
4 removed here. I don't know who this gentleman is, and it
5 seems to me like it's hearsay.

6 MR. BRICKLIN: That's fine.

7 THE HEARING EXAMINER: Unless you can tie it in a
8 little better, because it's pretty remote here.

9 MR. BRICKLIN: That's fine. Then I have nothing
10 further for this witness.

11 THE HEARING EXAMINER: Anybody else got any cross?

12 MS. GUERNSEY: No.

13

14 CROSS-EXAMINATION

15 BY MR. KISIELIUS:

16 Q Ms. Pinneo, my name is Tadas Kisielius, on behalf of
17 Taylor. I have just a few questions for you.

18 A Okay.

19 Q You had testified to some nets that you had discovered
20 north of the residential properties and that one of them --
21 excuse me. One net that you testified to finding. Could
22 you say again -- was there a company name on that net?

23 A Yeah. I specified it was not your company, and I called
24 the company.

25 Q Do you remember which company that was?

1 A I can say it. Is that relevant?

2 Q It's not. The sacks -- and again, I'm just trying to
3 clarify, make sure I caught it. One sack? And did you say
4 that was similarly marked with some identification?

5 A Four numbers.

6 Q Four numbers.

7 A Yes. I have it in my email, because I came home and logged
8 the whole thing. But I believe it was four numbers. I can
9 take a second and look here. No company name. And I also
10 was under the impression, from the interim regulations,
11 that all those things were supposed to be marked with a
12 name. And the barge didn't have a marking. There were no
13 markings on anything.

14 Q You just talked about a barge.

15 A I'm sorry. The same day, when I was down there, talking to
16 the foreman, I also went north and found the bag.

17 Q Got it. Okay. So now a couple questions about that. This
18 is now, I think you testified, July of this year--

19 A Yes.

20 Q --that you had a conversation with the foreman?

21 A Yes. Anthony.

22 Q How did you approach the workers?

23 A I was in the kayak.

24 Q And so you paddled up to them where they were working?

25 A Yeah. Oh, and I got out and I was talking to them.

1 **Actually, I was just looking for that new identity that I**
2 **thought was supposed to be there, but I was wrong. And**
3 **then I was questioning -- actually, I just observed that on**
4 **the way down to Joemma.**

5 **Then, on my way back, Anthony was there. He wasn't**
6 **there the first time when I was there. And then Anthony**
7 **was there, and I asked him -- first of all, "I thought this**
8 **was an expired permit, and why are you still planting?"**
9 **Because I thought this was all in the process. And he**
10 **said, to his knowledge, it wasn't.**

11 **And then I asked about the tubes being marked, and he**
12 **said he didn't believe -- he thought that it was for new**
13 **permits, not existing permits, which I said I didn't think**
14 **this was an existing permit, being expired.**

15 **And then, he was on the phone with Brian Phipps at the**
16 **time, and so he relayed the questions to Brian. And I**
17 **asked -- I'm going to look at my notes here. I asked him**
18 **why he was planting, and then he relayed that to Brian.**
19 **And then Brian told him he was supposed to ask me to leave**
20 **the premises. And I said that "I don't have to. I've had**
21 **an invitation to observe down here anytime, by Bill Dewey."**

22 **Q And so you had this whole conversation with them. You**
23 **kayaked up, and did you say you got out of the kayak?**

24 **A Yeah. I was talking to him on the farm; not hurting**
25 **anything.**

1 Q Let me ask you a quick question about Photograph Number 26
2 of the packet.

3 MR. BRICKLIN: (Produces photo to witness.)

4 Q Did you testify that you had taken that photo?

5 A No. My friend did.

6 Q Okay. Do you know where that photo was taken, exactly?

7 A That is -- no, but it's -- they were down by the Foss farm,
8 so it's not in front of our beach. Our beach does not do
9 this.

10 Q Okay. I'm just trying to get some clarity on the location.
11 "By the Foss farm" means on the Foss property?

12 A I could call her on the break and find out. I do not know
13 where this was, exactly, taken. I know they took it for
14 this purpose. And she got sick this morning or she would
15 be here to tell you herself.

16 Q Okay.

17 A Sorry. I didn't look at you (indicating to Hearing
18 Examiner).

19 Q You had testified to the condition of the rebar
20 photograph -- I believe it was 31 -- that it was in that
21 condition and that you had seen it like that. How often do
22 you see it like that? How long is it in that condition
23 when you see it like that?

24 A I can't say on that. It's not my favorite thing, frankly,
25 to walk down that end anymore, so I don't go down there

1 that often. I mean, I do go down, but it's not very
2 pretty.

3 **Q** So when you testified that the rebar -- and I think you
4 said, in that state, it poses a hazard to you kayaking. Is
5 that the state that you're referring to --

6 **A** If rebar was sticking up like that, in the water, it's not
7 going -- I doubt it would make me drown, no. But it would
8 be an obstruction you would not be expecting. But it
9 wouldn't obstruct me like a scuba diver in a net.

10 **THE HEARING EXAMINER:** wouldn't obstruct you like a
11 net?

12 **THE WITNESS:** Pardon me?

13 **THE HEARING EXAMINER:** what do you mean, it
14 wouldn't obstruct you like a net?

15 **THE WITNESS:** I said like a -- like when Bob was
16 testifying that a scuba diver would get caught in a net.
17 That's very dangerous. For me to bump some rebar is a
18 bummer, and it shouldn't be there. It's garbage to me.

19 **MR. KISIELIUS:** Thank you. I have no further
20 questions for you.

21 **THE HEARING EXAMINER:** I have a couple questions
22 for you.

23 ///

24 ///

25 ///

1

VOIR DIRE EXAMINATION

2 **BY THE HEARING EXAMINER:**

3 **Q** when you kayak, can you kayak over the area that's netted?

4 **A** You can.

5 **Q** You can?

6 **A** Yes, you can. You have to be careful about what you're
7 hitting if you're in shallow water.

8 **Q** Okay. And since you're new, do you stay in shallow water,
9 basically? Since you're new at kayaking?

10 **A** I'm supposed to, per my husband's request, when I'm alone.
11 And I have my little strap. I do all the safety stuff.

12 **Q** And you said you don't go down there very much anymore.
13 It's not very pretty. What did you mean by that statement?

14 **A** When the tide is out and you're walking the beach--we all
15 walk the beach--it's just -- you go down more to be a
16 lookie-lou and to see what's happening at the farm, not to
17 see cool driftwood. And it's just like the photos. It's
18 just not pretty.

19 **Q** So you avoid the area? Is that what you're saying?

20 **A** It's -- well, when the tide's out, if you're walking, you
21 just go for a beach walk, that's -- you might go north more
22 than south because of that.

23 **THE HEARING EXAMINER:** Thank you. May this witness
24 be excused?

25 **MR. KIMBALL:** I had a couple of questions, Your

1 Honor.

2 THE HEARING EXAMINER: Oh, I'm sorry. I thought...

3

4

CROSS-EXAMINATION

5 BY MR. KIMBALL:

6 Q Shallow water? It would have to be, what, 18 inches, two
7 feet or shallower, in order to hit the bottom with your
8 paddle, in the kayak?

9 A Whatever the draft is of your kayak and whatever your
10 paddle. I've never measured that.

11 Q So if you're in five feet of water, you're not going to hit
12 the bottom.

13 A My paddle doesn't go down five feet, no.

14 Q "We all walk the beach"? You understand that the beach
15 belongs to my clients?

16 A The same as the beach that they walk on on my property.
17 That is my beach, yes.

18 Q Does the Foss family come down onto your property?

19 A They could. I don't recognize everybody that walks on our
20 property.

21 Q You indicated --

22 A But they're welcome to.

23 Q You indicated that you came home and "logged it." You were
24 referring to this time when you talked to Anthony.

25 A Uh-huh.

1 Q You've kept a running log of activities on my clients'
2 beach?

3 A I have not. I have kept notes of anything that I
4 personally have observed. And this is the first
5 interaction I've had like this, and I don't like to lie, so
6 I wrote down the words as I said it, because I wanted to
7 email it to them, and sent it to the County and our Council
8 members and our neighbors and wanted to be accurate. So I
9 made my own notes, because I don't have a computer there at
10 our -- it's a vacation place. And that's what I meant by
11 "logging."

12 Q Okay. So you kept notes on what you had observed?

13 A So that I could get home and type this up.

14 Q Uh-huh.

15 A And the notes are thrown away.

16 Q How many occasions did you go down onto the beach to
17 observe this operation?

18 A You mean just stand and watch them, or what do you mean?

19 Q On how many different times did you go down to the beach
20 and observe and take notes? Is that better?

21 A This is the first time I have gone to the beach and come
22 home with notes. I was upset after this interaction
23 because I had the understanding that it was expired, and so
24 I wanted to know why are they still -- why are we seeing
25 more tubes when it's expired?

1 Q So you went down there to object to the fact that Taylor
2 was operating on that beach?

3 A No. I went down there in my kayak for a kayak and came to
4 them planting and so asked questions. And the team that
5 was there didn't speak very much English so -- or they were
6 pretending like they didn't speak much English -- so they
7 couldn't answer my questions.

8 So when I came back, Anthony was wonderful. He was
9 very congenial. Anyway, he was --

10 Q Cooperative? Friendly?

11 A Oh, totally. And he told me about some rude neighbors, and
12 I apologized for that, because I don't approve of that,
13 so...

14 Q When you were talking about photographs, you said, quote,
15 "That day was my day." Has there been a schedule of
16 people--

17 A No.

18 Q --photographing --

19 A That day -- I wish that, when this was put together, that
20 each -- the name of who put it there was also identified,
21 because, when we assembled it, it was a group effort and --
22 you know, it's easier to recall. I don't remember -- I
23 mean, I recognize my general photos, because I don't have a
24 lot of them. I know that's my otter. But, otherwise, it
25 would have been nice to say "taken by," because -- no

1 question.

2 Q Did you add the legends on the photographs?

3 A I did not.

4 Q Do you know who did that?

5 A I believe I do.

6 Q And who is it that you understand did that?

7 A Can I confirm with someone to make sure I'm saying the name
8 right?

9 Q No, I'm just asking for your understanding.

10 A Of who did it?

11 Q Yeah.

12 A I believe it was Catherine Townsend.

13 Q Okay. You say "we assembled." who are the members of the
14 "we" that assembled the photos?

15 A We have -- Case Inlet Association is our neighborhood of 15
16 homes, and we have joined with multiple other associations
17 who have the same issues with geoduck farming. And so we
18 -- this was a community effort.

19 Q Who else took photographs that are in this packet, marked
20 as Exhibit 150?

21 A I don't know, every photo, who has taken what.

22 Q You don't know the name of anyone else who did that?

23 A I told you the Ketterings took the leg. I know Sherilee
24 had some of them. The divers were Bob. I got permission
25 from him to submit those. I told you mine.

1 Q You've not ever struck a piece of rebar with your kayak?

2 A I have not.

3 Q You have never had your paddle entangled in a net?

4 A No, and I did not say that I entangled in a net. It's just
5 you don't want to be hitting -- have you ever kayaked?

6 Q Poorly.

7 (Laughter.)

8 THE WITNESS: Poorly. You sometimes push off the
9 sand, and you want -- you understand (indicating to the
10 Hearing Examiner).

11 Q You live in Issaquah and this is a beach cabin; is that
12 right?

13 A It's our vacation home. It's actually a home.

14 Q How long have you owned that property?

15 A I think it was eight years in July; eight or nine. But
16 we've been coming down there for over 20 years, because one
17 of our very best friends owns the cabin three houses down.
18 So we have seen the change down there over a 20-year span;
19 21 years.

20 Q when did that change begin?

21 A well, I -- one of the things that I testified at the
22 interim-regulation hearing is that I have a nicer beach
23 now, because -- and I don't have scientific proof of this,
24 but I know that John McCormick is claiming that he has lost
25 about four feet of his bank, which is hard to prove. But I

1 testified that I now have a nicer beach because that sand
2 is drifting -- wherever it's coming from, the harvesting,
3 the bank, whatever -- I used to have a lot more sand-dollar
4 beds, thousands and thousands of sand dollars, in front of
5 my property, and now I have mainly beach.

6 Q So sand is migrating from the south onto your beach?

7 A Yes, very much so.

8 Q Did you own the property at the time of the February 2001
9 earthquake?

10 A Yes.

11 Q Did you notice any change --

12 THE CLERK: Could you please speak closer?

13 Q Did you notice any changes to the beach configuration?

14 A I did not notice any changes to the beach. The changes
15 were in the bank above our homes.

16 Q They sloughed?

17 A One home in particular, but we had nothing. Our beach was
18 -- our home, our -- most of the homes were not touched.

19 Q Did you notice any changes to the bank, on the banks on the
20 Foss property, to the south of you?

21 A I did not.

22 Q It would not be inconsistent with the shaking of an
23 earthquake for a feeder bluff to shed a lot of sand?

24 MR. BRICKLIN: Objection; qualifications to testify
25 about this subject.

1 THE HEARING EXAMINER: It's not helpful.

2 MR. KIMBALL: Thank you. I don't have any further
3 questions. Thank you very much.

4

5 REDIRECT EXAMINATION

6 BY MR. BRICKLIN:

7 Q Ms. Pinneo, before you go, you've been referring to an
8 email that chronicled your recollection.

9 A Yes.

10 MR. BRICKLIN: Your Honor, I'd ask that we get this
11 introduced into the record since she's been referring to it
12 so much. It was not previously marked.

13 (Discussion off the record.)

14 MR. KISIELIUS: Mr. Examiner, we're not certain
15 whether we're going to object or not. We just have not seen
16 this before, and it is not in Mr. Bricklin's exhibit list.
17 So we'd ask the opportunity to take a look at the email
18 before you make a ruling on whether it will be admitted.

19 THE HEARING EXAMINER: We'll take a five-minute
20 recess right now. Make it 10. This will be the morning
21 recess.

22 (Recess taken from 10:23 a.m. to 10:38
23 a.m.)

24 THE HEARING EXAMINER: The hearing on Taylor
25 shellfish, AA16-07, will be reconvened.

1 MR. KISIELIUS: Mr. Examiner, we're going to object
2 to the entry of this email as evidence. First of all, it
3 wasn't on Mr. Bricklin's exhibit list. To the extent that
4 it was relevant to Ms. Pinneo's testimony, she's already
5 used it to refresh her memory, and that's part of the record
6 right now. From our brief review, the email contains
7 allegations of impropriety according to a standard of an
8 interim regulation that wasn't adopted at the time and
9 hasn't been adopted yet. It appears to be irrelevant to the
10 proceedings. And if it was relevant, it's already part of
11 the record through her testimony.

12 THE HEARING EXAMINER: I'm going to admit it for --
13 I'll give it the weight I think it deserves.

14 MR. BRICKLIN: Mr. Examiner, just for the record,
15 to identify it clearly, at the Clerk's request, this has
16 been marked as Exhibit 153.

17 THE HEARING EXAMINER: And I haven't got it. Oh,
18 this is it here.

19 MR. BRICKLIN: And it's an email from Ms. Pinneo to
20 a number of people, starting with Jill Guernsey, dated July
21 8th, 2007.

22 THE HEARING EXAMINER: Correct. I haven't looked
23 at it, but -- next witness.

24 MR. BRICKLIN: Laura Hendricks.

25 MR. KIMBALL: I would like to ask Ms. Pinneo a

1 couple of questions about the exhibit.

2 THE HEARING EXAMINER: Certainly. Come back,
3 please. I don't think she used it to fresh her memory at
4 all, in my recollection.

5 THE WITNESS: My wording, I did.

6 THE HEARING EXAMINER: Did you? You're under oath.

7

8

REXCROSS-EXAMINATION

9 BY MR. KIMBALL:

10 Q Ms. Pinneo, you complained to the workers about not having
11 a Washington boat license on the little boats, correct?

12 A I believe I referred to the -- yeah, the barge and the
13 boat, and I thought it was odd that their equipment doesn't
14 need a license and ours does. So I was asking about that
15 there was no Taylor identification. I said, "why wouldn't
16 you want" -- "if this is a great" -- I don't know if I had
17 that in there, but I did say to him, "why wouldn't you want
18 to identify Taylor Shellfish if it's a great thing? So why
19 isn't your barge licensed?"

20 Q You made inquiry of Anthony and quizzed him on whether the
21 workers were, quote, "legal employees," end quote?

22 A I could barely carry on a conversation, and so I just said
23 to him -- not knowing, I said, "I hope that these are legal
24 employees, because I would want them to get" -- I don't
25 know. I don't know -- I won't speculate.

1 Q These people did not speak English, and that --

2 A I hoped they had green cards or whatever they need to be a
3 legal employee.

4 Q Did you recognize what language they spoke?

5 A I know it was Spanish.

6 Q What percentage of the population of the state of
7 Washington do you understand to be of Hispanic origin?

8 A A lot. And I work with a lot, and I wish I knew Spanish,
9 frankly.

10 Q But that was a concern that you expressed to Taylor in this
11 kayak trip?

12 A For some reason, I just asked if they were, hoping that
13 they were not under-the-table workers.

14 Q You were opposed to what they were doing; you were not
15 happy seeing that they were planting aquaculture, and you
16 reacted accordingly, correct?

17 A I did not react unhappy. I reacted very civilized. But I
18 was and am unhappy that they've continued to plant when
19 it's expired. It was legal before, when they were
20 planting.

21 Q You do not want aquaculture on the beach next to where you
22 have your vacation cabin, correct?

23 A I do not want geoduck aquaculture that destroys the sand.

24 Q So any type of aquaculture other than geoduck, or does that
25 totally eliminate geoduck aquaculture?

1 A Could you rephrase that?

2 Q Well, what you just told me -- do you intend, by that, to
3 limit it to no geoduck aquaculture?

4 A Ever, or on our property?

5 Q No one has it on your property. It's on the Foss property,
6 correct?

7 A Yes.

8 Q You recognize you have no entitlement to use the Foss
9 property?

10 A Yes.

11 Q You're not opposed to all farms of aquaculture; just
12 geoduck aquaculture as it is practiced now?

13 A I don't -- from what I've read, I don't think it's been
14 studied enough. I don't think that it's regulated enough.
15 I don't know who is coming out from the County and checking
16 to make sure the garbage was picked up, because I felt like
17 that was our job.

18 This dollar per tube is not a good deal to me, when
19 we've picked up -- I wish I had a dollar per tube. I don't
20 know how that works. I just think that we need some better
21 regulations and that it needs to be studied on what it's
22 really doing to the natural life there.

23 Q But earlier, you told me you didn't have any scientific
24 educational background in this, I believe.

25 A Not in geoducks. I am a registered nurse. I have a lot of

1 scientific education, but not in geoducks.

2 Q You're a nurse?

3 A I'm a nurse; oncology nurse.

4 Q At Overlake?

5 A No, at Children's. I work with cancer kids.

6 MR. KIMBALL: Thank you.

7 THE WITNESS: Uh-huh. Am I done?

8 THE HEARING EXAMINER: well, I have a question for
9 you.

10 THE WITNESS: Oh, I'm sorry.

11 THE HEARING EXAMINER: You're not getting off that
12 easy.

13 THE WITNESS: Okay, sorry.

14

15 FURTHER VOIR DIRE EXAMINATION

16 BY THE HEARING EXAMINER:

17 Q You said you felt like it was your job to pick up after
18 them. What do you mean by that?

19 A Anytime -- anytime you walk the beach and you see garbage,
20 we pick it up.

21 Q Uh-huh.

22 A And, at our last community meeting in -- I believe it was
23 in June -- there was another pile of garbage that people
24 collected that -- it's still a problem.

25 Q With Taylor, or with the beach itself?

1 A Oh, it's geoduck garbage. It's not garbage.

2 Q Oh, geoduck garbage.

3 A It's not bottles. It's not papers.

4 Q Can you describe it? What are you talking about in terms
5 of volume?

6 A In terms of volumes?

7 Q The volume. What is it? Nets? What is it?

8 A It's broken tubes, it's nets, it's one -- I've seen one
9 orange crate. The larger black nets that are -- I believe
10 they're the seedling bags.

11 Q Uh-huh.

12 A We've found those. And, again, this is not all me. This
13 is a -- you know, we have 15 homes down there. People are
14 always picking up whatever they see. And I'm actually
15 surprised that we're still finding the small nets, because
16 those have been gone I don't know how long. But, you know,
17 they just are probably from the storms.

18 THE HEARING EXAMINER: Thank you.

19

20 RE-CROSS-EXAMINATION

21 BY MR. KISIELIUS:

22 Q Ms. Pinneo, may I ask one question, just to clarify? So
23 you're talking about the neighbors association. It that
24 Foss-related garbage?

25 A I don't know of another geoduck farm, other than at Foss.

1 So that's -- I -- where else would it come from?

2 Q But you had previously testified that there was another
3 operation that was responsible for the net that you found.

4 A That net -- I need to specify -- the photo was not in
5 there -- it's a long -- like a hundred-yard, 30-inch-wide,
6 dense-plastic, coil net. It wasn't the nets you guys use.
7 It had a different company's name on it, and I called them.

8 Q So that's, I guess, the basis of my question. You
9 acknowledged that some of the debris that you've found is
10 from a different operation, and I'm asking whether you--

11 A No.

12 Q --know whether the debris that you just described was from
13 the Taylor operation on the Foss site.

14 A I couldn't have picked up that net. It was so big and it
15 was in the -- I took photos of that and called them, and
16 they removed it.

