

A P P E A R A N C E S

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A P P E A R A N C E S (Continued)

COUNCIL MEMBERS PRESENT:

- William Lynch - Chair
- Jaime Rossman, Department of Commerce
- Cullen Stephenson, Department of Ecology
- Joe Stohr, Department of Fish and Wildlife
- Dennis Moss, Utilities and Transportation Commission
- Dan Siemann, Department of Natural Resources

Local Government and Optional State Agency:

- Ken Stone, Department of Transportation
- Bryan Snodgrass, City of Vancouver
- Greg Shafer, Clark County
- Larry Paulson, Port of Vancouver

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A P P E A R A N C E S (Continued)

FOR COLUMBIA RIVER INTER-TRIBAL FISH COMMISSION:

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ALSO PRESENT:

Amanda Kleiss, Paralegal
Annalisa Provence, Paralegal

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5922-000063-CRK

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1 PROCEEDINGS

2 JUDGE NOBLE: Good morning. We're here
3 again before the State of Washington Energy Facility
4 Siting Council, Case No. 15-001 in the Matter of
5 Application No. 2013-01, Tesoro Savage LLC Vancouver
6 Energy Distribution Terminal. Everybody here is all
7 right? It is July 25, 2016, and it's 9:08 a.m.

8 Are the parties ready to proceed? Is there
9 anything we need to do before we proceed with the
10 testimony this morning?

11 MS. REED: Your Honor, the City of Vancouver
12 has two exhibits which were just submitted this morning
13 and which have been circulated to the parties, and I
14 have not heard -- I have not heard that anyone has any
15 objections. The first exhibit is a copy of the
16 ordinance that was recently passed by the city council
17 of the City of Vancouver with respect to the future
18 siting of oil facilities within the city or the
19 enlargement of existing facilities. And the second
20 exhibit is a letter from BNSF to the State of Washington
21 disclosing the number of oil unit trains that are
22 transiting BNSF's system by county within the state of
23 Washington.

24 JUDGE NOBLE: But these two documents, I
25 have copies of them here, one being the ordinance number

1 M-4170. They don't have exhibit numbers. Oh, yes, they
2 do. They do. I take that back. The ordinance is
3 Exhibit 3137 and the letter is Exhibit 3138. Could I --
4 well, first of all, the ordinance is something that the
5 council could take notice of if it's an ordinance that's
6 been passed. Are you asking that the council take
7 notice of that under the APA?

8 MS. REED: Your Honor, I was uncertain as to
9 how you would want to treat that, whether you would want
10 to take notice or have it submitted as an exhibit,
11 because you did ask us to submit the City of Vancouver's
12 ordinance in -- as an exhibit, so it has been submitted
13 and labeled as an exhibit. So I was doing the same with
14 this, but if you would prefer that I would request
15 notice be taken, that's fine.

16 JUDGE NOBLE: That's all right. Either way
17 would be fine. First of all, I would ask if there's an
18 objection to what has been submitted as 3137?

19 MR. JOHNSON: Well, not other than a
20 relevance objection. I guess one concern is it maybe --
21 is this witness going to use that exhibit? Because if
22 he's not, then I don't understand who's going to testify
23 to it. So are we just now at this late stage putting in
24 paper without any kind of sponsoring testimony?

25 MS. REED: It was my understanding that this

1 witness was going to use it.

2 MR. JOHNSON: Okay. So other than reserving
3 our right to a relevance objection during the testimony,
4 we don't have an objection to that. We do not object to
5 the other exhibit.

6 JUDGE NOBLE: All right. Well, the --
7 Vancouver Municipal Code, as I recall, has been noticed
8 by the council already by order.

9 MS. REED: It has, Your Honor.

10 JUDGE NOBLE: I will admit both Exhibit '31
11 [sic] and '37. Both are admitted at this time.

12 MS. REED: Thank you, Your Honor.

13 JUDGE NOBLE: Does everyone have copies of
14 them to use in the questioning? Could you share this
15 with the other side?

16 MS. REED: I did. I circulated them
17 yesterday to everyone. You will be getting official
18 service versions by e-mail today, but I wanted to make
19 sure all parties had them before we started.

20 JUDGE NOBLE: Thank you. Is there anything
21 else we need to do on or off the record before we get
22 started with the testimony today? All right. One more
23 week to go.

24 Ms. Reed, do you have the first witness?

25 MR. TELEGIN: I do, Your Honor. Good

1 morning.

2 JUDGE NOBLE: Could you identify yourself
3 for the record.

4 MR. TELEGIN: Yes, thank you. My name is
5 Bryan Telegin. I'm here on behalf of Columbia
6 Riverkeeper, et al. And I would like, if I may, to call
7 Mr. David L. Wechner.

8 JUDGE NOBLE: Would you pronounce his name
9 once again for me.

10 MR. TELEGIN: The witness' name?

11 JUDGE NOBLE: Yes, please.

12 MR. TELEGIN: Wechner, W-e-c-h-n-e-r.

13 JUDGE NOBLE: Thank you.

14 Mr. Wechner, would you raise your right
15 hand.

16 (Witness sworn.)

17 JUDGE NOBLE: Thank you. We've been having
18 witnesses that like to speak very fast in this
19 proceeding. So would you try to not speak too fast for
20 the court reporter, if you can?

21 THE WITNESS: Yes, I will.

22 JUDGE NOBLE: You may proceed, Mr. Telegin.

23 MR. TELEGIN: Thank you, Your Honor.

24

25

TELEGIN / WECHNER

1 DAVID L. WECHNER,
2 having been first duly sworn,
3 testified as follows:

4 DIRECT EXAMINATION

5 BY MR. TELEGIN:

6 **Q. Good morning, Mr. Wechner.**

7 A. Morning.

8 **Q. I wonder if you might just begin by stating and**
9 **spelling your name for the record.**

10 A. My name is David L. Wechner. Last name is
11 spelled W-e-c-h-n-e-r.

12 **Q. Thank you. Now, Mr. Wechner, your CV has been**
13 **submitted to the council already, but I wonder if you**
14 **might just begin a little bit by saying what you do for**
15 **a living, what your background is professionally and**
16 **generally your familiarity with the Vancouver area.**

17 A. I'm a consulting land use planner at present, a
18 sole proprietor business based in Coupeville,
19 Washington. My land use planning career started here in
20 Clark County in the city of Vancouver in the 1990s. I
21 worked both for Clark County as an environmental planner
22 and in development review. Went on to work for the City
23 of Vancouver in the growth management division, which is
24 long-range planning, specializing in reviewing updates
25 to the annual review process of the comprehensive plan,

TELEGIN / WECHNER

1 writing ordinances, training staff on development --
2 development review staff on certain aspects of the
3 Vancouver code.

4 I've also worked in the state of Oregon and
5 Washington as a planning director in Josephine County,
6 Island County, Washington, and City of Sherwood, Oregon.
7 I have lived in the Vancouver area for a number of
8 years, still own a home here, and am familiar with the
9 Port of Vancouver site and other sites along the
10 Columbia River, having written several shoreline permits
11 and floodplain permits during my tenure in Clark County.

12 **Q. Thank you. Now, you submitted prefiled**
13 **testimony in this case. Have you -- do you adopt that**
14 **prefiled testimony as your testimony under oath here**
15 **today?**

16 A. Yes.

17 **Q. And in addition to the documents cited in your**
18 **prefiled testimony, could you please give us an idea of**
19 **what documents you reviewed to prepare your testimony,**
20 **both today and in your previous work.**

21 A. I reviewed the environmental impact documents.
22 I've reviewed the applicant's submittal to EFSEC. I
23 reviewed some of the testimony of previous land use
24 expert witnesses that were called, including
25 Mr. Carrico, and reviewed some of the -- some of the

TELEGIN / WECHNER

1 proceedings of this hearing on tape.

2 JUDGE NOBLE: Mr. Telegin, you -- excuse me.
3 Mr. Wechner, you are speaking softly. So keep the
4 microphone close so that the -- we all can hear.

5 THE WITNESS: Okay. Am I speaking slowly
6 enough?

7 MR. TELEGIN: Thanks.

8 BY MR. TELEGIN:

9 Q. In your prefiled testimony, you devote a lot of
10 space in the live discussion to this project's
11 consistency with the City of Vancouver's comprehensive
12 plan. Can you please tell us, in your opinion, why the
13 comprehensive plan is important to an evaluation of this
14 project's land use impacts?

15 A. Well, a comprehensive plan reflects the spirit
16 of a community, their goals and aspirations for a land
17 use development and the relationship of a review of a
18 project of the comprehensive plan as reflected in SEPA,
19 State Environmental Policy Act, with references to both
20 the planning and guidance in the Shoreline Management
21 Act. And a comprehensive plan is the basis of
22 development regulations, which are more specific --
23 specifically tied to projects when local jurisdictions
24 make particular land use decisions. But it's a list of
25 the City's vision and it's a list of direction that the

TELEGIN / WECHNER

1 City wants to go for future land use decisions, and so
2 the comprehensive plan is sort of an overall guidance
3 that planners use when there's ambiguity in the code,
4 when new use has come about or when decisions need to be
5 made about either code decisions or decisions on land
6 use projects that fall under the auspices of the State
7 Environmental Policy Act.

8 **Q. And are comprehensive plans ever used in the**
9 **permitting of individual development projects such as**
10 **this one?**

11 A. They're used in the sense of the SEPA checklist
12 review and primarily the review under the Environmental
13 Policy Act. Specifically Item 8 of the SEPA checklist
14 talks about what are the proposed -- let's see if I can
15 quote it directly. The proposed measures to mitigate or
16 address impacts to projected land use -- land uses and
17 plans. And so there's a connection to what the City has
18 planned in a broader sense, as well as the specific
19 development regulations that would apply on the
20 property.

21 **Q. And a moment ago you talked about ambiguity in**
22 **the code. Could you please elaborate on that, how a**
23 **comprehensive plan might be used to resolve ambiguity,**
24 **or if you have any examples of that?**

25 A. Well, when new uses come about, changes in

TELEGIN / WECHNER

1 technology, changes in -- different kinds of land uses
2 that come up, a recent example of that, the data bank --
3 or data farms, the large companies such as Google might
4 use that are large buildings, they have -- they draw a
5 lot of energy, they need large tracts of land in
6 proximity to a lot of electricity. They were a use
7 that -- that wasn't even contemplated 30 years ago. And
8 so when uses like that come along, local jurisdictions
9 can look to their comprehensive plan, look at that
10 general direction and policy guidance to use in
11 interpreting whether their code allows that use or
12 should condition that use, and then use these other
13 state statutes such as the Shoreline Management Act and
14 the State Environmental Policy Act to decide how to
15 mitigate any impacts, if they can be mitigated, or to
16 approve or deny the use outright.

17 **Q. So you mentioned SEPA in your answers already**
18 **and you alluded to the Shoreline Management Act. Could**
19 **you please provide -- are there any other state laws or**
20 **policy documents that a local jurisdiction normally**
21 **would look to when reviewing a local -- or a project**
22 **such as this?**

23 A. Those are the two -- the Growth Management Act
24 would be one.

25 **Q. Can you just give a description of sort of what**

TELEGIN / WECHNER

1 the Shoreline Management Act, for example, looks to and
2 how that factors --

3 A. Well, the Shoreline Management Act includes
4 policies regarding shorelines of statewide significance,
5 and it lists a series of priorities for both shorelines,
6 and those are incorporated as part of a local shoreline
7 master programs. So a local code makes a specific
8 reference to a state management act, whether it be SEPA
9 or the SMA. And in doing so, it's incorporating that
10 larger policy in a set of criteria. So while it not
11 be -- may not be a specific standard that's being
12 applied, such as a setback, building setback to a
13 property line, there are criteria, such as recognizing
14 statewide interest over local interest, general
15 protection of environmental resources or consistency
16 with local land use plans.

17 Q. Thank you.

18 JUDGE NOBLE: Mr. Telegin, before you ask
19 your next question, you are speaking very fast and also
20 you were speaking at the same time as your witness
21 occasionally. So make sure you don't do that.

22 MR. TELEGIN: Thank you for calling that to
23 my attention, Your Honor.

24 BY MR. TELEGIN:

25 Q. Mr. Wechner, in your prefiled testimony, you

TELEGIN / WECHNER

1 talk a lot about off-site impacts, impacts that will be
2 felt in places in Vancouver, other than the port. I
3 wonder if you could let us know, in your opinion, as a
4 land use planner, is it normal to consider off-site
5 impacts when assessing local projects like this?

6 A. Yes, it is. Especially with a large use or one
7 that poses a particular impact, such as -- I'll say
8 odors, or hazardous chemicals or large amounts of
9 traffic. You would look at off-site impacts. A good
10 example might be if you were going to locate a
11 fertilizer plant, you might look at its proximity to a
12 school, to a nursing home, to other kinds of residential
13 uses where emergency response, in the event of a
14 potential accident, would be difficult or certain
15 populations might be affected, such as an elderly
16 population. So you are looking at off-site impacts, and
17 that really is the nature of land use reviews.

18 If we only limited our review to the property
19 lines that the use was proposed within, there wouldn't
20 be much discussion. It would be whether it's zoned for
21 it or not. But the Environmental Policy Act, the
22 Shoreline Management Act, as two examples, do broaden
23 that review but look at off-site impacts.

24 Other aspects like the growth management concept
25 of concurrency look at off-site impacts to traffic

TELEGIN / WECHNER

1 intersections. How are those intersections going to be
2 affected? Will it cause increased congestion or queuing
3 or levels of service that fall below the local
4 standards?

5 **Q. In this case, in your opinion, was the**
6 **applicant's analysis of off-site impacts adequate?**

7 A. I don't believe they were. They took the tack
8 of sort of drawing a tight line around the site within
9 the industrial zone, and it is an industrial type of use
10 and one could certainly make the argument that it's --
11 that it's allowed within that zone, but the use actually
12 expands.

13 I think the land use analysis for this type of
14 use, it's essentially border to border. It requires the
15 use of rail lines and it spreads its impact throughout
16 the state. And so the -- it's rather unique in that, in
17 that way. Most projects have a fairly localized impact
18 and that impact has to decrease as it -- as you move
19 further away from the site. In this case, the impact
20 can be felt throughout the state of Washington along the
21 rail line, the east, west and northern returns, as well
22 as down the Columbia River with increased shipping
23 traffic.

24 **Q. Thank you. So in your prefiled testimony, you**
25 **speak about several planning documents that are in the**

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1 comprehensive plan or perhaps they're part of the
2 comprehensive plan. I'm thinking of the Vancouver City
3 Center Vision plan, the Fruit Valley neighborhood plan
4 and so forth.

5 JUDGE NOBLE: We can't hear you,
6 Mr. Telegin.

7 MR. TELEGIN: You can't hear me when I speak
8 like that?

9 JUDGE NOBLE: We're not. The mic is not --
10 pull it closer.

11 MR. TELEGIN: Can you hear me now? Thank
12 you.

13 JUDGE NOBLE: Maybe if you move it to your
14 left.

15 MR. TELEGIN: Sorry, I will try and keep it
16 close to my mouth.

17 JUDGE NOBLE: You have enough cord. You can
18 move it to your left and then as you're facing --

19 MR. DERR: You're too tall.

20 MR. TELEGIN: Mr. Derr suggests I'm too
21 tall.

22 BY MR. TELEGIN:

23 Q. So, Mr. Wechner, in your prefiled testimony, you
24 talk about several plan documents that are in the
25 comprehensive plan or parts of the comprehensive plan.

TELEGIN / WECHNER

1 I'm thinking of the City Center Vision plan, the Fruit
2 Valley neighborhood subarea plan and so forth. When you
3 reviewed those plans and documents associated with those
4 plans, did you see any indication that the City was
5 planning for a particular level of increased train
6 traffic to the city?

7 A. No, I didn't. There was an acknowledgment until
8 the subarea plans of the existence of the rail line.
9 It's been there for more than a hundred years. So it
10 would be imprudent to not acknowledge that the rail line
11 exists, but there wasn't any specific assessment of
12 increases in rail traffic or increases in hazardous
13 commodities that might go down the rail line.

14 What I did see in those plans was increased
15 access for pedestrians, for alternative modes of
16 transportation, for access to the water; they're -- as
17 very neighborhood centric as Vancouver is, they have
18 neighborhood associations in the city of Vancouver that
19 pass neighborhood plans and they are the basis for a lot
20 of public investment in the city of Vancouver. And so
21 those subarea plans are focused on walkable communities,
22 human scale, interaction between neighborhoods and the
23 commercial areas and the light industrial areas, and
24 this use brings a heavy industrial use to the doorstep
25 of some of those neighborhoods.

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1 **Q. During the course of these proceedings, we've**
2 **also heard discussion of a project called the West**
3 **Vancouver Freight Access project. Are you familiar with**
4 **that project?**

5 A. I've read the environmental assessment and some
6 of the documents associated with it, yes.

7 **Q. When you were reviewing documents associated**
8 **with the comprehensive plan and the various subarea**
9 **plans of the City of Vancouver, did you see any**
10 **indication that those plans were being written in**
11 **anticipation of a particular level of increased traffic**
12 **associated with the West Vancouver Freight Access**
13 **project?**

14 A. I didn't see evidence in the West Vancouver
15 Freight Access project referenced to this type of a
16 project, a petroleum oil terminal. And the level of
17 traffic in that document wasn't really specified along
18 the east-west corridor.

19 **Q. Thank you. So in your knowledge and experience**
20 **as a land use planner, is this proposal compatible with**
21 **existing -- most land uses in the Vancouver area?**

22 A. I don't believe on the whole it is. There are
23 components of the proposal that certainly are. Its
24 primary activity is within an industrial zone.

25 But as I stated earlier, the impacts of this

TELEGIN / WECHNER

1 proposal stretch beyond the heavy industrial zone, and I
2 think on the whole, when you look at the inconsistency
3 with subarea plans, neighborhood development, proximity
4 of residences, at-grade crossings that might be
5 affected, there are -- for example, there's one
6 subdivision, Steamboat Landing along the Columbia River,
7 which is, I believe, almost 200 residences that would be
8 cut off by this -- by train traffic at an at-grade
9 crossing that -- for several minutes throughout the day.
10 So I think in that -- when you look at the whole of this
11 project and the potential adverse impacts that it
12 produces, I don't believe it is compatible with the
13 Vancouver comprehensive plan and subarea plans.

14 **Q. In your prefiled testimony, you referred to some**
15 **other documents that we haven't discussed yet. One of**
16 **them is a publication by NOAA, it's Exhibit 5922; I**
17 **believe it's an atlas of the Columbia River. In your**
18 **mind, what's the significance of that document?**

19 A. Well, the federal government produced this
20 atlas, which was focused primarily on the sensitivity of
21 cultural and species habitats along the Columbia River,
22 their sensitivity to oil spills. And that was a
23 cooperative agreement between NMFS, the National Marine
24 Fishery Service, and NOAA, Oceanic and Atmospheric
25 Administration, and I believe also funding by US Fish

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1 and Wildlife Service. And what they did was map out the
2 entire Columbia reach and what the sensitivity of
3 certain areas would be to oil spills. And it's
4 significant, because while we talk about the impacts
5 that may be rail traffic in general, the federal
6 government was focused on the specific impacts of
7 transporting oil via ship, barge or rail through the
8 Columbia River Gorge. And I think their concentration
9 and their identifying the potential impact and the
10 species that are sensitive to that ought to be
11 considered by EFSEC in your determination of balancing
12 the potential adverse impacts of this proposal versus
13 the benefits.

14 **Q. And in your testimony, you also talk about the**
15 **City of Vancouver's moratorium. Do you know what the**
16 **City's current position is on the oil terminal?**

17 A. Well, the City's current position, as I
18 understand it -- and I haven't read the exhibit that was
19 submitted today -- but they are using the provisions of
20 the Growth Management Act that allow a jurisdiction to
21 impose a moratorium on a particular kind of use until
22 they can write suitable development regulations to
23 address it.

24 **Q. Thank you.**

25 MR. TELEGIN: No further questions.

DERR / WECHNER

1 JUDGE NOBLE: Cross-examination.

2 CROSS-EXAMINATION

3 BY MR. DERR:

4 Q. Thank you. Mr. Wechner, my name is Jay Derr. I
5 represent the applicant in this proceeding, and I'm
6 going to be asking you a few questions about both your
7 written prefiled and your testimony today.

8 A. Morning.

9 Q. Good morning. And the court reporter has to
10 tell me to go slow. Doesn't have to tell me to speak
11 more loudly, but he tells me to go slow quite often.

12 To start with, a question about what all you
13 reviewed. Did you by chance review what's called the
14 Land Use Consistency Order that the EFSEC council issued
15 on this project?

16 A. Yes.

17 Q. So you're aware they have already made a
18 determination about whether the terminal use is
19 consistent with the zoning and comp plan designation for
20 the terminal site?

21 A. I read that document, and I found the primary
22 thrust of the language consistency determination by the
23 council was focused on the zoning of the site. And I
24 also note that Mr. Snodgrass, a member of the council,
25 had highlighted the environmental impacts that had yet

DERR / WECHNER

1 been evaluated.

2 Q. And so I'm trying -- I want to explore, if I
3 can, in my questions with you, whether your judgment
4 about consistency relates to the terminal use at the
5 terminal site or relates to the rail traffic going to
6 the terminal use. So could you tell me, is it both?
7 Which is it?

8 A. Well, the primary impact imposed by this use is
9 the off-site impact that it poses.

10 Q. So that would be the rail traffic? Is that the
11 off-site impact to the --

12 A. The commodity, the increased risk of spills.
13 And not just rail traffic, but there's ship traffic as
14 well. There will be shiploads of crude oil crossing the
15 Columbia Bar, which is generally accepted as one of the
16 more dangerous crossings of the West Coast.

17 Q. So help me out. Is it the traffic, the volume
18 of traffic, is it the commodity on the rail traffic or
19 is it both?

20 A. Well, I think the volume of traffic will impact
21 Downtown Vancouver. As I understand it, when the trains
22 come in to the Port of Vancouver, they dump their load.
23 They would then have to back up past Downtown Vancouver
24 again if they're coming in from the east and use the
25 north alignment then to -- then to traverse north. So

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1 that's three passes of Downtown Vancouver for a train, a
2 mile-and-a-half-long train, four of them per day. So
3 there's a train traffic impact, there is the commodity
4 and some of the potential risks that are associated with
5 that commodity that are inherent in the proposal, and
6 then there's the ship traffic going down the river. So
7 I think, again, on the whole, you've got impacts at all
8 three levels.

9 **Q. And is it your testimony -- I'm going to go to**
10 **ships just for a second. Is it your testimony the City**
11 **comprehensive plan and subarea planning documents**
12 **address ship traffic downriver?**

13 A. The Shoreline Management Act addresses that, and
14 the determination is it goes beyond the City's
15 determination of consistency. It goes to land use in
16 general by the council, I believe.

17 **Q. So let me ask you maybe a more general question.**
18 **You testified, I believe, that you -- it's important to**
19 **look at off-site impacts when considering a project; is**
20 **that correct?**

21 A. Yes.

22 **Q. And when you look at off-site impacts, such as**
23 **traffic volumes, be it rail, roads, boats, I guess, do**
24 **you look at a single point in time in assessing off-site**
25 **impacts, or do you look at sort of a range of times to**

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1 identify what are the impacts from the project?

2 A. I'm going to ask you to clarify. When you say
3 "a range of times," are you talking about a range of
4 times throughout the day, or a range of times --

5 **Q. Really either. Maybe I'll ask it more**
6 **generally. How would you consider impact to traffic**
7 **volume, rail, roads, boats, would you look at project**
8 **traffic compared to today's traffic, this hour's traffic**
9 **or would you look at a range of traffic on a**
10 **transportation corridor to assess impacts?**

11 A. Well, I'd look at a couple of those lenses --
12 through a couple of those lenses to look at traffic.
13 Concentrated traffic can have a -- one kind of impact,
14 and then long range, long-term traffic can have another
15 kind of impact.

16 To illustrate, the density of this water glass
17 doesn't change when I move it around the room, but when
18 I put it right here, it has quite an impact to me. And
19 so I think that how you're looking at train traffic, its
20 frequency, its duration, its intensity, if you will,
21 depends on -- that produces different levels of impact.

22 **Q. So let me see if -- I'm not sure I understand**
23 **the water glass piece, so let me ask an additional**
24 **question. Let's take roads. I think I understand how**
25 **road traffic works a little better.**

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1 When you're looking at off-site impacts, traffic
2 impacts, do you look at the volume of traffic on a road
3 at 2 in the morning? 5 in the afternoon? Do you look
4 at it over the course of a week? A month? A year? How
5 do you evaluate those impacts?

6 A. Well, you would look at the average daily
7 traffic, sort of a general idea of how much traffic in
8 use it produces. You would look at, for most auto
9 traffic impacts, a.m. and p.m. peak hours. Those are
10 identified in the international traffic engineering
11 manual as to what particular kinds of use is produced.
12 And you would also look at the dispersion of that
13 traffic and where it's going to have an impact.

14 Part of what makes this use unique, as I said,
15 is that it's confined to a rail line. There are no
16 bypass routes. There aren't other intersections that
17 you can disperse that traffic in. So it's -- it has a
18 more concentrated nature in the traffic it produces.

19 **Q. So I'm especially interested in the timing**
20 **piece. So if I have a road which has higher volumes at**
21 **one point in time during the day or during the week,**
22 **perhaps the workday as opposed to the weekend, and lower**
23 **volumes at another time, do I start with the lower**
24 **volumes to assess off-site impacts, or do I consider**
25 **also the higher volumes to assess off-site impacts?**

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1 A. You would likely consider both, but the higher
2 volumes is likely to produce a greater impact.

3 **Q. So now I want to ask some questions about rail**
4 **and rail capacity. Are you familiar with the testimony**
5 **about the volumes of rail traffic on this rail line and**
6 **how they have changed over the last months or years?**

7 A. What specific testimony are you referring to?

8 **Q. So testimony, for example, the BNSF witness that**
9 **spoke about rail traffic volumes. You mentioned you**
10 **reviewed the environmental documents that -- draft EIS**
11 **mentions rail traffic volumes and a pattern of rail**
12 **traffic volumes. Did you review that information?**

13 A. There was information I reviewed in reviewing
14 the EIS where the Port of Vancouver reported there
15 were -- 57,000 rail cars was their highest level of rail
16 car traffic seen at the Port of Vancouver in, I believe
17 it was 2007, and compared that to the rail traffic that
18 this particular use will produce. And using the
19 applicant's figures, 100 to 120 rail cars per unit
20 train, an average of four trains per day every day of
21 the year produces 160,600 rail cars --

22 **Q. How about --**

23 A. -- which is --

24 **Q. Excuse me. Were you finished? I don't want to**
25 **interrupt.**

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1 A. -- which is significantly higher than 57,000
2 rail cars that were previously seen, which is the
3 highest level for Vancouver.

4 Q. How about on the mainline? Did you review
5 information about rail traffic on the main BNSF line
6 that runs through Vancouver?

7 A. No.

8 Q. I want to switch and ask -- actually, let me ask
9 you a question about the West Vancouver Freight Access
10 project. So is it your testimony, that series of rail
11 improvements were not intended or designed to increase
12 rail traffic to the port and the efficiency of rail
13 traffic through the city?

14 A. I think they were designed to increase
15 efficiency and address operational issues and
16 congestion. That's what I read in the introduction to
17 the environmental assessment.

18 Q. So is it your testimony not to increase rail
19 traffic to the port?

20 A. By no specified amount, as I recall.

21 Q. Okay. Switching gears, questions about -- I
22 believe you testified to the applicability of the City's
23 subarea plans. And if I remember your testimony right,
24 you discussed three subarea plans, in particular Fruit
25 Valley, the Downtown, which is either the CCP or the

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1 VCCV, various labels, and the Riverview Gateway, are
2 those the plans you looked at?