17 I left the canvas bag, because I wanted to leave it
18 how it was. And then I -- the other garbage is all -- it's
19 the little black nets, it's the rubber bands, it's the PVC
20 tubes. I've never found a blanket net.

21 Q And this is all debris that you've found this last summer?

22 A Oh, anytime you go on the beach.

23 Q You were testifying to a time when the neighbors got
24 together and --

25 A We have a yearly meeting, and there was a pile of garbage

1 again, at the yearly meeting, that was just picked up that
2 weekend.

3 Q That weekend. And it included little nets and so, again,
4 the question -- and I'm sorry to ask it again. I just
5 don't know if you've answered it. Do you know whether that
6 gear that you picked up belonged to the Taylor operation at
7 the Foss site?

8 A It's not identified, like the interim regulations are
9 specifying. So that will be nice, to have a company name
10 and phone number to call -- a County number to call. And I
11 do not know of any other geoduck farm in our vicinity that
12 -- I don't know where -- you probably know where it is.
13 They're your farms.

14 Q Okay. Sorry again, but the answer to the question: Do you
15 know whether it's from Taylor, or not?

16 THE HEARING EXAMINER: I think she has answered by
17 saying she doesn't know of any other operation.

18 THE WITNESS: where else would it be from? You've
19 got hundreds of thousands of tubes down --

20 Q Again, the basis for the question is just you've
21 acknowledged that some of the trash you've picked up from
22 before is not from Taylor.

23 A Only that one long, hundred-foot or whatever roll of
24 dense-plastic, 30-inch-wide or so -- it's a coil. I don't
25 know what they use it for, but it had another shellfish

1 company name on it. I couldn't have picked it up if I
2 wanted to, and that's the only other thing that is not from
3 the Taylor property.

4 Q So it's your testimony that the little nets are on Taylor
5 property?

6 A It's not on my property.

7 Q Correct. But you said--I'm just trying to get some
8 clarity--you'd picked up some trash this summer that had
9 included little nets to cover individual tubes, and that,
10 now, you just said that you knew that this is on the Taylor
11 property.

12 And so the question is now -- your testimony is that
13 you know that Taylor uses individual nets over the tubes.

14 A They don't now, that I've seen. But they did for a long
15 time. And I, as recently as last summer, was walking north
16 to Camp Gallagher, and I came back -- with a girlfriend,
17 and I came back with a pile of the little nets that are up
18 -- still in the camp debris and driftwood, and it's still
19 there. So I just don't walk past garbage and leave it. If
20 I can pick it up, I pick it up.

21 MR. KISIELIUS: Okay. Thank you. No more
22 questions.

23 ///

24 ///

25 ///

1

FURTHER RECROSS-EXAMINATION

2 BY MR. KIMBALL:

3 Q You talked about --

4 MR. BRICKLIN: Excuse me, Your Honor. We're
5 operating under time constraints today, and I think we've
6 had enough questioning of this witness on these issues at
7 this point.

8 MR. KIMBALL: One small point I want to explore.

9 THE HEARING EXAMINER: Go ahead. I agree with your
10 comment.

11 Q -- the pile of garbage at your yearly meeting. Somebody
12 brought a pile of garbage to the yearly meeting to show
13 everybody what garbage there was, correct?

14 A No. My neighbor hosted the meeting that day. She had
15 walked the beach that morning, and that was the garbage she
16 found that morning, and it was on the deck where we had our
17 meeting.

18 Q And your neighbor who did that was whom?

19 A Kim Howe.

20 Q And you did not see her gather that garbage that morning?

21 MR. BRICKLIN: Objection, Your Honor.

22 THE WITNESS: I wouldn't want to see her pick up
23 her garbage. I do my own garbage.

24 Q So everything that was in the pile at the yearly meeting
25 was gathered that same day?

1 MR. BRICKLIN: I think we've had enough garbage,
2 Your Honor.

3 THE HEARING EXAMINER: That's been asked and
4 answered.

5 MR. KIMBALL: I have nothing further.

6 THE HEARING EXAMINER: I want to remind all counsel
7 that this is limited cross-examination, you know, and we
8 need to be moving on with this hearing. I'm not finding a
9 lot of this stuff very helpful for our central issues. So
10 let's move on, please. Thank you. May this witness be
11 excused?

12 MR. BRICKLIN: Yes, Your Honor.

13 THE HEARING EXAMINER: Thank you for coming
14 forward.

15 MR. BRICKLIN: Try Laura Hendricks again, Your
16 Honor.

17

18 LAURA HENDRICKS, having been first duly sworn upon
19 oath by the Hearing Examiner, testified as follows:

20

21 THE HEARING EXAMINER: would you state your name
22 for the record, please?

23 MS. HENDRICKS: Laura Hendricks.

24 THE HEARING EXAMINER: And would you spell your
25 last name?

1 MS. HENDRICKS: H-e-n-d-r-i-c-k-s.

2 THE HEARING EXAMINER: You may proceed.

3

4 DIRECT EXAMINATION

5 BY MR. BRICKLIN:

6 Q And again, Ms. Hendricks, remember, you're going to have to
7 do the pivot job here. Where do you live?

8 A In Gig Harbor, Washington.

9 Q And what involvement have you had with learning about the
10 geoduck industry?

11 A I've been researching this industry for the last year and a
12 half.

13 Q Why is that?

14 A Originally, there was an application in my bay, and we
15 didn't know what it was, so we started looking into it. We
16 thought it might be just --

17 THE HEARING EXAMINER: I'm sorry. Originally,
18 there was what?

19 THE WITNESS: There was an application for geoduck
20 aquaculture in my bay, and so I started researching it. The
21 neighbors wanted to know what it was, and nobody had any
22 idea what it was. So we just started doing research and
23 looking at all the scientific information and talking with
24 Fish and Wildlife and State agencies. And from that, we
25 ended up setting up different organizations in different

1 communities that also knew nothing about it, and it was
2 starting to come into their neighborhoods.

3 Q Did you have any experience as a researcher?

4 A My background was an analyst; not in science, but in the
5 financial realm.

6 Q Uh-huh. Has your organization undertaken to determine the
7 amount of fill that is represented by the tubes that are
8 inserted into a beach during these operations?

9 A Yes. One of the things -- of the many things we've looked
10 into, one of them is the fill, yes.

11 Q I guess you don't have the notebook up there.

12 MR. BRICKLIN: Mr. Examiner, I'm not clear on the
13 exhibit number.

14 THE HEARING EXAMINER: 154 would be the next
15 number.

16 MR. BRICKLIN: No, this is a premarked one, and I
17 believe it's Exhibit 26, but my numbers may be one off, so
18 it may be 27. Let's see if we can get that sorted out.

19 MR. KISIELIUS: I have it as 26.

20 MR. BRICKLIN: Okay. It is 26.

21 THE HEARING EXAMINER: Is that "Protect Our
22 Shoreline"? Is that the top of it?

23 MR. BRICKLIN: Yes.

24 THE HEARING EXAMINER: It's not been admitted into
25 evidence.

1 MR. BRICKLIN: Right.

2 Q Ms. Hendricks, I'm handing you what's been marked for
3 identification as Exhibit 26. Do you recognize that
4 document?

5 A Yes, I do.

6 Q And would you describe for what purpose it was created?

7 A The purpose was showing how -- because the shellfish
8 industry has made statements that the beach levels are
9 lowered one to two inches at harvest, we wanted to
10 calculate how much material that was, that was coming from
11 those beaches, being removed. And also, we were doing --
12 at the same time, we were looking at the information of the
13 Corps of Engineers on dredging and fill and structures that
14 they say are part of their operations.

15 Q All right. So this is actually a different exhibit than
16 the one I had intended, but that's fine. We'll do this one
17 first. So this was a calculation of how much material is
18 removed, as represented by a one- to two-inch lowering of
19 the beach?

20 A That is correct.

21 Q All right. And without taking us all the way through the
22 calculations, what was the total amount of material
23 removed, if there was one or two inches of beach lowering?

24 MR. KIMBALL: Objection; foundation. I believe she
25 said she was an analyst in the financial field. We've not

1 heard any qualifications to opine on geology or
2 geomorphology, I guess, as Dr. Parsons called it.

3 MR. BRICKLIN: Your Honor, this is a mathematical
4 calculation. It's calculating the volume of a cube, if you
5 will. Not a cube, but a --

6 THE HEARING EXAMINER: Based on the calculation,
7 just on the mathematical calculation, I'll admit the
8 mathematical calculations.

9 THE WITNESS: Well, you can do it on cubic yards,
10 or --

11 Q Let's do cubic yards.

12 A Okay. One acre at an inch loss is 134 cubic yards. And
13 one acre at two inches' loss is 268, rounded, cubic yards.
14 Effectively, in dump trucks --

15 THE HEARING EXAMINER: Pardon?

16 THE WITNESS: This also showed that -- for an
17 example, to make it -- to the standard person looking at it,
18 it would be 13 dump trucks at one acre, coming out, of
19 material; and, to two inches, it would be 26 dump trucks.

20 Q Thank you. And are those calculations shown more
21 specifically on that exhibit, 26?

22 A Yes. The way we came up with the calculations are shown in
23 consecutive order.

24 MR. BRICKLIN: We'd move the admission of that
25 exhibit, Your Honor.

1 THE HEARING EXAMINER: It will be admitted.

2 MR. BRICKLIN: Thank you.

3 Q And then let me hand you, while you're here, Exhibit 21,
4 which is the one I meant to start with.

5 THE CLERK: What is 26?

6 THE HEARING EXAMINER: It's a "Protect Our
7 Shoreline," the mathematical calculation.

8 MR. BRICKLIN: Exhibit 26, for the record, is
9 "Material Removal From Beach."

10 Q And Ms. Hendricks, could you read the title of Exhibit 21?

11 A The title is, "Calculation of Fill Comprised of Plastic PVC
12 Tubing In Tidelands For a One-Acre Geoduck Operation."

13 Q And is this, again, just a pure mathematical calculation of
14 the volume of the tubes that are inserted into a beach?

15 A Yes. It's a very detailed calculation, because we always
16 want to show where we get our information, so anyone can
17 follow the calculations through and verify their accuracy.

18 Q All right. And so, without taking us through each tiny
19 step, kind of just jumping to the bottom line, what, I
20 guess, on an acre of beach -- what do those tubes represent
21 in the way of fill?

22 MR. KIMBALL: Objection, not to the calculation,
23 but to the exhibit as indicating that it is material removal
24 from the beach. What she appears to be redoing is
25 calculating just a volume of material based on one inch

1 times an area of beach, not what is removed. I don't
2 believe there's foundation to do the latter.

3 MR. BRICKLIN: That was the prior exhibit, Your
4 Honor. This exhibit is calculating the volume of the tubes.

5 THE HEARING EXAMINER: That are removed?

6 MR. BRICKLIN: That are being inserted in the
7 beach. This is tubes into the beach: How much fill does
8 that represent?

9 THE HEARING EXAMINER: Overruled.

10 Q So, Ms. Hendricks?

11 A This shows there are 502 -- it's 18.62 cubic yards an acre
12 of fill, or 868,586 cubic inches per acre.

13 MR. BRICKLIN: And, Your Honor, we'd move the
14 admission of Exhibit 21 as providing the details of that
15 calculation.

16 THE HEARING EXAMINER: It will be admitted.

17 Q And then, did your organization also calculate the amount
18 of time, during summer daylight hours, that a geoduck farm
19 would be visible; that is, at low tides?

20 A Yes, we did.

21 Q All right. And I'm handing you what's been marked for
22 identification as Exhibit 18. Does that exhibit reflect
23 those calculations?

24 A Yes.

25 MR. KISIELIUS: We'd like to object to the

1 **relevance of this. View obstruction is not an issue here.**
2 **The testimony she's about to provide is related to view**
3 **only.**

4 **THE HEARING EXAMINER: Sustained.**

5 **Q Hand that one back.**

6 **A (Witness complies.)**

7 **Q Thank you. Has your organization collected information**
8 **regarding the scientific assessment of impacts associated**
9 **with geoduck aquaculture?**

10 **A Yes. We've spent a year and a half visiting with**
11 **scientists around the world and taking documents that they**
12 **recommend that we use; visiting with them, making sure that**
13 **our recommendations and our observations are accurate and**
14 **that -- they have sent us many of these documents that we**
15 **have in our archives.**

16 **THE HEARING EXAMINER: What is the name of your**
17 **organization, again?**

18 **THE WITNESS: We actually have five groups.**
19 **There's actually six now. Mine is Henderson Bay Shoreline**
20 **Association.**

21 **THE HEARING EXAMINER: Yours is what?**

22 **THE WITNESS: Henderson Bay Shoreline Association.**
23 **Protect Our Shoreline is our Thurston group. We have Case**
24 **Beach Association, which, you've heard from a lot of their**
25 **people. There's the Case Beach Shoreline Association.**

1 **There's a Case Inlet Association. We are now working with a**
2 **Jefferson County new association, and we're working with**
3 **Anderson Island.**

4 **THE HEARING EXAMINER: And what is the premise of**
5 **your organization?**

6 **THE WITNESS: There really -- we started out as**
7 **concerned citizens that wanted to find out what aquaculture**
8 **was and what was it doing. Because many of us had protected**
9 **our shorelines a lot of time, making sure that we're doing**
10 **the right things.**

11 **When we first started, it was on geoduck. But our**
12 **concern now is how much habitat alteration and modification**
13 **is each county going to allow in this state, and what are**
14 **the long-term consequences of that alteration. Because we**
15 **continue, as shoreline owners, to get information about: We**
16 **should not put in docks. We should not put in bulkheads.**
17 **We should not move debris. We just want to find out why all**
18 **of these impacts are not being looked at equally. We all**
19 **need to work together to make sure we save Puget Sound. So**
20 **that's why we're concerned.**

21 **THE HEARING EXAMINER: Thank you.**

22 **Q Ms. Hendricks, let me hand you Exhibit 43. Do you**
23 **recognize that document?**

24 **A Yes, I do.**

25 **Q What is that?**

1 **A** **This is a partial listing of the most important studies**
2 **that we have found that are relative (sic) to the intensive**
3 **aquaculture.**

4 **MR. PLAUCHE: I'm going to object, Mr. Examiner.**
5 **Ms. Hendricks has testified that she doesn't have a**
6 **scientific background. This is a list of scientific studies**
7 **she's now characterizing as "the most important." I have**
8 **not heard any qualification that would allow her to enter**
9 **that testimony.**

10 **THE WITNESS: Can I change that to most relative to**
11 **what we're doing? Maybe not the most important, but they're**
12 **relative to the species and the operations that we're seeing**
13 **here in Puget Sound.**

14 **MR. PLAUCHE: Same objection, Your Honor. She**
15 **hasn't testified to any knowledge that would allow her to**
16 **ascertain what's the most relative -- relevant, important,**
17 **any of that. She's got no scientific background or**
18 **foundation.**

19 **THE HEARING EXAMINER: Are these materials that**
20 **your organization uses in their presentations?**

21 **THE WITNESS: Yes, sir. We use them when --**
22 **they're used in our presentation. They have been submitted**
23 **to the Governor's office, to Ecology, Fish and wildlife, the**
24 **DNR, ISPAC (phonetic), for the concerns that we show for**
25 **Puget Sound.**

1 THE HEARING EXAMINER: I'm going to admit it for
2 those purposes. Exhibit 43 will be admitted.

3 Q And when you testified that these are relevant, do these
4 studies relate to geoduck aquaculture?

5 A I don't believe there are any -- there might be some
6 literature reviews in there, but on the geoduck, because
7 there have been very limited studies, there's been very
8 little information to find. And what is interesting, when
9 you look at all this, is that, if you look from the sky to
10 the ground, you see the impacts to the birds, with netting;
11 with the geoduck and oyster nets.

12 MR. PLAUCHE: Mr. Examiner, I'm going to object
13 again. She's now testifying as to impacts of the operation
14 on the environment; again, has not -- it's one thing for her
15 to have offered a document that compiles certain studies.
16 Now she's going to start testifying as to her understanding
17 of impacts. She's got no scientific basis for that
18 testimony.

19 THE HEARING EXAMINER: I'm going to allow you to
20 testify what your organization's concerns are, period.

21 THE WITNESS: Our organization's concerns are that
22 we continue to hear we need another study. But when you
23 look at the number of studies that are already published,
24 there are studies that show impacts on birds, on disturbance
25 from aquaculture and nets and predation, on siltation.

1 If you look at the studies, there's -- on what's been
2 done to the harvesting of clams, on the benthic layer, which
3 salmon depend on, it shows the impacts in a five-year study.
4 If you look at studies on forage fish and you look at
5 studies on vegetation, on eelgrass, it shows the impact of
6 aquaculture on those.

7 And then the industry's own literature. They talk about
8 their past management policies of either deterring,
9 excluding, or destroying a great deal of aquatic life. If
10 you add all of those things up, it is a tremendous amount of
11 alteration, modification of our habitat and our wildlife in
12 Puget Sound that we feel somebody has to look at.

13 MR. PLAUCHE: I'm going to object and move to
14 strike that last sentence. Again, there's no foundation.
15 They had a fisheries expert, they had a geomorphologist that
16 was qualified to testify on these issues. They did not
17 testify to these issues. So I'm going to move to strike
18 that last sentence, the characterization of the impact.

19 THE HEARING EXAMINER: I'm going to allow her
20 testimony as to what their concerns are.

21 MR. PLAUCHE: And again, I'll just state it so I
22 don't have to keep interrupting. I'll state it as a
23 continuing objection to this line of testimony.

24 THE HEARING EXAMINER: That's fine.

25 MR. PLAUCHE: Thank you.

1 Q Ms. Hendricks, I'm handing you what's been marked as
2 Exhibit 4.

3 THE HEARING EXAMINER: Could we stop just a moment
4 here?

5 MR. BRICKLIN: Yes.

6 THE HEARING EXAMINER: What are the issues in front
7 of me today? Could you tell me what the issues are?

8 MR. BRICKLIN: Whether the proposed project
9 constitutes substantial development such that it requires a
10 Substantial Development Permit. And number two, whether the
11 permit that was issued in 2000 has expired.

12 MR. KIMBALL: I would agree with him on Number 2.
13 And Number 1 is --

14 THE CLERK: Speak into the microphone, please.

15 MR. KIMBALL: I don't have one.

16 THE CLERK: Find one.

17 MR. KIMBALL: And Number 1 is a subset of that, in
18 my view.

19 MR. KISIELIUS: We'd agree with Mr. Bricklin's
20 characterization of the issues.

21 MR. PLAUCHE: I'm with him.

22 (Laughter.)

23 MS. GUERNSEY: I think it's true. I think the
24 primary issue is whether or not it expired. The secondary
25 issue, as raised by Taylor Shellfish, is the substantial

1 development argument.

2 THE HEARING EXAMINER: Can you gentlemen tell me
3 how a lot of this testimony is going to help me with those
4 two issues?

5 MR. PLAUCHE: Your Honor -- or go ahead, David.
6 I'm sorry.

7 MR. BRICKLIN: On the substantial development
8 piece, Your Honor, the statutory definition of "substantial
9 development" identifies a number of different ways you can
10 qualify as development. And one of the --

11 THE HEARING EXAMINER: Don't you think we're
12 getting a little far away from what we're looking at today,
13 all of us? I mean, we're looking at two primary things.
14 The basic one is whether or not a permit is to be continued.
15 And I'm telling you right now, I'm not finding a lot of this
16 testimony extremely helpful.

17 MR. BRICKLIN: Okay. Well, Your Honor --

18 THE HEARING EXAMINER: On the two issues.

19 MR. BRICKLIN: You're right. If I could just bring
20 this piece to a close just by offering this last exhibit,
21 and I'm done with this piece.

22 MR. PLAUCHE: And if I can just weigh in on that.
23 I definitely agree with you on your characterization of this
24 as marginally or not relevant. I raised that objection back
25 on November 1st and 2nd, as these environmental issues

1 **started coming in.**

2 **I do want to preserve, though -- as I indicated then,**
3 **these issues are now in. They're part of the record. Mr.**
4 **Bricklin has argued that they're relevant, and we will be**
5 **putting on rebuttal testimony to address those issues.**

6 **THE HEARING EXAMINER: Keep it short. I'm going to**
7 **tell you right now, you need to know that I allow a lot of**
8 **information in because I think, when the general public**
9 **comes to a hearing, that they should be heard, you know.**
10 **And I think we're real lucky to have concerned citizens come**
11 **forward and tell us about their problems.**

12 **But at the same time, an awful lot of material is going**
13 **through here, but it's just not going to be used by me. You**
14 **can make your arguments as you want to, all the way around,**
15 **but I'm looking at two basic issues here. So you can go**
16 **ahead, but I'm just telling all of you I've got two basic**
17 **issues to decide, and I'm not finding a lot of this**
18 **information very helpful at all on those two issues.**

19 **MR. BRICKLIN: If I may, then, just very quickly,**
20 **conclude this.**

21 **Q Do you recognize the Exhibit 4 that I've handed to you?**

22 **A Yes, I do.**

23 **Q And just for the record, could you read the title and the**
24 **date so that the Clerk has that identified?**

25 **A "Sustainable Shellfish: Recommendations For Responsible**

1 **Aquaculture."**

2 **Q And the author?**

3 **A Is Heather Deal.**

4 **Q And is there a date on that?**

5 **A No. I know it came out just about a year ago.**

6 **Q Okay.**

7 **A Davis Suzuki Foundation.**

8 **Q All right. And is this one of the documents that your**
9 **organization collected?**

10 **A Yes, it is.**

11 **Q Just very briefly, how is it relevant to your**
12 **organization's concerns?**

13 **A Well, it just verifies the concerns we have had, that other**
14 **foundations have the same concerns.**

15 **THE HEARING EXAMINER: Okay. I'll admit it for**
16 **very limited purpose, reflecting what their concerns are.**

17 **MR. BRICKLIN: All right. Thank you, Your Honor.**
18 **That's Number 4.**

19 **THE HEARING EXAMINER: That's Number 4?**

20 **MS. GUERNSEY: 4, or four zero?**

21 **MR. BRICKLIN: 4.**

22 **MS. GUERNSEY: Thank you.**

23 **MR. BRICKLIN: Excuse me one moment. (Confers with**
24 **Mr. Kisielius and Mr. Plauche.) Your Honor, without having**
25 **to take time from the witness, we're going to offer Exhibit**

1 13, which is a CD disk containing a video of a program that
2 featured the Taylor operation right here at this site and
3 has some onsite video footage, and I think there's not going
4 to be an objection.

5 MR. PLAUCHE: There is.

6 MR. BRICKLIN: Oh, there is?

7 MR. PLAUCHE: I'm sorry. I object to the
8 characterization that it was a harvest on this site. It was
9 not a harvest on this site.

10 MR. BRICKLIN: Excuse me. I didn't mean to say
11 "harvest." But it is this site?

12 MR. PLAUCHE: No. No, it is not.

13 MR. BRICKLIN: Excuse me. I stand corrected. But
14 it is a video of Taylor's operations, generally, which are
15 typical --

16 MR. PLAUCHE: We do not have an objection to the
17 admission of the DVD but with a note that that is not the
18 Foss site.

19 MR. BRICKLIN: That's not?

20 THE HEARING EXAMINER: It's one of the --

21 MR. PLAUCHE: It is a Taylor site.

22 MR. BRICKLIN: All right.

23 MR. KIMBALL: It's a commercial TV program.

24 MR. BRICKLIN: Your Honor, that's all for this
25 witness.

1 THE HEARING EXAMINER: And you all think this is
2 relevant for me to watch?

3 MR. PLAUCHE: No. But it's entertaining. I have
4 seen it. It will be the most enjoyable thing you have to
5 do, probably.

6 MR. BRICKLIN: That's all for this witness, from
7 me, Your Honor.

8 THE HEARING EXAMINER: Any questions?

9 MR. PLAUCHE: I don't have any questions for this
10 witness.

11 THE HEARING EXAMINER: Thank you.

12 MR. KIMBALL: Mr. Hearing Examiner, I wanted to
13 clarify one thing. On 43, which was the list of studies, my
14 understanding is you have admitted that for the limited
15 purpose to show--

16 THE HEARING EXAMINER: Their concerns.

17 MR. KIMBALL: --that material that they've looked
18 at vis-a-vis their concerns, not for the validity of it as
19 scientific material.

20 THE HEARING EXAMINER: That is correct.

21 MR. KIMBALL: With that understanding, I have no
22 questions, then.

23 MS. GUERNSEY: No questions.

24 THE HEARING EXAMINER: May this witness be excused?

25 MR. BRICKLIN: Yes, Your Honor.

1 THE HEARING EXAMINER: Thank you, Ms. Hendricks,
2 for coming forward. We appreciate your testimony.

3 MR. BRICKLIN: We don't have anything further, Your
4 Honor.

5 THE HEARING EXAMINER: Who's next?

6 MR. PLAUCHE: Jill.

7 MS. GUERNSEY: We don't have anything further.

8 THE HEARING EXAMINER: You don't have any
9 presentation?

10 MR. BRICKLIN: I think we're on to rebuttal now.

11 THE HEARING EXAMINER: We're on to rebuttal?

12 MR. PLAUCHE: No rebuttal?

13 MS. GUERNSEY: No.

14 MR. KISIELIUS: We'll be calling just a few
15 witnesses in rebuttal to the testimony.

16 THE HEARING EXAMINER: What's this tomorrow? Some
17 expert?

18 MR. PLAUCHE: Tomorrow morning, at 8:30, we've got
19 David Troutt. He's a fisheries resource manager for the
20 Nisqually Tribe. He will testify, in part, in rebuttal to
21 some of the testimony that came in from Mr. Daley, relating
22 to fishery impacts, that Mr. Bricklin offered. Would you
23 like me to take a moment to articulate the witnesses that we
24 do have coming up?

25 THE HEARING EXAMINER: I'd appreciate that.

1 MR. PLAUCHE: Well, first, we'll call Brian Phipps
2 to the stand to rebut some of the testimony related to the
3 factual operations on the Foss site, the location of beds,
4 and some of those issues.

5 we'll then bring Dr. Fisher back to testify to some of
6 the fishery issues that were raised by Mr. Daley. We will
7 then bring a Dr. Jon Davis forward to address some of the
8 genetics and biomass issues that were testified to by Mr.
9 Daley. We will then bring Lynn Goodwin on, briefly, to
10 testify to, again, the biomass-effects issue. And then
11 we'll have Mr. Troutt tomorrow morning.

12 THE HEARING EXAMINER: Okay.

13 MR. PLAUCHE: Thank you.

14 MR. KIMBALL: I may have five minutes of rebuttal
15 from one of the partners of North Bay.

16 THE HEARING EXAMINER: well, shall we move on,
17 then? Now, you know what I'm looking for, so...

18 MR. KISIELIUS: Thank you, Mr. Examiner. We would
19 like to recall Brian Phipps to the stand.

20 THE HEARING EXAMINER: Mr. Phipps. You've been
21 previously sworn in.

22 MR. PHIPPS: Yes, sir.

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DIRECT EXAMINATION

BY MR. KISIELIUS:

Q Mr. Phipps, it's been a few weeks since you were last up there. Could you very quickly just restate your title with Taylor Shellfish?

A I'm the geoduck harvest manager for Taylor Shellfish.

THE HEARING EXAMINER: And you're still sworn in. You're still under oath. You may proceed.

Q And have you been present for both days of the hearing in November and today?

A Yes, sir, I have.

Q And you've heard all the Interveners' witnesses' testimony?

A Yes, I have.

Q I would like to ask you a few questions about the location of the geoduck beds. Do you recall the testimony of the Interveners' witnesses regarding the location of those geoduck beds?

A Yes.

Q There's some vagueness, and I'd just like you to lend some clarity to it. Does Taylor keep records of the exact location of the geoduck beds?

A Yes. We GPS our geoduck beds.

Q You GPS the coordinates?

A Yes. It's the GPS coordinate of all the different plantings on the Foss farm; every farm, actually.

1 Q And when did you begin recording the GPS coordinates of the
2 geoduck beds?

3 A I believe we got our GPS unit in 2004.

4 Q So what did you do in 2004?

5 A We started GPSing all the previous plantings on the Foss
6 farm: the 2001, 2002, and so on.

7 Q And since 2004, have you continued that practice?

8 A Yes, we have.

9 MR. KISIELIUS: I'd like to enter, as an exhibit --
10 and I'm sorry. You'll have to remind me if we're on 154.

11 THE HEARING EXAMINER: Next exhibit is 154,
12 correct.

13 MR. KISIELIUS: I'm barricaded in here. Thank you.

14 THE WITNESS: (Witness produces exhibit to the
15 Hearing Examiner.)

16 MR. KISIELIUS: We're going to have a big one as
17 well (indicating to large photos).

18 THE HEARING EXAMINER: This is a series of
19 photographs. The first photograph is 2006, with a series of
20 photographs with pink markings.

21 Q So, Mr. Phipps, could you please describe what we're
22 looking at?

23 A These are the different age plantings of GPS from 2003.
24 Here's 2006, 2005, and then 2004 over here (indicating).

25 Q Is this depicting the entirety of the Foss farm?

1 A No, sir, it is not.

2 Q But the entirety --

3 A Oh, the farm. Not the property. Yes, the farm, not the
4 property. I'm sorry.

5 Q Okay. And, again, if you could just describe briefly --
6 we've gone into this before, but in terms of age classes,
7 what that means in relation to this photograph.

8 A Okay. The different age classes, you have your harvest.
9 The next harvest is here, in 2003 (indicating). And then,
10 in 2004, they get younger, and we're going this way. And
11 we have -- the last planting is 2006.

12 Q So, again, just to be clear, is the entirety of the Foss
13 farm ever covered in tubes?

14 A No, it is not. The only amount of tubes out there right
15 now are the 2006 planting.

16 Q Do you recall Dr. Parsons' testimony about the level of the
17 tide the two times he visited the property?

18 A Yes, I do.

19 Q And what's your recollection of his testimony?

20 A I believe he stated, when he walked south on the Foss farm,
21 it was a plus 2. And when he went north of the Foss farm,
22 it was a minus 3.

23 Q And do you recall whether he felt that the geoduck beds
24 were visible during his visit during the plus 2 tide?

25 A I believe he said he walked across the harvested area.

1 Q okay. Were you able to plot your GPS location at the plus
2 2 and minus 3 tides on this aerial photograph?

3 A Yes, we have.

4 Q I'd ask you to flip back over to the next page.

5 A (Witness complies.)

6 Q Could you describe what we're looking at here?

7 A Okay. The geoduck beds, again. And then you have your
8 GPS. Two-foot plus is the top red line. And the
9 three-foot minus is the bottom red line.

10 Q So just to be clear, is it possible, at the plus 2 tide,
11 that Dr. Parsons could have seen the harvested area of the
12 geoduck beds at the plus 2 tide?

13 A No.

14 Q So in light of that, do you recall Dr. Parsons' testimony
15 and Ms. Luedtke's testimony, and some of the other
16 witnesses, about a soft spot that they were calling the
17 harvest area?

18 A Yes, I do.

19 Q Do you know what they were talking about?

20 A I believe it's the ghost shrimp bed. It's above our
21 geoduck beds.

22 THE HEARING EXAMINER: You think it's a what?

23 THE WITNESS: A ghost shrimp bed.

24 Q Can you describe: what is a ghost shrimp bed?

25 A You get -- they're ghost shrimp or sand shrimp. They

1 burrow down in the ground. If you're walking across it,
2 you'll sink in anywhere from two to eight inches on your
3 initial walk across. And then, if you stand there and work
4 your feet back and forth, you'll sink clear up to your
5 knees.

6 Q Okay. Are there other -- well, let me ask you first: were
7 you able to identify the location of this ghost shrimp bed?

8 A Yes. We GPS'd it.

9 Q So how did you GPS it?

10 A With our GPS unit.

11 Q I guess what I meant was: How did you determine the
12 boundaries?

13 A Okay. Is (sic) what I did is we walked the area. And as I
14 would sink, and then I would get out of the soft area, we
15 walked that area with a GPS.

16 Q And were you able to plot that on the aerial photograph as
17 well?

18 A Yes, we did.

19 Q Could you flip to the next page?

20 A (Witness complies.)

21 Q Could you identify for us the area that you've marked out
22 as the ghost shrimp bed?

23 A This light green area is the ghost shrimp bed.

24 Q You described the condition of the ghost shrimp bed as
25 being you'd sink down. How long would it remain in that

1 condition?

2 A It stays that way as long as there's ghost shrimp in there.

3 Q Just, again, briefly--because I don't think this is marked
4 on there--where is the ghost shrimp bed in relation to the
5 McCormick property line? In other words, north of the Foss
6 property.

7 A It's right here, in front of Mr. McCormick's property.

8 Q And where is it in relation to the plus 2 tide line?

9 A It goes right through the plus 2. The ghost shrimp bed
10 goes right through the plus 2.

11 Q Okay. And the majority of it is --

12 A It was above it.

13 Q When did you first become aware of this ghost shrimp bed?

14 A When we started planting in 2002, we actually tried to
15 stomp tubes up into the ghost shrimp area. Because what
16 happens is, when you stomp the tubes in, they just
17 completely sink and they can't stay there. So we weren't
18 able to plant there.

19 Q So this is in 2002. Had you done any harvesting activity
20 anywhere on the Foss property at that time when you
21 discovered the ghost shrimp bed?

22 A Not in 2002.

23 Q And it was in that state?

24 A Yes.

25 Q Okay. Have you visited the -- well, let me ask you first

1 to identify where, up towards the north end of the
2 property -- can you point to the location of the area of
3 the most recent harvest?

4 A It's the yellow area, here (indicating).

5 Q I think, if you flip it over one more time...

6 A (Witness complies.)

7 Q Describe what we're looking at there.

8 A This is just an enlarged version. You have your harvest
9 area that we harvested directly in front of Mr. McCormick's
10 place. And then, at the plus 2, you have the ghost shrimp
11 bed right above it.

12 Q And have you visited the area that was harvested recently?

13 A Yes.

14 Q And were you able to observe the condition of the harvested
15 area?

16 A Yes, I have.

17 Q And could you describe it to us?

18 A It's the same as -- the substrate returns back to the -- I
19 wouldn't -- I don't know if it's the natural state, but
20 it's firm as soon as -- a couple tide cycles after, you're
21 able to walk through it. You can't tell.

22 I mean, if you wanted to walk out with me, I'd be
23 happy to take you out. You can't tell the difference. You
24 can see it right after harvest, but not now. The last time
25 we harvested here, I believe, was August 15th.

1 Q when you were out there visiting, were there other studies
2 that were done? Core samples, that sort of thing?

3 A Yes.

4 Q Could you flip the page, please, for us?

5 A (Witness complies.)

6 Q Is that the location of the core samples?

7 A Yes, I believe so. We GPS'd those core samples that Dr.
8 Fisher was doing that night.

9 MR. KISIELIUS: Mr. Examiner, I'd ask that this
10 entire exhibit be admitted into evidence.

11 THE HEARING EXAMINER: 153, A through E -- 154, A
12 through E, will be admitted into evidence.

13 Q Mr. Phipps, I want to switch subjects here and ask you a
14 few questions about Ms. Luedtke's testimony and some of the
15 other witnesses, the fact witnesses. Were you present for
16 their testimony?

17 A Yes, I was.

18 Q Have you met Ms. Luedtke before?

19 A Yes, I have.

20 Q Could you describe where you met her?

21 A We had a meeting with the Interveners in Gig Harbor, so I
22 met her at that meeting.

23 Q And what was the purpose of the meeting?

24 A The debris issues; to try to work on the debris issues and
25 the marking issues of some of the items that we use.

1 Q And so we'll get into some of those issues. I'd like to
2 first ask you about the use of nets on the Foss site. Do
3 you recall Ms. Luedtke's testimony and Ms. Pinneo's
4 testimony about the nets at the Foss farm?

5 A The individual nets, or the larger net?

6 Q Well, I guess we'll ask about both. I'd like to start with
7 going back to the Interveners' exhibit, Photograph Numbers
8 3 and 4.

9 A Okay.

10 Q No, it's the Interveners'.

11 THE HEARING EXAMINER: You're talking about Exhibit
12 Number 150?

13 MR. KISIELIUS: 150, yes. Thank you.

14 THE HEARING EXAMINER: You want 3 and 4?

15 MR. KISIELIUS: Yes.

16 THE WITNESS: I know which ones they are.

17 Q You should probably take them, just to refer.

18 A Okay.

19 Q So do you recall her testimony that, in this photograph,
20 the small nets had come off and floated away?

21 A Yes.

22 Q Is that your recollection of what's happened in this
23 photograph?

24 A No. What happened is, we pulled the nets and the tops that
25 -- we had the individual nets on, and then we had the

1 canopy net over it, because a few of the tops were coming
2 off. So we put a large net over the top of it to keep them
3 there. So before we pull the tubes, we pull the individual
4 nets and the canopy net off.

5 Q So it's your testimony that this is a photograph just
6 after --

7 A Just after, yes.

8 Q So do you know what day you removed the nets?

9 A The nets, we removed days before; a couple days before.

10 Q Okay. And how do you know that with such certainty?

11 A We keep records of everything we do on the Foss farm. On
12 any farm, actually.

13 Q So you checked your records to see what the activity was on
14 this particular --

15 A Yes.

16 Q Did you notify Ms. Luedtke that this activity was going to
17 be happening?

18 A Yes, I did. After the meeting, we were in the hallway, and
19 she asked, if there was any major operations on the Foss
20 farm, would I call her. And I made a phone call and let
21 her know that we were going to be pulling nets, tubes, and
22 the cover nets.

23 Q So you notified her the day that the activities happened?

24 A Before. Before the activity.

25 Q okay. I'd like to ask you just a few questions more about

1 nets. There was some testimony from Ms. Pinneo about --
2 excuse me -- Mr. Paradise, about nets and entanglement. Is
3 there one type of net that people use when you're talking
4 about the canopy nets?

5 A No. There's different types.

6 Q And are you familiar with the safety hazards, that they
7 might -- you heard Mr. Paradise's testimony. Do you have
8 any response to that?

9 A I don't see -- we -- we don't dive and plant, but I know
10 there's other geoduck farms that actually plant through the
11 net, and they do it by diving. So we haven't heard of
12 anybody getting caught in any nets. And we staple our nets
13 down every six feet. We have an anchor every six feet, so
14 I don't see how you could get underneath them.

15 Q And what about the different types of nets? Can you speak
16 to the type of net that you use at the Foss farm?

17 A The large overlay net?

18 Q Yes.

19 A It's one net. It's 50 by 50. It's what they call a
20 one-inch stretch, that's made out of nylon, and it doesn't
21 float.

22 Q okay. So in terms of the fear of the net drifting up and
23 catching somebody --

24 A It doesn't float.

25 Q okay. I also want to ask you one more question related to

1 the nets. Do you recall the testimony that these nets trap
2 and kill wildlife?

3 **A** Yes.

4 **Q** And have you been present at the Foss farm when you've
5 pulled those nets?

6 **A** Yes, I have.

7 **Q** What do you observe when you pull the nets?

8 **A** There's crabs underneath them. There's cockles underneath
9 them. There's eels. There's the little -- they look like
10 a periwinkle. I'm not sure if -- it's a little -- I'm not
11 sure what they're called. They look like a periwinkle.
12 There's fish. There's everything, and it's all alive.
13 It's not dead.

14 **Q** Okay. I'm going to ask you really briefly: Do you recall
15 Ms. Luedtke's testimony that the gear and nets have
16 restricted her ability to fish the site?

17 **A** Yes.

18 **Q** And have you had occasion to check with the Washington
19 Department of Fish and Wildlife to see whether Ms. Luedtke
20 has ever obtained a fishing license since this farm has
21 been installed?

22 **MR. BRICKLIN:** Objection, Your Honor; relevance.

23 **MR. KISIELIUS:** It goes to the weight of her
24 testimony and whether she's a credible witness on whether or
25 not this impact --

1 THE HEARING EXAMINER: Sustained.

2 Q Let's switch subjects and talk about barges. Do you recall
3 Ms. Luedtke's testimony regarding the barges--I think
4 they're called scows, maybe--at the Foss site and the
5 length of time that they were there?

6 A Yes. I believe she said they were there from February till
7 July, I believe; or June. And she said they had become
8 part of the landscape.

9 Q And is that an accurate characterization of the length of
10 time that the scows are out there?

11 A I went back and looked at our harvest records and our
12 pulling -- our tube records, and they were there, from that
13 length of time, for about 40 days. About 40 days.

14 Q And is that 40 days in a row?

15 A No. No. That's just -- we would bring them in and use
16 them and then take them out right after we're done.

17 Q And the range again, just for clarity, is February
18 through...?

19 A June, I believe.

20 Q Okay. And checking your records, you saw when the activity
21 was there?

22 THE HEARING EXAMINER: What year?

23 THE WITNESS: Pardon?

24 THE HEARING EXAMINER: What year?

25 THE WITNESS: This year.

1 THE HEARING EXAMINER: Thank you.

2 Q Thank you. Those are the scows?

3 A Correct.

4 Q Do you use other kinds of boats?

5 A Yes. We have, like, little -- basically, little outboard
6 boats with -- skiffs, with just an outboard on them.

7 Q And have you ever left those at the Foss site overnight?

8 A No. We don't moor those at the Foss site.

9 Q By way of comparison, do you recall -- well, let me ask you
10 first: In your recollection, how many private boats are
11 moored to the north of the Foss site?

12 A I believe there's nine.

13 Q And how about to the south, near Joemma State Park?

14 A I believe we've looked at it, and there's seven mooring
15 buoys at the Joemma State Park.

16 Q And in your experience, to your recollection, how often are
17 there boats moored to those buoys?

18 A Most of the buoys that are moored out north are during the
19 summer months -- during the hot times: May through
20 September, the beginning of September.

21 Q Do you recall Ms. Luedtke's testimony about the state of
22 the Foss barges, the fact that they don't have reflectors,
23 they don't have lights?

24 A Yes.

25 Q Do any of these private boats have reflectors on them?

1 A No, they don't.

2 Q And do they leave lights on overnight?

3 A No, they don't.

4 Q I'd like to switch gears and ask you a few questions about
5 the use of rope at the Foss site.

6 A Okay.

7 Q And I would ask you to look at Photograph 32 of Exhibit
8 150. I'll hand you a copy of that. Do you recall Ms.
9 Luedtke's testimony about the rope on Photograph 32?

10 A Yes.

11 Q Can you tell us what this rope is for?

12 A After the meeting with the Interveners in Gig Harbor, we
13 were asked to try different methods of securing our nets,
14 to make sure they wouldn't get away -- the large canopy
15 nets. So what we did is, we placed plastic anchors in the
16 ground with this rope on it, and then put some plastic
17 rings on the edge of the net, and then stretched it, kind
18 of like an accordion, and then stretched it out and tried
19 to keep it down that way. And that's what this rope is
20 for.