3 A. Yes, those are the three.

4 **Q. And is the terminal located in any of these**
5 **subarea plans?**

6 A. No, it's not.

7 **Q. How about in the Fruit Valley neighborhood plan,**
8 **is there another storage facility located in that**
9 **subarea plan?**

10 A. Another storage facility for --

11 **Q. Another fuel storage facility located in that**
12 **subarea plan?**

13 A. I don't believe it's in the subarea plan.

14 **Q. Are you familiar --**

15 A. It may be in the Fruit Valley neighborhood, yes.

16 **Q. Are you familiar with the NuStar facility?**

17 A. No.

18 **Q. Do you typically, when you're reviewing**
19 **applicability of subarea plans with a development**
20 **proposal, apply the policies of a subarea plan where the**
21 **development proposal is not located?**

22 A. If there are off-site impacts to that subarea,
23 yes, I would.

24 **Q. So you would. If you're building, for example,**
25 **the waterfront development project, you would review it**

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1 for consistency with the Riverview Gateway plan and the
2 Fruit Valley neighborhood plan?

3 A. Perhaps the Fruit Valley neighborhood plan. You
4 would look at a subarea plan that was proximate to the
5 use or the impacts of the use it produces.

6 **Q. Wouldn't a use like --**

7 A. And the rail line associated with this project
8 which is an integral part of the project does go through
9 the subarea plan, so essentially the project expands to
10 reach those subareas.

11 **Q. How about -- are you familiar with the**
12 **waterfront development plan?**

13 A. Somewhat, yes.

14 **Q. So isn't that an intensity of use that's**
15 **expected to generate a lot of traffic on the city's road**
16 **network?**

17 A. I suppose it could.

18 **Q. And on Interstate 5 --**

19 A. However, the proximity of the -- well, I can say
20 this about the waterfront development project, that one
21 of the drivers of that is to bring people downtown so
22 that they don't have to get in their car to go to work.
23 They're proximate to the downtown economic corridor.
24 And so as I understand it, it's a mixed-use project. So
25 it includes businesses, commercial development and

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1 residential within the entire development.

2 Q. So would it be your --

3 A. So mixed-use developments generally reduce the
4 total amount of traffic as opposed to more traditional
5 residential development.

6 Q. So would it be your testimony a project like
7 that would not need to look at off-site traffic
8 impacts --

9 A. Oh, yes, it would.

10 Q. -- in that development?

11 A. Yes, it would.

12 Q. And because it would have to look at those
13 off-site traffic impacts, would it be your testimony
14 that development also would have to look at its
15 consistency with the Riverview Gateway plan where
16 Highway 14 goes?

17 A. If it doesn't produce any traffic to the
18 Riverview Gateway subarea plan, then no, it wouldn't.

19 Q. So am I understanding correctly that your
20 testimony about consistency with subarea plans is
21 primarily about the rail traffic that goes through those
22 subareas; is that correct?

23 A. Correct.

24 Q. So let me ask you a couple of specific questions
25 about your testimony to make sure I'm understanding its

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1 focus. Paragraph 31 of your prefiled, you state that,
2 there are no policies in the Central City plan that call
3 for heavy industrial uses such as the proposed oil
4 terminal.

5 So is that statement about the oil terminal or
6 is that statement about the rail traffic to the oil
7 terminal?

8 MR. TELEGIN: I'm going to object, Your
9 Honor. I think that's one sentence out of a full
10 paragraph. I would like Mr. Wechner to be able to
11 review the entire document before answering that
12 question.

13 JUDGE NOBLE: I didn't hear the last of what
14 you said.

15 MR. TELEGIN: I would like Mr. Wechner to
16 have an opportunity to actually read that paragraph
17 before answering that question. I have it here, if you
18 don't mind me handing it to him.

19 MR. DERR: That would be great. Or I'd be
20 happy to pull it out.

21 BY MR. DERR:

22 **Q. I would like you to have a copy of your prefiled**
23 **testimony.**

24 JUDGE NOBLE: Thank you. And as for the
25 objection, the witness will be able to -- if the

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1 statement was taken out of context or is incomplete,
2 he'll be allowed to complete the quote. Paragraph --

3 MR. DERR: Paragraph 31.

4 JUDGE NOBLE: Is on page 14?

5 MR. DERR: Page 14 of the prefiled. And I
6 was, I believe, quoting the last sentence at that bottom
7 of that page 14.

8 JUDGE NOBLE: So the objection's overruled.

9 MR. TELEGIN: Mr. Wechner, your prefiled
10 testimony should be at the front of that particular
11 binder.

12 BY MR. DERR:

13 **Q. Looks like you have the whole comp plan there.**

14 A. Produced lots of paper. What paragraph again,
15 please?

16 **Q. Paragraph 31.**

17 A. Thank you.

18 **Q. Page 14. And I was referring to the sentence at**
19 **the bottom of that page, so if you want to read that**
20 **paragraph. And the question, again, is whether that**
21 **statement is referring to the terminal or to the rail**
22 **traffic to the terminal.**

23 THE WITNESS: Judge Noble, do you wish me to
24 read the paragraph in its entirety for the council?

25 JUDGE NOBLE: If you feel the sentence that

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1 has been pointed out is an incomplete statement of what
2 you're saying in that paragraph, then you can read the
3 whole paragraph, although the council does have a copy
4 of it, so you can prepare for it if you want.

5 THE WITNESS: All right. Thank you. I
6 think the council would benefit from hearing the entire
7 paragraph.

8 JUDGE NOBLE: All right.

9 THE WITNESS: Paragraph 31 on page 14 of my
10 prefiled direct testimony, "As discussed more fully
11 below, the City has undertaken a programmatic effort to
12 revitalize the downtown area - as that area is defined
13 in the Vancouver City Center Vision & Subarea Plan -
14 which, as discussed more fully below, emphasizes
15 intensifying residential development, public access,
16 recreation, cultural, hospitality, entertainment, and
17 limited commercial uses in Downtown Vancouver. There
18 are no policies in the City Center plan that call for
19 intensifying heavy industrial uses such as the proposed
20 oil terminal project. The terminal would increase rail
21 traffic and the possibility of spills, accidents, and
22 other potential impacts" --

23 JUDGE NOBLE: Mr. Wechner, you are going to
24 have to slow down.

25 THE WITNESS: -- "and near Downtown

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1 Vancouver well beyond those envisioned when the plan was
2 created. Thus, the additional rail traffic and
3 crude-by-rail operations would conflict with the plan
4 and do not support revitalization of the downtown area.
5 The impact of the heavy industrial use intensifying in
6 Downtown Vancouver is contrary to the City's vision and
7 inconsistent with the City's investments to make that
8 vision a reality." And I state, "The terminal is
9 inconsistent with policy CD-14" -- which is the comp
10 plan policy on connected and integrated communities.

11 BY MR. DERR:

12 Q. So again, my -- thank you for reading it. My
13 question, is that intended to refer to the terminal or
14 to the rail traffic to the terminal?

15 A. It is primarily concerned with the rail traffic
16 to and from the terminal.

17 Q. Okay. I want to try paragraph 57 as well. This
18 is a section of your testimony referring to open space,
19 trails, recreation. And, again, the same question, you
20 refer in the middle in particular, to, starting at
21 line 8, "near-constant industrial activity required to
22 off-lead six miles of oil trains each day, is not
23 consistent with wildlife protection" -- et cetera.

24 So my question there is that, I believe, is
25 referring to the rail loop track unloading. Am I

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1 correct in understanding that testimony?

2 A. Correct.

3 **Q. And so is it your testimony that the rail loop**
4 **track unloading activity is not consistent with those**
5 **other uses and those planning policies?**

6 A. Well, a general reference to industrial activity
7 is the rail traffic, as well as the actual off-loading.

8 **Q. So it would include the rail unloading activity?**

9 A. Yes.

10 **Q. And isn't that -- the West Vancouver Freight**
11 **Access project, construction of that rail loop for that**
12 **rail unloading activity?**

13 A. The West Vancouver Freight Access project wasn't
14 built necessarily for an oil terminal. It was built for
15 general congestion relief and better operational
16 functionality of the rail lines. This is a use that
17 piggybacks upon that project, but it wasn't specifically
18 identified in the West Vancouver Freight Access project.

19 **Q. So the commodity was not identified?**

20 A. No.

21 **Q. Was the unit train rail unloading identified in**
22 **the West Vancouver Freight Access project?**

23 A. The freight access project was primarily focused
24 on the intersection of east-west and north-south rail
25 lines.

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1 Q. Didn't include the loop track. Is that your
2 testimony?

3 A. I'd have to look at the plan again. I think it
4 did identify the loop track.

5 Q. And do you know --

6 A. The loop track has been there for a while.

7 Q. And do you know, is that loop track available
8 and used by other trains in addition to the proposed
9 trains for the Vancouver project?

10 A. I assume it is.

11 Q. Let's go to paragraph 69. We're now talking
12 about the Riverview Gateway planning area. And, again,
13 the sentence that begins on line 20, "The proposed oil
14 terminal would produce a significant amount of train
15 traffic that is likely to discourage access to the
16 riverfront or force an above-grade crossing of the
17 track, at considerable expense, thus frustrating this
18 goal of the subarea plan."

19 So I assume that testimony is about the rail
20 traffic; is that correct?

21 A. Yes.

22 Q. And is your testimony that that impact is unique
23 to oil trains, or is that an impact of train traffic
24 generally?

25 A. It's an impact of train traffic generally. It

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1 is noted that this project, as I stated previously, does
2 represent a significant increase in rail traffic coming
3 to the Port of Vancouver.

4 Q. So let me just now -- I'm done with your
5 prefiled. Thank you.

6 Let me just posit a question for you. Sounds
7 like your testimony -- or your opinion is, increased
8 rail traffic to the port would be inconsistent with the
9 City comprehensive plan and the subarea plans that you
10 discussed. Is that your testimony?

11 A. My testimony is focused on the larger picture of
12 the impacts that this rail -- that this project would
13 produce. And it will produce impacts to subarea plans.
14 It will produce impacts to individual neighborhoods. I
15 think that the increased risk may have impacts on
16 investments in the area which was identified in the
17 Johnson Economics report and, in particular, one of --
18 in reviewing some of the previous testimony I heard, it
19 was proposed that you only look at rail traffic and
20 off-site impacts if you're actually making increases to
21 the rail facility itself. That isn't how we look at
22 land use projects. You look at the project proposal
23 itself and what kind of traffic it produces along the
24 transportation routes, and then try to identify what
25 land use impacts are inherent in that use. So you don't

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1 have to be installing a new track to therefore look at
2 the impact of train traffic.

3 Q. So let me pose some other uses. Suppose the --
4 actually we had testimony from Mr. Smith that the port
5 at one time had looked at a proposal to bring unit
6 trains of potash, I believe it was, to the port. Would
7 it be your testimony that that project is inconsistent
8 with the City's comprehensive plan and subarea plans
9 because it's more unit trains to the port?

10 A. Well, I haven't reviewed the potash train
11 proposal, so I'm not sure I could comment upon that.

12 Q. So if it brought more train -- more unit trains
13 of potash, would it have the same impacts that you
14 testified to in your prefiled testimony?

15 MR. TELEGIN: I'm going to object, Your
16 Honor. I think that's an incomplete hypothetical. Just
17 a bare increase doesn't --

18 JUDGE NOBLE: We can't hear you and you
19 spoke too fast.

20 MR. TELEGIN: Sorry, Your Honor, apparently
21 it's a common problem.

22 JUDGE NOBLE: Yes.

23 MR. TELEGIN: I'm going to object on the
24 basis that the hypothetical that Mr. Derr just posed is
25 an incomplete hypothetical. He asked Mr. Wechner about

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1 bare increases. I don't believe that gives Mr. Wechner
2 enough information to work with in forming a response to
3 the hypothetical.

4 JUDGE NOBLE: I'm going to overrule the
5 objection because I think the witness would be able to
6 say that if that's the case. You may answer. Do you
7 need the question again?

8 BY MR. DERR:

9 Q. Do you want the question -- do you want it read
10 back or do you want me to try it again?

11 JUDGE NOBLE: Do you feel you've already
12 answered?

13 A. You can read the question again as you stated
14 it. Thank you.

15 BY MR. DERR:

16 Q. Well, if you want it read as I stated, then I
17 guess we'll have the court reporter read it.

18 JUDGE NOBLE: You could ask it again,
19 Mr. Derr.

20 BY MR. DERR:

21 Q. Let me try again. I just didn't memorize the
22 question, so it might come out a little different.

23 JUDGE NOBLE: Maybe the witness memorized
24 it.

25

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1 BY MR. DERR:

2 Q. We heard testimony from Mr. Alastair Smith that
3 the port had evaluated a project which would bring unit
4 trains of potash to the port, so it would bring more
5 trains to the port above the existing volumes, different
6 commodity, potash, and they would be unit trains, they
7 would use the same loop track. Would it be -- and they
8 would go the same BNSF route. So I'm trying to fill in
9 the details that your counsel was asking for.

10 In that hypothetical, would that change in rail
11 traffic to the port, would it be your testimony that
12 that project also is inconsistent with the City
13 comprehensive plan and with the subarea plans that you
14 discussed in your testimony?

15 A. Again, without knowing the specifics of the
16 potash project, how many trains, how long are the
17 trains, what are the frequency of the trains, to be
18 frank with you, I don't know much about potash, so I
19 can't speak to that. So if it's listed as a hazardous
20 substance and evokes special rules by the Department of
21 Transportation regarding potash transport, then it may
22 very well produce impacts that would affect subareas and
23 be inconsistent with the Vancouver comprehensive plan.

24 But without knowing -- projects are looked at
25 specifically for the project and what kind of impacts

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1 does it actually produce, and without knowing the
2 specifics of that, I couldn't comment on that. And I'm
3 not sure anyone could.

4 Q. So let me try a different product maybe you know
5 better. Cars. So let's say the port were to increase
6 its Subaru activity and bring in more trains to
7 transport Subarus from the port to other markets, and
8 let's say it's four trains a day of Subarus, same number
9 of trains, same length of trains, would it be -- but a
10 Subaru, not crude oil. Would it be your testimony that
11 that project would be inconsistent with the City
12 comprehensive plan and the subarea plans that you
13 discussed in your testimony?

14 A. I think there's a lesser degree of impact
15 certainly in transporting Subarus, which I do know
16 because I've owned one. There's a lesser of an impact
17 in importing other kinds of commodities than there are
18 with crude oil, yes.

19 Q. Thank you. A couple of questions about your --

20 A. But that is -- if I can finish. But that is not
21 to ignore the volume-of-train-traffic issue and how that
22 might impact neighborhoods.

23 Q. So I'm going to switch topics again. I believe
24 you said you have experience as a long-range planner; is
25 that correct?

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1 A. Yes.

2 **Q. So I'm curious, as a long-range planner, how do**
3 **you consider compatibility of adjacent land uses when**
4 **you make planning decisions, deciding what goes on the**
5 **map? And then more in particular, how do you address**
6 **existing uses? If a use is already there, how do you**
7 **evaluate that in making long-range land use planning**
8 **decisions?**

9 A. Well, generally you look at the kind of
10 operation that is there. Is it compatible with adjacent
11 uses and other land uses in the area? And if so, zone
12 it or plan for it to be inclusive of that use. But land
13 use zoning giveth and taketh away. Uses that oftentimes
14 have been in existence for a long time, let's say a
15 slaughtering and rendering operation, which has had a
16 town grow up around it, might actually be zoned to no
17 longer exist once that use is abandoned, so it can't be
18 re-established. So you do do an evaluation of what the
19 adjacent land uses might be, what impacts even an
20 existing use might produce that would affect the
21 properties around it.

22 **Q. So how about other existing activities, like**
23 **transportation corridors? Do you take those into**
24 **consideration in your long-range planning?**

25 A. Certainly.

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1 Q. Do you take into consideration crossing of
2 transportation corridors in your --

3 A. Yes.

4 Q. So are you familiar, as a long-range planner,
5 with the concept of coming to the nuisance? Is that a
6 term you recognize?

7 A. Coming to the nuisance?

8 Q. Coming to the nuisance.

9 A. I think that's the first time I've heard that
10 phrase.

11 Q. Okay. Then I -- so that -- it must be a lawyer
12 term rather than a planner term, so I will change my
13 label. If you have an existing activity and an
14 incompatible land use locates next to that existing
15 activity, these lawyers would call that coming to the
16 nuisance. So is that a concept that you would consider
17 in your long-range planning?

18 A. As I understand the concept as you've explained
19 it, yes. You would consider a new land use being
20 proposed and what existing land uses there are adjacent
21 to it for making land use decisions, either a
22 development proposal or, in a long-range context,
23 comprehensive plan designations, rezoning regulations.

24 Q. So let me now try a specific example of that
25 concept. So you mentioned, I believe, in your

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1 testimony, a residential development that had to cross
2 the railroad tracks to get access.

3 A. Right.

4 Q. Am I remembering that correct? So in that --
5 and let me -- maybe a foundation question. Do you have
6 an idea of whether the railroad was there before the
7 subdivision or vice versa?

8 A. I'm certain the railroad was there first.

9 Q. So --

10 A. It may have been historic use of that site for
11 other purposes, as I understand.

12 Q. So when the permit is reviewed for that
13 subdivision, would that permit typically have taken into
14 consideration the facts related to the railroad crossing
15 to access that project?

16 A. Yes.

17 Q. And would that be an appropriate way to review
18 that issue?

19 A. Yes, it would be.

20 Q. Switch now to the Shoreline Management Act. I
21 believe you testified that you looked at the Shoreline
22 Management Act as well?

23 A. Yes.

24 Q. So I'm curious, are you familiar with the
25 concept of preferred uses in the shoreline under the

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1 Shoreline Management Act?

2 A. Uh-huh.

3 **Q. And are ports and port industrial operations a**
4 **preferred use under the Shoreline Management Act?**

5 A. I believe they are.

6 **Q. Did you review the waterfront development**
7 **approval as part of your preparation for your testimony?**

8 A. Briefly, yes.

9 **Q. Are you familiar with conditions in that**
10 **approval that relate to compatibility of that**
11 **development with the adjacent railroad tracks?**

12 A. There were underpasses to provide vehicular
13 access to the waterfront development project that were
14 in -- that would intersect with the rail line, yes.

15 **Q. Are you familiar with any requirements that were**
16 **imposed on building design to address noise impacts from**
17 **the rail traffic?**

18 A. I have not specifically, but I recall there
19 were -- there were references to building design
20 standards, yes.

21 MR. DERR: I have no further questions.

22 JUDGE NOBLE: Redirect?

23 MR. TELEGIN: Thank you, Your Honor.

24

25

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REDIRECT EXAMINATION

1
2 BY MR. TELEGIN:

3 Q. Mr. Wechner, Mr. Derr asked you about a concept
4 called coming to the nuisance, and you didn't know what
5 that phrase -- Mr. Derr asked you about the concept of
6 coming to the nuisance, which is a phrase that you were
7 not familiar with. As a land use planner, are you
8 familiar with the concept of nonconforming uses?

9 A. Yes.

10 Q. And what is the concept of nonconforming uses?

11 A. I referred to it earlier in my testimony, when
12 you have a use that may be pre-existing, existing zoning
13 regulations or comp line designations, but it's been
14 established for a long time. The community has imposed
15 a land use regulation on that property that would
16 disallow that use, so it's nonconforming with the zoning
17 regulation and the comp plan designation as it exists,
18 even though the business pre-existed the zoning
19 designation.

20 Q. And is it typical or is it normal in the land
21 use context for jurisdictions to adopt rules, for
22 example, that say a nonconforming use may not be
23 enlarged or expanded?

24 A. Correct.

25 Q. And does the doctrine of nonconforming uses

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1 apply in the situation that Mr. Derr identified to you,
2 where you have an existing use and new uses come in and
3 surround that use?

4 A. Well, the nonconforming use ordinance would
5 apply to the use itself on its property. The off-site
6 impacts might be considered a new use when they come
7 around it, but it's an individual decision on a use that
8 is nonconformed with its zoning area comp plan
9 designation on that particular property.

10 Q. Okay. Mr. Derr asked you about ship traffic and
11 whether or not anything in the Vancouver Municipal Code
12 regulates ship traffic, and I believe that you cited to
13 the SMA. Does the SMA require you to look at off-site
14 impacts?

15 A. Yes.

16 Q. And does the City's Shoreline Management Program
17 require you specifically to look at whether or not
18 properties adjacent or away from the project site will
19 have a loss of shoreline ecological function and value?

20 A. Yes.

21 Q. Mr. Derr asked you about when you look at
22 off-site traffic impacts, do you look at a range of
23 times? Do you look at one time? I just want to clarify
24 what your testimony is on this point. You mentioned
25 57,000 and you mentioned the 160,000. What do those

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1 numbers refer to precisely?

2 A. Those were rail cars -- rail car volumes
3 reported by the Port of Vancouver. And they reported
4 a -- the greatest volume of rail cars at the Port of
5 Vancouver -- received at the Port of Vancouver was
6 57,000, I believe the year was 2007. And then my
7 comparison to -- just to get some idea of the increase
8 in intensity and scale of this operation compared to
9 existing rail traffic, was to multiply the average
10 number of trains, four, times the average number of
11 cars, there was a range given between 100 and 120, so I
12 used 110, times 365 days of the year, and that's 160,600
13 rail cars.

14 Q. So when we're speaking about ranges here, as I
15 understand it, is that then -- that point in the range,
16 is that essentially comparing the highest level at the
17 port ever with what this proposal is contemplating?

18 A. Correct.

19 MR. TELEGIN: Thank you. No further
20 questions.

21 JUDGE NOBLE: Council questions?

22 Mr. Snodgrass?

23 MR. SNODGRASS: Morning.

24 THE WITNESS: Morning.

25 MR. SNODGRASS: Just a couple of questions.

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1 When -- I wanted to, I guess, ask some questions about
2 the distinction between permitting -- a permit review of
3 a development proposal versus a subarea plan or
4 comprehensive planning activity, typically long-range
5 planning activity versus a development-reviewed
6 proposal.

7 THE WITNESS: Right.

8 MR. SNODGRASS: Am I right that I understand
9 your testimony that even on a development-reviewed
10 proposal, where the code is the primary if not exclusive
11 driver of the review, that off-site impacts are
12 considered through SEPA and other means as well?

13 THE WITNESS: Yes.

14 MR. SNODGRASS: To your understanding, is
15 SEPA part of the Vancouver City code?

16 THE WITNESS: Yes, it is.

17 MR. SNODGRASS: Is it fair to say that in a
18 longer range context that when, say, doing a subarea
19 plan, doing a comprehensive plan, those kind of issues,
20 that you look a little bit more holistically and perhaps
21 with a little less deference to which use got there
22 first and more what is sort of the longer term vision?

23 THE WITNESS: That's exactly what the
24 purpose of subarea planning and comprehensive planning
25 is, yes.

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1 MR. SNODGRASS: Okay. Lastly, just, you
2 know, I know you've worked for a number of
3 jurisdictions, is having a jail -- populated jail within
4 a larger industrial activity, industrial use such as the
5 port, have you come across that frequently?

6 THE WITNESS: No.

7 MR. SNODGRASS: Okay. No further questions.
8 Thank you.

9 JUDGE NOBLE: Mr. Paulson?

10 MR. PAULSON: Thank you. Mr. Wechner, just
11 a few questions. As I understand it, the railroad is
12 federally regulated and not governed by a city or a
13 county or even a state law --

14 THE WITNESS: Correct.

15 MR. PAULSON: -- in terms of its products?
16 And the BNSF railroad serves a number of locations,
17 everything from Vancouver, British Columbia, probably
18 down to California?

19 THE WITNESS: Uh-huh. Yes.

20 MR. PAULSON: Thank you. When was the City
21 Center Vision subarea plan last implemented dealing with
22 the waterfront development; do you know?

23 THE WITNESS: Specific to the waterfront
24 development project or the overall City Center --

25 MR. PAULSON: Waterfront development

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1 project.

2 THE WITNESS: There were road improvements
3 done in the last five years. I'm not sure of the exact
4 date.

5 MR. PAULSON: Which came first, the City
6 Center Vision and subarea plan or the West Vancouver
7 Freight Access project, in terms of the waterfront
8 development? If you know.

9 THE WITNESS: I'm not sure I can cite
10 specific dates.

11 MR. PAULSON: Do you know Eric Holmes?

12 THE WITNESS: Yes.

13 MR. PAULSON: What's his position?

14 THE WITNESS: He's the city manager for the
15 City of Vancouver.

16 MR. PAULSON: And he's the city manager and
17 has been the city manager since 2010. Does that sound
18 about right?

19 THE WITNESS: Sounds about right.

20 MR. PAULSON: Okay. And if he testified
21 that he -- the City and the Port and the developer of
22 the waterfront development worked together for the West
23 Vancouver Freight Access project to supply that
24 waterfront development, would that surprise you?

25 THE WITNESS: No. I believe that there was

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1 coordination regarding the underpasses that came under
2 the BNSF railroad that would serve the waterfront
3 development project.

4 MR. PAULSON: And if he testified that the
5 issue was not the trains but it was the commodity, would
6 that surprise you?

7 THE WITNESS: Yes.

8 MR. PAULSON: No other questions. Thank
9 you, sir.

10 JUDGE NOBLE: Other council questions?

11 Mr. Lynch?

12 MR. LYNCH: Morning.

13 THE WITNESS: Morning.

14 MR. LYNCH: I have a couple of questions
15 regarding the Fruit Valley area. And you've read their
16 subarea plan and you're familiar with that?

17 THE WITNESS: Yes.

18 MR. LYNCH: Do they identify any
19 nonconforming uses in that area in the area plan?

20 THE WITNESS: I don't recall any
21 specifically, but there may be. There are typically
22 nonconforming uses in every subarea.

23 MR. LYNCH: Is it -- you're not aware that
24 they're trying to phase out any industrial uses in that
25 area?

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1 THE WITNESS: No.

2 MR. LYNCH: Is it -- am I correct in saying
3 that more than half of the Fruit Valley neighborhood is
4 zoned industrial?

5 THE WITNESS: I'm not sure of the
6 percentage, but that's probably not -- I would agree
7 with that assumption, I think.

8 MR. LYNCH: And actually maybe somewhere in
9 the order of 60, 70 percent.

10 THE WITNESS: Could be.

11 MR. LYNCH: I just want to make sure I
12 understand your testimony about nonconforming uses.
13 You're not saying that existing railroad tracks coming
14 into a port, that that's a nonconforming use?

15 THE WITNESS: No, I'm not.

16 MR. LYNCH: Okay. If a port -- you
17 expressed concerns about the increased traffic coming
18 into the port, and I think Mr. Derr was asking you some
19 questions regarding that, but let me pursue that a
20 little further. There was a suggestion at one point
21 that the Port of Vancouver could turn to container
22 traffic there, and let's assume for the moment that that
23 was possible. If they were to fully use all their
24 existing land for container traffic, which meant that
25 you have a number of trains coming in and out of the

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1 port, are you saying that that would be inconsistent
2 with what the City of Vancouver plans?

3 THE WITNESS: I'm not certain it would be,
4 no.

5 MR. LYNCH: I'm sorry?

6 THE WITNESS: I don't know that it would be,
7 no.

8 MR. LYNCH: But I thought your testimony was
9 largely based on the number of trains coming in and
10 traffic, and also the commodity being thought --

11 THE WITNESS: Well, it could be, depending
12 upon how much rail traffic is produced that impacts
13 residential neighborhoods the rail line comes through.
14 Each use has to be looked at individually. This use is
15 unique in that it's a hazardous substance, it is in part
16 the commodity -- as Mr. Paulson referred to and
17 Mr. Holmes I believe referred to, it is in part a
18 commodity that's coming through residential
19 neighborhoods; it is also the rail traffic and the
20 impacts associated with that. If a container traffic
21 came through, then the decision would not be before
22 EFSEC and would not be -- take this broader scope. It
23 would be a City of Vancouver call on whether it's
24 compliant with their code or not.

25 MR. LYNCH: City of Vancouver ever express

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1 concern with the port about fully going out to their
2 potential?

3 THE WITNESS: I don't know that they have or
4 not.

5 MR. LYNCH: Thank you.

6 JUDGE NOBLE: Other council questions?

7 Questions based on council questions?

8 MR. DERR: Just a couple.

9 RE-CROSS-EXAMINATION

10 BY MR. DERR:

11 Q. It's back to me, Mr. Wechner.

12 A. Okay.

13 Q. You were asked a question about locating the
14 jail in the industrial area. Do you recall that
15 question?

16 A. Yes.

17 Q. Did you review the siting documents, the
18 environmental review for that jail siting decision?

19 A. Briefly, yes.

20 Q. So do you recall the fact that those siting
21 documents recognize that the particular location was in
22 the middle of an industrial area and would come with
23 associated potential land use conflicts?

24 A. Yes, it did.

25 Q. So is it fair to say the jail knew what it was

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1 getting into?

2 A. I think so.

3 Q. Okay. And then lastly, you were talking about,
4 I believe, neighborhood plans, neighborhood planning
5 process and this increase in rail traffic.

6 MR. DERR: Ms. Mastro, could you pull up
7 Exhibit 244, page 99.

8 BY MR. DERR:

9 Q. The way this works, it comes up, we think, on
10 the screen. This is the first test of the day, so we'll
11 find out.

12 MS. MASTRO: Have faith.

13 MR. DERR: Have faith, yes, ma'am. I can't
14 remember. Can we blow these up?

15 BY MR. DERR:

16 Q. So this is a document that was part of the -- is
17 part of the record, and can you identify what this
18 document is or what it appears to be?

19 A. You're asking me to identify it?

20 Q. Yes.

21 A. It's a letter from Lee McCallister, Fruit
22 Valley neighborhood chairman and --

23 Q. And what does it say --

24 (Simultaneous discussion interrupted by
25 reporter.)

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1 BY MR. DERR:

2 **Q. Go ahead. You finish.**

3 A. It's a letter from Lee McCallister, the Fruit
4 Valley neighborhood chairman. It is signed. It's not
5 addressed to anyone in particular.

6 **Q. And what's the subject matter of the letter?**

7 A. I'm reading it.

8 (Witness reviews document.)

9 A. They talk about rail traffic versus truck
10 traffic. There is an assessment of transportation
11 record of rail transport, and the final statement is the
12 Fruit Valley Neighborhood Association supports and
13 endorsed the project.

14 MR. DERR: Thank you. I have no further
15 questions.

16 JUDGE NOBLE: Any other questions based on
17 council questions?

18 MR. TELEGIN: Yes, Your Honor.

19 REDIRECT EXAMINATION

20 BY MR. TELEGIN:

21 **Q. Mr. Wechner, Councilman Paulson asked you**
22 **whether the railroad was federally regulated. I just**
23 **want to know -- and also Mr. Snodgrass asked you if the**
24 **City's SEPA code is part of its development code, and I**
25 **believe you answered yes to both questions. My question**

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1 was, under SEPA, are jurisdictions or agencies limited
2 to considering impacts within their jurisdiction?

3 A. No.

4 **Q. In fact, are they expressly required to look at**
5 **impacts outside their jurisdiction?**

6 A. Yes.

7 MR. TELEGIN: Ms. Mastro, could you pull up
8 Exhibit 244 again, please.

9 BY MR. TELEGIN:

10 **Q. Mr. Wechner, you were asked a couple of**
11 **questions, I believe, by Chair Lynch, and maybe others,**
12 **about build-out of the West Vancouver Freight Access**
13 **project.**

14 MR. TELEGIN: Ms. Mastro, could you please
15 turn to page 17 of that document. I'm sorry. Is that
16 page 17?

17 MS. MASTRO: It is.

18 MR. TELEGIN: That's not my page 17.

19 MR. DERR: If it helps, that's Bates stamped
20 17. So you may be dealing --

21 MR. TELEGIN: I'm using the internal
22 pagination of the document. I am sorry. If you look at
23 the report itself, there are page numbers within the
24 document.

25 MR. ROSSMAN: Page 31 of the PDF.

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1 MS. MASTRO: Thank you.

2 MR. TELEGIN: Thank you.

3 BY MR. TELEGIN:

4 Q. Do you see that second-to-last paragraph,
5 Mr. Wechner?

6 A. Beginning with the word "Currently"?

7 Q. Yes. Could you please read that paragraph just
8 to yourself and tell me what your understanding of that
9 paragraph is.

10 (Witness reviews document.)

11 BY MR. TELEGIN:

12 Q. I guess I'll ask you, according to this
13 paragraph, how many trains was the West Vancouver
14 Freight Access project anticipated to add to the port on
15 a daily basis?

16 A. Three point five.

17 Q. Three point five. Does this project add more
18 than 3.5 trains per day?

19 A. Yes.

20 Q. Thank you. Mr. Derr also asked you about the
21 letter from the Fruit Valley Neighborhood Association,
22 and he asked you a question. He said is it -- I'm
23 sorry. Two questions. On the Fruit Valley Neighborhood
24 Association letter, do you know if that letter was
25 written at a time when the Fruit Valley neighborhood was

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1 envisioning an oil terminal at the port?

2 A. I believe the date was 2009. That would have
3 preceded the oil terminal proposal.

4 Q. Okay. Thank you. Mr. Derr also asked you about
5 the Jail Work Center, and he asked you is it fair to say
6 that they knew what they were getting into, and I
7 believe you answered yes. I just wanted to clarify.
8 Did the jail know, in your opinion, that they were
9 getting into an oil terminal?

10 A. Mr. Derr asked sort of a general question on
11 whether they were getting into an industrial area, and
12 in that context, I answered yes. The oil terminal
13 proposal had not been -- had not been proposed at all to
14 my -- to my knowledge, when the Jail Work Center was
15 built.

16 MR. TELEGIN: Thank you. No further
17 questions.

18 THE WITNESS: Thank you.

19 JUDGE NOBLE: Thank you, Mr. Wechner. You
20 are excused as a witness. Thank you for your testimony
21 today.

22 THE WITNESS: Thank you, Judge Noble.

23 JUDGE NOBLE: This is a good time to take
24 the morning break. We will be in recess until 10:40.

25 (Recess taken from 10:25 a.m. to 10:44 a.m.)

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1 JUDGE NOBLE: Mr. Kernutt, are you ready to
2 call your next witness?

3 MR. KERNUTT: I am, Your Honor. For the
4 record, this is Matt Kernutt, statutory Counsel for the
5 Environment, and I call Mr. James Holmes.

6 JUDGE NOBLE: Mr. Holmes, would you raise
7 your right hand, please.

8 (Witness sworn.)

9 JUDGE NOBLE: Thank you. Please be seated.
10 You may proceed, Mr. Kernutt.

11 JAMES HOLMES,

12 having been first duly sworn,

13 testified as follows:

14 DIRECT EXAMINATION

15 BY MR. KERNUTT:

16 Q. Mr. Holmes, this reminder that I'm about to give
17 you is for me even more so than you. For the sake of
18 the court reporter, do remember to speak as -- speak
19 slowly in your answers. I have a personal over/under of
20 five reminders for myself from the ALJ. I don't know if
21 I will reach that, but I'm hopeful.

22 Can you please state and spell your name for the
23 record.

24 A. I'm James Holmes, J-a-m-e-s, H-o-l-m-e-s.

25 Q. And where are you currently employed?

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1 A. I am currently employed at ABT, A-B-T,
2 Associates in Boulder, Colorado.

3 **Q. In what capacity are you employed there?**

4 A. ABT Associates is a consulting firm that works
5 on environmental regulations and environmental science.
6 I work in the environment and natural resources
7 division, and I lead a practice on natural resource
8 damage assessment and environmental science.

9 **Q. I would like you to sort of, for the council,
10 further explain your job duties in that capacity.**

11 A. Be happy to. My position is vice president, and
12 I co-lead a natural resource damage assessment practice.
13 So the vast majority of my work is spent conducting
14 natural resource damage assessments and reviewing
15 environmental science data; that is, I have been doing
16 this for ABT and its predecessor companies, which
17 include Stratus Consulting, who merged with ABT
18 Associates last year. Since 1991, though, I had a
19 break, so I worked on natural resource damage
20 assessments until the mid 1990s, and then I left and did
21 other work. I worked again on natural resource damage
22 assessments around 2000 when I was a graduate student,
23 and then returned full-time to the company that is now
24 ABT Associates in 2004.

25 **Q. And you submitted written prefiled testimony in**

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1 this matter, correct?

2 A. That is correct.

3 **Q. Do you affirm that your prefiled written**
4 **testimony accurately reflects your opinion in this**
5 **matter?**

6 A. Yes, I do.

7 MR. KERNUTT: For the council's benefit,
8 Mr. Holmes' CV is located at Exhibit 1501, and that has
9 been admitted.

10 BY MR. KERNUTT:

11 **Q. So I would like to turn to the primary**
12 **employment responsibilities you have in relation to**
13 **natural resource damage assessments. There has been**
14 **testimony relating to what I'm going to call NRDAs, for**
15 **the purpose of throwing more acronyms in front of EFSEC.**
16 **Can you first please explain what natural resource**
17 **damages are.**

18 A. Natural resource damages, the term "damages"
19 refers to compensation that is required to compensate
20 the public if a spill occurs and the value of natural
21 resources are diminished. So the government holds
22 natural resources in trust for the public. They are the
23 trustees of natural resources. And if something is done
24 to reduce the value that impacts those natural
25 resources, under either the Superfund act or the Oil

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1 Pollution Act, depending on the nature of the spill, the
2 public is entitled to be compensated for that loss, and
3 the compensation is to be used to restore the natural
4 resources that were harmed.

5 **Q. So then what is a natural resource damages**
6 **assessment?**

7 A. As the name implies, the assessment of natural
8 resource damages includes trying to figure out what the
9 nature of the spill was, where the contaminant went,
10 what natural resources were exposed to that contaminant,
11 what harm was caused by that exposure, which in the
12 natural resource damage assessment the term is
13 "injuries" to natural resources, and then what
14 compensation is due to the public because of those
15 injuries, and those are the damages.

16 **Q. So you testified earlier that you lead the**
17 **practice group on NRDAs at ABT Associates, correct?**

18 A. I am co-leader of that, yes.

19 **Q. Co-leader. How many NRDAs has your practice**
20 **group worked on, approximately?**

21 A. We have worked on over a hundred. Starting in
22 the mid to late 1980s, we have had a natural resource
23 damage assessment practice. The company name has
24 changed many times. The people who are there are still
25 the same people who were there in the late 1980s and

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1 early 1990s. The folks who are still there now are --
2 have a huge amount of experience conducting these
3 assessments, and I personally have done -- or have
4 worked on at least 25 or 30 assessments over the years.

5 **Q. Can you provide some of the more high-profile**
6 **examples of NRDAs that you have been involved with or**
7 **your practice group?**

8 A. Certainly. A little walk through history here.
9 So one of the first large ones that we worked on was the
10 Clark Fork River in Montana, which was a 120-mile
11 Superfund Complex from copper mining in Butte and
12 smelting in Anaconda. We worked on a very large
13 multiyear NRDA in the Coeur d'Alene Valley in the Idaho
14 panhandle. That was a lead-zinc smelting complex. We
15 worked on the bankruptcy of Asarco, which that's the
16 American Smelting and Refining Company, I believe, but
17 they went into bankruptcy in the late 2000s, and every
18 area that had natural resource impacts from a hundred
19 years of their history had a damages claim that needed
20 to get filed in the bankruptcy court. And then most
21 recently we worked on Deepwater Horizon in the Gulf of
22 Mexico which occurred in 2010 and recently settled.

23 **Q. So let's turn back a little bit to the NRDA**
24 **process. When you are conducting a natural resource**
25 **damages assessment, you testified that you are looking**

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1 to essentially, as the name implies, assess natural
2 resource damages. What is the general process for
3 assessing NRDA's?

4 A. Without going into too many boring details, the
5 general process when trying to lay out a natural
6 resource damage assessment is to start with trying to
7 quantify how much was spilled over what period of time.
8 Then doing a pathway analysis; where did the contaminant
9 that was spilled go. Doing an exposure analysis, which
10 is what natural resources were exposed to that
11 contaminant, at what concentrations, for how long and
12 where. And then you do an injury assessment; what
13 adverse effects did that exposure to the contaminant
14 cause, where and for how long. And then you take all of
15 that information and put it together into an overall
16 picture of these were the adverse impacts of the spill,
17 then have to figure out what is the appropriate
18 restoration or the appropriate valuation of those
19 impacts, and that forms the basis of your claim.

20 **Q. In the event of a spill, who generally is**
21 **involved in the preparation of an NRDA?**

22 A. That can be somewhat site-specific. I mentioned
23 natural resource trustees before. The trustees are
24 always involved in natural resource damage assessment.
25 That is their duty as the trustees. The responsible

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1 party or responsible parties are often involved. Again,
2 it is entirely case-specific. Some responsible parties
3 are proactive and want to work cooperatively with the
4 trustees to make the natural resource damage assessment
5 go as quickly as possible and resolve their liability.
6 Some responsible parties are quite recalcitrant and will
7 deny any liability till -- as far as they possibly can,
8 and that is an entirely different kind of natural
9 resource damage assessment for the trustees.

10 **Q. Have you been involved in an NRDA that has**
11 **included tribal trustees?**

12 A. I have. I've worked on the -- probably the most
13 prominent one was I wrote the conceptual site model for
14 a natural resource damage assessment in Hanford,
15 upstream of the reaches that we're talking about here
16 today. That included several tribes, including the
17 Yakama and the Nez Perce and I think Umatilla. And I
18 worked on what they call the Tri-State Mining District
19 in Kansas, Oklahoma and Missouri. The Tar Creek
20 assessment plan, I think had six or seven different
21 tribal trustees who were part of that assessment in
22 Oklahoma. And then my company has worked -- including
23 people who worked under me, have worked on several dozen
24 other claims for different tribes around the country.

25 **Q. Can you -- in working with the tribal trustees,**

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1 can you generally describe your understanding or how --
2 your interaction with the tribal trustees regarding the
3 ability of natural resource damages to replace impacts
4 to the tribes?

5 A. I can speak to my experience in particular of
6 the Hanford. I do not consider myself to be an expert
7 on tribal cultural values. And, in fact, one important
8 point for somebody who specializes in doing natural
9 resource damage assessments is we are aggregators of
10 information, but we are not experts in everything. So I
11 described earlier how you need to do fate and transport,
12 you need to do exposure studies, you need to do toxicity
13 studies to understand what the adverse effects are, and
14 in a typical natural resource damage assessment, you
15 would have separate experts who were in charge of all of
16 those different points, and then someone like me would
17 be the aggregator of this information into one claim;
18 how to use that information to be able to make a
19 successful damages claim. So when I talk about my
20 experience working in Hanford, I'm going to be talking
21 about my experience from what I heard from the tribal
22 members and the council at Hanford rather than trying to
23 say that I am an independent expert on tribal cultural
24 values.

25 So with that caveat, the tribes were pretty

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1 clear that they did not agree that compensation in the
2 form of money was in any way, shape or form an adequate
3 compensation to them for harms that occurred in the
4 environment. And in particular, as I'm sure we're going
5 to discuss, when -- often when doing natural resource
6 damages claims, you use a discount factor to account for
7 time. So that means harms that occurred in the past get
8 compounded and anything that occurs in the future gets
9 discounted. And the idea that if you leave
10 contamination in place, it should get discounted in the
11 future so that future generations are going to be
12 exposed to that contamination or have some sort of harm
13 there, was something that they couldn't possibly have
14 been more clear about their rejection of that standard
15 practice in NRDA. That was not something that fit into
16 their world view at all.

17 **Q. I believe you testified a little earlier, and**
18 **you mentioned natural resource injuries. Can you**
19 **describe what natural resource injuries are as opposed**
20 **to natural resource damages?**

21 A. Certainly. So natural resource injuries are
22 adverse effects on specific natural resources. So an
23 example, if you are looking at injuries to natural
24 resources like fish, would be to look at toxicology data
25 in which you expose fish to that particular contaminant

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1 and if the fish suffers some sort of adverse effect,
2 that could be anything from mortality down to lack of
3 growth, lack of reproduction, any kind of adverse
4 effects that could be internal physiological effects,
5 those sorts of data are used to be able to assess
6 natural resource injuries. If you know what the
7 exposure of the fish in the wild was to those
8 concentrations, you can make some estimates of what sort
9 of adverse effects are going to happen.

10 In the case of birds, you do the same thing.
11 You can -- you can give birds oil internally and see
12 what kind of adverse effects happens, you can put oil on
13 bird feathers and see what kind of adverse effects
14 happens, you can put oil on a bird egg and see what
15 happens to the viability of the egg; those are the sorts
16 of studies that are used to try to assess natural
17 resource injuries.

18 **Q. What are some of the limitations of NRDAs?**

19 A. There are lots. But the primary limitation is,
20 particularly if you're dealing with an ephemeral spill,
21 like an oil spill, is -- it is not possible to actually
22 fill every data gap. It is very difficult to get into
23 the field and collect a sufficient amount of samples to
24 really be able to know exactly where all the oil went
25 and when, at what concentration. Oil in particular is

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1 notoriously heterogeneous. It does not make a nice,
2 even plume going downstream. It sorts itself into lines
3 with slick, lines with no slick. And then you have the
4 mixing of the oil and the third dimension going down
5 into the water, what are the fish actually exposed to,
6 because the oil slick gets down into the water. There's
7 a lot of data gaps like that that are not possible to be
8 able to answer, a lot of which leads to -- just in the
9 nature of the NRDA world, there are some uncertainties
10 that are difficult to answer.

11 There are some things that we're certain about,
12 like a certain contaminant is toxic if something is
13 exposed to it. We'll have some samples, we'll have some
14 pictures. You might have, you know, some counts of dead
15 fish or dead birds or something like that. But trying
16 to put that together into a full picture of every
17 natural resource that might have gotten harmed is a
18 difficult process and has a fair amount of uncertainty
19 to it.

20 **Q. Given how difficult the NRDA process is that you**
21 **just testified or can be, in your experience, how long**
22 **does the natural resource damage assessment process**
23 **generally take?**

24 A. It can range by quite a bit. It depends again
25 on both the size of the problem and the cooperativeness

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1 of the responsible party. So for something that was
2 really a tremendously large spill, like Deepwater
3 Horizon, the fact that they reached settlement within
4 six years was really quite surprising. That is much
5 shorter than we might have anticipated. I had been --
6 for smaller spills, you can reach settlement within a
7 few years. For larger areas, larger issues, large
8 mining sites, the Coeur d'Alene Basin, we worked on a
9 natural resource damage assessment there for almost
10 20 years. Clark Fork River, we worked on that
11 assessment for at least ten years. So these things can
12 go on for a long time.

13 **Q. In your experience, when do restoration projects**
14 **base that the NRDA's measuring generally begin after a**
15 **spill?**

16 A. Many years afterwards. So you have -- you know,
17 even in the case of Deepwater Horizon where, within the
18 first year, BP recognized that they had liability and
19 set up a \$1 billion fund to start doing restoration
20 immediately, by the time the trustees could agree on the
21 projects and everybody could agree on what kind of
22 credit BP might get for doing those projects and you go
23 through the standard National Environmental Policy Act,
24 NEPA -- that's what it stands for -- process of an
25 environmental assessment during an environmental impact

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1 statement, it's several years later in the best of
2 cases, and it can be many, many years later if it's a
3 protracted NRDA with litigation.

4 **Q. What is the current -- what is currently the**
5 **most common method of calculating natural resource**
6 **damages?**

7 A. Currently, the most common method is something
8 called "equivalency analysis." It is two different
9 types of equivalency analysis. There's the resource
10 equivalency analysis where you might try to scale a
11 specific resource, and then there's habitat equivalency
12 analysis. So the basis of an equivalency analysis is
13 you try to add up all of the harm that has occurred to
14 natural resources or to a specific natural resource over
15 time and over space, and on a ledger, that's your debit.
16 Then you design restoration projects that are going to
17 restore or acquire equivalent natural resources to --
18 and those restoration projects get scaled until you have
19 enough restoration to offset the harm that has occurred.

20 **Q. All right. I'd like to turn specifically to**
21 **your report that you -- that ABT Associates filed in**
22 **this particular proceeding. In your report, you**
23 **evaluated two worst-case discharge scenarios, correct?**

24 A. That's correct.

25 **Q. And where did you get the basis for those**

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1 scenarios?

2 A. Both of the scenarios came out of the draft
3 Environmental Impact Statement.

4 **Q. Now, does your testimony include any evaluation**
5 **of the likelihood of either scenario occurring?**

6 A. No, that's not something we would have any
7 expertise in. We just looked up what the effective
8 worst-case discharge was for both of the scenarios and
9 used them.

10 **Q. In your report, you list several limitations,**
11 **things that you did not end up looking at, namely,**
12 **potential injuries that could result from the two**
13 **scenarios that you did not account for. Can you please**
14 **describe those limitations.**

15 A. Yeah, I'm going to turn in here -- because
16 there's many of them. I'm going to look at my report
17 real quick to make sure that I don't miss some. So the
18 two most obvious ones that we did not account for are
19 potential natural resource injuries in marine
20 environments. We ended our analysis at the mouth of the
21 Columbia River, but recognized that -- particularly in
22 the case of a large vessel grounding in Vancouver, that
23 it is highly likely that a lot of oil would get
24 discharged into the ocean and enter into a whole new
25 assessment of ocean habitats, ocean resources, shoreline

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1 resources, and that was beyond the time and the scope
2 that we had to be able to work on this. So that is an
3 obvious limitation of the report that we had here.

4 Another major limitation was we did not attempt
5 to account for natural resource valuation from tribal
6 members or from the public. The equivalency analysis
7 that I described before is something that -- it makes
8 sense to many people, that if you have an amount of
9 restoration that's appropriate compensation for the
10 injury, that that balances out well, but sometimes that
11 does not do a good job of capturing how the public
12 values natural resources.

13 There are other economic methods that economists
14 can use to try to capture those values, to try to make
15 sure that the public thinks that the restoration
16 projects are actually adequately compensating them.
17 That -- we had no data on that, but this would be an
18 area where that would probably be something that * would
19 recommend to a trustee to investigate.

20 **Q. Let me interrupt briefly. Did you account for**
21 **spill response efforts in assessing potential injuries?**

22 A. That is another -- something that we did not
23 account for on either side of the ledger. So spill
24 response can sometimes remove some of the oil from the
25 environment, but spill response can very often cause

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1 additional injuries to natural resources.

2 Typical spill response-type activities would be
3 skimming and burning of oil. You'll have a whole bunch
4 of response vessels in the river that wouldn't be there
5 otherwise. If oil gets onto shorelines or riverbanks,
6 the response crews will mow and rake and dig to remove
7 the oil from the shorelines. Dispersants are used quite
8 regularly to try to disperse surface slicks, which can
9 be very effective at preventing the slicks from coming
10 ashore, but it drives the oil down into the water column
11 and can expose more water column biota to the oil in
12 smaller droplets where it's more available to them. So
13 there's pluses and minuses to response actions, and we
14 did not attempt to quantify either one of those.

15 **Q. Let me interrupt you really quickly, just**
16 **because I'm not a scientist. You mentioned "biota."**
17 **What is that?**

18 A. Critters, living things. Fish that are in the
19 water, for instance. Biological resources.

20 **Q. What impact do these limitations that you**
21 **described, and I know you only described a few of them,**
22 **have on the conclusions in your report?**

23 A. I feel fairly confident that the damages
24 estimates we came up with for just the Columbia River
25 proper, without accounting for the valuation studies and

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1 without accounting for any oil that would get into the
2 ocean or along the shorelines, would be another estimate
3 of the total natural resource damages that one would
4 have if the spill actually occurred.

5 **Q. I'm going to turn to the first scenario that you**
6 **evaluated in your report, the vessel discharge scenario.**
7 **I'll refer to that as Scenario 1, or the vessel**
8 **discharge scenario. And this is a hypothetical spill,**
9 **correct?**

10 A. That's my understanding.

11 **Q. So where did this hypothetical spill occur, the**
12 **location that you evaluated?**

13 A. The scenario that we put together was to have
14 the spill happen in Vancouver, and so that's a hundred
15 miles upstream from the mouth. Certainly an argument
16 could be made that if this is a vessel grounding and the
17 vessel were to ground and lose all its cargo in Astoria
18 rather than Vancouver, your natural resource damages
19 might be quite a bit higher, but for our purposes it was
20 a little easier to be able to assess a spill that
21 occurred further upstream. So we, for this scenario,
22 had the spill happen near the terminal.

23 **Q. What time of year?**

24 A. We had a scenario of the spill occurring in the
25 spring, primarily because of the migrating salmon

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1 populations that might get exposed to it.

2 **Q. And what amount of oil did you approximate would**
3 **spill in this worst-case discharge scenario?**

4 A. We didn't actually approximate that. We just
5 copied the number out of the Environmental Impact
6 Statement, and my recollection is it was over
7 189,000 barrels, close to 89 million gallons.

8 **Q. And you evaluated two sort of subscenarios**
9 **regarding the rate of discharge from this spill. Can**
10 **you describe that for the council?**

11 A. Yes. The -- in trying to understand the
12 implications for what concentrations of oil would -- or
13 biological resources be exposed to in the river, it
14 would be different if a vessel catastrophically broke in
15 half and dumped its entire cargo quickly into the river
16 or if a vessel punctured a hole and oil came out of it
17 over a longer period of time. So we modeled both the
18 concentrations and the area of oil slick if the oil were
19 to come out in a two-hour period, and then separately,
20 we examined if the oil were to come out in a 24-hour
21 period.

22 **Q. So I believe you testified earlier that in the**
23 **two -- in this scenario, you would anticipate oil**
24 **reaching the mouth of the Columbia River; is that**
25 **correct?**

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1 A. That is correct.

2 **Q. How long does your -- in your report do you**
3 **estimate the oil would take to reach the mouth of the**
4 **Columbia River?**

5 A. We came up with an estimate based on the net
6 average current that we had from National Oceanic and
7 Atmospheric Information, NOAA buoys, that would have the
8 oil reach Longview, which is about the furthest upstream
9 extent of saltwater intrusion, and then at that point,
10 you have tidal reversals during the day, so your net
11 downstream flow becomes quite a bit less and it will
12 take, in our estimation, another four days to actually
13 reach the mouth of the Columbia and discharge into the
14 ocean.

15 **Q. Did you have any particular data spills, like a**
16 **prior oil spill, that helped you in this analysis?**

17 A. After we had agreed on what the scope we were
18 going to work on was going to be, we conducted some
19 literature research to see what information we could
20 find that would help us estimate the fate and transport
21 of oil, a potential natural resource exposure, and we
22 found that there was a grounded vessel in 1984, I
23 believe in the town of St. Helens, Oregon, which is
24 roughly 15 river miles downstream of Vancouver, and the
25 people working that spill published some spill reports

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1 that were very helpful. They showed for that particular
2 spill, which occurred in March, that oil went quite
3 rapidly downstream, in fact, discharging into the ocean
4 within two days, and most of the adverse impacts that
5 they were able to quantify in the mid 1980s, including
6 dead waterfowl and whatnot, were found along the coast
7 of Washington. So it well-extended close to 50 miles
8 north, and there was some oil also south along the
9 Oregon coast, but most of the oil was on the Washington
10 coast.

11 MR. KERNUTT: Ms. Mastro, could you please
12 bring up page 75 of Exhibit 1503. For the council's
13 benefit, this is the ABT Associates report,
14 Exhibit 1503, Bates stamped page 75.

15 BY MR. KERNUTT:

16 **Q. Mr. Holmes, can you please describe the figure**
17 **that is up on this page.**

18 A. That appears to be a figure that shows the
19 national wildlife refuges and the small game management
20 area that are in the Columbia River downstream of the
21 Bonneville Dam. There are seven national wildlife
22 refuges along that 140-mile stretch of river.

23 **Q. In your report, when you calculate potential**
24 **injuries, did you account for these -- how did you use**
25 **the wildlife refuges and managed habitat declared on**

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1 this figure?

2 A. For both scenarios. But since we were talking
3 about the vessel scenario, we assumed that natural
4 resources within the river channel itself would be
5 exposed to oil from Vancouver down to the mouth. And
6 although I believe we defined the mouth a little bit --
7 it's going to be hard to figure out where you're
8 actually still river and where you are ocean when you
9 get down there. So I think that what we were -- where
10 we put the mouth of the river might have been five or
11 six miles inland from where other people say is river
12 mile zero.

13 But we did an assessment of potential natural
14 resource injuries in the river channel itself based on
15 the hydrography data set. It's in the federal
16 geographic information system files. And then
17 separately, we did an assessment of potential injuries
18 to floodplain resources. And because the spill hasn't
19 happened, we don't know what the river stage will be and
20 we don't know whether the oil will get up into the
21 floodplain or how far into the floodplain it will go.
22 What we do know is that there are birds and other
23 natural resources that live in the floodplain that are
24 going to get exposed to that oil because they eat fish
25 out of the river. They're going to fly, get oil, then

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1 come back into the floodplain. So as a proxy for
2 estimating floodplain habitat injuries, we focused just
3 on the wetland areas within the natural wildlife
4 refuge -- national wildlife refuges downstream of the
5 oil.