21 Q So you testified the rope was anchored.

22 A Yes.

23 Q What kind of rope did you use?

24 A It's -- I believe it's a nonfloating -- it's something --
25 it's a nonfloating rope. I can't remember the name of it.

1 Q okay. And so you tried this out, this alternative method.

2 Did it work?

3 A No. What happens is, all the nets kind of ball up in one

4 spot.

5 Q So has this rope that's in that photograph -- has that been

6 removed?

7 A Yes, it has.

8 Q And have you ever used this method since that experiment?

9 A No, we haven't.

10 Q I'm going to ask you a few questions about the testimony we

11 heard about rebar.

12 A Okay.

13 Q Do you recall -- actually, there were several witnesses

14 that testified to rebar that was left upright and exposed.

15 A Yes, I do.

16 Q Do you recall testifying -- and I don't know that it was in

17 response to the Interveners' photographs, but I think it

18 was in response to the County's photographs, that showed

19 rebar in a similar state --

20 A Yes.

21 Q Could you tell us again why it's in that state?

22 A Is what we do is, when we're pulling the nets, we pull all

23 the rebar and stack it in a pile -- or not in a pile, but

24 just stick them in the ground so they're standing up. So

25 that way, when we get ready to go, it's all in one spot.

1 You can come in when the tide comes in and then just set it
2 in the boat, and it's all in one area, not scattered all
3 around the whole perimeter.

4 Q I'd like to ask you specifically about Exhibit 151. I'll
5 hand a copy to you.

6 THE HEARING EXAMINER: I don't have a copy of 151.

7 MR. KISIELIUS: This was entered, I believe,
8 November 2nd, Interveners' exhibit.

9 THE HEARING EXAMINER: Well, I only have exhibits
10 through 148 today. My office will start looking for the
11 other ones, but that's all I have today.

12 MR. KISIELIUS: We're going to get an extra copy
13 here from Mr. Phipps, if we have one.

14 THE HEARING EXAMINER: I've seen it. You can go
15 ahead and use it now.

16 MR. KISIELIUS: Here's an extra copy.

17 THE HEARING EXAMINER: Oh, thank you.

18 MR. KISIELIUS: You're welcome.

19 Q So based on this photograph, can you draw any conclusions
20 about what's going on in this photograph?

21 A Yes. If you look in the front of the photograph, you can
22 see the rebar; it's sticking up. And then there's the
23 tubes that are exposed. Is what we do, Your Honor, is,
24 when the tide is starting to go out, we start at the
25 highest point where the tubes are. Then, when the tide

1 drops off to the deep ground, we move out and we work the
2 deep ground; and then, when the tide comes back in, we come
3 back and finish up where we were.

4 So if you look, that -- they pulled the net off.
5 They've got the rebar in a certain spot. I think that
6 they're out working -- is what we do is, we move out and
7 then come back in. So we'll stop doing what we're doing up
8 above, go down, work at the bottom, and then come back to
9 the top. And I believe that's what's going on here.

10 Q And can you tell, from that photograph, you know, in terms
11 of the canopy net, how many had been removed so far?

12 A It looks like just one, because, around the rest of the
13 gear, you can still see the canopy net's on.

14 Q In a typical session, would you do more than one?

15 A It all depends on the size of your crew. If you have
16 enough crew to pull more tubes, you'll do more. If you
17 don't, you'll only do one. If they only did one here,
18 that's all they can pull: the amount of tubes that are
19 underneath one net.

20 Q And in terms of the testimony that you heard about the date
21 of this photograph as being June of 2006, did you check
22 your records at all to see the activity at the Foss site in
23 June of 2006?

24 A Yes. We were pulling nets in June.

25 Q Okay. Let's switch, real quickly, to Photo 31. I'll hand

1 you a copy. This is from Exhibit 150. Can you read the
2 date that is on that photograph?

3 A 3 of '07.

4 THE HEARING EXAMINER: what is this?

5 MR. KISIELIUS: Exhibit 150, Photograph Number 31.

6 THE HEARING EXAMINER: 31? Thank you. All right.

7 Q So in March of 2007, do you know whether the Taylor crews
8 were out at the Foss site?

9 A Yes, they were.

10 Q And were you pulling nets?

11 A Yes, we were.

12 Q would you personally have been down to the site in March of
13 2007?

14 A Yes.

15 Q And do you recall ever seeing rebar, like this, exposed?

16 A well, the only time that you see rebar like this, when it's
17 sticking up out of the ground that far, is when we're
18 pulling nets.

19 Q And the crew --

20 A will pick it up before the tide covers it.

21 Q I want to briefly ask you a few questions about Photographs
22 50 and 51, which is also in Exhibit 150.

23 THE HEARING EXAMINER: Those haven't been admitted
24 into evidence, incidentally. We stopped at Number 44.

25 Q Let me ask you the question this way: Do you recall

1 Ms. Luedtke's testimony about activities that were
2 happening on October 23rd of this year, 2007?

3 A I don't believe so. I don't remember.

4 Q Okay. Well, we've heard a little bit about the cleanup
5 activities. Can you tell us a little bit about the
6 biannual cleanup? I believe Ms. Pinneo testified to that.

7 A Is what we do is, biannually, the whole industry --
8 industry-wide, shellfish-industry-wide, gets together and
9 we clean up beaches in south Puget Sound.

10 Q Okay. I'm going to ask you to just take a look at these
11 photographs to refresh your memory of Mrs. Luedtke's
12 testimony.

13 A (Witness complies.) Okay.

14 Q So on October 23rd, can you tell us what was happening on
15 that day?

16 A That was the day of our -- one of the days of our biannual
17 beach cleanup.

18 Q And let me ask you some more details about that. On the
19 biannual beach cleanup, do you work on just your
20 properties?

21 A No, we do not.

22 Q So in the vicinity of the Foss farm, where do you walk?
23 where do you --

24 A We start from Joemma State Park and pick up all the way to
25 -- I believe it's the north Pierce County line, which is

1 Rocky Bay.

2 Q And how far is that, in terms of miles?

3 A Approximately 10 miles.

4 Q And do you catalog what you collect on those beach
5 cleanups?

6 A Yes. We have an itemized list on everything that we get,
7 and the reason -- at least aquaculture garbage is itemized.
8 When we -- at the meeting with the Interveners, we had
9 some --

10 THE CLERK: Keep the microphone.

11 THE WITNESS: We had some -- just some data sheets,
12 general sheets, of the total amount of garbage. Well, they
13 asked if we could itemize all the garbage. So we itemized
14 the aquaculture garbage.

15 And then, on the bottom, we just put a total yardage of
16 other debris. We don't count the pop cans and bottles and
17 stuff like that, but we do keep track of what's aquaculture.

18 Q When you say you "don't keep track," does that mean you
19 just don't itemize it?

20 A Yeah. We just don't itemize it. I'm sorry.

21 Q So what do your records show for October 23rd, in terms of
22 what was picked up on that day?

23 A Total garbage, or aquaculture garbage?

24 Q Let's do both.

25 A The total garbage, I believe, was four and a half cubic

1 yards. Aquaculture garbage was 15 feet of rope.

2 Q And again, is that just for the Foss farm?

3 A No. That's the whole 10-mile stretch, all the way from
4 Joemma State Park to Rocky Bay.

5 Q okay. I'd like to ask you, also, about some testimony we
6 heard about 2007 planting. I believe Ms. Pinneo was
7 talking about 2007 planting.

8 A Right.

9 Q If you flip back over on our earlier exhibit, I don't see
10 any of the age classes that are marked 2007.

11 A We actually didn't plant in 2007.

12 Q I believe you testified to this before. Can you recall why
13 you didn't plant in 2007?

14 A When we first started and we put the tubes in -- we put
15 some tubes in here in 2007, through here (indicating). And
16 we put the tubes in, and we didn't have seed at the time.
17 So we left the tubes in, and we covered them with net.

18 And then, after that, when we finally got the seed
19 from the hatchery and we raised it in our nursery system,
20 by that time, we had heard, from the County, that we might
21 get a stop-work order, so we didn't plant.

22 Q okay. so there's nothing planted in 2007?

23 A No. There's nothing planted 2007. There's no tubes for
24 2007.

25 Q so the 2007 planting -- we heard some testimony from Mr.

1 Daley about biomass. And you actually testified to this, I
2 think, on November 1st. Do you recall your testimony about
3 the number of pounds of geoduck on the site?

4 A Yes, I do.

5 Q And what did you say?

6 A I said it was 1.3 million pounds.

7 Q What is that? Is that a number of the geoducks that are on
8 the site right now?

9 A No. That would be if everything -- Your Honor, if
10 everything came to be two pounds at the same time, I would
11 expect to get 1.3 million pounds. But they're in different
12 age classes, so they're different sizes, so the biomass is
13 actually less than that.

14 So if you do it by -- I ran some numbers by age class,
15 and I took the number of seed we put in by the percentage
16 of survival that we got from each batch of geoducks that we
17 planted, took an average weight, and came up with a total
18 biomass for the farm.

19 Q And what were the results of that calculation?

20 A The total biomass for the whole thing was 589,000 pounds, I
21 believe.

22 Q And did you break that down into pounds per square foot?

23 A Yes.

24 Q Could you tell us what that was?

25 A If you go on the 10 acres that's planted, it's 1.3. If you

1 use the whole farm, the whole 12, it's 1.2. Or 1.1. I'm
2 sorry. 1.1.

3 Q 1.1. It looks like there's a range. You said the whole
4 farm versus 10 acres. Can you describe what the
5 distinction is there?

6 A Well, if you use the whole farm, it's the whole --
7 everything we've planted previously. If you use the --
8 what's planted now, there's areas -- the two acres that we
9 didn't get to plant this year. So we don't have seed in
10 there, so that's the two different -- that's why there's 10
11 acres and 12 acres.

12 Q Okay. So you get a range: 1.1 to 1.3. If those had been
13 planted, what would the results be? What's your
14 estimation?

15 A It would be the same. The seed doesn't -- it's only 10 to
16 15 millimeters when you plant it, so this year's crop would
17 be -- I still think it would be in the range.

18 THE HEARING EXAMINER: It's five years to reach two
19 pounds? Is that what it is?

20 THE WITNESS: Yes.

21 Q Okay. I only have just a few more questions.

22 MR. BRICKLIN: What was the 1.1 figure?

23 THE WITNESS: That's if you use the whole 12 --

24 THE CLERK: I didn't hear the question.

25 MR. BRICKLIN: Sorry. I was just asking: 1.1

1 **what?**

2 **THE WITNESS: That's 1.1 pounds per square foot.**

3 **I'm sorry.**

4 **MR. BRICKLIN: Thank you.**

5 **Q I'm going to switch subjects here and ask you to look at**
6 **Exhibit 150, Photograph Number 49. I'll hand you a copy.**

7 **THE HEARING EXAMINER: It's not in evidence.**

8 **MR. KISIELIUS: I'll ask him just to use it to**
9 **refresh his memory on the testimony of Dr. Parsons and**
10 **Ms. Luedtke.**

11 **Q Do you recall Dr. Parsons' and Ms. Luedtke's testimony**
12 **about the -- I believe they called it "scum" that floats**
13 **north of the Foss site?**

14 **A Yes.**

15 **Q And do you recall, after looking at those photographs, if**
16 **you remember the dates that they said that had occurred,**
17 **that they observed it?**

18 **A The date was 2/8 of '07.**

19 **Q And have you been able to check the harvesting records to**
20 **determine whether harvesting occurred at the site in that**
21 **range?**

22 **A They harvested on the 4th of February of '07.**

23 **Q Four days before?**

24 **A Yes.**

25 **Q And again, this is based on your record?**

1 A Yes.

2 Q okay. Are you able to tell us where that harvest on
3 February 4th happened?

4 A Yes. It was in this area (indicating) of the 2002
5 planting, here.

6 Q And can you guess the distance from there to the property
7 line, where they observed the condition?

8 A 700 yards, roughly.

9 Q Okay. Last couple of questions here. You had also heard
10 testimony today -- were you present for Mr. Paradise's
11 testimony about the sediments that he had observed?

12 A Yes.

13 Q Okay. And I believe he said that the date that he observed
14 this condition was May 17th of 2007.

15 A Yes.

16 Q Were you able to check the records to see if and when any
17 harvesting had been occurring?

18 A Yes. We harvested at the end of April. I believe it was
19 the 22nd. And then we harvested May 30th.

20 Q Okay. You also heard some testimony about tubes that were
21 at the bottom of the water there. Do you recall that
22 testimony today?

23 A Yes.

24 Q I guess, as a first question, are there other geoduck
25 operations in the area?

1 **A** Yes, there are.

2 **Q** Okay. Does Taylor use the same tube size as other
3 operators in the area?

4 **A** No, we don't. And Key Peninsula -- or, everywhere, we use
5 six-inch. And then, on the Key Peninsula -- we try to save
6 our grey tubes for the Key Peninsula. We have grey and
7 white tubes, and we save our grey ones for the Key
8 Peninsula.

9 **Q** I'm going to ask you to take a look at Photographs -- I
10 believe it's 29 and 30, from Exhibit 150. I believe my
11 copy of Photograph 30, I handed to Mr. Bricklin's witness.
12 Do you have an extra copy? I may have it. I may have
13 another one.

14 **MR. PLAUCHE:** I've got it.

15 **THE HEARING EXAMINER:** I've got an extra one here.

16 **MR. KISIELIUS:** Thank you.

17 **Q** Okay. You can refer to that, please. So do you recall
18 Mr. Paradise's testimony about those tubes?

19 **A** Yes, sir.

20 **Q** Can you make any judgment, based on what you see in these
21 photographs, whether or not these are the types of tubes
22 that Taylor uses?

23 **A** Yeah. The industry usually cuts their tubes 10 inches,
24 nine and a quarter to 10 inches. So if you take the length
25 of the tube, it's 10 inches. And then you take the width

1 of the opening, and it's roughly half that. It's not a
2 six-inch tube. It's a four-inch tube.

3 Q So based on that, can you conclude whether or not this
4 would be a Taylor tube?

5 A I don't believe that's our tube, no.

6 Q Has Taylor conducted any diving activities at the Foss site
7 to look for loose tubes?

8 A Yes. We conduct dive surveys on the bottom of our beds.

9 Q And what were the results of those dive surveys?

10 A This summer, we surveyed. We did nine dives, found seven
11 tubes, and no tubes on the Foss farm.

12 Q So those other seven tubes were from where?

13 A Different areas.

14 Q Okay. Do you recall Mr. Paradise's testimony about the
15 tubes that he had found in the proximity of Joemma State
16 Park?

17 A Yes.

18 Q And do you have any knowledge of the facts around those
19 tubes?

20 A Yeah. I was walking on the pier. I walked down to the
21 pier, and I could see the tubes underneath the pier. So I
22 called Paul Harris at Seattle Shellfish and let him know
23 that there were some at the bottom of the pier. And he had
24 let me know that they had dropped and lost a bag of tubes
25 at their geoduck farm. And I don't know exactly what date

1 they went and picked them up, but they did get a call, and
2 they did pick them up.

3 THE HEARING EXAMINER: Where is their farm in
4 relationship to this?

5 THE WITNESS: I believe -- I believe it's south.
6 It's south of the --

7 THE HEARING EXAMINER: How far?

8 THE WITNESS: -- the pier. See this spot, right
9 here (indicating)?

10 THE HEARING EXAMINER: Uh-huh.

11 THE WITNESS: I believe it's right in here, so it's
12 not very far.

13 THE HEARING EXAMINER: It's just south of the
14 Joemma State Park?

15 THE WITNESS: Yes.

16 MR. KISIELIUS: I have no further questions for
17 you. Thank you.

18

19 CROSS-EXAMINATION

20 BY MR. KIMBALL:

21 Q Was it your understanding that they were using the pier to
22 load gear onto their boat to take to their farm?

23 A No, sir. I don't believe they use that pier.

24 MR. KIMBALL: Okay. I have nothing further.

25 THE HEARING EXAMINER: Any further questions?

1 **MR. BRICKLIN: I have just a couple.**

2

3

CROSS-EXAMINATION

4 **BY MR. BRICKLIN:**

5 **Q You indicated that you used gray tubes at this site, not**
6 **white ones; is that correct?**

7 **A Yes. I knew you were going to bring that up. After the**
8 **meeting in 2004, we got ahold of PW Pipe, and they were**
9 **actually running a grey line of tubes for us instead of**
10 **white. So it's after 2004. Sorry.**

11 **Q So you have used white tubes on this site?**

12 **A Yes. Yes.**

13 **Q All right. And you were discussing, in Exhibit 150,**
14 **Photograph 49, the one that has the identification of**
15 **"brown scum on beach" --**

16 **THE HEARING EXAMINER: Are you going to admit that**
17 **into evidence?**

18 **MR. BRICKLIN: Yes. I was just going to ask --**
19 **there was testimony about it last time, by Ms. Luedtke, so I**
20 **would move that one, Your Honor.**

21 **THE HEARING EXAMINER: 49 will be admitted into**
22 **evidence since it's been clarified.**

23 **Q Was it your testimony that you had harvested 700 or so**
24 **yards south of that part of the beach shortly before that**
25 **photograph was taken?**

1 **A** Yes, if this picture is below the houses.

2 **Q** Right.

3 **A** That's correct.

4 **Q** okay. You testified that, in 2007, you initiated a
5 planting by installing the tubes, but then you didn't
6 follow through because you didn't have seeds; is that
7 right?

8 **A** At the beginning of the summer. That's correct.

9 **Q** Then did you pull the tubes out?

10 **A** After we heard that we were going to get a stop-work order
11 from the County, we pulled the tubes out, yes.

12 **Q** You testified about the amount of garbage you picked up on
13 this beach related to aquaculture. And that quantity would
14 not include the amount of aquaculture-related debris that
15 had been picked up by the neighbors, would it?

16 **A** No, sir.

17 **Q** You testified that you staple the net down every six feet
18 or so. Can you describe the mechanism by which you staple
19 these nets in place?

20 **A** If you look at the rebar picture, we use that rebar, and
21 then we hook a little plastic ring on the edge of the net
22 and then shove that all the way down until it's flat with
23 the ground.

24 **Q** Does it ever come loose?

25 **A** They do work up.

1 Q Thank you. It's your testimony that the area that you
2 identified as the ghost shrimp bed -- that that was soft in
3 2002; is that right?

4 A Yes, sir.

5 MR. BRICKLIN: That's all I have, Your Honor.

6 MS. GUERNSEY: Nothing.

7

8

REDIRECT EXAMINATION

9 BY MR. KISIELIUS:

10 Q I would just like to clarify in follow-up, in redirect.
11 You just testified about the rebar working up. In your
12 experience, how far does it work up in the natural course
13 of events?

14 A It only comes up a couple -- three or four inches. About
15 the same height as the tube.

16 Q What does your crew do when they see it worked up?

17 A They'll stomp it back down.

18 MR. KISIELIUS: Thank you.

19 THE HEARING EXAMINER: Anything further? Thank
20 you. I appreciate your testimony. Next witness, please.
21 Wait a second here. Do you want to break for lunch now, or
22 do you want to take the next witness?

23 MR. PLAUCHE: I don't think I can finish the next
24 witness in 10 minutes, so it might make sense to break for
25 lunch.

1 THE HEARING EXAMINER: Can we all be back here at
2 1 o'clock?

3 (Lunch recess taken from 11:51 a.m. to
4 1:08 p.m.)

5 THE HEARING EXAMINER: Good afternoon. The hearing
6 on Taylor Shellfish, AA16-07, will be reconvened.

7 MR. PLAUCHE: Thank you. I do have one witness
8 that I didn't list in the litany that I gave you before, but
9 I have one question for him, and I'd like to go ahead and
10 call him first. I'd like to call Bill Dewey to the stand,
11 please.

12
13 BILL DEWEY, having been first duly sworn upon
14 oath by the Hearing Examiner, testified as follows:

15
16 THE HEARING EXAMINER: Please state your name for
17 the record.

18 MR. DEWEY: My name is Bill Dewey, D-e-w-e-y.

19
20 DIRECT EXAMINATION

21 BY MR. PLAUCHE:

22 Q And, Bill, could you explain to Mr. McCarthy the nature of
23 your work with Taylor?

24 A I manage public affairs for Taylor Shellfish Company, so I
25 do their regulatory work, their water-quality work, and

1 soon, in the legislature, with various local, state, and
2 federal governments that we interact with.

3 Q You've been in the room today, have you not?

4 A I have.

5 Q Okay. And you heard the testimony regarding your
6 invitation to the public to come down to the Foss property
7 at any time. Do you recall that testimony?

8 A I do.

9 Q Okay. Do you recall the nature of your making such an
10 invitation? Do you recall making such an invitation?

11 A I testified, I think, on three different occasions, on that
12 interim geoduck ordinance, and so what specifically I said,
13 which time that they're referring to, I'm not sure. But
14 generally, when I talk about inviting people to our farms,
15 when it's land that Taylor owns, we always -- our policy is
16 that people are welcome to visit the farms at their own
17 risk, and we ask them not to disturb the equipment or
18 harvest the shellfish. And, also, it's a right that may be
19 revoked at any time. And that's how we deal with land that
20 we own.

21 On our properties that we lease, like is the situation
22 there at Foss, I generally would not extend that
23 invitation, because it's not mine to extend. We don't own
24 that property, so -- however, I do also recall testifying
25 there, to the Pierce County Council, and saying -- because

1 we've been accused of directing people to certain farm
2 sites and not showing all of our farms and -- you know, so
3 I made it clear that people were welcome to come on tours
4 and we'd be happy to arrange tours of any of our farms at
5 any time. But that was arranging tours; it was not just
6 come at you own -- at your own will.