6 **Q. What injuries -- natural resource injuries can**
7 **occur to fish as a result of such an oil spill, or any**
8 **oil spill?**

9 A. We -- ABT was in charge of the aquatic injury
10 assessment and the fish toxicology work for Deepwater
11 Horizon. We had a massive program that included 12 labs
12 and several hundred individual toxicity tests, and we
13 learned a whole lot more about the adverse effects of
14 oil on a whole range of different fish. And we found,
15 somewhat surprisingly, that very low concentrations of
16 oil -- generally when one is doing a toxicity test on
17 oil, you look at polycyclic aromatic hydrocarbons, PAHs.
18 PAHs are only about 1 percent of a crude oil, but they
19 are known to be toxic. And so we looked at PAH exposure
20 to Deepwater Horizon oil. We looked at how that
21 toxicity gets increased if you have sunshine, that the
22 UV actually makes the oil more toxic. We even did tests
23 where we just had a very thin slick that we pitched on
24 top of a beaker and then put fish eggs in it and found
25 that even very small slicks would prevent those fish

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1 eggs from being viable. So in -- long story short, we
2 found that, to a wide range of species, oil exposure
3 causes toxic responses.

4 **Q. Do you have estimates of potential mortality**
5 **rate in your report?**

6 A. That is -- what we were able to do in our
7 report, we were able to discuss what we know about what
8 concentrations are toxic to fish. We were able to
9 estimate what concentrations might be in the water based
10 on what we know about the PAH profile of Bakken crude
11 and the mixing models that are included in the EIS. So
12 we were able to estimate the exposure and we were able
13 to estimate how many salmon might get exposed to that
14 based on the fish counts at Bonneville Dam.

15 What we did not have is a wealth of information
16 on what sort of toxic response does, for instance, a
17 two-year-old Chinook smolt have if it's exposed to oil
18 and what sort of toxic response would an adult migrating
19 salmon coming back up the Columbia River and
20 intersecting this oil have.

21 We know from the Deepwater Horizon studies that
22 fish such as mahi-mahi were very athletic and fast, an
23 impressive fish, suffered great decreases in their
24 swimming ability and -- if they were exposed to oil even
25 as adults. So we can hypothesize that the exposure to

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1 oil for adult salmon trying to migrate back to spawn
2 would have some adverse effects, but without having
3 actual data, we really had to just take some guesses as
4 to what the total toxicity might be.

5 **Q. In your report you do -- and you mentioned in**
6 **your -- just answering that last question, that you**
7 **focused largely on salmon populations of impacts. Why**
8 **is that?**

9 A. Primarily the -- there's two reasons why I
10 wanted to focus on salmon. It's very common in a
11 natural resource damage assessment for trustees to focus
12 on a high-profile species, a species that might be a
13 listed threatened and endangered species, a species in
14 which a lot of effort has been put into trying to
15 restore the species in the past. Salmon qualifies.

16 The other reason that we focused on salmon is
17 because of the fish count at Bonneville Dam. We
18 actually -- unlike most other biological resources in
19 that area of the lower Columbia River, we actually have
20 pretty good annual fish counts if salmon go up and down
21 through that dam. So we had some numbers to work with.

22 **Q. Do you anticipate injuries to birds in this**
23 **scenario?**

24 A. Yes, I do.

25 **Q. What have previous spills, like Deepwater**

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1 Horizon, revealed about the injuries to birds as a
2 result of an oil spill?

3 A. Again, ABT Associates was in charge of the avian
4 toxicity program for Deepwater Horizon, as well -- under
5 the guidance of Dr. Karen Dean. And one of the
6 interesting -- we did a lot of new work. What was known
7 going into Deepwater Horizon was that if eggs have oil
8 on them, even small amounts of oil, they tend to be
9 nonviable. And what was known from a lot of research
10 done after Exxon Valdez, was oiled feathers don't
11 insulate as well and birds become hypothermic. Because
12 Deepwater Horizon happened in a place where -- in the
13 middle of the summer in the Gulf of Mexico, hypothermia
14 isn't high on people's minds. But they wanted to find
15 out what other adverse impacts could occur if a bird
16 were to have oil on it. So one of the ways to know that
17 a bird has been exposed is to actually be able to see
18 the oil on the feathers, and we needed to find out what
19 happens if that bird preens the oil off the feathers and
20 ingests it, what happens if that's a migratory bird and
21 it still has a few thousand miles of migration to go
22 when they have oil on their feathers.

23 And what we found was some information that was
24 already known, that ingesting oil causes hemolytic
25 anemia, as in low red blood cells, lethargic. A new

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1 finding was exposure to oil actually caused the heart to
2 get flabby, like the birds were getting congestive heart
3 failure. Another new piece of information from
4 Deepwater Horizon was that homing pigeons that had light
5 amounts of oil on their feathers were not nearly as
6 efficient at being able to fly home. We had GPS
7 trackers on them, and the oiled birds, instead of flying
8 in a direct straight line at one altitude back home were
9 flying off-course. It looked like they were trying to
10 find thermals on ridges. They were flying up; they were
11 flying down. It seemed that they were having trouble
12 keeping themselves orientated and flying. Also we found
13 really that even small amounts of oil on a bird can
14 greatly affect it.

15 **Q. In the vessel discharge scenario, can you talk**
16 **to me -- explain sort of the service loss curve and how**
17 **that operates in determining not just damages but also**
18 **the length of time it might take for a habitat**
19 **restoration to return that habitat to a baseline**
20 **condition.**

21 A. I'll take one step back from that, because you
22 used the term "service loss" which I don't think we've
23 talked about.

24 **Q. Correct.**

25 A. So when doing a habitat equivalency analysis, or

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1 a HEA, which is one of the most common methods for
2 evaluating natural resource damages, there is a term for
3 "lost habitat services." And it's meant to be a scaling
4 term that allows the trustees to be able to have a
5 habitat that is -- that got injured, and a habitat that
6 gets restored, if they're not completely identical or if
7 the services that one provides is slightly different
8 than the services that another one provides, that you
9 can use this as a scaling factor to be able to make sure
10 that you're calculating the total amount of restoration
11 properly.

12 So I have this term in my HEA calculations, and
13 it depends on which of the reaches in the river and
14 which of the scenarios; generally, I assumed that the
15 vast majority of the adverse impacts were going to
16 happen in the first year of the spill. It would recover
17 fairly rapidly in the second year of the spill. But as
18 is typical in oil spills, there are some lingering
19 adverse effects of fairly low level of service loss, if
20 you will, and I had that extending for another
21 eight years. So it would reach what's called baseline
22 conditions, the conditions if the spill had not
23 occurred, ten years after the spill.

24 **Q. What -- so now we'll turn a little bit to the**
25 **dollar amounts that represent what the natural resource**

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1 damages represent. And you used the HEA method in
2 calculating natural resource damages for the vessel
3 spill, correct?

4 A. That's correct.

5 MR. KERNUTT: So, Ms. Mastro, if you could
6 please turn to -- and hold on one second -- that would
7 be page 76 of Exhibit 1503. If you can sort of zoom in
8 to Table 4.8 there. Thank you.

9 BY MR. KERNUTT:

10 **Q. You have several -- I believe there's about**
11 **four -- there is -- I don't believe. I know. There are**
12 **four dollar amount ranges and damage estimates on there.**
13 **The bottom method is the HEA method, correct?**

14 A. That's correct.

15 **Q. You have two numbers that you added together.**
16 **Can you please describe what those two numbers**
17 **represent.**

18 A. Sure. The first number is the total estimate of
19 natural resource damages for injuries in the river
20 channel itself. So that includes both designated
21 wetland habitat within the river channel and river
22 marine habitat, and there are some areas that are called
23 subtitle habitat when you get all the way down near the
24 mouth. That's the first number, the 114.4 million.

25 The 56.9-million-dollar number is the estimate

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1 for natural resource damages to floodplain habitat.
2 Again, that was just based on the amount of wetland
3 habitat in national wildlife refuges downstream of
4 Vancouver, and an estimate of some degree of service
5 loss to the animals that live there. There may also be
6 some degree of service loss to the actual habitat
7 itself, depending on whether or not the river is high
8 and the oil actually gets into those habitats. Not
9 something we can know ahead of time. So because the
10 floodplain habitat is separate from the river habitat,
11 those two are additive.

12 **Q. You also have a few other numbers, as I**
13 **mentioned, three others, separate estimates, that you**
14 **have. I believe Dr. English will speak to the value of**
15 **the loss of recreational fishing, so I won't have you**
16 **testify in relation to that. But if you can briefly**
17 **describe the second number, the 232 million, how you**
18 **reached that number and why you include it within this**
19 **summary?**

20 A. I can certainly talk about how I came up with
21 that number. As the footnote indicates, why I put it in
22 here is something that I'm going to have to caveat
23 because, to come up with that number, I looked at the
24 oil spill sediment settlements for very small spills
25 that have occurred in the Columbia River and have been

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1 settled according to the Washington Administrative Code
2 for settling natural resource damages for oil spills.
3 And the guidance for that suggests that it's an
4 appropriate quick method of calculating natural resource
5 damages for spills that are 3,000 gallons or less. So
6 it is not something that would be appropriate for any of
7 the scenarios that we're talking about here.

8 But I took the information that's available for
9 50 spills in the lower Columbia River and got an
10 estimate of, I believe -- I'll have to double-check. I
11 think it's -- \$29 per gallon was the average for all 50
12 of the settlements. And then I multiply that by the
13 total number of gallons in the effective worst-case
14 discharge scenario to come up with that estimate. But
15 scaling natural resource damages based on the volume of
16 oil released is not a method that we would ever
17 advocate. It was just a way of looking at what's sort
18 of the potential range one might be looking for.

19 **Q. Why would scaling not be appropriate?**

20 A. Because natural resource injuries are entirely
21 site-specific and it depends on what's exposed to them;
22 it depends on so many different factors. The actual
23 volume of oil is not something that's ever going to be
24 linearly scaled or to be able to say, if you spill ten
25 times the amount of oil, you're going to have ten times

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1 the amount of natural resource injuries so you should do
2 ten times the amount of restoration. That really
3 doesn't make sense because you don't know whether -- if
4 a spill that's one-tenth the size of the effective
5 worst-case scenario were to occur, I do not believe that
6 your natural resource damages would be a tenth, because
7 I think you would still have a lot of exposure to a lot
8 of oil and you would still have much higher natural
9 resource damages even if this volume of spill was a lot
10 less.

11 **Q. And the top number, the possible range based on**
12 **past major spills, can you tell me what those -- that**
13 **damage estimate represents?**

14 A. That's another estimate that -- scaling up based
15 on the volume of the spill, see previous caveat. Again,
16 this was just a range-finding exercise for me to look at
17 what the total settlement was for three different
18 prominent oil spills: Deepwater Horizon, Exxon Valdez
19 and the Nestucca oil spill outside of Grays Harbor.
20 Look at what the total settlement was for those three
21 spills in terms of the dollars per barrel spilled and
22 then scale that up times the number of barrels spilled
23 in this effective worst-case discharge.

24 **Q. Let's turn to the second scenario you evaluated.**
25 **I believe that was a train derailment scenario. Could**

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1 you please briefly describe that scenario.

2 A. For a worst-case scenario for the train
3 derailment, again, the volume of oil spill, we just
4 copied it out of the Environmental Impact Statement. I
5 think it was 20,000 barrels. And, again, we said it was
6 going to occur in the spring when you have migratory
7 salmon. And in our minds, we thought that the
8 worst-case spill for this would be to have a spill right
9 above Bonneville Dam, have the oil go either over the
10 spillway or between the penstocks, and have that oil --
11 if you have the oil go through that kind of turbulent
12 environment, it's going to mix greatly into the water
13 column, so there would be resources immediately
14 downstream of the dam that would get exposed to a lot of
15 oil in the water column itself. So that was the
16 scenario that we wanted to look at here for a high
17 potential impact.

18 **Q. Are there any particularly sensitive species'**
19 **spawning ground directly below the dam?**

20 A. My understanding is that there is a white
21 sturgeon -- protected white sturgeon spawning ground a
22 few miles downstream of Bonneville Dam.

23 **Q. And the impacts to fish from oil and the impacts**
24 **to birds from oil would be very similar in relation to**
25 **this spill, if it spilt oil in the Columbia River,**

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1 correct?

2 A. That is correct.

3 **Q. How did you calculate the NRDs for -- the**
4 **natural resource damages for this scenario?**

5 A. We used the same HEA method that we used for the
6 vessel grounding. The difference in this scenario is
7 we're further upstream, so instead of having a hundred
8 river miles of potentially exposed river habitat and
9 adjacent floodplains, we have 140 miles. We have
10 several more national wildlife refuges, most of them are
11 right downstream of Bonneville, and we would have
12 exposure there. So the method is the same, but the
13 areas that would be exposed are greater.

14 MR. KERNUTT: Ms. Mastro, could you please
15 bring up page 93 of Exhibit 1503. If you could zoom in
16 on the table again.

17 BY MR. KERNUTT:

18 **Q. Can you please describe the bottom number in**
19 **that damage estimate.**

20 A. Certainly. Like with the vessel grounding, this
21 is the addition of natural resource damages in the
22 Columbia River itself and natural resource damages in
23 the adjacent national wildlife refuge wetland areas
24 downstream of Bonneville. They get added together, just
25 like in the previous scenario. The numbers are lower

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1 here because the spill occurs further upstream, so the
2 anticipated impacts in the estuary itself would be quite
3 a bit lower than if you had a major vessel grounding in
4 Vancouver.

5 **Q. And the same caveats that you mentioned before**
6 **apply to the first and second ranges, the range finding**
7 **based on major -- past major spills and past incidents,**
8 **correct?**

9 A. That is correct.

10 **Q. Is it your opinion that your report quantifies**
11 **all potential natural resource injuries that are likely**
12 **to occur as a result of either spill scenario?**

13 A. No. As we mentioned before, we did not follow
14 the oil out into the ocean and along the coast.
15 Particularly with the vessel grounding, that seems like
16 a highly likely scenario that the oil would actually
17 discharge into the ocean and expose natural resources in
18 the ocean and along the coast to oil.

19 A much smaller spill in 1984, the ExxonMobil
20 vessel that grounded, that was about 2 percent of the
21 oil discharge of the effective worst-case scenario and
22 that resulted in 50 miles of shoreline oiling and
23 several hundred dead bird carcasses along the coast. So
24 I think it's pretty safe to say that if you had a spill
25 that was anything like the effective worst-case

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1 discharge in the river and discharge that oil to the
2 ocean, then you would have natural resource injuries
3 that we did not quantify here.

4 **Q. For those injuries that you did include in your**
5 **report, did you account for all potential losses to**
6 **natural resource values?**

7 A. No, we did not. By using the habitat
8 equivalency analysis, we are making a presumption that
9 if our estimates are correct and the amount of
10 restoration that occurs offsets the natural resource
11 injuries, that we estimated based on the oil exposure to
12 resources. We have not done any valuation of whether or
13 not the public believes that that's the case. So in a
14 typical large natural resource damages estimate, natural
15 resource economists might develop a survey to ask the
16 public whether they think they're being made whole. You
17 might have a tribal cultural specialist who would help,
18 to the best of their ability, figure out how tribes
19 would place a value on these natural resources,
20 inherently difficult. And to quantify it, we didn't
21 touch any of that in our estimates here.

22 MR. KERNUTT: I have no further questions at
23 this time.

24 JUDGE NOBLE: Cross-examination of
25 Mr. Holmes?

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CROSS-EXAMINATION

1
2 BY MR. JOHNSON:

3 Q. Thank you, Mr. Holmes. I'm Dale Johnson. I'm
4 one of the attorneys for the applicant. I just have a
5 few follow-up questions.

6 First of all, in your discussion of the natural
7 resource damages assessment and natural resource damages
8 process, I just want to clarify your understanding about
9 how things work. Is it true that cleanup and response
10 actions come generally before the natural resource
11 damages phase?

12 A. It depends on the nature of the spill and how
13 proactive the trustee is. In some cases that's -- that
14 is true. In other cases, particularly cases related to
15 oil spills, the natural resource damage assessment
16 actually occurs rather rapidly and can be in conjunction
17 with response activities because the data that need to
18 be collected need to be collected while the oil is still
19 there. So we can't wait until response activities are
20 done to be able to start an assessment.

21 Q. Okay. So is it fair to say that those two
22 processes can occur simultaneously?

23 A. Yes, it is.

24 Q. Okay. And that the response and cleanup
25 activity doesn't need to await the natural resource

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1 damages assessment process?

2 A. No. There are occasions, depending on the
3 nature of the spill, where the assessment might await
4 the response activities, but I am not aware of any --
5 any time that a response activity has been waiting for
6 an assessment to start.

7 Q. Okay. And isn't it also true that compensation
8 or responsibility for cleanup of a spill, an oil spill
9 specifically, can be resolved separately from liability
10 related to natural resource damages?

11 A. Could you rephrase that question?

12 Q. Sure. So we talk about two parallel processes:
13 a response in cleanup process on one hand; a natural
14 resource damages process on the other hand. And what I
15 was getting at was whether or not liability and
16 contribution to costs of cleanup on one hand can be
17 resolved separately for liability and compensation
18 related to natural resource damages costs on the other?

19 A. Yes.

20 Q. Okay. You also described some of the
21 limitations in the ABT report that you were referring
22 to. One of them related to ocean resources and natural
23 resource damages impacts beyond the mouth of the
24 Columbia River. Do you recall that testimony?

25 A. Yes, I do.

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1 Q. And you also, I think, said that part of your
2 assessment in terms of the time it would take the oil
3 from a spill in the river to reach the ocean was based
4 on the 1984 Mobil spill; is that correct?

5 A. Our estimate of -- for the vessel grounding in
6 particular, that it would take five days to go across
7 the estuary, it's -- actually would have been slower
8 than the amount of time it took for the oil in 1984. So
9 we made our -- an independent calculation prior to
10 actually having the knowledge of the 1984 spill.

11 Q. Okay. And does that -- so does your estimate of
12 slower travel time account for advances in spill
13 response and cleanup that have occurred between 1984 and
14 today?

15 A. We did not actually take into account either the
16 positives or the negatives of oil spill response in
17 trying to quantify the natural resource injuries here.

18 Q. Okay. Again, with regard to limitations and the
19 fact that you didn't account for certain items, you -- I
20 think you testified that, in your opinion, that means
21 that the ultimate conclusions you drew about the value
22 to natural resource damages resulted in likely an
23 underestimate.

24 A. That is my opinion, yes.

25 Q. Okay. And I just want to be clear. So your

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1 discussion of impacts on ocean resources and the fact
2 that that's a limitation is not any suggestion that you
3 have undertaken any kind of analysis of what those
4 impacts or damages might be; is that right?

5 A. My testimony is that we didn't take into account
6 any of the potential impacts on the ocean, and that's
7 one of the reasons why we believe -- or why I believe
8 that the estimate is an underestimate because, for the
9 vessel grounding scenario in particular, it seems very
10 likely that there's going to be some natural resources
11 injuries in the ocean and out on the coast.

12 Q. Okay. But again, there's nothing in the ABT
13 report or in your testimony today or in your prefiled
14 testimony that would allow you to draw a specific
15 conclusion about the value of natural resource damages
16 associated with impacts beyond the Columbia River; is
17 that right?

18 A. That is correct. I have not tried to do that.

19 Q. Okay. You also stated that there's a limitation
20 related to the public valuation of natural resources and
21 you talked about the potential for doing surveys and
22 those kinds of things to determine in the event of a
23 spill what those might be. And I think you included
24 consideration of tribal values and cultural resources as
25 part of that; is that right?

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1 A. Those could be either done together or done
2 separately.

3 **Q. Okay. Taken either together or separately, I**
4 **just want to understand that there's nothing in your**
5 **testimony today or in the ABT report or in your prefiled**
6 **testimony that would allow you, or anyone else for that**
7 **matter, to draw a specific conclusion about the value of**
8 **what those damages may be; is that right?**

9 A. That is correct. I have not tried to put any
10 valuation numbers in.

11 **Q. Okay. And then with regard to spill response**
12 **efforts, you also indicated that there's a possibility**
13 **that a response could actually result in additional**
14 **damages. Did I understand that correctly?**

15 A. Yeah, they -- it's very common to have response
16 injuries be part of a natural resource damage
17 assessment. So that's actually something that the
18 trustees are supposed to consider. So, you know, for
19 instance, it's -- a spraying of dispersant might do a
20 very good job of preventing the oil slick from
21 interacting with more shoreline or making it further
22 downstream, but the trustees need to account for both
23 what are the implications to fish and other biological
24 resources that might get exposed to the oil that has
25 gotten dispersed into the water column and what are the

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1 implications to resources like shellfish that find the
2 dispersant itself to be fairly toxic. You very
3 frequently have a response action to go remove oil out
4 of a floodplain if oil gets stranded up in a floodplain
5 and you have to account in the damages assessment both
6 for the fact that the oil has been removed, that's a
7 good thing, but then you have to account for the fact
8 that all the people on the floodplain mowing the grass
9 and taking all the vegetation away that was oiled,
10 that's a bad thing. So those are the sorts of things
11 that would normally be in a damages assessment that we
12 did not consider as part of this report.

13 **Q. Okay. And two questions related to that. First**
14 **of all, are you aware that the response plans for this**
15 **facility include accounting for methods to keep**
16 **dispersants from reaching the river?**

17 A. I have -- in my damages estimate, I didn't take
18 into account dispersants at all. So, no, I was not.

19 **Q. Okay. Again, similar question regarding spill**
20 **response efforts and the potential for actually having**
21 **response-related natural resource damages. There's**
22 **nothing in the ABT report or your testimony today or**
23 **your prefiled testimony from which you could draw a**
24 **conclusion about a specific value related to those**
25 **response damages; is that right?**

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1 A. That is correct. I didn't consider them.

2 Q. Okay. Also I just wanted to confirm with you
3 that there's a -- let me put it this way. Is there not
4 a difference between natural resource injury and
5 damages, and if so, could you explain the difference?

6 A. Sure. Natural resource injuries refer to the
7 adverse impacts of the contaminant on natural resources,
8 such as birds, fish, shellfish, surface water itself.
9 Natural resource damages in the context of the NRDA
10 refers specifically to the compensation that is due to
11 the public because of those injuries.

12 Q. Okay. Thank you. With regard to your oil
13 trajectory model and prediction of potential PAH levels,
14 did you do enough analysis to determine whether or not
15 they would be sufficient to cause any specific injury to
16 any particular population of fish?

17 A. No, we didn't look at any particular population
18 of fish. What we did was to model what we thought was a
19 reasonable range of PAH concentrations that would be in
20 the water column based on the information that was in
21 the EIS, and then we looked at literature values, both
22 from the information that we generated as part of our
23 Deepwater Horizon toxicity testing and other information
24 that was in the literature, to see what sorts of adverse
25 effects occur at those concentrations that we modeled

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1 and we based our estimates of injury on that.

2 Q. Okay. And I think you discussed, when you're
3 talking about acute -- or aquatic injuries and
4 toxicology, that you -- there are lessons learned as a
5 result of the Deepwater Horizon spill and other spills
6 about impacts on the fish.

7 Is it fair to say that your -- even though you
8 didn't have actual data necessarily with regard to the
9 fish in the Columbia River that might be impacted, that
10 your effort -- that your ABT report reflects an effort
11 to account for toxic impacts, the kinds of toxic impacts
12 you discuss?

13 A. Yes. And ultimately, all of this information we
14 have on potential toxicity with regard to oil in birds
15 and fish get wrapped into the HEA model in estimating
16 what the debit is going to be in the lexicon of HEA
17 that's in the amount of service loss. So in order to be
18 able to estimate what sort of service loss might occur,
19 it includes an estimate -- or a general belief that the
20 oil in the river will be toxic to some of the critters
21 that live in the river.

22 Q. Okay. So that would not be one of the
23 limitations, then, that you discussed earlier that would
24 contribute to an underestimate in terms of the value
25 of --

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1 A. I mentioned earlier a limitation was not having
2 species-specific toxicity data. So we couldn't look at
3 any of those response curves and be able to pin specific
4 service loss on we know that these were the
5 concentrations in the river and we know that these are
6 the toxic responses to Chinook salmon smolts, for
7 instance. But we are able to more generally say we know
8 that the PAHs will be in the river and we know that PAHs
9 in that concentration are going to be toxic to some
10 species, and we incorporated that into our service loss
11 term. So it's -- it's just -- it reflects a matter of
12 uncertainty, but, yes, we did -- in order to have that
13 service loss term, we were accounting for adverse
14 impacts to the fish.

15 **Q. Okay. Thank you.**

16 MR. JOHNSON: Ms. Mastro, could you pull
17 up -- let's see here. It's Table 4-8. I don't have the
18 page number. I thought I did. I'm sorry, the exhibit
19 number. Well, let me just ask the question.

20 BY MR. JOHNSON:

21 **Q. There were several columns -- or several rows**
22 **and this is Table 4-8, where you used different**
23 **methodologies to arrive at different numbers -- here we**
24 **go. And I just wanted to ask you, if you were to have**
25 **to identify the most reliable estimate of those -- of**

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1 those entries in those four rows, which one would
2 represent your best estimate of damages?

3 A. Be prepared for the caveats. The spill hasn't
4 happened. So none of them are going to be a reliable
5 estimate of natural resource damages when we don't
6 actually have a spill and we don't have any firsthand
7 data and in particular, we don't know how much
8 floodplain is going to get exposed.

9 But for purposes of trying to estimate a
10 reasonable amount of natural resource damages for a
11 spill from a vessel grounding just in the Columbia River
12 itself, I think that the bottom estimate based on the
13 HEA is reliable and -- but in terms of an estimate of
14 total natural resource damages if this spill were to
15 occur given the caveats of not accounting for tribal
16 values, not accounting for public values, not accounting
17 for impacts to oceans and coasts and all of the other
18 things that we didn't account for, that is -- that
19 number is likely to be quite low.

20 **Q. Okay. And same question for Table 5.6, which**
21 **was the table related to the rail-related spill. Would**
22 **you respond the same?**

23 A. My response will be the same, although I would
24 say that if the spill were to occur, as our scenario is
25 upstream of Bonneville, that the amount of oil that

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1 would get discharged into the ocean would be
2 considerably less than in the vessel grounding. So the
3 underestimate there for potential impacts in the ocean
4 and on the coast would be a lot less than the impacts
5 that we didn't account for with the other scenario.

6 **Q. Okay. And finally, and I think you've touched**
7 **on this, but I just want to be clear, in your**
8 **experience, a natural resource damage assessment does**
9 **include valuation of what are referred to as nonuse or**
10 **intrinsic or passive-use values, does it not?**

11 A. It can.

12 **Q. Okay. Fair enough.**

13 MR. JOHNSON: Thank you. No further
14 questions.

15 JUDGE NOBLE: Redirect, Mr. Kernutt?

16 MR. KERNUTT: I have no questions on
17 redirect.

18 JUDGE NOBLE: Council questions?

19 Mr. Shafer?

20 MR. SHAFER: Mr. Holmes, thank you very much
21 for your testimony today.

22 Early in your testimony, you cited working
23 on I think it was a hundred-plus projects doing the
24 damage assessments, and I'm interested in the
25 relationship, if you might know, between the actual

1 costs of events that you've had experience in in the
2 earlier estimated damages should an event occur. Did
3 you find some relationship there? Were actual damage or
4 costs often less or much less or kind of close to that
5 target estimated damages, or were there times where it
6 was significantly higher?

7 THE WITNESS: Let me make sure I understand
8 your question. You're asking whether a preliminary
9 damage estimate early on in the process ends up
10 frequently being an underestimate or an overestimate?

11 MR. SHAFER: Yes. That relationship between
12 planned costs versus actual costs.

13 THE WITNESS: The exercise of conducting a
14 natural resources damage assessment before the spill has
15 happened is not something that I regularly do. And so
16 there is -- particularly at some sites, inland sites,
17 like mining impacts and whatnot where the impacts go on
18 for decades, you do a preliminary estimate of damages as
19 part of the initial damage assessment, and then you
20 follow up with data and then you revise that estimate
21 accordingly. And it's certainly the case that sometimes
22 the preliminary estimate turns out to be an
23 underestimate because you found that a contaminant was
24 more toxic, there's more of it, you found it further
25 downstream, something like that. So that's fairly

1 common.

2 MR. SHAFER: Okay. And one other question.
3 Does your work involve the assessment of risks where
4 you're trying to balance the relationship of probability
5 and consequences for this project, and with that do you
6 think that there's -- if so, is there at least some risk
7 that the costs could be considerably higher than the
8 estimates we're seeing?

9 THE WITNESS: For -- one of the major
10 differences between response or remediation of a
11 contaminated site in a natural resource damage
12 assessment is a lot of times your response actions or
13 your remedial actions are based on perceived risks to
14 biota, and natural resource injuries are almost always
15 based on actual injuries that have occurred that you can
16 demonstrate. So we don't -- we don't rely on risk
17 assessments that much for doing this. That said, your
18 final question, is there a risk that this is an
19 underestimate? I would say that there's a very
20 substantial risk that this is an underestimate because
21 of the amount of potential natural resource exposure and
22 potential valuation information that we did not include
23 in this study.

24 MR. SHAFER: Thank you.

25 JUDGE NOBLE: Other questions?

1 Mr. Snodgrass?

2 MR. SNODGRASS: Good morning. A couple of
3 questions. Just so -- if I understand the description
4 of injuries as opposed to damage, does injuries
5 encompass individual deaths of individual critters?

6 THE WITNESS: Yes. Generally, as an
7 example, if you were to be doing an assessment that
8 focused on potential injuries to waterfowl, you would
9 have a count from response of the number of carcasses
10 that they found and that would be your starting point of
11 we know at least this many died.

12 And then if you needed to try to estimate
13 how many total might have died as a result of oil
14 exposure, frequently you would do a search or efficiency
15 study where you put dummy carcasses out and see how many
16 of them your searchers actually found and you would do
17 some -- there's a whole bunch of other studies that show
18 that the ability to find a carcass is really quite
19 limited, and the total number of actual bird deaths
20 would be much higher than what was actually found. So
21 that's a starting point in NRDA, to count individual
22 critters and then move on from there.

23 MR. SNODGRASS: Is that a -- in the
24 settlements and in the work you do, is that a fairly
25 well-established principle in the settlements and in

1 law, that the value of the individual critters counts?

2 THE WITNESS: I won't opine as to the law,
3 but I will say that it is -- it is definitely part of
4 any NRDA where, if you have individuals who you know
5 died as a result of the exposure, that gets included in
6 your analysis. So, yes.

7 MR. SNODGRASS: Turning away from that and
8 looking at habitat restoration and so on. In the range
9 of spills that are discussed in your testimony, is a
10 zero valuation, in other words, no impacts at all
11 monetarily, is that -- how realistic is that?

12 THE WITNESS: If there was no exposure or if
13 the exposure was so low that we think that there was
14 going to be no adverse impacts, then you would have no
15 damages and we'd have that analysis.

16 MR. SNODGRASS: I guess, have you in your
17 practice looked at or started work on or is it realistic
18 that to the extent you look at preventative measures or
19 restorative measures or responses, that those would
20 result in no -- no value of impact loss?

21 THE WITNESS: I'm not entirely sure what
22 you're getting at. If there was enough oil to require a
23 response action, it would be highly likely that there
24 would be some sort of injury that would get incorporated
25 into the damages estimate.

1 MR. SNODGRASS: That was my question.

2 JUDGE NOBLE: Other council questions?

3 Mr. Siemann?

4 MR. SIEMANN: Good morning, and thanks for
5 being here this morning.

6 My first question is with regard to tribes,
7 you've mentioned that there -- and tribes and natural
8 resource valuation, you mentioned the tribes are not --
9 they don't see financial compensation as being adequate
10 and they don't tend to appreciate the discounting
11 methods that we tend to use.

12 Have you worked on natural resource damage
13 assessments with tribes in which they have -- where
14 tribes have been satisfied with the outcome, or is there
15 sort of -- any sort of way in which we can think about a
16 natural resource damage assessment that -- where tribes
17 could be satisfied by the outcome? Any example of that?

18 THE WITNESS: Yes. So there's -- I guess
19 there's two questions. I've certainly worked on cases
20 where tribes have agreed that this is a -- this is as
21 good a settlement as they're going to get. I would not
22 say necessarily that they were satisfied, but they --
23 but they understood the process and agreed that this was
24 how -- this was better than if nothing was done at all.

25 They are very much interested in focusing on

1 the cleanup more than the -- what we call compensatory
2 restoration of the off-site. "Let's just go and build
3 you another one" type of thing. They would much rather
4 say, please return it to the way it was before you
5 trashed it. So that's common. Yeah, it's not -- it's
6 not that the tribal valuation is an insurmountable
7 problem and that it's impossible to be able to
8 incorporate that into a damage assessment, it's just
9 difficult.

10 MR. SIEMANN: Are there any lessons -- so
11 you mentioned restoring what was lost in the specific
12 site is critical. Are there other insights like that
13 that would be helpful for us to understand?

14 THE WITNESS: For these particular tribes, I
15 mean, I would rely on what the tribal experts have to
16 say. I'm not sure that I'm going to venture off into an
17 opinion, other than to understand that tribes have a
18 different view of natural resources sometimes, that --
19 these are sacred lands to them. So trying to be able to
20 say that if a spill happens, we can make it all better
21 if we just restore habitat and pay you a bunch of money
22 to go do restoration projects, is a difficult road to go
23 down.

24 MR. SIEMANN: Fair enough. Thanks.

25 Second topic, we've talked about a single

1 spill, sort of, we've looked at it as an individual
2 event. And what I'm wondering about is, over the course
3 of 20 years, there's certainly the possibility of
4 multiple spills. If you think about multiple spills,
5 would those be additive in terms of damage, or could
6 they actually be multiplicative or in some other way
7 other than additive?

8 THE WITNESS: That would depend quite a bit
9 on what sort of multiple spill scenario we're looking
10 at. There's no question that repeated exposure could
11 have more adverse impacts than a quick one-time
12 exposure. So if you have multiple spills or if you
13 have, say, a discharge in petroleum out of groundwater
14 that is happening continuously at a fairly low level,
15 that level of continuous exposure is likely to cause
16 more harm than if you just have a one-time exposure of a
17 plume going by.

18 MR. SIEMANN: Okay. And my last question
19 may be more technical than your expertise, but you
20 mentioned -- we've heard previous testimony that an oil
21 spill will -- that the oil will stay on the surface of
22 the water. And so I'm sort of curious, if fish are
23 swimming below the surface and they're not coming up to
24 the surface, would they actually be exposed to that oil?

25 THE WITNESS: I can give you a brief

1 overview on oil and water mixing. So there are
2 generally -- of course, most crude oils are lighter than
3 water so they're going to be on top of the water
4 surface. If you have some sort of turbulence, it's
5 going to drive that oil down under the surface. So if
6 you have wind, if you have tidal influence that creates
7 waves, if you have ship wakes, all of those are going to
8 cause turbulence on the surface and that oil mixes down
9 into the water column and exposes things that are
10 swimming.

11 One of the great research questions that we
12 are currently working on, in fact, just finished a study
13 last Friday on this, was just how much does that oil
14 actually go down. So we are -- this is an active
15 question that we're trying to resolve, is what does the
16 PAH profile look like under even an oil slick because
17 that's a difficult question to answer. But we know from
18 the studies that we did last week, that even fairly
19 small one-foot waves in a tank cause the oil to very
20 quickly go all the way down to the bottom of the tank.

21 MR. SIEMANN: Thank you.

22 JUDGE NOBLE: Other council questions?

23 Mr. Lynch?

24 MR. LYNCH: Good afternoon.

25 THE WITNESS: Hello. Uh-oh, it's afternoon.

1 MR. LYNCH: I'm sorry, I've got a handful of
2 questions, and some of them have more than one part, so
3 please forgive me. I'll try to break them up.

4 I'm particularly interested in how NRDA's
5 differ from mitigation. I'm much more familiar with how
6 mitigation works if you're trying to put in a proposal
7 and its impacts. I would like to explore that a little
8 bit with you. Now, for NRDA's, they're always just
9 site-specific or will they sometimes recognize that the
10 site can only be repaired X amount and there's going to
11 be some other work done elsewhere to compensate?

12 THE WITNESS: There -- it depends on the
13 nature of the spill. So it is -- in the land of NRDA,
14 the responsible party is responsible for cleaning up
15 back to the baseline conditions and in addition
16 compensating the public for the interim losses, as the
17 term is used. So if it takes several years to be able
18 to clean something up to get it back to baseline
19 conditions, then the interim amount of time there,
20 there's additional compensation that's required and that
21 additional compensation is usually an additional
22 off-site restoration project that needs to get done.

23 MR. LYNCH: And frequently with mitigation
24 projects, they have a review period associated with them
25 that the site will be monitored for X amount of time to

1 see how well a place is re-establishing or being -- or
2 becoming established. And I'm just wondering with an
3 area that's being rehabilitated and under NRDA, is an
4 entity just charged a certain amount and it's like when
5 that money runs out and the place isn't rehabilitated,
6 is it, so sorry, so sad or is it, no, the place isn't
7 rehabilitated so you need to pony up some more money?

8 THE WITNESS: Again, that's site-specific.
9 But when those of us at ABT Associates are able to work
10 with the trustees, we insist that there be an O&M budget
11 for maintaining a restoration project, that there be
12 regular reviews to see how -- and data collection to
13 make sure the restoration worked. And generally there's
14 some sort of warranty that if you plant something and it
15 dies, that you will go back and fix it. So there are
16 multiple places when it's done properly, when we design
17 a restoration project to ensure that it's working and
18 ensure that there is either a re-opener or preferably
19 some acknowledgment that there's going to be some degree
20 of failure and the budget to be able to fix it so the
21 restoration actually occurs as specified in the
22 restoration plan.

23 MR. LYNCH: You testified earlier that you
24 didn't look at individual species and the impacts upon
25 them in your proposed scenarios. What I'm just

1 wondering, how do you take -- if this were a real-world
2 situation, how would you address the situation where you
3 have listed fish being impacted? And what I'm thinking
4 of in particular was, there was some expert testimony
5 earlier in this proceeding where there was a small run
6 of Chinook at a place in the Columbia and not only was
7 it a small run, a small population, but the window was
8 very tight when the fish ran. And so if you have an
9 incident that affects them, I'm just wondering, how do
10 you begin to mitigate for the impact on a species of
11 salmon like that? Because you just can't stick in
12 hatchery stock, so how do you mitigate for a spill in a
13 population like that?

14 THE WITNESS: Well, that's -- you touch on
15 something that is a challenging problem in a natural
16 resource damage assessment, which is how do you make
17 sure that you account for, you know, what you're
18 expressing there is a wild population -- small
19 endangered population of salmon that gets exposed to
20 this oil, feels like it has a greater amount of value
21 than hatchery-run salmon that are coming back to get
22 strip spawned, and it's incumbent upon the trustees to
23 make sure that they try to capture that value when
24 they're doing a natural resource damage assessment. The
25 restoration projects that would get done would likely be

1 restoration projects that are already on the table
2 designed to try to save this wild and scenic -- you
3 know, the species that are struggling. So there's
4 people who make careers trying to figure out how to
5 restore salmon runs in the Columbia River, and we would
6 be calling those people up and consulting them and
7 saying, what can we do to try to offset this potential
8 injury?

9 MR. LYNCH: And I just have two last
10 questions. Once there's been an incident, is it -- in
11 your experience is it easier for an invasive species to
12 take hold in that area?

13 THE WITNESS: I am not -- I don't know of
14 any particular NRDA-related spill incident in which the
15 result of the spill has resulted in invasive species
16 coming in. There's certainly places where they -- the
17 native species are more sensitive to contamination and
18 the nonnative species are less sensitive to the
19 contamination and you see some of that. That's more
20 prevalent in long-term Superfund-type areas where the
21 release has been going on for a long time and the only
22 things that can live there are pollution-tolerant
23 organisms. I have not seen an oil spill type of
24 situation where the result of the oil spill is that a
25 bunch of invasive species could now come in.

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1 MR. LYNCH: My last question pertains to the
2 type of oil that was modeled for these two scenarios.
3 Is it correct bumper oil was used?

4 THE WITNESS: No, we used Bakken crude.

5 MR. LYNCH: You used Bakken.

6 THE WITNESS: But it is a good point that
7 diluted bitumen, the dilbit, is also going to be brought
8 to this terminal and that is, I'm sure as other people
9 have testified, a much different oil, a much heavier
10 oil. If you had that oil in a turbulent environment in
11 the river, you could easily drive it down to the bottom
12 of the river where it's very difficult to figure out how
13 to respond to it. So that is another -- another
14 scenario that we did not address here, would be if you
15 had an effective worst-case discharge of a heavier oil,
16 a dilbit rather than a lighter oil like Bakken crude.

17 MR. LYNCH: Thank you.

18 JUDGE NOBLE: Other council questions?

19 Questions based upon council questions?

20 RE-CROSS-EXAMINATION

21 BY MR. JOHNSON:

22 Q. Just one question that relates back to your
23 testimony. I think you said you're not in the practice
24 of estimating natural resource damages before the event
25 occurs. Do you remember that?

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1 A. I do.

2 **Q. In those cases where an event has occurred and**
3 **you've been -- you've worked on behalf of a trustee, a**
4 **natural resources trustee, whether it be the United**
5 **States or a state or a tribe, were the resulting NRDAs**
6 **settled, that is, settlement of liability, typically**
7 **higher or higher than the damage estimates that you had**
8 **derived?**

9 A. Typically, they're lower. Sometimes it depends
10 on the nature of the trustee, the nature of the case and
11 who's settling. So we have -- in the last year, for
12 instance, the State of New Jersey went through a -- an
13 eight-year process of claims against a refinery,
14 including a nine-month trial, and then after -- when
15 both sides had rested and the case was with the judge,
16 the governor stepped in and settled for approximately
17 3 percent of what the State had actually been asking for
18 in the trial. And those sorts of things happen, and
19 it's not fun for those of us who are working on it for
20 all of that time.

21 There are sometimes where a settlement is
22 reached in cooperation and everybody agrees that the
23 public is made whole, and there are some instances where
24 settlements happen behind closed doors and a handshake
25 is made and it's less -- or a lot less than what the

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1 natural resource damage estimate had actually said was a
2 fair claim.

3 MR. JOHNSON: Thank you. Nothing further.

4 JUDGE NOBLE: Mr. Kernutt?

5 MR. KERNUTT: Yeah, I just have a couple of
6 questions so I'm hopeful council will not be staring at
7 me with hungry eyes.

8 JUDGE NOBLE: How many is several? Because
9 we could break for lunch.

10 MR. KERNUTT: No, I do not. I anticipate
11 this to be very short.

12 JUDGE NOBLE: Thank you.

13 REDIRECT EXAMINATION

14 BY MR. KERNUTT:

15 **Q. You testified just in response to Mr. Johnson's**
16 **question that a lot of these were the result of**
17 **settlement, these lower estimates. Do you find in some**
18 **instances the natural resource damage assessment process**
19 **can be adversarial?**

20 A. There's no question that there are some
21 responsible parties who want nothing to do with the
22 natural resource damage assessment process, and it is
23 litigation-sensitive and there is -- there's a wide
24 range from responsible parties who say let's sit down
25 and resolve this, to responsible parties who call the

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1 governor and say, make them go away, I don't want
2 nothing to do with this. So there's a wide range of
3 this, and there's definitely instances where it's
4 adversarial and the responsible party wants nothing to
5 do with the trustees.

6 **Q. And in some instances would you agree that said**
7 **adversarial process could take decades?**

8 A. It certainly can take many years to resolve some
9 claims. As I said earlier, the Coeur d'Alene case was
10 one in which we worked on it for close to 20 years
11 before those claims got fully settled. So, yes, these
12 cases can get dragged on for very long periods of time.

13 MR. KERNUTT: Thank you. No further
14 questions.

15 JUDGE NOBLE: Mr. Holmes, thank you very
16 much for your testimony. You're excused as a witness.

17 THE WITNESS: Thank you.

18 JUDGE NOBLE: It is now 12:22 so we will be
19 in recess for the lunch hour until 1:25. Thank you.

20 (Recess taken from 12:23 p.m. to 1:27 p.m.)

21 JUDGE NOBLE: Parties ready to present the
22 next witness?

23 MR. KERNUTT: Yes, Your Honor. Counsel for
24 the Environment calls Dr. Eric English.

25 JUDGE NOBLE: Dr. English, would you raise

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1 your right hand, please.

2 (Witness sworn.)

3 JUDGE NOBLE: Thank you. Please be seated.

4 You may proceed, Mr. Kernutt.

5 ERIC ENGLISH,

6 having been first duly sworn,

7 testified as follows:

8 DIRECT EXAMINATION

9 BY MR. KERNUTT:

10 Q. Dr. English, I'm going to, as much for my
11 benefit as yours, again, give you the instruction to
12 remember to speak slowly in response to my questions?

13 A. Okay.

14 Q. Please state and spell your name for the record.

15 A. My name is Eric English, E-r-i-c E-n-g-l-i-s-h.

16 Q. You submitted written prefiled testimony in this
17 matter, correct?

18 A. Yes.

19 Q. Do you affirm that your prefiled written
20 testimony accurately reflects your opinion in this
21 matter and is true and correct?

22 A. Yes, I do.

23 MR. KERNUTT: For the council's benefit,
24 again, Exhibit 1502 is a copy of Dr. English's CV, and
25 it has been admitted.

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1 BY MR. KERNUTT:

2 **Q. Dr. English, can you briefly summarize your**
3 **educational background for the council.**

4 A. Yes. I have a bachelor's degree from Williams
5 College. I have a master's in public administration
6 from Cornell University, and a Ph.D. in economics from
7 Cornell University.

8 **Q. Can you briefly summarize your employment**
9 **history?**

10 A. I've spent the last 20 years conducting economic
11 analysis for policy and litigation, and the last
12 15 years of that has been involved specifically with
13 natural resource damages, and I've spent nine years
14 working with the National Oceanic and Atmospheric
15 Administration. I've spent six years working with
16 Stratus Consulting, which is now ABT Associates. And
17 for the last three years, I've been an independent
18 contractor.

19 **Q. Have you, in the course of your work, previously**
20 **evaluated impacts to fishing as a result of an oil**
21 **spill?**

22 A. Yes, I have, and numerous oil spills. I have
23 looked at impacts to fishing. That includes in the
24 Deepwater Horizon case in the Gulf of Mexico. That
25 includes a 2007 oil spill in San Francisco Bay. And in

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1 many of those cases that involved original data
2 collection and economic modeling, but in many of those
3 cases it involves the type of analysis I did for this
4 situation, which used a reliance on pre-existing data.

5 **Q. That dovetails nicely into my next question.**
6 **Can you briefly describe the analysis that you undertook**
7 **as a part of this proceeding.**

8 A. Yeah, I calculated three values. The first one
9 was lost revenues to commercial fishermen, and I think
10 that number was \$4.7 million. And that was based on the
11 assumption of a six-month closure of commercial fishing,
12 and the expected level of commercial fishing and
13 expected prices were based on an average of the previous
14 five years and information for those data came from the
15 Washington Department of Fish and Wildlife, the Oregon
16 Department of Fish and Wildlife and the National Marine
17 Fisheries Service. So that's the first value I
18 calculated.

19 The second one involved losses to recreational
20 fishermen from impacts to a spill on the Columbia River.
21 And that was also based on a six-month closure, but also
22 included a six-month period of recovery, and that's
23 typical for recreational fishing. Anglers often do not
24 respond simply to closures but also to their own
25 concerns about encountering oil. And again, that was

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1 based on an expected level of activity that I calculated
2 based on an average of the previous five years. And
3 information from that came from similar sources, but
4 also included information from the economic literature
5 to get the actual value of losses. And the total for
6 recreational losses was 17.8 million, I believe.

7 And the third category was also related to
8 recreation; that would be a decline in angler
9 expenditures. If fishermen take fewer trips, then they
10 also spend less money on those trips. And that
11 calculation was very similar to the calculation of
12 impacts to recreational value, but instead of looking at
13 the value of angler trips, I looked at the expenditures
14 of angler trips, and information for that came from the
15 US Fish and Wildlife Service.

16 **Q. So let me back up a little bit. In your**
17 **analysis, you primarily -- you entirely based your**
18 **analysis on the worst-case discharge scenario that**
19 **Mr. Holmes talked about in relation to a vessel spill in**
20 **the lower Columbia River, correct?**

21 A. That's right.

22 MR. KERNUTT: Ms. Mastro, can you please
23 pull up Exhibit 1503, page 47 of your report. If you
24 can zoom out just a smidge so we can get it entirely on
25 the -- there we go.

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1 BY MR. KERNUTT:

2 Q. Can you read that okay, Dr. English?

3 A. Pretty well.

4 Q. You do have a copy of this in front of you if
5 you would like to refer to that and that will be easier
6 to refer to that. You have a copy of your prefiled
7 direct testimony, as well as your report. That's Bates
8 stamped page 47, 3-11 based on the pagination of the
9 report.

10 A. Thank you. Yes, I have it.

11 Q. Can you please describe what this table shows?

12 A. This table shows a variety of past oil spills in
13 the United States since 1990 when the Oil Pollution Act
14 was passed. And it gives information about fishing
15 closures, and it also provides information about some of
16 the factors that would affect fishing closures; so, for
17 example, the quantity of oil spilled, the type of
18 environment where the oil was spilled and the geographic
19 extent of impacts.

20 Q. Did you personally work on any of these oil
21 spills?

22 A. Yes, I did.

23 Q. Which ones?

24 A. Let's see. I worked on the Athos oil spill in
25 Delaware, the Bouchard 120 spill in Massachusetts, Chalk

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1 Point in Maryland, Citgo Oil Refinery in Louisiana,
2 Cosco Busan in San Francisco, Deepwater Horizon in --
3 well, in the Gulf of Mexico, and the Ever Reach oil
4 spill, and I think that's it.

5 Q. Okay. And in estimating your -- you estimated
6 that there would be a potential six-month fishing
7 closure as a result of a worst-case discharge in the
8 lower Columbia River. That's correct?

9 A. That's correct.

10 Q. And did you use the results of this -- the
11 information in this -- contained in this table to reach
12 that conclusion?

13 A. I did.

14 Q. Now, you mentioned you had three separate damage
15 estimates. Are those additive, or how do those damage
16 estimates relate to one another?

17 A. Well, they're not additive in the sense that
18 that's a common caveat that economists often use when
19 describing these different types of damage estimates.
20 But it's not that informative, so let me try to describe
21 what the differences are.

22 So the loss to recreational fishermen represents
23 a loss in value that resources provide to the public.
24 So the Columbia River is a resource and it provides
25 value to recreational anglers, and when an oil spill

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1 occurs, that value is lost and you can't really get it
2 back. You can compensate for it, but that value is lost
3 and you can't get it back.

4 The second category is loss for commercial
5 fishermen. That can be viewed in two different ways.
6 So that is also a decline in the value of resource
7 services provided to the public, but equivalently it can
8 be viewed as a loss of revenue to commercial fishermen.
9 And in the aftermath of a spill, it's typically viewed
10 in the private claim. It could be thought of as public,
11 it could be thought of as private, but commercial
12 fishermen usually pursue a claim for that and so it's
13 handled in the private arena.

14 And the third number, that is the expenditures
15 of recreational anglers, this one's a little bit
16 different from the first two and this is the main reason
17 it really can't be added together. So if commercial
18 fishermen take fewer trips to the Columbia River, they
19 reduce their expenditures on recreational fishing, but
20 they could also spend more in some other way. So we
21 don't know overall if there was a loss, but the loss of
22 spending to certain groups, like bait shops or marinas,
23 is still a disturbance in spending to the local economy.
24 And so that last value is something that's important to
25 a lot of people and is typically included in the way

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1 policy analysis is conducted.

2 Q. Do any of your estimates include potential
3 impacts to Pacific Ocean fisheries?

4 A. They do not.

5 Q. Did you -- you were here for Mr. Holmes' direct
6 testimony, correct?

7 A. Yes.

8 Q. So you heard him testify that he -- in relation
9 to this scenario, it is highly likely that oil would
10 reach the Pacific Ocean. Do you -- if oil did reach the
11 Pacific Ocean as a result of a spill like this, do you
12 anticipate potential impacts to recreational and
13 commercial fishing on the Pacific Ocean?

14 A. I do. Although it can be difficult to estimate
15 in the context of a hypothetical scenario, in the case
16 of an actual spill, we could certainly be assessing
17 impacts in the Pacific Ocean and have every reason to
18 believe based on past spills that those impacts would be
19 substantial.

20 Q. And you have evaluated fishing and -- commercial
21 and recreational fishing impacts to spills on ocean
22 environments before?

23 A. Yes, I have.

24 Q. Have you reviewed the prefilled testimony of Todd
25 Schatzki?

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1 A. I did.

2 Q. Specifically, did you review Mr. Schatzki's
3 testimony regarding ways commercial fishermen may lessen
4 the impacts of a fishing closure?

5 A. Yes.

6 Q. Do you have any opinion regarding Mr. Schatzki's
7 suggestions?

8 A. I do. If I understood correctly, I think
9 Mr. Schatzki was suggesting that commercial fishermen
10 could mitigate their losses by substitution, and that
11 would include either substituting to other locations and
12 fishing there or potentially substituting to a later
13 time on the Columbia River after the fishery was
14 lifted -- excuse me, after the closure was lifted.

15 And I think overall that would be difficult or
16 speculative, at best. And here are some of the reasons.
17 I think commercial fishing is governed by commercial
18 fishing licenses, and so the ability of a commercial
19 fisherman with a particular license to switch to other
20 locations is limited. So just through the regulatory
21 regime, there are some limitations on the ability of
22 commercial fishermen to substitute to other locations.

23 Second of all, the oil spill, although we
24 estimated impacts specifically to the Columbia River,
25 that in no way suggested impacts wouldn't also occur

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1 over large areas of the Pacific Coast up and down from
2 the Columbia River. And so commercial fishermen live in
3 a certain place and they keep their boat in a certain
4 place, and so the ability of those commercial fishermen
5 to avoid the Columbia River might be one thing; but the
6 ability to avoid spill impacts in other areas throughout
7 the Pacific Coast that were affected would be much more
8 difficult.

9 So if the oil were to spread 50 miles north and
10 south of the mouth of the Columbia River, for example,
11 that would imply closures in other areas; so those areas
12 would be precluded from commercial fishermen trying to
13 substitute to other areas.

14 And thirdly, even in those I think rare cases
15 where commercial fishermen could substitute to another
16 location, those would be locations where commercial
17 fishermen are already operating. So even if to some
18 small extent commercial fishermen could mitigate their
19 own losses, they would just be passing those losses on
20 to other people who are also commercial fishermen, and I
21 think that would limit the ability to actually mitigate
22 losses in any collective sense and wouldn't then in
23 effect diminish the estimate of losses to commercial
24 fishermen.

25 The second part of what Mr. Schatzki was saying

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1 was -- involved substitution back into the Columbia
2 River, fishing at higher levels after the closure is
3 lifted. And to some extent that involves -- well, I
4 think to a complete extent that involves the ability of
5 populations to sustain that additional level of fishing
6 at a later date. So I think at a minimum that's
7 speculative, just because the biology of the river is
8 something that can be difficult to predict.

9 As I said, I'm not an expert in the biology of
10 the Columbia River. I did speak with a few officials as
11 I was preparing the analysis, a few people at the state
12 level, who indicated to me that it was either very
13 difficult to say or very unlikely that a substitution
14 could occur at a later date, so that fit with my sense
15 that it was unlikely and so I do think the chances of
16 that are small.

17 MR. KERNUTT: Thank you, Dr. English. I
18 have no further questions.

19 JUDGE NOBLE: Cross-examination?

20 CROSS-EXAMINATION

21 BY MR. JOHNSON:

22 Q. Dr. English, I'm Dale Johnson, one of the
23 counsel for the applicant. With regard to impacts to
24 Pacific Ocean fisheries, you opined that there could be
25 an impact with some value, but I just want to confirm

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1 that there's nothing in the ABT report, your testimony
2 today or your prefiled testimony that would allow you to
3 draw a conclusion about the specific estimated value of
4 impact on Pacific Ocean fisheries; is that right?