7 MR. PLAUCHE: Thank you. That's all I have for
8 this witness.

9 THE HEARING EXAMINER: Thank you. Any questions?
10 May this witness be excused?

11 MR. PLAUCHE: Yes.

12 THE HEARING EXAMINER: Thank you, sir. Call your
13 next witness, please.

14 MR. PLAUCHE: I'd like to call Dr. Jeff Fisher back
15 to the stand, please.

16 THE HEARING EXAMINER: You need to pick up the
17 microphone. You've been previously sworn in; is that
18 correct?

19 DR. FISHER: That's correct.

20 THE HEARING EXAMINER: You're still under oath,
21 then.

22 DR. FISHER: Yes.

23 THE HEARING EXAMINER: You may proceed.

24 MR. FISHER: Can you hear me okay? Better?

25 THE HEARING EXAMINER: Yes.

1 DR. JEFFREY FISHER, having been previously
2 duly sworn upon oath by the Hearing Examiner, testified as
3 follows:

4
5 DIRECT EXAMINATION

6 BY MR. PLAUCHE:

7 Q Okay, Dr. Fisher. You went over your qualifications in our
8 case in chief, back on November 1st and 2nd, so I'm not
9 going to go over that again. Were you in attendance both
10 days of the hearing, on November 1st and 2nd?

11 A I was here.

12 Q And you were here for the Interveners' witness testimony
13 during those days?

14 A Yes, I was.

15 Q And have you also been in the hearing since it reconvened
16 this morning?

17 A Yes, I have.

18 THE CLERK: You might need to hold it up, because
19 I'm not picking up very well.

20 THE WITNESS: Okay.

21 Q There's a couple of issues that I'd like to go over with
22 you, just in response to some of the testimony that we
23 heard from the Intervener, particularly Mr. Daley, their
24 expert on fisheries. I'd like to first just focus a little
25 bit on the effect of cultivation gear, shellfish

1 cultivation gear, on fish habitat and fish presence.

2 You testified to this in our case in chief, and can
3 you just briefly summarize what your testimony was in that?

4 A Yeah. I brought forward half a dozen different papers that
5 reflected the role of aquaculture gear in providing
6 structured habitat that essentially served to attract or
7 increase the biodiversity around the gear. The papers that
8 I cited were primarily focused on oyster-culture studies.
9 But they were done in sand-flat-type habitats, where the
10 same type of controlling factors as is seen on the Foss
11 site would be exhibited.

12 Q And you heard Mr. Daley's testimony to the effect that
13 those studies that you're referring to -- that you somehow
14 inappropriately relied on those, or it was inappropriate to
15 rely on the conclusions of those studies. Can you address
16 that?

17 A Yeah. First, I would disagree. Essentially, as I just
18 alluded to, these studies were all conducted in sand-flat-
19 type environments. While the geography may have been
20 different, the types of physical-habitat elements were very
21 similar. And so the controlling factors that lead to the
22 creation of a sand-flat type of environment, be they at
23 Foss or in Rhode Island, are -- can be considered to be
24 fairly similar.

25 The species may change, but the type of thing that

1 you're going to -- the type of response that you would see
2 in response to the installation of aquaculture gear in this
3 case, I think, would be fairly analogous.

4 Q Okay. And then you referenced those were different
5 species, and that does not change the applicability of
6 these studies?

7 A Not in my opinion, no.

8 Q Okay. And can you describe, briefly, for the Examiner,
9 what a mesocosm study is?

10 A Sure. Mesocosm is essentially a type of some
11 semi-controlled study by which you're able to control some
12 of the environmental variables that you might not otherwise
13 be able to control in a broad -- in a study that's
14 conducted just in situ, or out in the environment, like on
15 the Foss site per se.

16 The one mesocosm study I did cite was conducted in a
17 zone where they had some hydraulic control into the lagoon
18 environment.

19 THE HEARING EXAMINER: Go ahead.

20 THE WITNESS: Sorry. Okay.

21 Q And you heard Mr. Daley's testimony, that the aquaculture
22 gear at the Foss site was -- I think he said "totally
23 unnatural and something salmon would avoid." Do you
24 disagree with that conclusion?

25 A Yeah. I disagree with the conclusion. I think, as has

1 been demonstrated in some of the exhibits, showing the
2 algae over the nets, when -- at high tide, that algae
3 raises up in the water column and simulates an eelgrass
4 bed.

5 we have very strong evidence of the use of eelgrass
6 beds by juvenile salmonids. It's not the type of structure
7 that is a vertical bulkhead or a wall or an overhanging --
8 or an overwater structure that creates shade. These are
9 the kinds of environmental factors that had been documented
10 to influence juvenile salmonid behavior.

11 This is the type of situation where, essentially, you
12 are slightly raising above the bed, with the netting over
13 the tubes, and creating a structure upon which there's
14 extensive settling of other marine organisms that wouldn't
15 be able to persist in a sand-flat environment that rapidly
16 turns over.

17 So essentially, you have a bit of a smorgasbord that
18 serves more as an attraction device, a fish attraction --
19 fish aggregating device. And that's the theory behind the
20 creation of artificial reefs, and those are well-documented
21 in providing that function in Puget Sound.

22 Q Now, are you a fisherman?

23 A I am.

24 Q And do you fish in Puget Sound?

25 A I do. Not that effectively, but I do.

1 (Laughter.)

2 Q And do you recall Mr. Daley's testimony that he would not
3 fish on the Foss site because of the geoduck farm?

4 A I do.

5 Q And would you reach the same conclusion?

6 A He's probably a less-effective fisherman than I am.

7 (Laughter.)

8 THE WITNESS: I -- no. Again, this type of
9 structure would serve as an aggregating device for fish, I
10 think, as I, in my reconnaissance survey or in a kayak,
11 paddling over the beds, visually observed that. I can't
12 give you any numbers there. We haven't had a chance to do
13 those studies yet. But, yeah, I would generally disagree
14 with that.

15 In an otherwise relatively featureless sand flat, as
16 Mr. Paradise had indicated, off of Joemma Park, for example,
17 where you have structure, you will tend to get a
18 congregation of fish, and that's generally where most
19 fishermen would try to concentrate their efforts.

20 Q And do you recall Mr. Daley's testimony regarding
21 Ms. Bindal-Young's work on environmental effects of
22 shellfish culture?

23 A I do.

24 Q And do you agree with Mr. Daley's interpretation of that
25 work, to the effect that shellfish farms create a, quote,

1 unquote, "monoculture"?

2 A Well, a couple of comments to that effect. I mean, it is
3 farming. They are planting a particular species. And I
4 think it's certainly predictable that, in a farmed
5 environment, the species that you're planting will be more
6 abundant. But there's a big difference between abundance
7 and diversity.

8 And I think, even in Ms. Bindal-Young's paper, her
9 subsequent paper that she published this year, in fact, she
10 found no significant difference in the biodiversity of
11 bivalves and other infauna in clam beds, up in British
12 Columbia, that were netted.

13 So in her earlier study, she did find some difference
14 in diversity relative to the reference site. In the most
15 recent one, she found no difference.

16 And again, that's a different kind of physical habitat
17 than what we're looking at here. Those are gravel beds as
18 opposed to sand flats.

19 Q And I'm going to hand you what's been marked as Exhibit
20 142. And is that the paper from Ms. Bindal-Young that you
21 just referenced in your testimony, the subsequent paper
22 that came out this year?

23 A Yeah. This is the more-recent one, with coauthor Jonathan
24 Whiteley. It's entitled "Ecological Implications of
25 Intertidal Mariculture, Observed Differences In Bivalve

1 **Community Structure Between Farm and Reference Sites."**

2 **MR. PLAUCHE: I'd move to admit Exhibit 142.**

3 **MR. BRICKLIN: No objection.**

4 **THE HEARING EXAMINER: Exhibit 142 will be admitted**
5 **into evidence.**

6 **Q** **Now, do you recall Mr. Daley's testimony relating to**
7 **shellfish farming or geoduck farming as a stressor to**
8 **salmon?**

9 **A** **I do.**

10 **Q** **And have you reviewed the literature on stressors to salmon**
11 **populations in Puget Sound?**

12 **A** **I have. I've reviewed many. I can't say I've reviewed**
13 **every single document, but many of those which have been**
14 **produced by the Puget Sound Partnership.**

15 **Q** **And do any of those documents, to your knowledge, identify**
16 **geoduck culture as an identified stressor to salmon?**

17 **A** **They do not.**

18 **Q** **Okay. Now, I want to move now to some of Mr. Daley's**
19 **testimony regarding the potential impacts of the geoduck**
20 **farm at the Foss site on sand lance. In your opinion, does**
21 **the Foss farming operation affect sand lance spawning**
22 **habitat?**

23 **A** **No.**

24 **Q** **And could you explain why? why not?**

25 **A** **I may have referenced it before, but sand lance and surf**

1 smelt are spawning from a tidal elevation of about plus 5
2 up to, you know, plus 10, or the upper level of the high
3 tides. As had been testified by Mr. Phipps, the culture
4 operations are between about minus 2 and plus 2, and the
5 lateral distance between those elevations is quite
6 substantial on the beach. It's a pretty flat beach.

7 So there's simply no spacial overlap to the
8 operations. And even at the time at which they're
9 harvesting, the sand which is disturbed essentially is
10 moving down current and falls out in a very short order.

11 Q And Mr. Daley also testified to potential effects on sand
12 lance rearing habitat. Do you recall that?

13 A I do.

14 Q And how would you go about analyzing the effects of the
15 Foss farm on the sand lance rearing habitat?

16 A Well, that -- that's more challenging. To my knowledge,
17 while the -- while the intertidal habitat is recognized --
18 we operate on tidal habitats recognized as spawning
19 habitat, and that is a limiting factor, per se, in Puget
20 Sound.

21 Rearing habitat has not been documented, to the best
22 of my knowledge, as a limiting factor to the viability of
23 those species. So, you know, in looking at salmonid
24 biology, we could do these things called limiting factors
25 analyses. That's prescribed under House Bill 2514, and on

1 a watershed basis.

2 So in that case, you're looking at what are the
3 habitat factors that are limiting to the viability of the
4 population. You could take that same kind of an analysis
5 and apply that to sand lance and/or surf smelt, and, to the
6 very best of my knowledge, that has not yet been done in
7 Puget Sound. But clearly the type of habitat where the
8 farm is located is certainly not limited within the range
9 of -- including Case Inlet.

10 Q Okay. So that means, even if there was some effect on sand
11 lance rearing habitat, from the geoduck farm, that may or
12 may not be a significant effect in light of the fact that
13 there's a lot of that habitat?

14 A That's correct. And further, I don't necessarily ascribe
15 to Mr. Daley's position that the netting precludes the use
16 of the habitat. Sand lance are long, skinny fish. The
17 mesh size, diameter, is large enough for the fish to go in
18 and out.

19 I've developed subtidal eelgrass transplant beds where
20 they're rapidly colonized by sand lance, and I've seen them
21 burrow into the sand, pop back when you're doing dive
22 surveys and that kind of thing. So we haven't yet
23 confirmed that, one way or another, but if you look at the
24 diameter of the netting that Taylor has used over those
25 beds and the -- the girth, if you will, of the sand lance,

1 there would be no physical -- necessarily, physical
2 obstruction to them going through the netting, provided
3 that, of course, the net wasn't so encrusted with algae
4 that it was simply occluded.

5 Q Okay. Now, moving off the sand lance now, I want to talk a
6 little bit about the environmental effects of the
7 harvesting at the Foss site. And you heard Dr. Parsons'
8 testimony related to -- at least what he testified was a
9 harvest area at the Foss site and the condition of that
10 area. Were you here for that testimony?

11 A I was.

12 Q Okay. And do you recall how he characterized that area?

13 A Roughly, "bombed out," or something. I forget the specific
14 language, but I think that's what he described it as.

15 Q And are you familiar with any studies looking at the
16 effects of the geoduck harvest environmentally?

17 A Yes. I'm familiar with several.

18 Q Okay. Can you describe that briefly, please?

19 A I think, as I related, some of the studies in my last
20 testimony -- Chris Pierce, with the Department of Fisheries
21 and Ocean, from Canada, has ongoing studies that they began
22 last year. They collected a fair bit of data looking at
23 benthic infauna diversity, before seeding, after seeding,
24 after harvest. They looked at a variety of sediment
25 chemistry elements; you know, grain size, redox potential,

1 stuff like that.

2 We -- my team has looked -- my former associates, with
3 my previous firm, have looked at -- looked at some of those
4 same issues. We looked at epifauna--that's the critters
5 that you can see on top of the sand, not the stuff
6 inside--at three different farm sites. And, of course, I
7 have looked at some of these same kinds of metrics as well
8 at the Foss site.

9 Q So just focusing for a moment, briefly, on Dr. Pierce's
10 work -- have you spoken to Dr. Pierce? Do you know where
11 he is in that work and whether there's any data available?

12 A Yeah. I've spoken to him several times. I think I
13 related, the last testimony, that he had recently given a
14 paper at a conference in British Columbia, and they had set
15 up, essentially, a test plot, to look at and compare
16 biodiversity in the test plot. And, Mr. Examiner, tell me
17 if I get into too many details. I don't want to get into
18 too many details, okay?

19 THE HEARING EXAMINER: Okay.

20 THE WITNESS: They set up the test plot, 20 meters
21 by three meters, and three reference plots that were all
22 sort of adjacent to that test plot, to look at these
23 sediment characteristics and the biota characteristics.

24 At this point, they've got quite a bit of the sediment
25 data characterized. They've simulated a harvest with the

1 same stinger apparatus that's used down here.

2 And the benthic infauna data are in on diversity, and
3 they found no significant difference in the infaunal
4 diversity preceding -- before they put any seeds and tubes
5 in versus post -- immediately post harvest.

6 The rest of the data are still coming in. The sediment
7 grain size, I think, I've alluded to before, too. They
8 found a slight increase in the sediment grain size,
9 actually, in the harvested zone relative to reference zones
10 after harvest. But otherwise, they found, primarily,
11 nothing significant between the seeded and unseeded zones.

12 Q Okay. And you mentioned that you had done some similar
13 work out on the Foss site. Did you have similar
14 conclusions, or reach similar conclusions?

15 A To some degree. I think we've done some things that --
16 should I show this figure?

17 Q Sure. I think it's the last, that shows -- this is a
18 previously admitted exhibit, and Mr. Phipps testified that
19 they located, with a GPS, the core samples that Dr. Fisher
20 took.

21 THE HEARING EXAMINER: The record should reflect
22 you're looking at Exhibit 154.

23 MR. PLAUCHE: Thank you.

24 THE WITNESS: So we set up -- wherever you see
25 dots, we took core samples.

1 THE HEARING EXAMINER: Uh-huh.

2 THE WITNESS: There's also two lines here that are
3 visible: here and here (indicating). This is -- this line
4 reflects a zone that had previously been harvested -- I
5 forget which is which. One of these is a harvest zone; one
6 is a nonharvest zone. Is it yellow?

7 Q Yeah, that's the harvest zone.

8 A That's the harvest zone. So this transect passed through
9 the harvested zone. This transect, 50-meter transect--and
10 we selected pinpoints on this transect in a stratified,
11 random regime--is in the previously harvested zone at the
12 end of August, I believe.

13 we also had a reference plot that doesn't show here,
14 which is north, just off of the property, doing the same --
15 applying the same technique. And what we found was: In
16 the zone that had yet to be harvested, that we found the
17 highest diversity.

18 we're still analyzing down to the lowest axis, so
19 these are preliminary. We found the highest diversity of
20 animals -- the highest concentration of flatworms. In the
21 harvested zone, we found the highest concentration of
22 juvenile sand dollars that were recruiting to the zone;
23 significantly higher.

24 The control zone, down below here, was somewhat
25 intermediate in diversity, but not significantly different

1 from the -- the harvested zone.

2 We didn't see any evidence, thus far, of a complete
3 absence of species in either the harvest, control, or
4 previously harvested -- or nonharvested zone yet that would
5 suggest there was a substantial or complete depopulation.
6 And this was taking 10 cores along -- along -- at each
7 zone.

8 We also looked at the ghost shrimp bed, and we found
9 no ghost shrimp in any of the cores in either the harvest,
10 the control, or the nonharvested zone, and an average of, I
11 think, 2.3 ghost shrimp per core in the ghost shrimp bed.

12 Q Okay. Thank you. And I'm going to hand you what's been
13 marked Exhibit 91. Now, you referenced some previous work
14 you had done with your colleagues on three sites,
15 evaluating some of these -- I think you said the epifauna.

16 A Right.

17 Q Is that study, Exhibit 91 -- does that recount the results
18 of that investigation?

19 A It does. And I want to clarify that this was -- the actual
20 work here was done by associates. I was on sabbatical at
21 the time, and I designed the study and then said, "See you
22 later, guys. Good luck."

23 So, essentially, what -- this was three different
24 sites that were examined: Hunter Point, North Bay, and
25 Stretch Island, all established geoduck farms. And we --

1 these were dive surveys over tube fields at high tide. And
2 essentially, in all three locations, they had the highest
3 abundance in the tube fields relative to the control; and,
4 in two of the three, they had higher species diversities
5 than in the control that was adjacent. And then, in the
6 third, there was no difference in diversity.

7 **Q** Thank you.

8 **MR. PLAUCHE:** And I would move to admit Exhibit 91.

9 **Q** Can you read the title of that for the reporter, so that
10 she's got it?

11 **A** Yeah. This is a "Draft Programmatic Biological Evaluation
12 of Potential Impacts of Intertidal Geoduck Culture
13 Facilities on Endangered Species and Essential Fish
14 Habitat." Good thing it's a draft, because there's a typo
15 on the title page.

16 (Laughter.)

17 **THE WITNESS:** So, to clarify, I think this was done
18 in anticipation of unknown federal regulatory components to
19 this. So that's -- you know, it still remains as a draft.

20 **MR. PLAUCHE:** Again, I move to admit Exhibit 91.

21 **THE HEARING EXAMINER:** It's admitted.

22 **MR. PLAUCHE:** Thank you.

23 **Q** Okay. I want to now move to some of Dr. Parsons' testimony
24 regarding this unconsolidated state of the area that he
25 testified was a harvest area. Have you done any compaction

1 analyses of the sediment at the Foss site?

2 A We have.

3 Q Okay. And can you describe for the Examiner what that
4 analyzed and what the results were?

5 A Yeah. We use an apparatus called a penetrometer
6 (laughing). And, essentially, this is a methodology that
7 was published by Gingrich and Pemberton, to look at
8 sediment compaction. And, essentially, you're dropping a
9 lead ball down onto the sediment, and then you're measuring
10 the radius and then calculating out the sediment firmness.

11 We did those same measurements along these transects,
12 but, while the figure only represents where we took cores,
13 we took, actually, 25 measurements along each transect, for
14 sediment compaction. We found no difference in sediment
15 compaction between the harvested and unharvested zone, and
16 a significant difference between the control zone and the
17 harvested and unharvested zone, where, in fact, the control
18 zone was significantly less firm than the other zones. And
19 I'm not exactly sure why that is yet, but that's what we
20 found.

21 Q Okay. And did you do any compaction analysis of the ghost
22 shrimp bed?

23 A We attempted to do some in the ghost shrimp bed, but it was
24 just simply too fluidized; and when you drop the measure in
25 there, you need an imprint such that you can measure the

1 diameter. You're measuring this with a micrometer, and it
2 just filled up and it was not a suitable technique in that
3 zone.

4 Q And the second system, with compaction analysis, you've
5 done at other geoduck harvest sites?

6 A It is. We're -- you know, we're building our database
7 there. We applied this technique at another site on
8 another island.

9 Q Okay. Now, on that ghost shrimp bed, you testified that
10 you did some core analyses in there and found ghost shrimp
11 in that area. Can you testify as to what the effect of
12 ghost shrimp are on sediment cohesion?

13 A Sure. I mean, ghost shrimp can be considered as the
14 ecosystem engineers in their own locale where you'll find
15 them. They tunnel. They're like -- you know, they're like
16 a beach mole, and they make, what I've read sort of
17 described as, a swiss cheese of the sediment.

18 They're detritivores, so they're eating bacteria that
19 they graze through their burrowing habits. And so, as a
20 consequence of all those tunnels, you have all this
21 increase in interstitial space that fills with water. As a
22 consequence, it's very fluid, and you step in there, and
23 you're up to your shins.

24 Q Is that what you experienced at the ghost shrimp bed on the
25 Foss site?

1 **A** It is.

2 **Q** okay. Could that fluidity, or that lack of cohesion within
3 the sediments there in that area, have been caused by the
4 water jets that are used to harvest the area, kind of down
5 tidal elevation from there?

6 **A** In my opinion, absolutely not. I mean, I'm not a
7 physicist, but unless water is in a siphon, I don't think
8 it travels uphill, so...

9 **Q** Now, I've got just a couple of miscellaneous things I want
10 to go over with you. Can you estimate how many hours,
11 roughly, you spent studying environmental effects of
12 geoduck farming?

13 **A** Several hundred and counting.

14 (Laughter.)

15 **Q** How many different geoduck farms have you visited during
16 that time?

17 **A** Probably -- you know, depending on if you're talking just a
18 simple reconnaissance or actual data collection. At a
19 minimum, half a dozen, and probably more in the range of 10
20 or 12.

21 **Q** And how many times have you been out on the Foss farm?

22 **A** Three times.

23 **Q** okay. So kind of on an overall basis, based on your
24 investigations and the information you've reviewed in the
25 course of your studying these issues, do you see

1 significant adverse environmental effects from geoduck
2 cultivating and harvesting?

3 **A** Not at the scale it's being practiced right now.
4 Essentially, what they do, as Mr. Phipps testified, is they
5 can only do a certain portion at a time. It creates a bit
6 of a mosaic, if you will. And the intertidal habitat is
7 really no different than a terrestrial environment in terms
8 of what we would call "the edge effect." And so I think
9 that's why you're seeing some of these increases in
10 diversity.

11 And so I've not seen anything, either at this farm or
12 the other farm, that looked -- and for that matter, that
13 have raised -- risen to the level of environmental
14 significance that -- that certainly would have any effect
15 -- any negative effect on the vitality of Puget Sound.

16 **Q** Okay. Now, what is your master's degree in, Dr. Fisher?

17 **A** Fish and shellfish pathology.

18 **Q** And can you describe what that is: Fish and shellfish --

19 **A** It's the diagnosis and treatment of fish and shellfish
20 disease.

21 **Q** I want to just show you, briefly, a couple of pictures from
22 Ms. Luedtke's testimony, and the first is Exhibit 152.

23 THE HEARING EXAMINER: 52?

24 MR. PLAUCHE: 152. It's this (indicating).

25 THE HEARING EXAMINER: Okay.

1 Q Now, Ms. Luedtke identified that as a dead moon snail. Can
2 you determine if that moon snail is dead or alive?

3 A In my opinion, the moon snail is a very much alive. The
4 muscle -- the muscular foot is turgid. And when they are
5 inverted, they -- this is a behavior that you will see as
6 they try to reestablish vertical orientation, where the
7 shell is up.

8 So I think further evidence that it's alive is
9 indicated by the pigmentation that is collected in certain
10 pockets. Hematavores (as pronounced) are concentrated. If
11 it was dead, I think what you would see is a very flaccid
12 muscular foot on the snail.

13 Q Now I'm going to hand you Exhibit 150. Actually, I'll give
14 you all three of these 150 numbers. It's Number 37, Number
15 8, and Number 34.

16 Now, on Exhibit 150, Number 37, that was identified,
17 by Ms. Luedtke, as a dead crab under a net. Can you
18 determine whether or not that crab is dead or alive?

19 A At this oblique angle of the photograph, I would be really
20 reluctant to say one way or another.

21 Q And on 150, Number 8, again, that's a crab under a net at
22 the Foss farm that Ms. Luedtke testified was a dead crab.
23 Can you determine whether that crab is dead?

24 A It would appear to be alive, based on coloration, but crabs
25 -- if you walk the beach and find them peeking under a net,

1 or not under a net -- at low tide, oftentimes, you need to
2 pick the animal up and see: Is there gill movement? Is it
3 exhibiting signs of life?

4 Lots of times, if they -- they hunker down in the
5 intertidal zone, they're going through a process called
6 ecdysis, which is when they molt, and they lose their
7 shell, and they aren't very motile at that time period.

8 So you see that both under nets and outside the nets.
9 And so I'm -- I'd be reluctant to say alive or dead unless
10 I was right on top of the --

11 Q Fair enough. Let's go to 150, Number 34, which I think is
12 a pretty dead fish.

13 A I would agree.

14 (Laughter.)

15 Q Okay. And can you ascertain whether that fish's death was
16 brought on by the predator net on which it lies?

17 A Well, it's lying on top of the predator net, so I would
18 have to say that it's pretty unlikely that the predator net
19 had anything to do with the viability of this particular
20 fish.

21 Further, if you look closely at this fish, it appears
22 to be a bait fish of some kind. It's out of focus, so I
23 can't really get a -- it's either a surf perch or maybe a
24 herring. I can't get a really good identification on it,
25 but the belly appears to be slit, and the lower jaw, and

1 the animal is eviscerated. So to me, it looks like it was
2 a bait fish that may have washed up on top of the beach and
3 ended up on the net. Really hard to say.

4 Q Okay.

5 A But it's clearly a dead fish.

6 (Laughter.)

7 Q Now I'm going to go to Exhibit Number 150, Photo Number 49.
8 It's the brown scum. Now, do you recall the testimony
9 regarding that photograph?

10 A I do.

11 Q Okay. Can you tell what is depicted on that photograph?

12 A What I see on the photograph is a placid condition of the
13 water. I see bands of drift that have settled on the
14 beach. I don't know what they are.

15 Q What are some of the possibilities?

16 A Could be detritus. There could have been a storm the last
17 couple of days and now it's settled out, so you get the
18 fine drift cells and this stuff deposits. I would have had
19 to have been there at the time that the photograph was
20 taken to give a more informed opinion.

21 Q Okay. Staying with this settlement issue for a moment, you
22 heard Mr. Paradise's testimony this morning, did you not?

23 A Uh-huh.

24 Q And do you recall his testimony related to the -- I believe
25 he said the water was less clear in the area that he dove

1 north of the Foss farm than it was in the area over by
2 Joemma State Park.

3 A Uh-huh.

4 Q Based on your experience on geoduck farms and the analyses
5 you've conducted, is that an effect that can be caused by
6 geoduck harvest or geoduck farming?

7 A I -- well, first of all, let's recognize that this is a
8 shallow-sloping beach and, if he's diving this beach, he's
9 going to be significantly offshore. Where we've waded
10 through here and taken measurements of turbidity, we have
11 not been able to discern a significant difference between
12 the turbidity between roughly just about 25 feet offshore
13 down-gradient of a harvest site and that up-gradient of a
14 harvest site.

15 And even right adjacent to the shore, when you get
16 about 100 feet down, we looked at it on a much windier day.
17 Or maybe it wasn't that much windier, actually. But you're
18 basically declining down to the background condition again.
19 So it's not propagating substantially offshore, and,
20 clearly, in the course of the harvest, which takes about
21 three, four hours at a max, that turbidity doesn't persist
22 but for, you know, a very short period of time.

23 Q Did you hear Mr. Phipps' testimony, that the harvests at
24 that site were two weeks before and two weeks after,
25 roughly, the time that Mr. Paradise testified he'd gone?

1 A Yeah. And I don't know if this photo was taken -- it's
2 February 8th, and it appears to be at daylight, and it
3 appears to be low tide, and low tides don't really happen
4 in daylight in February, so -- curious.

5 Q I want to go now to Exhibit 26, that was admitted this
6 morning. I'm sorry. Yeah, this is 26. Now, that's the
7 exhibit that was admitted this morning, dealing with the
8 amount of the dump-truck loads of sediment that come off
9 the site. Have you reviewed those calculations?

10 A I have.

11 Q Okay. And do you agree, or disagree, with those
12 calculations there, in terms of total amount moved off of
13 the site?

14 A Well, I disagree. I think they've taken the information
15 that is in the Environmental Code of Practices very, very
16 literally in the context where it's mentioned that there
17 could be beach lowering. I think that's a mistake of ECOP,
18 frankly, in describing that, because it's understandable
19 that one would read that and -- not having firsthand
20 observation of a harvest, and conclude that this is
21 possible.

22 But, in reality, as has been described by many people,
23 you get small, little divots that rapidly fill in. And
24 further, this doesn't, as I had reported before, reflect
25 the actual volume of the biomass of the geoduck themselves

1 that's removed from the beach.

2 Q And would that biomass be significant, in your opinion?

3 A Yeah. I mean, dependent upon the survival that's -- that
4 an individual bed gets, it could be somewhere between 60
5 and 80 cubic yards of biomass removed from an acre of --
6 from an acre of beach.

7 Q Okay.

8 A And harvest, obviously.

9 Q Okay. I'm going to now ask you to take a look at Exhibit
10 52-L, which I believe has already been admitted.

11 A (Witness complies.) Okay.

12 Q Do you recognize that photograph?

13 A I do.

14 Q Okay. Is that you in that kayak?

15 A That's me in that kayak.

16 Q Okay. So you've been in a kayak at the Foss site?

17 A I have.

18 Q And have you kayaked over the tube field?

19 THE HEARING EXAMINER: I'm sorry. Exhibit 52?

20 MR. PLAUCHE: 52-L.

21 THE HEARING EXAMINER: L. That helps. Okay.

22 Q Have you kayaked over the tube fields at the Foss property?

23 A Yes.

24 Q And has the aquaculture gear at the Foss property impaired,
25 in any way, your ability to kayak at the site?

1 **A** **No.**

2 **MR. PLAUCHE: I have nothing further for this**
3 **witness.**

4 **THE HEARING EXAMINER: Did you kayak over the area**
5 **where there were nets?**

6 **THE WITNESS: I did. And in this particular**
7 **photograph, the tide is low. When the tide came back in, I**
8 **kayaked over that area. That's where I saw, you know,**
9 **visually, with polarized glasses, a pretty high abundance of**
10 **tubes.**

11 **THE HEARING EXAMINER: How did you paddle?**

12 **THE WITNESS: How did I paddle?**

13 **THE HEARING EXAMINER: Uh-huh. How much water did**
14 **you have?**

15 **THE WITNESS: I think, by the time I paddled over**
16 **that, there was probably a couple feet; two, three feet of**
17 **water over the tube field.**

18 **THE HEARING EXAMINER: So there was enough depth**
19 **there for you to paddle?**

20 **THE WITNESS: Sure. I mean, the kayaks don't have**
21 **deep drafts.**

22 **THE HEARING EXAMINER: I know they don't, but the**
23 **paddle goes down a little further. Okay. Thank you. I**
24 **didn't mean to interrupt. Go ahead.**

25 **MR. PLAUCHE: That's all I have.**

1 THE HEARING EXAMINER: Anybody else?

2 MR. BRICKLIN: (Raises hand.)

3 THE HEARING EXAMINER: Yes.

4

5

CROSS-EXAMINATION

6 BY MR. BRICKLIN:

7 Q Mr. Fisher, you started out by talking about --

8 THE HEARING EXAMINER: Dr. Fisher?

9 MR. BRICKLIN: Excuse me. Dr. Fisher.

10 Q Doctor?

11 A Uh-huh.

12 Q You started out by discussing studies that had looked at
13 oyster aquaculture structures and the impacts they had on
14 the environment and the reasonableness of analogizing from
15 those to the structures that are employed with regard to
16 geoducks; is that right?

17 A That's correct. Right.

18 Q And, you know, I want to have you tell me a little about --
19 describe the types of structures that are used in the
20 oyster aquaculture and then compare those to the structures
21 that are used in the geoduck setting.

22 A Okay. Well, there are stake structures. There are bag
23 units used in oyster culture. There's netting used, as
24 well, in oyster culture. I think one of the studies I
25 cited actually had bat-ray netting, to prevent bat rays

1 from getting into an oyster reef zone that they had
2 planted. So there's a variety of different kinds of
3 structures that are used in an oyster-culture operation.

4 The oysters themselves, as well, in creating a
5 vertical-reef type of structure, are structuring it on
6 themselves. That is one of the differences, obviously,
7 between an oyster and a geoduck, which is an infauna. And
8 so essentially, without the structure, a geoduck, as you
9 may have seen walking the beach, where the tubes and the
10 nets are removed -- there's not a whole lot of structure
11 there. It's just simply a flat, sandy beach where the
12 geoduck shells are visible.

13 Q Before the netting and the tubes are removed, what is the
14 structure that exists on a geoduck beach? Is it the tubes
15 and netting themselves?

16 A It's the tubes and the netting themselves.

17 Q That is the structure?

18 A That is the structure that I'm referencing.

19 Q Okay.

20 A And it's a surface area, essentially, for colonization.
21 And I think that's the analogy, is that it's a surface area
22 that is slightly three-dimensional, because it rises up
23 above the sediment surface; in this case, a couple of --
24 you know, two to four inches or what have you.

25 Q How far above this sediment surface do the oyster

1 structures rise up?

2 A That's highly variable on location. You know, it can be
3 two to four inches. You know, it could be a couple of
4 feet, depending upon the reef structure and dynamics that
5 the farmer uses.

6 Q And do you know, in those studies that you're using, by
7 analogy, what the height of those structures were?

8 A Off the top -- I can't remember, off the top of my head.
9 I'd have to go review that again.

10 Q So, as you stand here today, you don't know whether they
11 were an analogous height or not?

12 A If you're speaking to whether or not the difference
13 between, say, a four-inch vertical relief versus a one-foot
14 vertical relief could have a difference in the measurements
15 you take in an intertidal zone, perhaps.

16 Q And you said "a couple."

17 A It could be a couple of feet. I know, out in the
18 Chesapeake, historically, they are very large, high reefs.

19 Q Right.

20 A It would be, you know, likely, a matter of degree. But,
21 you know, it's -- I think you're still going to see the
22 same type of relationship.

23 Q All right. You testified about a study that was, what,
24 Exhibit 142, authored, in part, by Bindal-Young.

25 A Uh-huh.

1 Q And you referred to an earlier study by Bindal-Young. Let
2 me hand you a copy of Exhibit 9, to see if that is the
3 earlier study that you were referring to.

4 A I think it's the one that you asked me about before.
5 Uh-huh.

6 Q All right. I just wanted to make sure we were talking
7 about the same thing. And if that's not been introduced,
8 Mr. Examiner, we'd like to have --

9 THE HEARING EXAMINER: What is it? What number?

10 MR. BRICKLIN: It's Exhibit 9.

11 (Discussion off the record.)

12 THE HEARING EXAMINER: Are you moving to admit it
13 now?

14 MR. BRICKLIN: Yes.

15 THE HEARING EXAMINER: There was an issue as to
16 whether or not it should be admitted, so...

17 MR. PLAUCHE: I'm sorry. I believe we objected on
18 relevance grounds, but I think we've gone into this now, at
19 some length, in Mr. Bricklin's case, and now we're
20 responding to that, so I would withdraw that relevance
21 objection.

22 THE HEARING EXAMINER: Okay. It will be admitted
23 into evidence.

24 MR. PLAUCHE: (Produces document to witness.)

25 Q And in this Exhibit 9, in the summary there, on the first

1 page, the author says, about halfway down through that
2 summary, "The intertidal regions that have been used for
3 farming for three and five years have lower species
4 richness, different bivalve composition, abundance, and
5 distributions, and a foreshore community dominated by
6 bivalves as compared to the intertidal region, where no
7 active farms occurred." Do you see that?

8 A I do, indeed.

9 Q And then it went on to say, "Beaches that were actively
10 farmed also had greater accumulation of organic matter and
11 silt." See that?

12 A Uh-huh. Yes.

13 Q And then it goes on, "Simplification of the intertidal
14 benthic community coupled with accumulations of organic
15 matter and increased siltation may have altered the ecology
16 of the foreshore region use for intense shellfish
17 harvesting." Did I read that all correctly?

18 A Yes.

19 Q Yes?

20 A Yes.

21 Q And all that is consistent with Mr. Daley's testimony,
22 correct?

23 A Well, I -- you'd have to be more specific on the points in
24 Mr. Daley's testimony. And, also, there's a lot of
25 speculation in that comment. And on the other paper, it

1 reads, "Bivalves species composition was not significantly
2 different between farm and reference sites."

3 Q Are you talking about Exhibit 9?

4 A No, I'm talking about --

5 Q My question is about -- we'll get to the other one in a
6 second. Don't worry. Exhibit 9: Those statements that we
7 just read there, in the summary, are certainly consistent
8 with Mr. Daley's testimony, aren't they?

9 A Mr. Daley referenced this paper, I believe. And again, in
10 a gravel beach environment.

11 Q Okay. So let's turn to the exhibit that you were referring
12 to today. Is that 142?

13 A Uh-huh.

14 Q And in this study, there was an analysis of a variety of
15 farms sites and comparing those to unfarmed sites, right?

16 A Uh-huh.

17 Q None of the farmed sites were nearly as large as the
18 project site that's at issue here, were they?

19 A I'd have to refresh my memory on what the size of the farm
20 sites were.

21 Q why don't you take a look on Page 497 of that article,
22 Table 1. You see the chart there of the sizes of the
23 farms?

24 A Uh-huh.

25 Q And they're in square meters. So to convert to square

1 feet, you'd have to, what, multiply by nine; is that right,
2 sir?

3 A Hmm?

4 Q To convert square meters to square feet, you'd have to
5 multiply by nine?

6 A Yeah.

7 Q All right. And so these sites that were reviewed -- 500
8 square meters, that's like 4500, roughly, square feet,
9 right?

10 A Yeah. So roughly the size of roughly an acre, for example.

11 Q How many square feet in an acre?

12 A About 42,485 or something like that.

13 Q Right. So wouldn't this be a tenth of an acre?

14 A Well, actually, this is square meters. So multiply -- take
15 the first one, so --

16 Q 500.

17 A 500 times nine. So 4500.

18 Q Not 45,000.

19 A I understand, but --

20 Q One at a time here.

21 A Sure.

22 Q So that's a tenth of an acre, right?

23 A That one's roughly about a tenth of an acre.

24 Q Okay. Next one is 3600, right?

25 A Yep.

1 Q So that's still not an acre, right?

2 A (Witness nods head affirmatively.)

3 Q Is that right?

4 A Yeah.

5 Q 1400; not even an acre. 1100; not an acre. 7900; not an
6 acre, right?

7 A Sure.

8 Q None of the farm sites were even an acre in size, were
9 they?

10 A And I don't believe, as was demonstrated earlier, that
11 they're actively -- you know, have the entire site
12 dominated with active farming at any one time here either,
13 so --

14 Q Is the author --

15 A They use the mosaic and triangulation, and that's a very
16 big difference between the type of farming that's being
17 done here. This is -- this is farming where you're using
18 Manila -- these are Manila clams. They're occupying the
19 very narrow sediment horizon, okay, in a gravel matrix.
20 That's not what we're talking about here.

21 Q Well, I'm sorry. I thought you were relying on Exhibit 142
22 to support your testimony. You're now telling me that this
23 is not a reliable study?

24 A No. No. I think the only reason I brought this up is,
25 essentially, that her most recent paper brings forward

1 contradictory evidence, that was presented by counsel at
2 the previous testimony, in terms of the species-composition
3 element. I'm not trying to make the argument, frankly,
4 that it's the same habitat.

5 Q You read this paper in its entirety?

6 A Yeah, at some point in time. Yes, I have.

7 Q Do you recall the author's conclusions that -- that the
8 conclusions that were reached were specific to farming
9 parcels of this small size and they could not be
10 extrapolated to farming larger sites? Do you recall that?

11 A Yeah. I do recall that.

12 Q Right.

13 A So then, why would you bring it forward as evidence --

14 Q Could you turn to Page 503, under the "Conclusions and
15 Recommendations"?

16 A Which one are we looking at? The first one, or the second
17 one?

18 Q No, the one you cited today, 142, Page 503, under the
19 heading "Conclusions."

20 THE HEARING EXAMINER: What page again, please?

21 MR. BRICKLIN: Exhibit 142, Page 503.

22 THE HEARING EXAMINER: Page 5- -- okay.

23 MR. BRICKLIN: Very near the end.

24 THE HEARING EXAMINER: Go ahead.

25 Q Under the heading "Conclusions and Recommendations," the

1 author says, "Seeding and netting appear to affect bivalve
2 communities at a regionally spatial scale larger than any
3 single site in this study." Do you see that?

4 A I do. I don't believe she should be able to draw that
5 conclusion from the data that were represented in the
6 study.

7 Q And she goes on to say, "If clam farming is a homogenizing
8 force at large scales, then the greatest impact of clam
9 aquaculture may result from cumulative impacts of several
10 tenures within a given geographical area." Right?

11 A I can read, yes.

12 Q And that would describe exactly what we're dealing with
13 here, where we have multiple planting and harvesting
14 regimes in a contiguous 12-acre plot over a number of
15 years. And then, once you get done, you start again and do
16 it again, right?

17 A That's essentially pretty accurate, but...

18 Q Thank you.

19 A It's accurate in terms of the operation, but I wouldn't --
20 she used small-sized farms, as you pointed out. Therefore,
21 how could one draw that conclusion from the data she put
22 forward in the paper?

23 Q You said that -- and I'm not sure, now, if it was this
24 study or one of the other ones -- that the study documented
25 a slight increase in the grain size of the sediments on the

1 site. Was it this study, or a different one?

2 A No. No. Chris Pierce's work, in that intermediate -- in
3 an intermediate, at 63 microns, at 500-micron-size class.

4 Q And so doesn't that indicate that the smaller grain sizes,
5 when they're disturbed during the harvesting, are drifting
6 away, and that's why you end up, after harvesting, with a
7 greater quantity of the larger grain sizes?

8 A They did not find a difference in the smaller grain sizes.
9 They did not find a significant difference in the smaller
10 grain sizes. They just found a significant increase in the
11 larger grain sizes, so I can't really speak to that yet.

12 Q Okay. You referred to Exhibit 91, which is this industry
13 document, the "Programmatic Biological Evaluation,"
14 correct?

15 A Uh-huh.

16 Q And this was prepared for Taylor and a couple of other
17 geoduck companies?

18 A Correct. Correct.

19 Q And one of the authors is Mr. -- I'm not sure how you
20 pronounce the name. Greg Roibe (phonetic), is that?

21 A Roibe, Greg Roibe.

22 Q And he actually is a geoduck farmer himself, correct?

23 A Mr. Roibe has a small farm that he started in 2005. That
24 is after -- I think, well over a year after this document
25 was produced.