5 A. That's correct.

6 **Q. Okay.**

7 MR. JOHNSON: Nothing further, Your Honor.

8 JUDGE NOBLE: Redirect?

9 MR. KERNUTT: No, Your Honor.

10 JUDGE NOBLE: Council questions?

11 Mr. Stohr?

12 MR. STOHR: Good afternoon, Dr. English.

13 Just a couple of questions just to get an understanding
14 of the scope of what you did.

15 As you looked at the rec fisher impacts or
16 the decline in the angler expectations or even the
17 commercial fisheries, did you look at secondary sorts of
18 impacts? I mean, it's one thing for a commercial
19 fisherman to not be out there and bring salmon to a
20 restaurant, but the restaurant then loses money in sort
21 of a secondary impact. Did you take a look at that?

22 THE WITNESS: I didn't. In many spills we
23 attempt to look at that sort of thing. I should say in
24 terms of impacts to restaurants, that's a private claim
25 and so I'm less familiar with that.

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1 But along the same lines, there is an impact
2 to consumers because consumers would've eaten the fish
3 caught locally in the Columbia River and so they would
4 suffer also a loss of economic value. And we've looked
5 at that in a variety of spills and we rarely feel it's
6 enough information to quantify it directly, but it is an
7 omission.

8 MR. STOHR: Another question around -- in
9 terms of the value of the fisher loss, commercial or
10 rec. Is that salmon only, or is sturgeon in there, for
11 instance, on the rec side?

12 THE WITNESS: We looked at all species
13 except two, and I could check the notes. I believe
14 sturgeon is in there, although I think it's a very small
15 portion of the harvest.

16 MR. STOHR: And the last question, and we've
17 got a number of hatcheries down there on the Oregon and
18 Washington side that potentially could be impacted from
19 a spill due to their diversions or the way they operate.
20 And so when you think of a six-month window to calculate
21 impacts, if you had a major impact at a hatchery, you'd
22 lose future production. And so was that part of your
23 input at all?

24 THE WITNESS: It was not.

25 MR. STOHR: Thank you.

ENGLISH

1 JUDGE NOBLE: Mr. Snodgrass?

2 MR. SNODGRASS: Good afternoon. Just one
3 question. We had heard from prior witnesses, primarily
4 tribal but I don't think exclusively, about the impacts
5 to reputation of the fishery after a cleanup has
6 occurred. So I just wondered if, in your experience,
7 you could advise us as to how we should think about
8 that, about what economic impacts may linger and if
9 they're looking for a shorter or a longer time on --
10 after the fishery is open after, let's say, the runs had
11 been re-established, to what extent is there a loss
12 of -- does the reputation of the fishery suffer and is
13 there an economic consequence there?

14 THE WITNESS: That's also something that's
15 commonly believed to occur. So it's often called either
16 a tainting effect or a stigma effect. And, again, we've
17 looked at that on a number of occasions. We've often
18 seen that there's evidence that something occurred, but
19 in the context of defending a case in litigation, we
20 have not been able to build a case that we felt was
21 strong enough to pursue that. So that means estimating
22 the amount is difficult, but, again, in economics,
23 there's always the conceptual side and understanding of
24 how consumers behave and that's always believed to be a
25 loss that we simply haven't been able to quantify.

ENGLISH

1 MR. SNODGRASS: Thank you.

2 JUDGE NOBLE: Other council questions?

3 Questions based on council questions?

4 MR. JOHNSON: None, Your Honor.

5 MR. KERNUTT: None here, Your Honor.

6 JUDGE NOBLE: Dr. English, thank you very
7 much for your testimony today. You are excused as a
8 witness.

9 THE WITNESS: Thank you.

10 MR. KERNUTT: Your Honor, I will note for
11 the record that I should have bet the under. I was very
12 successful in not being told to slow down, which I
13 consider to be an adjudication miracle. So thank you
14 very much, Your Honor.

15 JUDGE NOBLE: It is. I think in general
16 we're doing much, much better today and I credit you
17 entirely for that.

18 Mr. Lothrop?

19 MR. LOTHROP: Thank you, Your Honor. The
20 day is not over yet. We'll see how we do for the rest
21 of the afternoon. I would like to call Mr. Michael
22 Broncheau to the stand.

23 JUDGE NOBLE: Give me the pronunciation of
24 your last name again.

25 MR. BRONCHEAU: Michael Broncheau.

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1 JUDGE NOBLE: Broncheau. Mr. Broncheau,
2 would you raise your right hand.

3 (Witness sworn.)

4 JUDGE NOBLE: Thank you. Please be seated.
5 You may proceed, Mr. Lothrop.

6 THE WITNESS: Michael Broncheau, the last
7 name is spelled B-r-o-n-c-h-e-a-u.

8 MICHAEL BRONCHEAU,

9 having been first duly sworn,

10 testified as follows:

11 DIRECT EXAMINATION

12 BY MR. LOTHROP:

13 Q. Mr. Broncheau, I'd like to acquaint you and your
14 qualifications with the council. And could you describe
15 a little bit of your personal background, and then we'll
16 talk about your job duty at the Columbia River
17 Inter-Tribal Fish Commission.

18 A. I spent 30 years in military uniform, 20 of that
19 was active duty, an additional ten was active guard and
20 reserve with Oregon Army National Guard. And I retired
21 from active duty in 2003. And in August of 2003, I
22 started to work for the Columbia River Inter-Tribal Fish
23 Commission.

24 Q. Thank you, Mr. Broncheau. Can you describe what
25 job duties you assumed when you started working for the

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1 fish commission, and maybe move your microphone a little
2 closer to you.

3 A. My initial job assignment was the project
4 coordinator for the operation and maintenance of the
5 in-lieu and treaty fishing access sites. In 2008, we
6 received job reclassification and I am now the manager
7 for the operation and maintenance of the in-lieu and
8 treaty fishing access sites.

9 **Q. Mr. Broncheau, can you remind the council what**
10 **the in-lieu and treaty fishing access sites are?**

11 A. The in-lieu sites are the original five sites
12 constructed. And those sites, at least four of those
13 five sites, have permanent residents on them.

14 **Q. Where are they located?**

15 A. They are located on the Columbia River in the
16 Bonneville pool. All of them are along the Bonneville
17 pool, either at Cascade Locks and going as far as Lone
18 Pine next to the Dalles Dam. Those sites have permanent
19 residents. And the treaty fishing access sites, which
20 were constructed later, they spelled out specifically
21 that they would not have permanent residents authorized
22 to live on those sites. So the difference is in-lieu
23 sites have permanent residents, treaty fishing access
24 sites do not.

25 **Q. Can you describe the operation requirements of**

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1 the in-lieu and treaty fishing access sites for the
2 council.

3 A. Currently we have six full-time employees and
4 one seasonal employee. I manage the operation
5 maintenance, but I also have three crews upriver, a crew
6 supervisor and two senior maintenance operators and
7 three additional maintenance workers; essentially three
8 crews up there. We've divided the river up into three
9 sections, and each crew operates and maintains one of
10 those three sections.

11 **Q. And what are they responsible for in operating**
12 **and maintaining these sites?**

13 A. Currently they are responsible for the weekly
14 cleaning of all of the sites. The sites have men's and
15 women's restrooms and shower facilities, ceremonial
16 sheds, dry sheds, boat docks, boat ramps, irrigated and
17 manicured lawns and shrub beds; not all of the sites,
18 but a big percentage of them do. For the upriver,
19 they're a little more sparse in that they may only
20 have -- involve toilets and boat docks, boat ramps.
21 They're responsible for cleaning those on a weekly
22 basis. We just don't have enough manpower to clean them
23 every day, so they may get to the sites once or twice
24 per week.

25 In the spring of the year, we go through and do

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1 major cleanup of the sites, do pressure washing on
2 fish-cleaning tables, those types of things on dry
3 sheds. At the end of the year, we do a major cleanup
4 and we move any abandoned, personal or titled property
5 from the site.

6 **Q. So, Mr. Broncheau, is it fair to say that you**
7 **and your crews spend a lot of time adjacent to the**
8 **Columbia River?**

9 A. Yes, it is. My crew spends every day on the
10 river unless they're in training. And I get to travel
11 up to the river at least three to five days a week.

12 **Q. What is your budget for maintaining these sites,**
13 **and is it limited?**

14 A. Current budget is between 800 and 850,000 a year
15 and that comes out of a pre-existing fund that was
16 turned over to us from the Bureau of Indian Affairs when
17 we signed a 638 contract with them.

18 **Q. So, Mr. Broncheau, is that a capital fund**
19 **intended to carry into the future?**

20 A. Yes, it is. It was initially turned over to the
21 Bureau of Indian Affairs to invest. They were not able
22 to invest because of federal laws. So the tribes looked
23 for an alternative, and what they decided on was the
24 Columbia River Inter-Tribal Fish Commission would take
25 over the operation and maintenance of those sites and

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1 also the maintenance dollars. We, as a nonprofit, could
2 invest those dollars where the BIA was not able to
3 invest those. So we have been able to extend the life
4 of those maintenance dollars some, but due to the
5 limitations in our 638 self-determination contract, we
6 were not able to make a lot of dollars or a lot of
7 interest off of those investments. We need to invest in
8 federal documents that only are paying an extremely
9 small amount of interest right now.

10 **Q. Mr. Broncheau, I would like to ask you about the**
11 **numbers of residents at the sites. You said that**
12 **permanent residency is about -- at the in-lieu sites,**
13 **but not at the treaty fishing access sites. Maybe you**
14 **could talk a little bit about how many residents are at**
15 **the sites and what that has meant for your**
16 **responsibilities?**

17 A. That is correct. We actually started
18 maintaining numbers over the past three years. Last
19 year, in January, we had 78 residents on the sites,
20 almost all on the in-lieu sites only. And during the
21 height of the commercial gillnet season in September, we
22 had 901 residents on the sites. What it does for the
23 operation and maintenance is -- makes us work very hard
24 in order to try and keep those sites maintained with
25 that many tribal users on the sites on a daily basis.

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1 As the fish numbers increase, of course, use and
2 population on sites have also increased.

3 **Q. Mr. Broncheau, have these number of people being**
4 **on the sites required any changes in how you manage the**
5 **water supplies at the sites?**

6 A. Three years ago, the Indian Health Service
7 conducted a sanitary survey of the sites. They have
8 been doing so for several years. But they indicated
9 that we have enough population on the sites that the
10 sites with water systems that we operate and maintain
11 would probably qualify as public water systems.

12 Since that notification, we've started keeping
13 population data because part of the requirement for
14 becoming a public water system, it needs to have at
15 least 25 users for 60 or more days per year. And some
16 sites definitely indicated that some of our sites with
17 wells would qualify as public water systems.

18 Since that time, we've worked to get those sites
19 up to a public water system standard. That would be an
20 addition of more equipment on the sites in the well
21 houses, equipment such as water meters and sampling
22 quarts and new wellhead covers. It also meant that we
23 needed to get trained on public water systems. Three of
24 my crew have currently been through training and we are
25 now qualified as public water system operators.

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1 **Q. Mr. Broncheau, can you describe what the water**
2 **supplies are like at the sites and what you've learned**
3 **about water supply, generally, through this training.**

4 A. We have 12 sites with wells and two of those
5 sites are with hand wells only. The others have pumps,
6 and those pumps will provide water to the site through a
7 one-and-a-half or two-inch water main at the rate of
8 between 6 and 28 gallons of water per minute.

9 We have other sites that are connected to
10 utility company water systems, i.e., the city of the
11 Dalles, the city of Lyle, the city of Cascade Locks.
12 And those water mains are also about one and a half to
13 two inches in size and also provide water at a rate on
14 the upper end of 28-gallons-per-minute rate.

15 **Q. So in the course of your training, have you**
16 **learned what type of water supply is typically used for**
17 **fire suppression?**

18 A. Yes, we have. Through our current
19 qualifications, we learned that minimum water mains that
20 would be required to operate a fire hydrant is
21 four-inch, but the preferred is six-inch water mains and
22 none of our sites currently have anything close to that,
23 nor do any of the pumps -- could they provide water for
24 something like that. All of them, to fill a four-inch
25 or six-inch water main would take much more than the

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1 28 gallons per minute that's currently provided on all
2 of the sites.

3 **Q. Thank you. Next, I'd like to talk a little bit**
4 **about fire and the risk of fire at the sites.**

5 **Mr. Broncheau, could you give us -- give the council a**
6 **little background on your experience with firefighting.**

7 A. Before I went into the service, before I was
8 drafted, I also worked for the federal forest service
9 and I did go through their wildlands fire program, and
10 fought wildfires in Oregon, Washington, Idaho,
11 California. Attended some of their training, not only
12 as a firefighter, but also as a crew leader, assistant
13 crew leader and a safety scout.

14 **Q. Have you observed fires along the Columbia River**
15 **in your experience working for the commission?**

16 A. Yes. In the 13 years that I've been working on
17 the Columbia River, I've got to observe fires almost
18 every year, either in the Oregon or Washington side.
19 Last year I saw most of the grass and sage brush between
20 Wishram, Washington, and Roosevelt, Washington, burn in
21 a series of six or seven fires over the course of the
22 summer.

23 Wind is an extremely large factor in any of
24 those fires. Like we learned in the wildland fire
25 training, those fires tend to create their own weather,

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1 but also on the Columbia River, there's almost always a
2 constant west wind and that wind will push those fires
3 extremely quickly and they'll cover an extremely large
4 area. It happened not only on the Washington side but
5 the Oregon side.

6 Most recently it was a fire, in the past couple
7 weeks, it started at a point about two miles east of the
8 Dalles Dam and spread all the way to Deschutes River,
9 about ten to 12 miles, and it did that in an afternoon
10 and the night. The village of Celilo had to be
11 evacuated, and that fire moved extremely fast. Ten to
12 12 miles is a good distance to travel in about 12 to
13 14 hours.

14 **Q. Thank you. Have you observed fires at any of**
15 **the in-lieu or treaty fishing access sites?**

16 A. Unfortunately, yes, we have. We've had several
17 fires over the years. One of the worst that I remember
18 was at Underwood. Underwood is an in-lieu site about
19 three miles to the west of Bingen and about a quarter
20 mile from the Burlington Northern Santa Fe tracks. The
21 fire actually started on the site in a little camp
22 trailer and quickly spread to the one resident on the
23 site -- residence on the site, as well as several other
24 campers and trailers, boats, both on trailer and off
25 trailer. Also a railroad car that was there being used

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1 as storage for one of the tribal member's fishing gear,
2 that burned completely and all of the gear inside, as
3 well as two dry sheds.

4 Firefighting -- that particular fire was
5 extremely hampered because of the steep single-lane
6 access road down into the site and the size of the site
7 itself. It didn't allow more than one fire truck at a
8 time from the local rural fire department down on the
9 site to disburse the water from the fire truck. So had
10 there been a fire hydrant on site or a way to access
11 water directly from the river, I think more of the --
12 certainly more of the property on site could have been
13 saved.

14 **Q. Thank you.**

15 MR. LOTHROP: Ms. Mastro, could you call up
16 Exhibit 5126, please.

17 BY MR. LOTHROP:

18 **Q. Mr. Broncheau, could you describe to the council**
19 **what this picture is.**

20 A. This is a picture at the access to the Cook's
21 Landing in-lieu site. This is looking west along the
22 south side of SR-14 and the Burlington Northern
23 Railroad, both looking in a westerly direction. Off to
24 the left, you see some vehicles and the roof of a house.
25 Those were on the Cook's in-lieu site.

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1 **Q. Could you describe your concerns with respect to**
2 **Cook's in the event of a derailment, or for that matter,**
3 **many of the other sites?**

4 A. I think one of my worst fears on any of these
5 sites, not only the in-lieu sites but some of the treaty
6 fishing access sites when they're fully manned and fully
7 occupied, is a fire getting started on there. Almost
8 all of the sites have one road in and one road out. And
9 almost all of them cross a railroad, whether it be
10 Burlington Northern Santa Fe or on the Oregon side the
11 Union Pacific. If a fire gets started, if that access
12 road is blocked, either from an oil spill or some other
13 emergency, the only way that the residents on that site
14 can escape is either over the bank, which is hazardous
15 at best, or by boat, which is also hazardous. It's
16 hazardous in the daytime going from the dock, but if
17 they need to go from the bank to climb into a boat to
18 try and escape that area, that would be even more so.

19 **Q. Thank you, Mr. Broncheau.**

20 MR. LOTHROP: I would like to call up
21 Exhibit 5159.

22 BY MR. LOTHROP:

23 **Q. And ask you, Mr. Broncheau, to talk a little bit**
24 **about the shoreline along the Columbia River.**

25 A. When it comes up, you will see a shoreline that

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1 is extremely rocky. On the best of times, it's a hazard
2 getting across that when you go from the water up to the
3 top or vice versa, from the top down to the water.
4 Almost all of the shoreline on the Columbia River is
5 fairly rocky. Those stones are -- have fallen off or
6 they have been placed there with the construction of
7 either roads or railroads. And they use fairly large
8 stones at the base, at the bottom. Those stones are a
9 hazard to get across in daylight or dark.

10 MR. KERNUTT: Maybe you could -- could you
11 pull up the next exhibit, which I believe is 5160. If
12 that happens to be the same exhibit, it's not a problem.

13 BY MR. LOTHROP:

14 **Q. So, Mr. Broncheau, while we're waiting for the**
15 **exhibit to come up, perhaps you could talk a little bit**
16 **about whether these shorelines are remote and how easily**
17 **they can be -- how easily they can be accessed.**

18 A. In both the Dalles and the John Day pool, the
19 sites are extremely remote, sometimes miles in between
20 one of the sites, or anything else, to either the Oregon
21 or to the Washington side of the Columbia. If there is
22 a spill or a fire on those sites, it would be very
23 difficult sometimes to learn about it. Although the
24 sites are remote, trying to get word out is also a
25 problem, not only because of the limited access onto or

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1 off of the site, but also because not all of the sites
2 have cell phone coverage. All the tribal fishers do
3 have and use cell phones, but in some places we just
4 don't have coverage at all and it may be hours before we
5 actually know -- before we know, as a maintenance crew,
6 that something has happened at one of the sites.

7 MR. LOTHROP: Next, Ms. Mastro, it would be
8 great if you could call up Exhibit 54, page 151. And,
9 Ms. Mastro, can you make the picture in the lower
10 left-hand corner larger, if possible.

11 BY MR. LOTHROP:

12 Q. Mr. Broncheau, can you please describe what this
13 picture is.

14 A. This is a picture of a geographic response plan.
15 I attended some training last year and a couple almost
16 three years ago, and we learned a little bit about GRPs.
17 And to my surprise, I discovered that the GRPs are using
18 our fishing sites, the in-lieu sites and also some of
19 the treaty fishing access sites as collection points in
20 the case of an oil spill. This particular site is
21 Cook's Landing. Where you see the road in the upper
22 part of the north part of that photo there, is the same
23 railroad crossing we looked at a little earlier of the
24 Cook's treaty -- or in-lieu site. And you see that the
25 proposal is to put a boom and collect oil using the rock

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1 growing there that protects the little dock and boat
2 ramp at the Cook's Landing.

3 When we initially saw this, it was almost
4 three years ago in the Dalles, we made comment that this
5 would probably likely -- probably not be a very good
6 idea for these sites. You would have a lasting effect
7 on these sites for years to come. And then when we saw
8 it last year in another significant oil spill training
9 program, we said what we had commented on three years
10 ago. It evidently had no effect because these same
11 geographic response plans are still in there. They're
12 still using in-lieu and treaty fishing access sites as
13 collection points.

14 These sites are constructed on ancient fishing
15 sites and in a lot of cases fishing villages. According
16 to some of the carbon dating stuff that I have read for
17 our fishing sites, we've been fishing at some of these
18 sites for 10,000 years. 330 generations have used some
19 of these sites and yet currently, evidently, don't come
20 to the importance of not being used as spill response
21 sites, collection points.

22 If this is used, this particular one at Cook's
23 Landing, oil, of course, would naturally get into that
24 rock groin and contaminant that area at least for
25 months, probably years to come. That whole groin would

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1 probably have to be removed and then it could be cleaned
2 down to the base and reconstructed. Something like that
3 is not going to happen overnight. It's going to affect
4 the people that live on that site, and on this
5 particular site, anywhere from 25 to 75 people during
6 commercial gillnet season will be affected by that.
7 It's probably not as big an impact as if the oil were on
8 the surfing beach a few miles further east at Hood
9 River, but 75 people, their livelihood would be affected
10 for years to come. They haven't anyplace else to go.

11 **Q. Mr. Broncheau, there's now a pointer by your**
12 **right hand. Could you show the council where the**
13 **platforms are located on the fishing access site.**

14 A. With --

15 **Q. The pen is actually a laser pointer. No, no,**
16 **no. The pen on your --**

17 A. This one?

18 **Q. Yeah. I'm not sure exactly how it works.**

19 A. Okay. At that point right there, if I can find
20 my light again --

21 **Q. Maybe just one click. There you go.**

22 A. At that point right there and that point right
23 there are two platforms that are used by residents on
24 that particular site and that's used for ceremonial
25 fishing or subsistence fishing and commercial fishing.

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1 If that particular site was used and oil was collected
2 at that site, of course those platforms would become
3 unusable for years to come. And it's not something that
4 you can rebuild someplace else. This is a specific
5 need, specific reason those platforms are built there.
6 It would affect those families who use that for years to
7 come. These are not families that could, of course, go
8 and get loans on these platforms or replace them some
9 other way or to take out loans on homes or anything else
10 like that to try and replace those. And it wouldn't be
11 an immediate replacement however you look at it. Could
12 take years to rebuild that groin and make it usable
13 again.

14 **Q. Thank you.**

15 MR. LOTHROP: I have no further questions at
16 this time.

17 JUDGE NOBLE: Cross-examination?

18 CROSS-EXAMINATION

19 BY MR. JOHNSON:

20 **Q. Mr. Broncheau, I'm Dale Johnson, one of the**
21 **attorneys for the applicant. A couple of follow-on**
22 **questions to your discussion there at the end about the**
23 **GRPs. First of all, those are State-approved plans,**
24 **correct?**

25 A. Which?

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1 Q. The GRPs. And if you don't know the answer, I
2 can ask a second -- strike that question.

3 These plans aren't prepared or approved in any
4 way by the applicant for the Vancouver Energy terminal;
5 is that correct?

6 A. Not that I know of, no.

7 Q. Okay. All right.

8 MR. JOHNSON: Ms. Mastro, could you pull up
9 Exhibit 53, page 32, please.

10 MS. MASTRO: Exhibit 53, page 32?

11 MR. JOHNSON: Correct.

12 MS. MASTRO: It is a large exhibit, so it
13 will take me a minute.

14 MR. JOHNSON: Okay. Sorry about that. Then
15 while you're working on it, when you get in that range,
16 I think I'll start with page 31. Thank you. Could we
17 focus in on the last part of that, bottom part of that
18 page where it says "Considerations." Thank you.

19 BY MR. JOHNSON:

20 Q. Can you -- do you see there about halfway down
21 on the -- where it says "Considerations," it says,
22 "Tribal Lands or Uanda Interests (Note: 7)"?

23 A. I see it, yes.

24 Q. Okay. And then --

25 MR. JOHNSON: Now, if you can go to page 32,

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1 please, the next page and focus on Note 7.

2 BY MR. JOHNSON:

3 Q. If you can just take a moment and read Note 7.
4 (Witness reviews document.)

5 A. Okay.

6 BY MR. JOHNSON:

7 Q. Is this note regarding early coordination with
8 tribal governments being recommended during a response
9 consistent with your understanding of the coordination
10 that's expected during implementation of this GRP?

11 A. I would have expected some of that for the GRPs
12 that were published. And I don't know that that has
13 happened, even though we made comments three years ago,
14 they evidently weren't implemented in a revised plan, or
15 at least the latest one as of last year.

16 Q. Okay. And did you make comments on that
17 revision?

18 A. I'm sorry?

19 Q. Did CRITFC make comments on that proposed
20 revision, the one you just referred to?

21 A. We made comments when the training was going on,
22 yes.

23 MR. JOHNSON: All right. Nothing further.

24 JUDGE NOBLE: Redirect? Redirect?

25 MR. LOTHROP: None, Your Honor.

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1 JUDGE NOBLE: Council questions?

2 Mr. Shafer?

3 MR. SHAFER: Mr. Broncheau, thank you very
4 much for your testimony today.

5 In the history of these sites that you're
6 speaking of, have there ever been any train incidents,
7 any derailments, any spills of any type that have
8 adversely affected the sites?

9 THE WITNESS: Not since I have been working
10 there for 13 years, no.

11 MR. SHAFER: Okay. And you're not aware of
12 any even prior to that time?

13 THE WITNESS: No.

14 MR. SHAFER: Okay. Thank you.

15 JUDGE NOBLE: Other questions?

16 I have one about the exhibit. Could we see
17 5160 again, that photograph. There's a very light --
18 Mr. Broncheau, a very light kind of semi-circle line in
19 that photograph. Is that a net?

20 THE WITNESS: That is a commercial gillnet,
21 yes. It's attached to the bank on one end and you
22 probably can't see it, but there's a float out on the --
23 actually you're looking south across the Columbia from
24 the Washington shore. There would be a float holding
25 the other end of that net up. The little thin lines are

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1 floats that you see -- those are floats. And in this
2 particular section of the Columbia River, there is an
3 eddy that tends to want to push the net back upstream.

4 JUDGE NOBLE: And that's a tribal gillnet?

5 THE WITNESS: Sorry?

6 JUDGE NOBLE: Tribal gillnet?

7 THE WITNESS: Yes, it is. One of the four
8 Columbia River treaty tribes, one of our tribal
9 fishermen, and that's his net out there.

10 JUDGE NOBLE: Thank you for that
11 clarification. Thank you.

12 Any questions based on council questions?

13 MR. JOHNSON: No, Your Honor.

14 MR. LOTHROP: Yes, Your Honor, I have one.

15 REDIRECT EXAMINATION

16 BY MR. LOTHROP:

17 **Q. Mr. Broncheau, could you describe when the**
18 **treaty fishing access sites and in-lieu sites were first**
19 **contemplated by the tribes and the federal government,**
20 **when construction began on the treaty fishing access**
21 **sites and when the treaty fishing access site**
22 **construction was concluded.**

23 MR. JOHNSON: Objection, it's beyond the
24 scope of any council question.

25 MR. LOTHROP: Your Honor, I think it's

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1 relevant to the -- I'm sorry, I can't see your name.

2 MR. SHAFER: Shafer.

3 MR. LOTHROP: Shafer. Councilmember Shafer
4 asked, in Michael's experience, had he observed any rail
5 impacts to the sites. And I think it might be relevant
6 to know when the sites came into existence in
7 relationship to Mr. Broncheau's career.

8 JUDGE NOBLE: I'll overrule the objection.
9 If you have another question, Mr. Johnson, you can
10 certainly ask it.

11 MR. JOHNSON: That's okay, Your Honor.

12 JUDGE NOBLE: You may answer the question if
13 you remember what it was, Mr. Broncheau.

14 A. Prior to the construction of the Bonneville Dam,
15 the Corps of Engineers understood that construction of
16 that dam would require probably the loss of fishing
17 sites, fishing villages, and so they took several trips
18 to identify these locations. And I believe this was in
19 1937. At that time these sites were promised in lieu of
20 the sites that would be flooded and later on, because of
21 that flooding of treaty fishing access sites, that would
22 allow tribal members to have access again to the river.

23 The first of the treaty fishing access sites,
24 construction on them was started in 1995 and I think it
25 concluded in 1996. The last site at Dallesport was

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1 completed two years ago. So from 1937 to two years ago
2 is how long it's taken to get those sites in place. And
3 they haven't been there that long, as we -- as we -- as
4 tribal members consider time and generations. And so
5 there are still concerns that with the number of rail
6 cars coming through the gorge, that something could
7 still happen to our sites, or it doesn't even have to be
8 on site, as we've already seen. They use the sites as a
9 collection point. It could happen miles off the site,
10 above the site and still have a dramatic effect on the
11 sites.

12 MR. LOTHROP: No further questions, Your
13 Honor.

14 JUDGE NOBLE: I missed when Bonneville Dam
15 was constructed and I'm sure it was in the evidence
16 somewhere, but I'm not remembering. Do you know the
17 date, the year, when the Bonneville Dam was constructed?

18 THE WITNESS: When it was --

19 JUDGE NOBLE: Built.

20 THE WITNESS: When the construction started?
21 I'm sorry.

22 JUDGE NOBLE: When it was done.

23 MR. LOTHROP: So I think, Your Honor,
24 Mr. Broncheau is trying to -- thank you. You just
25 clarified your question. When construction was

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1 completed.

2 JUDGE NOBLE: Thank you. What year was it
3 completed; do you know?

4 THE WITNESS: I don't know.

5 JUDGE NOBLE: Oh, sorry. Thank you. I
6 thought you had said that and I had missed it. I
7 apologize. So is there a question based on that?

8 REDIRECT EXAMINATION

9 BY MR. LOTHROP:

10 Q. Would it surprise you if I said construction was
11 completed in 1938?

12 JUDGE NOBLE: No, no, no.

13 MR. LOTHROP: I have no further questions,
14 Your Honor.

15 JUDGE NOBLE: Mr. Broncheau, thank you very
16 much for your testimony. You are excused as a witness.

17 THE WITNESS: Thank you, Your Honor.

18 JUDGE NOBLE: The court reporter is asking
19 for a break. So we'll be off the record and in a break
20 until 2:30 -- 2:45.

21 (Recess taken from 2:31 p.m. to 2:49 p.m.)

22 JUDGE NOBLE: We're back on the record.

23 Mr. Lothrop, do you have another witness?

24 MR. LOTHROP: Yes, Your Honor. Your Honor,
25 I would like to call Chief Mitch Hicks to the stand.

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1 JUDGE NOBLE: Chief Hicks, would you raise
2 your right hand. I see it's already raised.

3 (Witness sworn.)

4 JUDGE NOBLE: Thank you. Please be seated.

5 MITCH HICKS,

6 having been first duly sworn,

7 testified as follows:

8 DIRECT EXAMINATION

9 BY MR. LOTHROP:

10 **Q. Chief Hicks, can you spell your first and last**
11 **name for the court reporter.**

12 A. Yes. Mitch Hicks, M-i-t-c-h H-i-c-k-s.

13 **Q. Thank you, Chief Hicks. Can you please describe**
14 **for the council your role with the Columbia River**
15 **Inter-Tribal Fish Commission?**

16 A. I began my career with the Inter-Tribal Fish
17 Commission in April of 1993. Throughout -- started my
18 career as a patrol officer, then as a sergeant, and
19 three years ago I was appointed as chief. I have spent
20 thousands of hours on the Columbia River, in a patrol
21 capacity and as a supervisor and as an executive. I
22 have worked the Columbia River from Hanford Reach to the
23 ocean and in a wide range of weather conditions and some
24 bluebird days and some not so.

25 **Q. Thank you. And can you describe the nature of**

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1 the work that your fisheries enforcement department
2 does.

3 A. We have about 700 square miles of patrol area.
4 We have a staff of approximately 13 sworn officers,
5 dispatch staff and administrative staff. The primary
6 patrol area is at Bonneville Dam and extends east to
7 McNary Dam. And then we also provide mutual aid support
8 to our tribes, the CRITFC member tribes, so at times we
9 may work some tributaries.

10 We have, as was discussed earlier, 31 of the
11 treaty fishing access sites and in-lieu sites that we
12 have policing responsibilities for. We also regulate
13 and enforce the tribal laws and state laws in the treaty
14 fishery and sport fishery within Zone 6. And we provide
15 cultural and archaeological resource protection on --
16 under contract with Army Corps of Engineers.

17 **Q. Chief Hicks, I'm going to ask you a question**
18 **that we didn't talk about a lot, but could you explain a**
19 **little bit about the jurisdictional setting on the**
20 **Columbia River within which you work, the operation of**
21 **federal law, state law, tribal law and the commissions**
22 **that your officers carry.**

23 A. So I carry a -- an executive certification from
24 the Oregon Department of Public Safety Standards and
25 Training. All of our officers and supervisors are

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1 State-certified, including our dispatchers, again, with
2 the State of Oregon. The law enforcement matrix that
3 the patrol officers operate under are three federal
4 judicial districts: so the Eastern District of
5 Washington, the Western District of Washington and the
6 District of Oregon. We're, again, as I mentioned, state
7 peace officers, certified peace officers, so we have
8 full Oregon police powers. We have two -- excuse me,
9 one federal commission from the Bureau of Indian Affairs
10 for our federal authorities, and then we have a
11 deputization from Klickitat County Sheriff's Office.

12 **Q. Thank you. Can you describe a little bit more**
13 **about the nature of the patrols that you and your**
14 **officers provide on behalf of the tribes.**

15 A. They kind of fall under the primary job
16 description of the officer individually. So some of our
17 staff is dedicated to treaty fisheries enforcement, some
18 of our staff is dedicated to in-lieu and treaty fishing
19 access site enforcement. They do, however, cross over.
20 So those patrols include vehicle and foot patrols, they
21 include boat and marine patrols and at times they can
22 also include aircraft patrols.

23 **Q. How many boats does your department maintain and**
24 **operate?**

25 A. Five.

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1 **Q. And what months of the year and in what types of**
2 **weather do those boats operate?**

3 A. The fleet that we have is somewhat varied in
4 size and vessel capabilities, but all of them
5 essentially are capable of operating year round. I've
6 been out personally in some pretty extreme conditions
7 and have been highly confident in the craft and the
8 vessels that we have. We do operate year round as well.
9 So there are a number of sheriff's offices and Oregon
10 State Police that have marine enforcement programs.
11 None of the counties or Washington State parks programs
12 are year-round operations. They're seasonal. Generally
13 run from Memorial Day weekend through the Labor Day
14 weekend. Oregon State Police and ourselves are really
15 the only ones that are operating marine patrols year
16 round. Although Oregon State Police, during their big
17 game seasons, are typically assigned off of the river
18 and not present.

19 **Q. What months of the year are big game seasons**
20 **typically?**

21 A. Starting around August, mid-August, through the
22 end of November, early December.

23 **Q. Thank you. Does your enforcement department**
24 **maintain emergency response skills?**

25 A. I mean, as in investigative skills or ICS

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1 skills?

2 **Q. Well, you pick. I was going to say emergency**
3 **response skills, but I understand there's different**
4 **types of emergency response, everything from fatalities**
5 **to spills to --**

6 A. Sure. So I guess we'll separate them as in a
7 criminal response versus, say, a search and rescue
8 response or, let's say, a hazardous material spill
9 response. But in pretty much all three types, you're
10 going to operate with an incident command structure of
11 some type. Even if it's -- many people don't realize,
12 but let's say even if it was just an individual contact
13 of a fisherman on the bank and you're doing a license
14 check and so forth, well, the officer that's making that
15 contact at that point in time is an incident commander.
16 That's about as small of a scale as you can get to. But
17 that could be expanded, depending on the event at hand.
18 So whether it's a major crime response or whether it's a
19 natural disaster response or a search and rescue
20 response, those just get expanded to kind of meet -- to
21 try to meet the need of the event that you're dealing
22 with.

23 **Q. Thank you. And can you describe your emergency**
24 **response capacities in relation to your skills.**

25 A. So capacity-wise on our marine patrols, we

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1 require two officers minimum per patrol. So when you
2 have a staff of approximately 13 sworn and you've got
3 seven days a week to cover, sometimes -- many times we
4 will only be able to schedule one officer on duty at any
5 given time. They do -- we do offer flexibility for
6 officers, though, to make shift adjustments so that
7 those patrols can get done and that we can have
8 emergency coverage during times that we know are
9 critical, which are generally during periods of foul
10 weather, periods of when fishermen need to have fishing
11 gear out of the river for closures, certain ceremonial
12 fishing time periods we want to be available and on hand
13 for emergencies. So there is some preplanning that goes
14 into that capacity.

15 **Q. So one of those emergencies might have included**
16 **the Mosier train incident?**

17 A. Correct. So --

18 **Q. Go ahead. Describe for the council what your**
19 **office did, if you wouldn't mind.**

20 A. So we had -- actually we had two -- one officer
21 on duty that day and then a captain -- department
22 captain. Within about 40 minutes of notification to us
23 from Wasco County Sheriff's Office, the one officer that
24 we had responded to the scene and would begin just a
25 search of the riverbank for any sheen or any spill and

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1 if there were recreators along the riverbank that needed
2 to be notified and evacuated or moved out of the way,
3 advised, given notification, those kind of things. The
4 captain, he got with the Wasco County undersheriff and
5 started coordinating the emergency responders that were
6 beginning to arrive.

7 **Q. And did you receive any word from the Wasco**
8 **County sheriff with regard to follow-up on the incident?**

9 A. Yeah. We happened to be a member of a larger
10 regional law enforcement group, it's called the
11 Mid-Columbia Interlocal Law Enforcement Group. It is
12 comprised of about 13 or 14 law enforcement agencies,
13 from ourselves to the sheriff's offices, state police on
14 both sides of the river, Washington parks, forest
15 service and others.

16 When this emergency happened, a group message
17 went out to all of the members of the group, similar to
18 if it were, say, an active shooter incident, because
19 we're all small agencies, we need lots of help,
20 nobody -- no one agency within the Mid-Columbia is a
21 stand-alone department to be able to respond to these
22 events. So following that response, some week or so
23 after the things were sort of restored to -- for the
24 local citizens, community members of Mosier, restored to
25 livability, Wasco County Sheriff's Office sent out a

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1 letter thanking everyone for their assistance. And he
2 acknowledged that what was accomplished there in terms
3 of first responders and from law enforcement couldn't
4 have been accomplished without -- you know, without
5 being a group effort.

6 **Q. Thank you. And did you have any subsequent**
7 **follow-up with law enforcement and other emergency**
8 **response to evaluate how things went during this**
9 **operation?**

10 A. Yes. So since then the Wasco County Sheriff's
11 Office sent each agency that had responders a form to
12 have written and returned to them as an afteraction
13 report. And last Friday for approximately three hours,
14 there was a hotwash held at the Columbia Gorge Community
15 College. A hotwash is an emergency management term for
16 basically a multi-agency debriefing of a large-scale
17 event. And there were -- they broke it up into
18 discipline. So there were local and state elected
19 officials, there were law enforcement leaders, there
20 were fire service leaders, public education, community
21 education, public health leaders, every -- I think there
22 was about 36 or 37 in attendance to that and basically
23 had a roundtable discussion and a debriefing of that
24 event.

25 **Q. What did you learn as a result of that**

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1 roundtable?

2 A. From the law enforcement perspective, our group
3 felt like that we could have and should have organized
4 the unified command much quicker. It took us about
5 36 hours or so to really get that structured. Then we
6 also identified some improvement that we could've made
7 in communications. The Wasco County 9-1-1 center was
8 completely overwhelmed and there was no representative
9 from a communications discipline included in the unified
10 command, and so we felt like that we could have done a
11 better job with including communications.

12 The other thing that we realized, during this
13 discussion from both fire service and from the law
14 enforcement responders, was when the Union Pacific
15 Railroad incident command team arrived, who I understand
16 to be a contracted incident command service for these
17 kinds of events, that the objective of that incident
18 command team was to get the rail cleared and get trains
19 moving again; which was not aligned with the objective
20 of the local unified command in terms of communicating
21 with the community, working with Red Cross and others
22 for sheltering of evacuated residents, input from city
23 council, input from county commissioners, input from I
24 know at least three state senators and one federal
25 congressman that was there and felt like they that had

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1 very little input directly anyway to -- with the
2 incident command team.

3 There were a couple of debriefings that were
4 held for community members and elected officials on two
5 different days, but we certainly got the sense that the
6 railroad incident command team and the local unified
7 command were not aligned in what the objectives in terms
8 of community health and community livability was --
9 would look like in -- you know, within a given amount of
10 time following that event.

11 **Q. So, Chief Hicks, I would like to shift gears a**
12 **little bit and talk about your knowledge of the Columbia**
13 **River and ask you to share some of that with the**
14 **council, and in doing so, talking about wind conditions,**
15 **wave -- and wave conditions. Let's start there, and**
16 **then we'll move on to boat experiences and vegetation.**

17 A. Okay.

18 **Q. So if you could talk a little bit about your**
19 **experience with wind and waves on the Columbia River.**

20 A. There's obviously -- or maybe not obviously, but
21 if you spent any time in the Columbia River Gorge, it
22 becomes obvious pretty quickly why the Columbia River
23 Gorge is the windsurfing capital of the world. Many
24 claim that. I don't know. I'm not a windsurfer, so I
25 don't get around the world windsurfing very much. But I

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1 do know that there are people from all over the world
2 that come there to participate in that sport, that
3 recreation. And the winds are consistent. That's why
4 they like it. The winds are strong. That's why they
5 like it. The wave action in the river itself is
6 significant and they like it. So that's all good for
7 recreation.

8 When it comes to law enforcement, marine
9 enforcement, emergency response in terms of drownings
10 and vessel capsizings and just dealing day to day with
11 the conditions of the river, it's a pretty unique
12 location, very unique.

13 **Q. Have you had to deal with drownings in your**
14 **official capacity?**

15 A. Yes.

16 **Q. How many?**

17 A. I've personally investigated 19 drownings in the
18 Columbia River.

19 **Q. Can you describe your boat operating skills and**
20 **those of your staff in these kinds of wind and wave**
21 **conditions.**

22 A. All of our staff attends a two-week training
23 academy with the Oregon State Marine Board. All of our
24 staff and patrol officers, when they go through their
25 field training program, we have our own five-week field

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1 training section, if you will. So they're -- they're a
2 phase, rather, is what they're called. I kind of lost
3 my thought here. There's a five-week phase just on boat
4 operations, and we -- it's structured -- the training is
5 structured just pretty much completely around what we
6 have learned over the last 30, 40 years of our patrols
7 and dealing with the wind, waves and current is -- you
8 know, rescue operations. We just held a search and
9 rescue training exercise about a month ago. And so all
10 of our officers are trained. They continue to train.
11 And some have been instructors, in fact, for this marine
12 board training that's offered by the state.

13 **Q. Would you consider these skills to be**
14 **specialized or unusual skills?**

15 A. I would not characterize them necessarily as
16 specialized, except that I think you're -- the
17 day-to-day street cop, of course, doesn't have these
18 skills, but that's not necessarily their key job
19 function either. But it is a skill, particularly in the
20 Columbia River Gorge. And I would maybe liken it to
21 operating in whitewater, say, if you've been in Hells
22 Canyon at all or, you know, Salmon River in Idaho or
23 someplace where you're operating jet boats in
24 whitewater, it could be somewhat similar. And it's a
25 skill that is learned, it's a skill that has to be

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1 refreshed and -- because it is perishable. It's a
2 perishable skill.

3 **Q. Can you give us a sense of how strong the wind**
4 **is with respect to the waves? Do the waves whitecap?**
5 **Does the water spray around?**

6 A. I mentioned earlier that I've spent thousands of
7 hours on the Columbia River in my career. Some have
8 been beautiful bluebird, you know, the river surface is
9 like a mirror, all the way up to conditions where winds
10 are 50 miles an hour plus and you can get standing waves
11 in the river itself to where we have one patrol boat
12 that I've operated, it's a 26-foot boat, it's got a
13 nine-foot beam, and we have submarined the bow of that
14 boat into the standing waves, filling pretty much the
15 open scupper deck in the front, you know, to the point
16 that water's sloshing up onto the windshield. I thought
17 we were going under that day. That was a scary -- that
18 was a scary event.

19 But the only reason we were out there was
20 because we had a call to rescue a windsurfer, a downed
21 windsurfer. We located the windsurfer and the waves are
22 so tall that they would disappear and -- you couldn't
23 even see them, you're going up and down, up and down,
24 and they're disappearing and you couldn't even see them
25 long enough to throw a ring to them and then not wanting

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1 to get the vessel so close that you come down on them
2 and injure them that way. So it's very, very difficult.
3 And then you've got wind that's pushing the vessel
4 around.

5 And other times you can be driving down the
6 freeway, there are a few sections where, say, around
7 east of Stevenson, there's a constriction in the Gorge
8 and it -- for whatever the scientific reasons are, but
9 it compresses the air there and it blows those waves up
10 and you can be driving down the freeway and it's blowing
11 water off of the whitecaps of these waves onto the
12 freeway. The same up east of John Day between John Day
13 River and Philippi Canyon. So it can get very blown --
14 very hard out there, and these are significant water
15 river conditions to be operating a vessel in and
16 conducting, you know, patrols and emergency responses.

17 **Q. Thanks. Can you give us a sense about**
18 **vegetation in the Columbia River?**

19 A. The Columbia River, of course, is strewn with
20 shallows and eddies where this vegetation grows up.
21 Typically in the wintertime, we see it -- it dies off or
22 something or it goes dormant and you don't see it much
23 on the surface. But then by early summer when it grows
24 up, it just forms very large mats across the surface of
25 the water. And then for various reasons the wind and

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1 wave action and I suppose other debris, big, large,
2 woody debris coming down the river breaks it loose and
3 it will float down the river and it will collect in
4 eddies and it collects within the tribal -- the
5 fishermen's gear as well, these nets. And it's pretty
6 massive how much of this vegetation is in the river.

7 **Q. Thanks. I would like to shift gears just a**
8 **little bit back to emergency response. Do you maintain**
9 **the capability of deploying boom material?**

10 A. We do. We have approximately 800 feet of
11 containment boom stationed at an office we have near
12 Boardman, Oregon. Some of the officers have been
13 trained in deploying boom, some have not. But
14 eventually all will be.

15 **Q. Can you describe your experience with**
16 **containment boom and whitecaps.**

17 A. So the containment boom is not as fluid, of
18 course, as the water itself or -- you know, it is
19 flexible, but it's not as fluid. So when you get --

20 MR. JOHNSON: Objection. Excuse me, I'm
21 sorry I cut you off. Your Honor, so far we don't have
22 the foundation that this witness has the expertise or
23 training or experience regarding booms. So if
24 Mr. Lothrop could lay that foundation before continuing,
25 please.

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1 JUDGE NOBLE: All right. I'll reserve
2 ruling on the objection until the foundation is laid.

3 MR. LOTHROP: Thank you, Your Honor.

4 BY MR. LOTHROP:

5 Q. Chief Hicks, do you have any training in
6 deploying booming material?

7 A. Yes, I do.

8 Q. Have you deployed booming material on the
9 Columbia River?

10 A. Yes, I have.

11 Q. What are your observations with regard to --
12 have you observed whitecaps on the Columbia River?

13 A. Yes, I have.

14 JUDGE NOBLE: At this time I'll overrule the
15 objection.

16 MR. LOTHROP: Thank you, Your Honor.

17 BY MR. LOTHROP:

18 Q. Chief Hicks, can you describe your observations
19 with regard to whitecaps and oil booming?

20 A. Sure. So as far as capability goes, it is
21 easily done in deploying boom when wind and waves are
22 occurring, even if they are large, as long as it's --
23 you can get it secured to one end or the other. But as
24 the wave action and the boom material interact, the boom
25 material is somewhat flexible, but, of course, it's not

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1 as fluid as the water is, so you get gaps and spaces as
2 the water and the waves interact with the boom and you
3 get cavitation of the whitecaps of the waves that are
4 move -- that are splashing over and under the boom
5 material.

6 **Q. Thank you. Chief Hicks, Mr. Haugstad, a witness**
7 **for the proponent, at paragraph 23 of his testimony**
8 **talked about the Current Buster Technology. Did you**
9 **review that portion of his testimony?**

10 A. I have.

11 **Q. Do you have any observations you'd like to share**
12 **with regard to the Current Buster Technology?**

13 A. I did some research into the NOFI Current Buster
14 systems. So this is a -- these are manufactured by a
15 company in Norway, and they're designed for large open
16 water areas and ocean. They are deployed and operated
17 by typically large, deep draft vessels. They are -- the
18 data that is provided by the manufacturer states that
19 these are designed to collect surface oil, and their
20 biggest benefit that they claim is to be able to cover
21 large amounts of area quickly. So they're talking about
22 moving this system through the water at two to three
23 knots. Well, that is already the approximate current
24 flow velocity in the Columbia River. So about 3 miles
25 an hour. In their data they show a -- from a very

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1 pristine, benign water surface at a speed of two knots
2 and what they call a throughput efficiency, which is
3 basically how much oil is collected through the amount
4 of -- for the amount of water -- amount of water that's
5 passed through this system. So at a very, very calm
6 ideal conditions, they have data that shows
7 approximately 91 percent or so being collected. But in
8 rough water -- what they call choppy waters, which in
9 their data was six- to 12-inch chop, that goes down to
10 about 68 percent. So while they are covering a large
11 amount of area, and while they may be doing it quickly
12 and fast, in my view, 68 percent, even 91 percent
13 collection efficiency is not acceptable, you know, in
14 the Columbia River. And given the wave and the river
15 conditions that generally prevail within the Columbia
16 River, at least from Bonneville Dam to McNary, that
17 efficiency could, you know, be anything less than that.
18 I don't even see how it would operate. They don't
19 even -- the manufacturer doesn't even -- doesn't have --
20 or I have not been able to find any data where this has
21 been tested or done in the Columbia River with these
22 particular systems.

23 **Q. At the risk of overstating the obvious, six- to**
24 **12-inch -- what did they call it, chop? Six- to 12-inch**
25 **chop, is that a relatively calm day on the Columbia**

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1 River?

2 A. That would be a relatively calm day on the
3 Columbia River. And the other characterization they
4 make of this water condition is a harbor chop. So if
5 you have a harbor in which there are vessels transiting
6 in and out of and you get wake actions and it's sort of
7 a confused sea or a confused surface at that point
8 because you've got this chop and these waves, this
9 little small slight wave action going every direction,
10 that's what they're characterizing as a harbor chop.

11 **Q. Thank you. And finally, Chief Hicks, I'd like**
12 **you to talk a little bit about your experience with**
13 **regard to the Cascade Locks marina.**

14 A. A number of years ago, the Cascade Locks fire
15 department purchased a fire boat, a fire suppression
16 vessel. The idea was that they would have this resource
17 to be able to fight fire on large passenger vessels,
18 sternwheelers that we get through the gorge and have had
19 actual on-board fire responses to. However, this piece
20 of equipment didn't get used all that often, so it sat
21 in the marina in Cascade Locks and the presumption was
22 after it was investigated, if you will, is that the
23 batteries had gone dead, the bilge pumps discontinued to
24 work. It was in the early springtime when this
25 happened, so there had been some snow events, there had

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1 been typical, you know, gorge springtime lanes and
2 filled up the bilge with water, the bilge pumps didn't
3 work because the battery is dead and it sank. And there
4 was approximately 200 gallons of diesel fuel in the
5 tanks when it sunk and the Cascade Locks marina is quite
6 small relative to most marinas along the Columbia River.
7 So there was a significant diesel sheen and diesel spill
8 release from that vessel. I never heard an exact
9 amount. All we know is that there was about
10 approximately 200 gallons on board. That marina has one
11 inlet and one outlet, one entrance and one exit. It's
12 probably 50, 60 feet wide, and that was boomed off to
13 contain it within the marina while the cleanup response
14 occurred and that diesel fuel still -- and that was very
15 calm, very slick conditions, as far as water goes, no
16 current in a marina basin, and it still escaped the
17 boom. Some percentage of it still escaped the boom.

18 MR. LOTHROP: Thank you, Chief Hicks. I
19 have no further questions at this time.

20 JUDGE NOBLE: Cross-examination for Chief
21 Hicks?

22 CROSS-EXAMINATION

23 BY MR. JOHNSON:

24 Q. Chief Hicks, I'm Dale Johnson. I'm one of the
25 lawyers for the applicant in this case. First of all,

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1 back to your -- well, first of all, in your daily
2 activities, do you routinely see crude oil unit trains
3 passing on both the Oregon and Washington sides of the
4 river?

5 A. Yes, I do.

6 Q. And could you -- do you have a copy of your --
7 you don't have a copy of your prefiled testimony.

8 A. I don't have it.

9 Q. Okay. I think maybe your counsel is looking for
10 a copy. And let me just ask you a question about it,
11 because it may not be necessary. And I understand that
12 you and Mr. Broncheau, I guess, prepared this prefiled
13 testimony together. So I'm just trying to determine if
14 this is -- if you can turn to page 7, bottom of page 7
15 where it says, "Many of the concerns expressed by the
16 City of Vancouver." You see that?

17 A. Yes, I see it.

18 Q. Okay. And then if you turn over to the next
19 page, there's several bullets there that identify, you
20 know, existing deficiencies in the ability of CRITFC to
21 respond. Is that your testimony or was that
22 Mr. Broncheau's?

23 A. No, this is -- so this testimony was done in two
24 parts. It was filed in combination with one another,
25 but this was one of Mr. Broncheau's sections.

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1 Q. Okay. So you can't speak to this section?

2 A. No.

3 Q. Okay. With regard to your testimony about the
4 Mosier incidents and your discussion of the unifying
5 command structure, is it your understanding that the
6 unified command structure is different or separate
7 somehow for different responding agencies?

8 A. I'm not sure I understand your question exactly.
9 But, yes, if you were to consider that we were being
10 asked for mutual aid by the Wasco County Sheriff's
11 Office, then our unified -- internally our unified
12 command structure, being myself or the -- or my captain
13 or perhaps an assigned sergeant in scheduling that -- or
14 providing that mutual aid, could be different, yes.

15 Q. Okay. I guess what I was driving at was I think
16 you specifically identified that the railroad incident
17 command team and the locally unified command team were
18 working towards different outcomes, and I think you
19 testified that the railroad was focused on getting the
20 trains moving again and the local unified command team
21 was working towards a different outcome. So what I'm
22 trying to understand is whether you view the railroad's
23 unified command as something different from the local
24 unified command.

25 A. They are, and we recognize that there are

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1 different missions, but there should be communication
2 between the two and there should be liaison between the
3 two. And if, say, Mosier's city mayor or Mosier's city
4 fire chief are expressing concerns, then incident
5 command ought to participate with the unified command,
6 local unified command, as to what either remedies they
7 may be able to offer or suggested solutions or active
8 engagement in that problem solving.

9 **Q. Okay. And is it your understanding that Union**
10 **Pacific was not communicating well with the Mosier fire**
11 **chief during that incident?**

12 A. I haven't talked to him specifically about that,
13 but that was a common theme around the hotwash table on
14 Friday, last Friday.

15 **Q. Was Chief Appleton present?**

16 A. Yes, he was.

17 **Q. Okay. And you didn't talk to him about this?**

18 A. Not specifically, no.

19 **Q. Okay. With regard to your testimony about the**
20 **booms and your experience in deploying booms, where**
21 **specifically have you deployed booms on the river?**

22 A. So we've had exercise with the Corps of
23 Engineers based on -- at times have oil spills at the
24 dams from hydropower equipment and so forth. So we have
25 done training exercises there. We have had -- we have

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1 had some training provided to us by Washington
2 Department of Ecology and their state parks division.
3 Those are -- come to mind quickly.

4 **Q. Okay. And were those exercises upriver of the**
5 **Bonneville Dam?**

6 A. Yes.

7 **Q. Okay. And you described conditions on the river**
8 **in response to a question by Mr. Lothrop in which he**
9 **asked you about six- to 12-inch chop and you responded**
10 **that that's a relatively calm day on the river. Does**
11 **that -- is that with regard to the Columbia Gorge area?**

12 A. The Columbia Gorge area, yes, prevailing. There
13 are other areas that I have worked on in my career
14 experience from, like I said, the Hanford Reach,
15 Tri-Cities to the ocean, where there are significant
16 wind conditions.

17 **Q. Where are the most significant wind conditions**
18 **along that -- along those areas of the river you just**
19 **described?**

20 A. Typically they are in the Columbia Gorge itself.
21 So say between Boardman, Oregon, to Troutdale.

22 **Q. Okay. And you also provided some testimony**
23 **about the Harbour Buster boom system. Have you ever**
24 **deployed a Harbour Buster boom system?**

25 A. I have not.

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1 **Q. Okay. And you said you did some research about**
2 **the Harbour Buster. Where did you do your research?**

3 A. From the manufacturer's website. They're on
4 productions of YouTube postings.

5 **Q. Okay. So you watched YouTube and did a web**
6 **search for it, read about it?**

7 A. Uh-huh.

8 **Q. Okay. And are you aware that there's more than**
9 **one design of the Harbour Buster system?**

10 A. I am.

11 **Q. And which specific design were you discussing**
12 **when you just provided testimony?**

13 A. It wasn't actually a Harbour Buster. It was a
14 Current Buster 2 and Current Buster 4. And also the
15 NOFI BoomBag.