1 Q And that's not a peer-reviewed document, is it?

2 A No. Under Section 7 of the Endangered Species Act, this is
3 the kind of documentation that's required for the
4 production for submittal to the federal services. So it's
5 -- no BA is intended to be considered a peer-reviewed
6 document. The basis of -- in fact, the basis of the
7 information presented is to be based on best available
8 science.

9 Q You talked briefly about the calculation of the amount of
10 material removed from these beaches and made reference to
11 the number of -- you know, the equivalence to the number of
12 dump trucks. And part of your testimony there was
13 regarding, I guess, the volume of the biomass removed
14 during harvest. Is that correct?

15 A I think that's one component that may not have been
16 considered in the Interveners' calculations.

17 Q I see. Okay. You weren't denying that there's a loss of
18 material as a result of the sediment drift during these
19 operations?

20 A I think my testimony spoke to the fact that there was a
21 very literal interpretation of the one to two inches of
22 sediment that is lost. And I have also testified, earlier,
23 that, during the course of the culture practice, there is a
24 very measurable accretion as a result of the tube field.

25 So I don't know if they balance out in the course of a

1 culture operation or not. But -- and further, when we
2 speak to loss, that would assume that there's a complete
3 loss from the whole geographic area. I've not seen that.
4 Not based upon what we measured in suspended sediment
5 concentrations and the distance that they travel during a
6 harvest. I've not seen that. I don't see how it could be
7 that we're yielding that -- whatever -- the 13 dump trucks
8 or what have you.

9 Q well, you saw the photograph last time, with the harvesters
10 in the water and the sediment plume visible right in the
11 water, right?

12 A I've measured it at three or four different sites.

13 Q Right. And you heard, today, Ms. Pinneo's testimony about
14 her beach accreting sand in the last few years, since these
15 operations have come into effect?

16 A I've heard her testimony, and --

17 Q To the extent of burying the sand-dollar beds on her beach,
18 right?

19 A I can't refute what she's saying in terms of her testimony.
20 That's what she testified to. At the same time, there's a
21 feeder bluff that's adjacent to her property. And I don't
22 know if you've been here over the past several winters.
23 There's also been some extreme storm events. These recruit
24 sand. That's why it's a good geoduck beach. That's why
25 it's a good sand-dollar beach. So I don't think you can

1 draw those types of conclusions, personally.

2 Q All right. The pictures of those sediment plumes, Ms.
3 Pinneo's testimony -- that's all consistent with the
4 calculations that were done to quantify the volume of
5 sediment being removed from this beach, right?

6 A I'm not sure I understand the question.

7 Q Isn't Ms. Pinneo's testimony and the photographic evidence
8 of those sediment plumes consistent with the calculations
9 that were done to demonstrate the quantity of material
10 removed?

11 A I would disagree. I think, essentially, there is sediment
12 that's disturbed--nobody is denying that--during the
13 harvest process. If you're saying "consistent" means this
14 supports the 13 dump trucks, I'd have to disagree.

15 Again, as I've said, we've measured the settling-out
16 distance. We've measured the turbidity. We've looked at
17 it in -- the duration that that persists, and I -- you
18 know, I can't agree with that statement.

19 MR. BRICKLIN: All right. That's all I have for
20 this witness.

21 THE HEARING EXAMINER: Anybody else?

22 MR. PLAUCHE: I just have a couple of questions on
23 redirect.

24 ///

25 ///

1 REDIRECT EXAMINATION

2 BY MR. PLAUCHE:

3 Q Mr. Bricklin asked you a couple of questions there about
4 the structure and -- the geoduck structure, and I just want
5 to be clear, because structure obviously is important, and
6 the testimony here is it's an important word under the
7 Shoreline Management Act here.

8 When you used the term "structure," does that have --
9 is that in a regulatory sense, or in a biological sense?
10 Can you describe that a little bit?

11 A No. It's in a biological sense. I've used it -- if I've
12 used it in the context, I'm using it as a structured
13 habitat, in the same manner that it's been reported in many
14 of the papers that I referenced last time and is in the
15 same manner that eelgrass beds and macroalgae beds are
16 considered structured habitat.

17 Q Thank you. And just on the Bindal-Young studies, the two
18 studies there that you and Mr. Bricklin spent some time
19 talking about, you didn't base your opinion on those
20 studies, did you?

21 A No, not at all.

22 Q Okay. And why not?

23 A Again, because they were conducted in a different kind of
24 physical habitat. And, you know, further, she has
25 contradictory evidence between the two papers.

1 MR. PLAUCHE: Okay. I have nothing further.

2

3

VOIR DIRE EXAMINATION

4 BY THE HEARING EXAMINER:

5 Q When you're talking about oysters and raising oysters, the
6 net that they use for oysters isn't similar to the net
7 they're using at all in the geoducks; is that correct?

8 A That is -- you know, that's correct. We use bags, yeah,
9 and use smaller mesh.

10 Q Very small mesh, and it's more metal, more structure, than
11 the net that they're using on geoducks?

12 A That's a fair interpretation. I can't say I know every
13 kind of net that's being used in oyster culture but, from
14 what I've seen.

15 Q And it's just a small bag-like operation as opposed to a
16 great big net that they're using here?

17 A This is true. However, there's many bags.

18 Q True.

19 A In context.

20 Q And that's about a quarter-of-an-inch opening?

21 A Usually.

22 THE HEARING EXAMINER: Yeah. Thank you.

23 MR. PLAUCHE: Can I ask one follow-up question on
24 that line of questioning?

25 THE HEARING EXAMINER: Uh-huh.

1 DR. DAVIS: Jonathan P. Davis.

2 THE HEARING EXAMINER: D-a-v-i-s?

3 DR. DAVIS: I'm sorry. D-a-v-i-s.

4 MR. PLAUCHE: And I'd like to start Dr. Davis's
5 testimony with introducing his curriculum vitae, which is
6 Exhibit 145.

7 THE HEARING EXAMINER: It will be admitted into
8 evidence.

9

10 DIRECT EXAMINATION

11 BY MR. PLAUCHE:

12 Q Dr. Davis, can you discuss, briefly, your educational
13 background?

14 A Yes. I have a BA and a master's in environmental studies,
15 and a Ph.D. in fisheries science from the University of
16 Washington.

17 Q And do you have a current association with the University
18 of Washington?

19 A I do. I'm currently an affiliate faculty member with the
20 university, and, in that context, I manage graduate
21 students. I'm on a committee -- I'm on a couple
22 committees, and I have daily interactions, literally, with
23 some researchers at the university, and faculty, and taught
24 there.

25 Not for the last few years, but several years ago, I

1 taught a course in sustainable aquaculture; and courses,
2 before that, in molluskan biology.

3 Q And are you currently also employed by Taylor Shellfish?

4 A I am. I've been employed by Taylor Shellfish for the last
5 eleven and a half years or so. And, in that employment, I
6 lead their -- I'm a lead researcher in their research and
7 development program, mainly focused on hatchery development
8 of shellfish and -- as well as, more recently, getting
9 involved in the environmental issues associated with
10 shellfish culture.

11 Q Do you also own your own company?

12 A I do. I have a shellfish farm on Hood Canal and, on that
13 farm, we raise Pacific oysters, Manila clams, and geoducks.

14 Q And do you do consulting work as well?

15 A I do. I do a variety of consulting work in the shellfish
16 industry. I also -- for example, I've got a couple
17 projects right now: One with the Hood Canal Salmon
18 Enhancement Group, where we're looking at geoduck
19 filtration rates at Hood Canal; looking at the feeding
20 behavior of geoducks. And I'm also working with the Puget
21 Sound Restoration Fund on a variety of projects, mainly
22 focused on restoration of native oysters.

23 Q And I'm going to hand you what's been marked as Exhibit
24 114. Could you read the title of that, please?

25 A It's entitled "Hood Canal Salmon Enhancement Group

1 Molluskan Study, Final Report, 10/30/2006."

2 Q And does that represent some of the work that you've been
3 doing in reference --

4 A Yeah. We're working on a variety of different things. The
5 part that I'm most focused on is looking at in situ, or
6 feeding behavior as you would see it in the field, for
7 geoducks. They're interested in finding out relationships
8 between geoduck's physiology and a low oxygen situation
9 they have in Hood Canal, and they want to know how geoduck
10 might interact with the environment at that level.

11 My interest has been that and focused on looking at
12 the physiology of geoducks, especially focused on their
13 feeding behavior in areas that are intertidal and subtidal.

14 Q And were you here in the hearing room on November 1st and
15 2nd?

16 A I was.

17 Q And were you here for Mr. Daley's testimony--

18 A I was.

19 Q --specifically? Okay. Mr. Daley alluded to potential
20 environmental effects of the biomass of geoduck being
21 cultured at Foss geoduck farm. Do you recall that?

22 A I do.

23 Q And as I recall, there were two different aspects of that
24 that he alluded to. One was sort of overeating, I guess
25 you'd call it--

1 A Correct.

2 Q --where they were filtering all of the food out so that
3 other critters couldn't rely on it. And then the one was
4 -- he described it as the waste volumes.

5 A Correct.

6 Q Let's start with, kind of, the eating end of things.

7 A Uh-huh.

8 Q You testified that you've done some work related to
9 filtration rates of geoduck.

10 A Correct.

11 Q And have you done any work that compares filtration of
12 geoduck -- the filtration rates of geoduck that you would
13 see, for example, at Foss farm with filtration rates from
14 other shellfish aquaculture?

15 A I have. To the extent that you can extrapolate, which, of
16 course, is always -- can be dangerous. But what I have
17 done is, I have looked at filtration rates of oysters,
18 filtration rates of geoducks under field conditions,
19 natural conditions.

20 So the first comparison is, in general, at harvest,
21 geoducks will filter about three times the volume of water
22 that a harvestable oyster will filter. But, of course,
23 they're much bigger, so that makes sense.

24 what I did was, I established -- I went through the
25 literature and went to my own data and looked at filtration

1 rates that you'd expect to see for both oysters and
2 geoducks and then applied those rates to farms, on a per-
3 acre basis, that held harvestable numbers of oysters and
4 geoducks.

5 And the results of that are interesting in that, if
6 you look at a typical oyster farm culturing single oysters,
7 you have approximately 240,000 individual oysters on an
8 acre. They have a biomass of about 36,000 pounds. Their
9 collective filtration over a day, on a per-acre basis, is
10 somewhere in the vicinity of around 17 million liters per
11 acre per day.

12 If you look at the more typical oyster-culture
13 operations in southern Puget Sound that are based on
14 clusters, essentially, the density of oysters is about five
15 times that--and this has been a practice that, of course,
16 has been going on for about 80, 90 years--you can
17 extrapolate again; and, again, with all the warnings of
18 extrapolation.

19 But, again, based on reasonable levels of filtration
20 rate at around three liters per hour, you can see that
21 about 86 million liters per acre per day can be extracted
22 with an oyster farm.

23 Now, if you take the values that I have just concluded
24 looking at with geoduck filtration, they filter around --
25 between four and 12 liters an hour, which is about -- as I

1 said, it's about -- let's take -- they're about three times
2 the rate that oysters will.

3 However, the numbers of geoduck on a typical farm--and
4 I'll use the Foss numbers, for example--is about 70,000
5 individuals per acre on that farm, and their biomass is
6 approximately 119,000 pounds at harvest.

7 So, at harvest, you could expect these geoducks to
8 filter, at nine liters an hour, somewhere around 13- to 14
9 million liters per hour per -- I'm sorry. 13 million
10 liters per day per acre.

11 So they're equivalent to about the number of -- the
12 equivalent to the filtration rate for an acre of single
13 oysters, the less-intensive type of oyster culture we see.

14 Q And how do they compare to a clustered oyster culture?

15 A About five times less.

16 Q And now let's go to the other end of the animal.

17 A Sure.

18 Q That's the --

19 A Bio deposits.

20 Q You say "the bio deposits." Mr. Daley said "waste." Is
21 "bio deposits" the more-accurate term?

22 A It is. In suspension-feeding bivalves, like oysters, like
23 geoducks, they actually -- they filter the overlying water.
24 They remove the particulate materials, and some of those
25 are -- they feed -- not feed. Some of those that they feed

1 on pass through the body and are excreted as feces. But a
2 good proportion of them are let go prior to ingestion as
3 something called pseudo feces. Bio deposits is the
4 collective term for that function in a mollusk.

5 Q So, now, have you done similar comparisons of the rate of
6 bio deposition, I guess, at the Foss farm to a typical
7 oyster bed?

8 A I did. And I based it -- again, I should mention that, for
9 the feeding studies for both oysters and geoducks, the way
10 we do these is, we actually measure the rate of bio deposit
11 production, and that's the metric that we're using.

12 So, on that basis, it's not unsurprising to see that
13 geoducks produce about three times the bio deposit volume
14 as oysters do. But because there's far fewer of them, on
15 an individual basis, per acre, it turns out that the large
16 cluster, high-density-cluster farm that would be typical of
17 southern Puget Sound produces about 192 kilograms per acre
18 per day of bio deposit compared to an oyster farm, singles
19 oyster farm, which is around 38 kilograms per day per acre.

20 And it turns out, then, because of the much-lower
21 number of individual geoducks, at 70,000--you will see
22 70,000 per acre, typically, at harvest, on this site--the
23 actual bio deposit production is around 42 kilograms per-
24 acre per-day production.

25 So, again, it's about five times less than what you

1 would see in a typical on-bottom aquaculture production
2 based on clustered oysters.

3 **Q** Okay. And you said that's something that's been happening
4 in Puget Sound for 80, 90 years?

5 **A** The Pacific oyster was introduced into Puget Sound,
6 originally, in 1905. It failed miserably until it was
7 finally successfully introduced in about 1919. And since
8 that time, the industry has been based largely on Pacific
9 oysters.

10 **Q** And are you aware of any studies that have identified
11 adverse environmental effects from that filtration and bio
12 deposition of a typical oyster bed?

13 **A** Not in Puget Sound, no.

14 **Q** And now, are you aware of Dr. Newell's work related to the
15 interactions of shellfish culture?

16 **A** I am.

17 **Q** Okay. And do you recall Mr. Daley's testimony that talked
18 about the potential for shellfish culture to overload the
19 sediments with organic matter and result in environmental
20 impacts?

21 **A** I recall that.

22 **Q** Okay. Is that overloading with organic matter something we
23 should be concerned with with regard to geoduck culture?

24 **A** In my opinion, no. And the major reason is that, in Dr.
25 Newell's work, he mainly considered suspension culture.

1 And that's where shellfish are cultured in three
2 dimensions, not just two, as you would see in the
3 intertidal.

4 With three-dimensional shellfish culture, you can get
5 buildups of organic debris below the farms in situations
6 where low flow or other parameters result in the
7 accumulation of bio deposits below the farms. This is not
8 the case, typically, in an intertidal farm, where you have
9 wave action, current flow. It's a higher-energy situation,
10 so that, most of the time, bio deposits are simply flushed
11 away.

12 Q And has Dr. Newell also identified any positive interaction
13 between shellfish and the environment?

14 A He has. There's a number of them. I think I alluded to
15 one already. The filtration capacity of shellfish is
16 renowned. It's been well-known for many, many decades.
17 That, at the end, results in increased filtration and
18 reduced turbidity by reducing the cestode or planktonic
19 load in the water.

20 That can result in increased light attenuation,
21 resulting in increased benefit to eelgrass, if it's
22 present, and certainly will almost always result in an
23 increase in the phytomicrobenthos, which are benthic plants
24 that live on the surface of the sediments. With more
25 light, they do better.

1 Q okay. I'm going to hand you what's been marked as Exhibits
2 126 and 127. Are you familiar with those two papers?

3 A I am, yes.

4 Q I'm just going to ask you to wait a second.

5 A Sure.

6 Q And when you referenced some of Dr. Newell's work on
7 positive environmental interactions, are those represented
8 in these studies?

9 A They are. They are. Dr. Newell is a friend of mine. He's
10 done lots of work in this field. And essentially, what
11 he's done is look at shellfish culture within the context
12 of looking at a carrying capacity. And so what he does is,
13 he goes through--and I'm referring to the paper; I guess
14 it's Exhibit 127--and he talks about how shellfish culture
15 interacts with the environment on a variety of different
16 scales.

17 MR. PLAUCHE: And I would move to admit Exhibit 126
18 and 127.

19 THE HEARING EXAMINER: They will be admitted into
20 evidence.

21 Q Okay. Now I'd like to move and talk briefly about some of
22 the concerns Mr. Daley identified about genetics, genetic
23 concerns related to geoduck farming. And again, I'd ask
24 you: Is this an area that we should be paying attention
25 to?

1 **A** It's an area that's been listed of concern because of the
2 potential interactions of cultured organisms, engrained
3 organisms with wild organisms of the same species in that
4 area, yes.

5 **Q** Okay. And now, as I understand it, you're involved with
6 the management of Taylor's hatchery. Is that correct?

7 **A** I certainly lend a hand as much as possible, yes.

8 **Q** And are there protocols in place at the hatchery to address
9 this concern about genetic interaction with wild stuff?

10 **A** Yeah. The worst-case scenario is, if you have an in-bred
11 line of geoducks, for example, in this particular case, and
12 you're pumping out seed that are all brothers and sisters
13 of each other, for example, and those animals could
14 interact with wild geoduck in an adverse manner.

15 What we do, as a matter of course and policy -- and
16 it's reflected in our best management practices, is we
17 rotate breed stock annually, at least twice, sometimes
18 more. We use multiple females, multiple males in all of
19 our spawnings. And these represent animals of different
20 ages. And we ensure adequate mixing of all the gametes
21 that are produced, so that we try to produce as diverse a
22 genetic product as possible when we produce the seed. And
23 I believe that these practices are -- essentially eliminate
24 significant risk to wild populations when those seeds are
25 planted out.

1 Q okay. Now, you were also here for Mr. Daley's testimony
2 about his -- that he would be hesitant to fish at the Foss
3 site.

4 A I did hear that.

5 Q And I'll ask you, because you all seem to be: Are you a
6 fly-fisherman as well?

7 A I am.

8 Q You fish in Puget Sound?

9 A I do.

10 Q Do you have similar concerns about fishing over a geoduck
11 farm?

12 A I don't. I target the cutthroats, just as, I guess, Mr.
13 Daley does, and I find that they actually congregate over
14 places that might have predator protection or shellfish
15 growing gear that I have. So I -- I haven't seen that
16 problem.

17 Q And you actually have a geoduck farm?

18 A I do, yes.

19 Q Have you fished at that farm?

20 A I have, yeah.

21 MR. PLAUCHE: I have nothing further for this
22 witness.

23 THE HEARING EXAMINER: Anything further for
24 anybody?

25 MR. BRICKLIN: (Raises hand.)

1

CROSS-EXAMINATION

2 BY MR. BRICKLIN:

3 Q Mr. Davis, this Exhibit 127, the Newell study, he was
4 trying to figure out the ecological carrying capacity?

5 A Right.

6 Q In other words, how many of these bivalves you could get to
7 grow in a given area?

8 A Correct.

9 Q How densely you can get them to grow?

10 A Correct.

11 Q And he proposes in there -- he says, the existing models
12 aren't really adequate and he proposes a new model?

13 A He's trying to bring a lot of information from a lot of
14 diverse sources into a kind of contextual look at
15 aquaculture, yes.

16 Q And on Page 45 of this, he says that, in these productive
17 locations where the bivalves are concentrated --

18 THE HEARING EXAMINER: What exhibit?

19 MR. BRICKLIN: This is 127, Page 45, in the
20 left-hand column.

21 Q He says, "Unfortunately, in these productive locations,
22 bivalves can be stocked at such high densities that their
23 bio deposits are focused on a small area of sediments,"
24 right?

25 A I'm not seeing where you are. I'm not highlighted here,

1 but I'll believe you. Oh, I see it. Yeah. I've got you.

2 Q A little less than halfway down.

3 A Yeah.

4 THE CLERK: Can you speak up, Mr. Bricklin, please?

5 MR. BRICKLIN: Yes. I'm sorry.

6 Q He goes on to say, "when receiving sediments become
7 overloaded with organic material, the resulting bacterial
8 respiration can consume oxygen at rates faster than it can
9 be resupplied by diffusion," right?

10 A Correct.

11 Q The study that you cited from the Hood Canal group --

12 A Yes.

13 Q -- the Hood Canal Salmon Enhancement Group--

14 A Uh-huh.

15 Q --that's actually just a Phase One report, isn't it, of a
16 multi-step study?

17 A Yes, it is.

18 Q And basically, what this report is doing is identifying
19 where there are data gaps and how they're going to go out
20 and get more information to fill those gaps, right?

21 A That's correct.

22 Q And the gaps that they identified are listed there, on the
23 bottom of Page 14 and the top of 15, and include the
24 sedimentation rate: A comparison between areas populated
25 by bivalves and not.

1 **A** Uh-huh.

2 **Q** **Rates of denitrification, oxygen consumption, chemical**
3 **constituents in the bio deposits. These are all things,**
4 **and others, listed there that this report says are not**
5 **currently known, right?**

6 **A** They were certainly identifying those as areas that they
7 were interested in, yes.

8 **Q** As data gaps?

9 **A** Correct.

10 **Q** So you're not relying on this report to suggest that any of
11 these issues are not still areas of concern regarding these
12 kinds of geoduck aquaculture operations, right?

13 **A** No. I would not connect them to geoduck aquaculture at
14 all. I don't think that that's stated there. The bottom
15 line is, the -- of course, you can always learn more. And
16 these -- this is a typical example of a group that has
17 obtained a nice amount of funding, and they're interested
18 in extending the knowledge base on what they don't know.

19 **Q** You think this is just an academic pursuit, or is this--

20 **A** No.

21 **Q** --information that they identified as important to
22 determining the impacts of these operations on salmon?

23 **A** Well, I don't think --

24 **Q** An endangered species.

25 **A** I don't see -- I don't see here where it says anything

1 about geoduck aquaculture.

2 Q I'm sorry. I thought you cited this report to support your
3 testimony about a lack of impacts from geoduck aquaculture.

4 A I cited my involvement with the Hood Canal Salmon
5 Enhancement Group for doing work with them on geoduck
6 filtration. That's what I cited. That's why I cited it.

7 Q So there's nothing in the substance of this report that the
8 Examiner ought to consider, then? Nothing relevant? You
9 don't need to look at your counsel for the answer.

10 A Well, the -- the basis of the Hood Canal Salmon Enhancement
11 Group Molluskan Study was really focused on Hood Canal and
12 had nothing substantively to do, I don't believe, with
13 geoduck aquaculture, specifically, at all.

14 Q So my question is: The Examiner need not concern himself
15 with the substance of this document?

16 A Perhaps not. Not within the context of geoduck
17 aquaculture, no.

18 Q Thank you. Just a second here. Are you familiar with the
19 National Shellfisheries Association?

20 A I am.

21 Q What is that organization?

22 A It's an international organization comprised of shellfish
23 biologists, academia, focused -- generally interested in
24 research on suspension of bivalves, crustaceans, other
25 commonly -- other critters commonly referred to as

1 shellfish.

2 Q And do you have any involvement with that group?

3 A I do.

4 Q And what is that?

5 A I'm currently president-elect ****(Is this guy an**
6 **overacheiver or what?)**.

7 Q All right. Does the National Shellfisheries Association
8 put out a newsletter?

9 A It does.

10 THE HEARING EXAMINER: 155.

11 Q Handing you a copy of what's been marked for identification
12 as Exhibit 155. Do you recognize this as the newsletter of
13 the group of which you're the president-elect?

14 A I do.

15 Q All right. On the first page there, where the little
16 squiggle line is, in the margins--

17 A Yes.

18 Q --there's a reference to the nationwide permit program of
19 the Army Corps of Engineers. Do you see that?

20 A Correct. Yes, I do.

21 Q And it says that "nationwide permits are a type of general
22 permit issued by the Chief of Engineers and are designed to
23 regulate what little, if any, delay or paperwork." Do you
24 see that?

25 MR. PLAUCHE: I'm going to object. I've not seen

1 this document before, and I'm not sure what the relevance is
2 of the nationwide permit.

3 THE HEARING EXAMINER: I'm not either.

4 MR. BRICKLIN: I believe the Petitioner has claimed
5 that regulation of the industry via Shoreline Substantial
6 Permits is unnecessary because, among other things, they're
7 regulated through the Army Corps program. And given that
8 the Army -- among other things, we believe the Army Corps
9 review of aquaculture is very limited; as is stated here,
10 "little, if any, paperwork." And that is why we were
11 seeking to have this testimony come in.

12 MR. PLAUCHE: I think our position is that the Foss
13 farm is not regulated under the Shoreline Management Act as
14 a development. It does not require a Substantial
15 Development Permit because it doesn't meet the definition of
16 "development." I don't know what this has to do with that.

17 THE HEARING EXAMINER: I'm going to sustain the
18 objection, and we're going to take an afternoon break. And
19 how many more witnesses are we going to do today?

20 MR. PLAUCHE: Just one more after Dr. Davis.

21 THE HEARING EXAMINER: And that's it?

22 MR. PLAUCHE: Yes.

23 MR. BRICKLIN: I think we're on track.

24 THE HEARING EXAMINER: We'll be in recess for 15
25 minutes. I'm hoping it will be a little bit earlier.

1 (Recess taken from 2:36 p.m. to
2 2:51 p.m.)

3 THE HEARING EXAMINER: The hearing on Taylor
4 Shellfish, AA16-07, will be reconvened. Doctor, you're
5 still under oath.

6
7 CROSS-EXAMINATION - (continuing)

8 BY MR. BRICKLIN:

9 Q Thank you. You testified, I believe, that the Newell
10 study, where it talked about the organic reissue, that it
11 could be distinguished because the aquaculture at issue
12 there was above the bed. And if I heard you right, as the
13 debris settled down in the, sort of, low-flush areas, the
14 accumulation that -- you wouldn't have in this setting?

15 A As I read his paper, that's the scenario I was
16 interpreting, yes.

17 Q Now, you have seen those pictures of the nets with the
18 algae draped over them, right?

19 A You mean the nets, at low-water, with the algae draped over
20 them?

21 Q Right.

22 A I have seen those, yes.

23 Q And more generally, the Puget Sound in particular is
24 considered a low-flushing area; isn't that right?

25 A No. I wouldn't agree with that at all.

1 Q You wouldn't?

2 A No.

3 Q Let me ask you this: It is your testimony that geoduck
4 aquaculture of the type at issue here has no adverse
5 impacts on environment? Is that what your testimony is?

6 A My testimony is that, at the intensity that it's practiced,
7 I think that the environmental interactions are minimally
8 invasive, yes. That's -- I would agree with that.

9 Q And you believe that there's scientific studies in
10 existence that are adequate to support that?

11 A There's very little written about geoduck specifically. I
12 think you've heard about that already, through other
13 testimony. But when we look at the fact that geoducks are
14 clams, they're suspension feeding, they have a lower
15 intensity overall than animals that are smaller than them,
16 in the sense of on a weight-specific basis, like -- we'll
17 get into that if you wish -- that geoduck aquaculture, as
18 it's practiced, is minimally invasive.

19 Q You agree with the Sea Grant analysis, that there are
20 actually many areas of concern that have not been
21 adequately studied?

22 A It's a great question. Frankly, I was anticipating it.
23 The Sea Grant studies that have just gone out for full
24 proposal are certainly looking at areas that are important
25 within the overall context of shellfish aquaculture,

1 including geoducks.

2 But I also think it's just as important to state that
3 there's a great deal that's known about the effects of
4 shellfish culture on the environment. And while I agree
5 that there are things we don't know, I don't think that
6 they are to such a degree out of whack with what we already
7 understand about shellfish culture that it will result in
8 any significant adverse effects coming from this
9 aquaculture.

10 Q Well, these studies that you rely on when you say "what we
11 do know is adequate for my conclusions" -- the studies that
12 evaluate impacts associated with growing oysters in the
13 Chesapeake Bay -- those don't shed an insight on the
14 impacts associated with liquifying the beach during
15 harvesting of a geoduck operation here in Puget Sound, does
16 it?

17 A Not specifically, no.

18 Q There's nothing -- I mean, none of the other aquacultures,
19 of oysters or other clams, involve anything like that, do
20 they?

21 A Well, certainly they do. Manila clam culture involves
22 turning over the sediment every year when you harvest it.
23 The clams are all in the substrate, and they're dug up.
24 Very similar operation that way. Perhaps not to the depth
25 of geoduck, no. Of course not. But the same idea.

1 Q You would agree that no analysis, scientific analysis, has
2 been done of the geoduck operations of that sort, right?

3 A No specific research has been done yet on harvest effects,
4 to my knowledge. They certainly haven't been published.

5 MR. BRICKLIN: All right. That's all I have for
6 this witness, Your Honor. Thank you.

7

8

REDIRECT EXAMINATION

9 BY MR. PLAUCHE:

10 Q I just have one question on redirect. With regard to the
11 Hood Canal Salmon Enhancement Group study--

12 A Yes.

13 Q --could you describe again -- I offered that as an exhibit
14 in response to some of your testimony, and what were you
15 relying on that for?

16 A Only to demonstrate that they have an interest in
17 evaluating different components of the ecology of the
18 geoducks. And my own interactions with the Hood Canal
19 Salmon Enhancement Group has been focused solely on
20 establishing studies to evaluate filtering behavior.

21 Q So was that filtration-rate information that you then
22 testified about with comparison to oyster culture -- you
23 derived that information as part of your work with the Hood
24 Canal salmon Group?

25 A In part, but not completely. I'm also funded by the

1 National Marine Aquaculture Initiative, which is not
2 well-funded -- grants to look at similar -- similar
3 activities on intertidal farms.

4 MR. PLAUCHE: I have nothing further.

5 THE HEARING EXAMINER: Doctor--

6 THE WITNESS: Yes.

7 THE HEARING EXAMINER: --you're not saying that
8 this approach to raising geoducks wouldn't interfere with
9 bottom fishing, are you?

10 THE WITNESS: I don't know. I think that the -- I
11 don't know the answer to that. But I do know that the
12 structure -- the structured habitat associated with the
13 geoduck farms -- essentially, the predator protection serves
14 as an attractant to many --

15 THE HEARING EXAMINER: I'm talking about just
16 fishing.

17 THE WITNESS: Oh, fishing. If I were
18 bottom-fishing. You could catch your sinker hook in that,
19 yeah.

20 THE HEARING EXAMINER: And some --

21 THE WITNESS: Even more than fly-fishing.

22 THE HEARING EXAMINER: well, you'd have the
23 potential of doing that.

24 THE WITNESS: I'm not that skilled a fly-fisherman,
25 and I don't use netting the same way that --

1 THE HEARING EXAMINER: That they do?

2 THE WITNESS: That they do, but --

3 THE HEARING EXAMINER: How do you use netting?

4 THE WITNESS: I use the -- I currently am using the
5 small, individual nets.

6 THE HEARING EXAMINER: But that would still have
7 the same effect.

8 THE WITNESS: It would. It would.

9 THE HEARING EXAMINER: Thank you, Doctor.

10 MR. PLAUCHE: I'd like to call Lynn Goodwin,
11 please.

12 THE HEARING EXAMINER: I'm timing you.

13 MR. PLAUCHE: The last one today, and I promise
14 it's going to be short.

15
16 LYNN GOODWIN, having been first duly sworn
17 upon oath by the Hearing Examiner, testified as follows:

18
19 THE HEARING EXAMINER: would you state your name
20 for the record, please?

21 MR. GOODWIN: Lynn Goodwin, G-o-o-d-w-i-n.

22 THE HEARING EXAMINER: Thank you.

23 ///

24 ///

25 ///

1 DIRECT EXAMINATION

2 BY MR. PLAUCHE:

3 Q Okay, Mr. Goodwin, I want to spend just a little time --
4 and as Mr. Bricklin was instructing his witnesses, I'll ask
5 you the question, but you should respond to the Examiner.

6 Mr. Goodwin, I want to spend a little time just
7 talking about your background, particularly as it relates
8 to geoduck populations in the Puget Sound. Can you
9 describe your educational background briefly?

10 A I have a BS in zoology --

11 Q I think you're going to have to move that closer.

12 A Right here? Is that okay?

13 THE CLERK: The closer the better.

14 THE WITNESS: I have a BS in zoology from Idaho
15 State University, an MS in fisheries science from Oregon
16 State University.

17 Q And after you received your master's, where did you start
18 working?

19 A I started working for the State of Washington, as a
20 fisheries biologist at the shellfish lab on Hood Canal, in
21 1966, and I retired there in 1994. And I was a shellfish
22 biologist, and I dealt with the subtidal shellfish
23 fisheries in Puget Sound, including the subtidal geoduck
24 fishery.

25 My duties were primarily to conduct scuba surveys in

1 Puget Sound, to map the subtidal geoduck resources, and to
2 do research on the life history of the various species,
3 including geoducks.

4 Q And geoducks. And have you published any work related to
5 geoduck?

6 A Yes. I published eight primary papers that I coauthored or
7 authored, and these are peer-reviewed papers, including one
8 dealing with the relationship of the environmental
9 parameters in Puget Sound to geoduck size and density. And
10 I've authored or coauthored many technical reports,
11 including the 1985 Environmental Impact Statement that
12 looked at the geoduck fishery.

13 THE HEARING EXAMINER: Was that for the State of
14 Washington?

15 THE WITNESS: That's for the State of Washington.

16 Q And since you retired from WDFW in 1994, how have you been
17 employed?

18 A I've been a private marine consultant, and I've done a lot
19 of work for the intertidal geoduck aquaculture business,
20 and also performing subtidal surveys with respect to marine
21 construction projects: docks and bulkheads. And I've done
22 the underwater biological evaluations for those projects
23 before they are issued permits.

24 MR. PLAUCHE: And I should have done this at the
25 outset, but I'd like to introduce Exhibit Number 18, which

1 is Mr. Goodwin's resume.

2 THE HEARING EXAMINER: That will be admitted into
3 evidence.

4 Q Now, Mr. Goodwin, I have just a few questions I want to
5 talk to you about regarding the standing crop of geoduck in
6 Puget Sound. But let me ask you first: How many hours
7 would you estimate you've spent, over the course of your
8 career, evaluating or looking at the standing crop of wild
9 geoduck in Puget Sound, biomass?

10 A I've never tallied up the numbers exactly, but I've spent
11 in the lower thousands of hours, starting in 1967.

12 Q Okay.

13 A And still going on right now.

14 Q Okay. And were you here earlier today for Mr. Phipps'
15 testimony related to the standing crop of geoduck at the
16 Foss farm?

17 A Yes.

18 Q You heard him testify that his calculations put the
19 standing crop between 1.1 pounds per square foot and 1.3
20 pounds per square foot, depending on how you measured that?

21 A Yes.

22 Q Okay. Is that density at the Foss site within the range of
23 densities you've seen in the wild geoduck beds?

24 A The range in our thousands and thousands of transects that
25 we've taken throughout Puget Sound -- they range from zero,

1 of course, where there is no geoducks, up to as high as 4
2 pounds per square foot. And the average of all these
3 thousands of samples was about a third of a pound per
4 square foot.

5 Q Okay. And the density range that Brian testified to at the
6 Foss site -- have you seen that in, sort of, larger beds,
7 larger congregations -- in comparable congregations, like
8 in a 10-, 20-acre range, in the wild, in Puget Sound?

9 A Yes. I've been involved in surveying three areas; two in
10 South Sound and one in Central Sound, that range in size
11 from 14 to 104 acres. And the site near Des Moines
12 averaged 1.1 pounds per square foot. At Heron Island, the
13 average there was 1.06 pounds per square foot. And at
14 Duvall Point, it averaged 1.04 pounds per square foot. So
15 close to the -- to the standing crops that are at the Foss
16 site.

17 Q And what is the highest density you've actually measured,
18 yourself, in the wild?

19 A Four pounds per square foot.

20 Q Okay. That was the four. Final question. In your
21 experience with wild geoduck biomass, where are the largest
22 congregations of biomass in Puget Sound?

23 A They're more concentrated in the South Sound, and the
24 animals are larger there than the other four sections of
25 Puget Sound.

1 MR. PLAUCHE: Okay. I have nothing further for
2 this witness.

3 THE HEARING EXAMINER: Any further questions?

4 MR. BRICKLIN: (Raises hand.) Has Exhibit --

5 THE CLERK: You need to speak into the microphone,
6 please.

7 MR. BRICKLIN: I'm sorry. Has Exhibit 88 been
8 admitted?

9 THE HEARING EXAMINER: No.

10 MR. BRICKLIN: No. All right.

11

12

CROSS-EXAMINATION

13 BY MR. BRICKLIN:

14 Q Good afternoon, Mr. Goodwin. You said that, currently,
15 you're doing some consulting work for the intertidal
16 geoduck industry?

17 A Yes.

18 Q who is that? who is employing you in that way?

19 A Primarily, Seattle Shellfish.

20 Q Uh-huh. Are you also employed by Taylor?

21 A No.

22 Q would you agree that the wild-stock fishery, that is, the
23 subtidal fishery, is the most dramatically different from
24 the intertidal geoduck aquaculture?

25 A It's different in certain ways and, in other ways, it's

1 very similar. I don't know whether I would characterize it
2 as being dramatically different.

3 Q In what ways do you think it's similar?

4 A well, we're dealing with the same animal.

5 Q Same animal, for sure.

6 A And it's primarily barren sand flats, whether it's subtidal
7 or whether it's intertidal. The intertidal is -- as other
8 people have mentioned, it's a lot more energetic area, with
9 wave action and along-shore drift.

10 The deeper you go in Puget Sound, the more apt the
11 particle size will be smaller. In other words, it becomes
12 silkier as you go deeper, in general. So there can be
13 differences in the amount of material that's put into
14 suspension and be floating downstream as plumes in the
15 deeper water compared to the intertidal.

16 Q In the subtidal fishery, there's not planting activity
17 involved, is there? They're natural or wild stock that
18 you're going after?

19 A There's no planting of hatchery seed.

20 Q In the subtidal?

21 A There's none being done now. However, back in the early
22 years, when I worked at the shellfish lab, we conducted 100
23 different experiments and planted 18 million geoduck seed,
24 trying to enhance the fished-out subtidal beds. But that's
25 not going on now.

1 Q Now, when we talk about the subtidal fishery, it's
2 dissimilar from the intertidal fishery in that way, right?

3 A Yes.

4 Q And the subtidal doesn't involve liquification of entire
5 beaches, does it?

6 A The -- normally, there would be animals that are harvested
7 one at a time. In other words, the diver would see a
8 geoduck, insert the stinger, and remove the geoduck from
9 the substrate, put it in his collection bag, and then move
10 on to the next geoduck.

11 Q And the ecosystems are different in those two areas very
12 greatly, right, in terms of -- you know, the intertidal
13 area, you've got forage-fish-habitat concerns, juvenile-
14 salmon-habitat concerns, a whole variety of different wave
15 actions that you were talking about; a whole variety of
16 differences between that and the subtidal fishery, right?

17 A There's differences, and there's also similarities. You'll
18 find some plants and animals that live both intertidally
19 and also subtidally. And, on the other hand, you'll find
20 some plants and animals that are restricted either to the
21 subtidal or the intertidal. They don't go across the
22 boundaries.

23 Q You said, in the data that you've reviewed, that the
24 average density of the geoducks in the wild is a third of a
25 pound per square foot--

1 A Yes.

2 Q --in areas where they're located? And so that would be,
3 what, about one-fourth, 25 percent, of the calculation that
4 the prior witness did for the density here at the Foss
5 property, right?

6 A That's correct. Close -- close to that.

7 Q Right. You don't have any opinion, do you, regarding the
8 environmental impacts associated with densities on the
9 order of 1.2 pounds per square foot in the intertidal
10 region, do you?

11 A Would you --

12 Q Sure. If I understood you right, you testified that you
13 are familiar with some subtidal areas, a couple, certainly
14 not typical, where densities were 1.1, 1.06; not too
15 different than the subtidal density at Foss, right?

16 A The intertidal.

17 Q Right. Excuse me, intertidal at the Foss farm. But none
18 of those wild geoduck beds, where you've done that survey
19 or had that information -- none of those are in an
20 intertidal area, right?

21 A That's correct.

22 Q You're not expressing any opinion regarding the
23 environmental impacts of having densities of that magnitude
24 in the intertidal zone, are you?

25 A I -- I've been associated with the intertidal culture

1 business since 1997, and I've looked at hundreds of farm
2 sites. And I've watched the harvest going on, and I've
3 surveyed geoduck populations in many of those beds. So I
4 know what's going on, basically, in the intertidal area
5 also.

6 Q But my question is: You're pointing to the density in the
7 subtidal area, these maximum densities. That doesn't
8 reflect -- or inform your opinion regarding the impacts
9 that would occur in the subtidal area if similar densities
10 were found there, does it? It's a different environment,
11 right?

12 A If a person was harvesting a subtidal bed of equal density
13 to the Foss farm and they were doing this at high tide by
14 divers, then I would expect the environmental effects of
15 both situations would be quite similar. But I would expect
16 there to be greater fines in the subtidal for the reasons I
17 just got through going through. And I'd expect the plumes
18 to be bigger, and the plumes would last longer in the
19 subtidal situation versus the intertidal.

20 Q Okay. But we're trying to talk about the density of the
21 animals, the pounds-per-square-foot issue. And to the
22 extent that impacts the ecosystem, the impacts would not
23 necessarily be the same in the subtidal ecosystem as they
24 are in the intertidal ecosystem. Isn't that true?

25 A That's correct. Not in all situations.

1 Q All right.

2 MR. BRICKLIN: Thank you very much. That's all I
3 have.

4 THE HEARING EXAMINER: Anything further?

5 MR. PLAUCHE: I have nothing further for this
6 witness.

7 THE HEARING EXAMINER: You may be excused. Thank
8 you. They sell for \$10 a pound; is that right? Geoducks?

9 MR. PLAUCHE: I haven't sold them or bought them.
10 I can ask one of my clients.

11 MR. BRICKLIN: There was testimony about that.

12 THE HEARING EXAMINER: It was \$10 a pound.

13 MR. PLAUCHE: It depends on the grade, it depends
14 on the market conditions.

15 THE HEARING EXAMINER: Well, don't I have testimony
16 that they sell them at \$10 a pound?

17 MR. PLAUCHE: 10, \$11 a pound.

18 THE HEARING EXAMINER: Do some of them sell for a
19 lot more than that?

20 MR. GOODWIN: No. That's the average price.

21 THE HEARING EXAMINER: Average price. Thank you.

22 MR. PLAUCHE: My only witness remaining is the
23 witness that I've got tomorrow morning, and I do appreciate
24 both counsel and your indulgence in coming back tomorrow
25 morning for that witness.

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**THE HEARING EXAMINER: The hearing will be
adjourned until tomorrow morning at 8:30.**

(The hearing adjourned at 3:15 p.m.)