16 **Q. Which one were you describing? All of them or**
17 **one of them?**

18 A. Actually as far as the, you know, chop and the
19 throughput efficiency rates and so forth, that was for
20 Current Buster 2 and Current Buster 4.

21 **Q. Okay.**

22 MR. JOHNSON: All right. No further
23 questions. Thank you.

24 JUDGE NOBLE: Redirect, Mr. Lothrop?

25 MR. LOTHROP: None, Your Honor.

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1 JUDGE NOBLE: Council questions?

2 Mr. Stephenson has a question.

3 MR. STEPHENSON: Thank you, Chief Hicks. Do
4 you work with -- you talked about working with fish and
5 wildlife -- excuse me, with state parks to do some boom
6 exercises. Do you work with enforcement from either
7 Washington State Fish and Wildlife or Washington
8 Department of Natural Resources on enforcement issues?

9 THE WITNESS: Washington Fish and Wildlife
10 through Columbian Basin Law Enforcement Council and
11 local sergeants and officers, yes.

12 MR. STEPHENSON: Does fish and wildlife have
13 any boom?

14 THE WITNESS: Not that I'm aware of.

15 MR. STEPHENSON: So you have 800, you said
16 something like that, down around Portland?

17 THE WITNESS: That was in Boardman, and that
18 was donated to us last year from Department of Ecology
19 in Olympia.

20 MR. STEPHENSON: Okay. And has Ecology been
21 involved in responses that you've been at?

22 THE WITNESS: Yes.

23 MR. STEPHENSON: And what's their response
24 time typically?

25 THE WITNESS: Their response time to the

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1 Mosier incident actually -- and they were the one that
2 laid the boom in front of Rock Creek at Mosier, their
3 response time if I -- I'm not positive, but I was told
4 by my captain, somewhere around an hour and a half to
5 two hours.

6 MR. STEPHENSON: Thank you.

7 JUDGE NOBLE: Other council questions?

8 Are there questions based upon
9 Mr. Stephenson's question?

10 MR. JOHNSON: No, Your Honor.

11 MR. LOTHROP: No.

12 JUDGE NOBLE: Captain Hicks, thank you for
13 your testimony. You're excused as a witness.

14 THE WITNESS: Thank you.

15 MS. CARTER: It appears I'm the bookend for
16 the tribal witnesses. Good afternoon. The last of our
17 witnesses will be Mr. Paul Lumley.

18 JUDGE NOBLE: Mr. Lumley, could you raise
19 your right hand, please.

20 (Witness sworn.)

21 JUDGE NOBLE: Thank you. Please be seated.

22 PAUL LUMLEY,

23 having been first duly sworn,

24 testified as follows:
25

CARTER / LUMLEY

DIRECT EXAMINATION

1
2 BY MS. CARTER:

3 Q. So, Mr. Lumley --

4 A. Yes.

5 Q. -- please state your full name for the record.

6 A. My full name is Paul Lumley, P-a-u-l
7 L-u-m-l-e-y.

8 Q. And please summarize your education and training
9 for the council.

10 A. Well, I was born and raised on the Yakama Indian
11 Reservation. I lived a big part of my life along the
12 Columbia River, so I have firsthand knowledge of it
13 since I was a child. I went to school at Western
14 Washington University, where I received my bachelor of
15 science degree in mathematics. And then I began working
16 at the Columbia River Inter-Tribal Fish Commission since
17 1987, except for a few years where I went to Washington,
18 D.C., where I was a senior tribal liaison for the
19 Department of Defense and also the National American
20 Indian Housing Council's executive director, and I am
21 currently the executive director of the Columbia River
22 Inter-Tribal Fish Commission.

23 THE WITNESS: Am I talking too fast?

24 JUDGE NOBLE: Yes.

25 THE WITNESS: I'll slow down. My apologies.

CARTER / LUMLEY

1 BY MS. CARTER:

2 Q. So you filed testimony in this case. Do you
3 still stand by your testimony?

4 A. I do with the exception of one correction. And
5 it's on the table.

6 MS. CARTER: So, Ms. Mastro, could we have
7 Exhibit 5218.

8 JUDGE NOBLE: So is Exhibit 5218 a part of
9 the prefiled testimony?

10 THE WITNESS: It was attached to my
11 testimony.

12 MS. CARTER: But it was given an exhibit
13 number.

14 JUDGE NOBLE: That's fine. I just wanted to
15 make sure it had its correct classification.

16 BY MS. CARTER:

17 Q. So go ahead, Mr. Lumley, and give your
18 correction.

19 A. About two-thirds of the way down, you'll see
20 where it says, "Tesoro-Savage Vancouver Energy," there's
21 a mistake there in the middle column where it says
22 "Trains Per Week." It says, "36." That actually should
23 say "28."

24 And on the column to the right, "Vessels Round
25 trips per week," it says, "20-25." That should say

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1 "14."

2 **Q. So while we have this up, what does this table**
3 **represent?**

4 A. This table was put together by my office to keep
5 track of existing coal and oil transportation proposals
6 that are going through our tribal fishing area. And
7 once we started assembling this information, we started
8 using this as our management tool to keep track of all
9 of these projects. And one thing that I was
10 particularly alarmed about were the sheer number and
11 volume of all these proposals that are coming through.
12 You can see on the right-hand side where it says,
13 "Notes," and it says, "Proposed" and "Operating." And
14 so there are several new proposals that we have to keep
15 track of.

16 I presented this information to the four tribes,
17 the Yakama, Umatilla, Nez Perce and Warm Springs, that
18 the fish commission is made up of, and I heard very
19 resounding alarm bells from the tribes about the sheer
20 number of proposals. But my office keeps track of these
21 proposals as they're being managed and our responses.
22 And I believe this is an important service to this
23 management area. So an important table for us.

24 **Q. Does this table indicate how many crude trains**
25 **are proposed or currently operating -- currently going**

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1 through the Gorge?

2 A. Yes. If you look, I believe they're in the
3 lower part of the table, you'll see on the right-hand
4 side, there's several that say "Operational." And there
5 are, looks like, three or four that are currently
6 operating, looks like in the range of I want to say 14.
7 Is that correct? I believe so.

8 **Q. So do you have any other observations on this**
9 **table before we move on?**

10 A. The one proposal for Tesoro Savage would
11 dramatically increase the number of trains going through
12 the Columbia River Gorge by at least twice as much.

13 **Q. And you're referring to crude trains?**

14 A. Correct.

15 MS. CARTER: So, Ms. Mastro, can we have
16 Exhibit 5023, page 6. Can you zoom in on the map, the
17 big map. Thank you.

18 BY MS. CARTER:

19 **Q. So would you quickly describe this map. What is**
20 **this map?**

21 A. This map depicts the Columbia River Basin, a
22 very large basin going into Canada and stretching out
23 through four states: Oregon, Washington, Idaho and
24 Montana. It shows the four tribes that I work for, the
25 Yakama, where I'm a citizen of the nation, Warm Springs,

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1 Umatilla and Nez Perce. The lighter-shaded colored
2 areas depict the ceded lands and the darker areas are
3 the current reservation boundaries.

4 Now, the ceded lands are important because we
5 ceded those lands to the federal government, but we
6 maintained specific rights to those areas, even though
7 they were ceded to the federal government.

8 The map doesn't necessarily depict where all of
9 the salmon go, but most of the salmon-bearing streams in
10 the Columbia Basin also happen to be in the area of
11 these four tribes. The -- there are several blockages
12 to salmon that go into Canada as well as into the Snake
13 River Basin in Idaho.

14 **Q. So have you fished on the Columbia River**
15 **mainstem treaty fishery?**

16 A. Yes. I fished there many times, fished actually
17 throughout the whole Yakama Reservation, but I grew up
18 on the river. My family would move to the Columbia
19 River during the fishing seasons. So I have fished
20 there since I was a child all the way through when I was
21 going to college. That's how I funded my college, at
22 least I tried. I did complete my bachelor of science,
23 but I was not able to complete my master's of science in
24 mathematics because the fishing seasons collapsed and I
25 didn't have enough money to continue.

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1 After I got a job at the Columbia River
2 Inter-Tribal Fish Commission, I still continued to fish
3 with my family until about the time I went to
4 Washington, D.C., for those five years. When I returned
5 in 2009, it was very difficult for me to continue
6 fishing on a regular basis because my job is rather
7 intense and I travel a lot. So I only fish occasionally
8 now with my family.

9 **Q. So please describe the importance -- we've**
10 **talked and several witnesses have talked about first**
11 **foods. So if you can, describe the importance of tribal**
12 **first foods to the council.**

13 A. In order to describe the relationship of first
14 foods, I have to talk about our creation and the
15 relationship we have with the Creator. When the Creator
16 put us on earth, we didn't have an ability to survive,
17 and so the Creator asked us -- asked these first foods
18 as, who can step forward to sacrifice yourselves so
19 these humans can live? And the first to step forward
20 was the salmon. Then after that came the game and then
21 the roots and the berries. And then the Creator gave us
22 these foods -- these first foods and said that with
23 these first foods, you'll always survive, but you have
24 to also take care of these first foods and if you do,
25 they will always take care of you. That is not

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1 something that is just a story that was told long ago.
2 That is actually how we as an Indian people identify
3 ourselves.

4 If you go -- if you're lucky enough to go to any
5 of our first salmon ceremonies, for example, you'll see
6 and hear prayers, songs, drumming, a lot of it in honor
7 of the first foods. And when the table is set, it's set
8 in a very specific way. First the water, then the
9 salmon, the game, the roots and the berries, set in that
10 order every time. And so this is not just practice;
11 it's really how we identify as Indian people. I suppose
12 in non-Indian perspective that would be our religion,
13 but it is how we identify as an Indian people.

14 I would add also that when the non-Indians came
15 over to this land, there were a lot of problems. And
16 the federal government wanted to enter into a treaty
17 with the tribes, and entered into several treaties with
18 the tribes actually. With my tribe, Yakama, as well as
19 Umatilla, Warm Springs and Nez Perce, we all have the
20 same kinds of treaty language. And that's the right to
21 fish in all usual and accustomed areas, as well as
22 hunting and gathering roots and berries.

23 If you think about those four things, fishing,
24 hunting, gathering roots, gathering berries, those are
25 our first foods. And in reading the minutes of the

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1 treaty negotiations, it is very clear that the tribes
2 would never have signed these treaties if they didn't
3 include their reserved rights to these first foods.

4 Now, when I say "reserved rights," I say that
5 very carefully because the tribes reserved those rights
6 to themselves. These were not granted by the federal
7 government. Tribes always had those rights. They're
8 reserving those rights in the treaties. So that's how
9 strongly the tribes felt about our first foods.

10 MS. CARTER: Ms. Mastro, do we have
11 Exhibit 5023, page 14? I believe it's the same
12 document. Right there, the picture. Can you zoom in on
13 the Celilo Falls picture? Thank you.

14 BY MS. CARTER:

15 **Q. Can you describe this picture.**

16 A. This is a picture of Celilo Falls. It was
17 inundated by the construction of the Dalles Dam in 1957,
18 but prior to that, the falls were a major gathering
19 place for the tribes in the area. It was our primary
20 salmon harvesting area. Natives came from all over the
21 Pacific Northwest to participate in the fishery, to
22 trade, be with friends and family. It was a wonderful
23 place to be. It's been described as the original Wall
24 Street of the northwest because there was so much
25 activity there. It was a beautiful and wondrous place

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1 to be. Unfortunately, I'm not old enough to have ever
2 witnessed it because I was born in 1963, but that shows
3 how we fish historically. You can see also the
4 platforms and how they have their nets. I believe the
5 testimony last week from Randy Settler described how
6 they did the hoop net fishing off of the platforms, and
7 this is how we did it and it's the way we have fished
8 since time immemorial.

9 **Q. So just expanding on that, describe how**
10 **important the treaty fishery is to the commission's**
11 **member tribes and the tribal people of the Columbia**
12 **River.**

13 A. The history of our treaty fishing right has been
14 a great struggle. We signed our treaty in 1855 and at
15 that time we had somewhere between 16 million and
16 30 million salmon that would come back. Unfortunately
17 because of dramatic habitat decline, deforestation,
18 agriculture, urbanization, overharvesting in the ocean,
19 we lost a lot of these fish. Dam construction was
20 another big cause for loss of the fish. So now we are
21 actually quite grateful if we even get a couple of
22 million salmon that come back.

23 Our time of fishing, as soon as the treaties
24 were signed, were met with obstruction. Obstruction by
25 non-Indians out of racism and out of greed for the

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1 salmon for themselves. And so we've had to struggle to
2 exercise our treaty rights since day one of the
3 treaties, unfortunately.

4 In the 1950s and '60s that history was very
5 difficult for us. As fishermen, we were harassed,
6 suffered physical violence against us, prevented from
7 going to the river. There was a series of court cases
8 where tribal members and the tribal government had
9 basically had enough. And they started testing the
10 rights of the states of Oregon and Washington to
11 intervene in our fisheries, to interfere with our
12 fisheries. And so we went to court and we started
13 winning. And two court cases in particular went all the
14 way to the United States Supreme Court. The United
15 States versus Oregon, 1967 I believe it was, where the
16 judge ruled that the tribes had a right to a fair share
17 of the fish. And a few years later in 1974, US v
18 Washington, another judge defined that right to be
19 50 percent of the harvestable surplus, and also ruled
20 that the salmon were deserving of the habitat to support
21 them. And both of those court cases went all the way to
22 the Supreme Court. And that will tell you, I think, how
23 much the tribes cared about their treaty reserve right
24 to these fish, that they would put their treaty out on
25 the line and go all the way to the Supreme Court and

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1 risk that, but the tribes wanted it and it is the law of
2 the land.

3 **Q. You referred to Celilo Falls as Wall Street.**
4 **Did the tribes engage -- engage in commerce with their**
5 **first foods and do they still?**

6 A. The tribes have always engaged in commerce with
7 the salmon. This particular area, the way my
8 grandfather explained it, was the salmon were so
9 plentiful they would dry the salmon in sides -- the
10 salmon sides would be filleted and they would dry them
11 and store them, and that actually was a monetary value.
12 So if you were trading, they would convert sort of the
13 monetary value into sides of salmon. So something was
14 worth a certain number of sides of fish, sides of
15 salmon. That's how the folks traded. So definitely for
16 salmon, we have a long history of commercial sale. And
17 we've also been involved as tribes in commerce with
18 other first foods, for example, huckleberries. There
19 are -- you'll often see huckleberries sold at our
20 powwows, at gala. Not often, sometimes though, you'll
21 also see some of our roots, our bitter roots, camas
22 roots, Wapato, not often, but you do see them there, but
23 primarily it's berries and fish. Sometimes you'll see
24 deer meat for sale to other tribal members, but you
25 don't see it that often. But those practices still

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1 continue today.

2 **Q. So can you describe some of the current efforts**
3 **that the tribes have gone to to improve the markets for**
4 **their salmon.**

5 A. I actually am really quite impressed with the
6 work of the four tribes through the Columbia River
7 Inter-Tribal Fish Commission. We experienced terrible
8 salmon marketing conditions when I was growing up. We
9 didn't expect to have the fish the way we did. We
10 wanted to fish like you see in that photograph, on the
11 platforms. But when the dams came in, the river changed
12 and we had to change the way we fished. We had to buy a
13 boat. We had to buy gillnets. We had to learn a whole
14 new way and invest in resources we never thought we had
15 to before. A lot of the fishermen don't have a lot of
16 money. A lot of our tribal people don't have a lot of
17 money. So they would be struggling to try and find
18 money for a boat, find money for nets. So oftentimes we
19 would go to the commercial wholesale fish buyers and ask
20 for a loan, and they would fund our activities. That's
21 how my father and I fished for many years. We would
22 start out a fishing season by taking a loan out by the
23 commercial wholesale buyer and then we would work
24 fishing to pay back the loan and hopefully have money
25 left over at the end of the season. But we found that

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1 the system on the river with all the fish buyers
2 together were holding down the prices for the tribal
3 fishermen.

4 I remember one season where our over-the-bank
5 fall Chinook, the most prosperous and best quality fish
6 in the fall season, were only getting a nickel a pound,
7 which is very, very bad. We -- the fish commission saw
8 this problem and started working directly with our
9 fishermen to train them on how to market their fish
10 directly. And we've seen very good success in that
11 regard. We also trained them on how to handle their
12 fish, best quality practices, not just for quality but
13 also for safety. It's HACCP, H-A-C-C-P-S, and started
14 marketing our fish that they're of high quality. And we
15 started a program to help the tribes advertise
16 themselves as business people.

17 And because of that now, we see prices per pound
18 on the Columbia River that are in the area of 6 to \$9 a
19 pound, something I never thought I would ever see in my
20 lifetime. But at certain times of the year, even our
21 tribal catch will be sold over the bank and at a higher
22 price per pound than the non-Indian commercial sales
23 from the lower Columbia River catch. So I'm very proud
24 of our work. Our fishermen are very happy with the
25 progress we've made to increase the value of our

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1 fishermen -- the value of the fish that we catch. And
2 it's not just from fresh salmon that are sold, but
3 that's also for marketing fish that have been processed
4 as well, so smoked, dried, canned.

5 **Q. So we've heard a lot of testimony regarding**
6 **potential economic losses from an oil spill. We've**
7 **heard very little about -- testimony about losses to**
8 **tribal fisheries. Could you characterize in your words**
9 **how loss of fisheries could impact tribal members in the**
10 **event of an oil spill.**

11 A. Are you talking about commercial or everything?
12 Everything?

13 **Q. Everything.**

14 A. Thank you. Well, initially we would be asked to
15 stop fishing. So that would have a huge effect on our
16 fish. We wouldn't be able to catch them. We would most
17 likely have a very difficult time marketing the fish
18 that we had already caught. And at some point in the
19 future, after the fisheries reopen, there will be a
20 stigma attached to our fishery for a very long time that
21 our fish are poisoned or contaminated in some way.

22 We also eat our fish a lot for subsistence. I
23 eat a lot of salmon myself. In fact, we've done studies
24 that show that Native American -- our Native American
25 tribes eat about ten times more salmon than the general

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1 public. So we depend on them for our own sustenance, so
2 there's that as well. There would be also concerns
3 about any of the fish that we eat. We would also
4 question ourselves whether or not the fish that we would
5 be eating would be safe to eat.

6 I remember I believe it was in 2007 when a
7 couple of Navy fighter jets went in -- crashed over the
8 Columbia River above John Day Dam and there was some
9 contamination there and we had to close the fishery
10 down, and it took quite a while for the fishery to
11 restart. When they did, there were people complaining
12 about whether or not the fish were safe to eat.

13 I particularly remember that accident because I
14 had just taken a job at the Department of Defense as a
15 senior tribal liaison. I was getting a lot of questions
16 and concerns from the tribes that I worked for. What
17 can I do to help them, because they were getting the
18 runaround from the Department of Defense. And so I
19 looked into it, and it was true, they were getting the
20 runaround to the point where it was too late for the
21 tribes to file claims for the losses of the -- for the
22 fishermen. I believe it was the Yakama Nation who filed
23 a claim. And I was pretty hurt by that because even
24 though I tried really hard on the inside to get that
25 claim filed, my own tribe blamed me because I'm a Yakama

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1 and I was a senior tribal liaison for the Department of
2 Defense, and it was very difficult for me to be the one
3 to have to accept that blame, but I was the only person
4 that they could really talk to about it. They didn't
5 really have great contacts at the Department of Defense
6 and they weren't really returning their phone calls
7 anyways, so it was a very difficult time for them. And
8 I just remember how hard it was for my family that
9 fishes in that area, for them to get back on their feet
10 after that accident and that was a pretty small accident
11 by comparison to what we're talking about here with oil
12 trains crashing into the Columbia or a barge spilling
13 its cargo in the lower Columbia. That would be huge.

14 **Q. So do you believe that the Vancouver Energy**
15 **proposal is a threat to tribal first foods?**

16 A. I most certainly do. It is a huge threat to our
17 first foods, and not just to the fish. I've listened to
18 some of the discussions these last few days about how
19 the proposal is really just in the Vancouver area, but
20 we're also looking at the transportation throughout the
21 entire stretch along the Columbia River from the upper
22 reaches above even where we fish, above the McNary Dam
23 all the way down to the estuary. So I view the whole
24 proposal as that, because the Vancouver proposal, Tesoro
25 Savage's proposal, would be nothing if it weren't for

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1 the transportation. So you have to include all
2 transportation of oil.

3 It would affect not only our fish, but it would
4 also affect some of the other first foods that are
5 gathered in the area. There's a deer population in the
6 area, and we also gather some of our roots. We have
7 Wapato that live in the marshes. Wapato is a root that
8 is underwater and you have to go in barefoot with your
9 toes and you pull the roots up. Very delicious, by the
10 way. And then the birds would be affected. Birds are a
11 game. We put those -- those are one of the our first
12 foods on the table too. And it's not just even our
13 first foods, but also the materials we use to practice
14 our culture. We gather our materials out there for
15 weaving, a -- the reeds from the cattails and other
16 grasses in the area that we use for weaving. If those
17 became contaminated, it would cause a stigma for a long
18 time for us to use those materials for weaving.

19 So I view this proposal as a real threat to our
20 first foods and, in saying so, I would say it's a real
21 threat to us as an Indian people as well.

22 MS. CARTER: Ms. Mastro, one more exhibit.
23 Exhibit 185, page 8.

24 BY MS. CARTER:

25 Q. Since she's pulling that up, Mr. Lumley, you

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1 were present for Mr. Ellis' testimony last Thursday,
2 correct?

3 A. Correct.

4 **Q. Okay. This exhibit was presented by opposing**
5 **counsel. And it's -- I would like you to describe this.**
6 **What is this?**

7 A. This is a map that shows the mainstem Columbia
8 River from the mouth of the Columbia up to McNary Dam.
9 And it is divided up into two sections. One of them has
10 a label that says Zone 6 Treaty Indian Fishery, and the
11 other one is Zones 1 to 5, Drift Gillnet Fishery.

12 And one of the -- back up here. All maps have a
13 story. This one has a pretty rich story. The relations
14 we have with the non-Indian community were very
15 difficult for many decades. Soon after Bonneville Dam
16 was built, we were struggling, trying to figure out new
17 ways to fish, and the non-Indian commercial fishery, and
18 sport fishery too, were harassing us, as well as the
19 state game wardens.

20 And so there was a decision made that -- the
21 states especially agreed that the tribes did have a
22 right to go fishing, and they said up in this area above
23 Bonneville Dam, we won't go fish up there; we will not
24 have our non-Indian commercial fishery up there. That
25 would be an area of exclusivity to the tribes. And you

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1 won't find that as a contract anywhere. It's just a
2 handshake agreement.

3 And the reason why is because the tribes were
4 very nervous about declaring that that would be the only
5 place that they could fish. That's not -- that map does
6 not show the only place where we can fish. In fact, I
7 fished down on the lower Bonneville Dam. I fished for
8 smelt with my father. And I've also -- well, actually
9 at Sandy River, I believe, the Cowlitz -- Cowlitz or I
10 want to say Burkett, down in that area, I remember it
11 was on the Washington side, also at Willamette Falls.
12 So we've had both commercial and noncommercial activity
13 outside of that area.

14 It was not something the tribes would ever want
15 to put down on paper, that they were giving up their
16 rights to fish commercially outside of Zone 6. In fact,
17 earlier this year, there's a coalition of tribal
18 fishermen who have banded together or lobbied the tribes
19 to extend a much more commercial season for the tribal
20 fishery down below the Bonneville Dam, down to what's
21 called zones -- about Zone 3, as I recall. And so I've
22 been asked to conduct an analysis of what it would take
23 to organize a structured commercial fishery all the way
24 down to about Zone 3, which would entail questions of
25 funding, because I'll have to extend my enforcement

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1 program down there; we'll have to have a management crew
2 that would keep track of sales and probably deal with
3 legal issues and also social issues in the area. And so
4 I've been asked to give that a more serious
5 consideration.

6 So the area in particular, Vancouver is not an
7 area that we have ever given up on, don't necessarily
8 have a commercial season there right now because of
9 social pressures, but the tribes are serious about
10 fishing there again someday in the future.

11 **Q. So just keeping it to Zone 6, based on your**
12 **knowledge, do unit trains full of crude transit the rail**
13 **through Zone 6?**

14 A. I'm sorry, I couldn't hear your question. One
15 more time.

16 **Q. Yeah, sorry. I was too fast. Keeping it to**
17 **Zone 6, based on your knowledge, do unit trains full of**
18 **crude transit the rail along Zone 6?**

19 A. Oh, yes. I see trains there -- I go up and down
20 the Columbia River on a fairly regular basis. So I see
21 oil trains definitely on both sides of the river.

22 **Q. So switching a little bit. Mr. Carrico's**
23 **testimony asserted that there were no tribal usual and**
24 **accustomed fishing places at the Vancouver Energy**
25 **terminal and downstream. This is at the Port of**

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1 Vancouver. How would you respond to Mr. Carrico's
2 testimony?

3 A. Well, we certainly have usual and accustomed
4 fishing rights in that area. There's no question about
5 it. We have rights to all of our first foods in that
6 area, in fact, not just for fish. I mentioned before
7 some of the other game and roots and berries in that
8 area. We've never given up our rights in that area
9 ever. Never given that up. Might also add that we're
10 not the only tribes in this area. We have the Cowlitz
11 Indian tribe there in the area, and if you also go
12 downriver, non-federally-recognized tribes, the Chinook,
13 and I've also heard the Grand Ronde tried to lay claims
14 to this area as well. So we're not the only tribes that
15 have an interest. We are, however, the only tribe that
16 has tribes in this area that have our rights guaranteed
17 to first foods in treaties with the United States in
18 1855.

19 **Q. Is it also fair to say that the fish that tribal**
20 **people eat swim past the proposed facility in the Port**
21 **of Vancouver?**

22 A. Yes, they do. They swim in both directions. As
23 salmon smolts, they swim out of the Columbia River past
24 that facility. When they go out to the ocean and come
25 back as adults to spawn, they also swim past that

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1 facility.

2 **Q. Do some of these fish that the tribal people eat**
3 **also live or rear in the estuary below the Port of**
4 **Vancouver?**

5 A. Almost all of our androgynous fish that we catch
6 have been reared in an estuary. The only exception
7 would be sturgeon who are landlocked from Bonneville
8 Dam, but all of our salmon, all of our lamprey that we
9 catch, they've all been reared in the estuary, there's
10 no question about it.

11 **Q. So switching gears a little bit. Why are the**
12 **tribes concerned about chemical contamination of their**
13 **first foods?**

14 A. The work we've done at the Columbia River
15 Inter-Tribal Fish Commission has been focused on salmon,
16 and we leave it up to the tribes to deal with the other
17 first foods, although we do have some discussions with
18 them about potential contamination and some of their
19 other first foods, especially the roots and the berries
20 and the deer. But -- so in our work with the salmon, we
21 heard complaints about the water, that it's getting
22 dirtier. And some of our fishermen were getting sores
23 on their body from the water, especially at -- even at
24 Willamette Falls.

25 And so they asked us to do a study on what's in

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1 the fish, because we eat a lot of fish. And so the
2 first step was in the early 1990s, maybe late 1980s, we
3 Completed a study that showed that we eat ten times more
4 fish than the general public. That was a study that was
5 done as a cooperative with the US Environmental
6 Protection Agency. And after that, we completed another
7 study that showed that there were a large number of
8 contaminates that were in the fish and that had to --
9 raised two levels of concern for the tribes. The first
10 was that we eat ten times more fish than the general
11 public, so are we poisoning ourself with the fish. And
12 the other question was on fish health, because we choose
13 to eat fish or not, but the salmon, they don't have a
14 choice. They have to swim and move. So we had concerns
15 about fish health as well.

16 So after that we started working directly with
17 the federal government to see what we can do to clean up
18 the water. You know, we used to drink right out of the
19 Columbia River. That map -- excuse me, that photograph
20 showed the platforms at Celilo Falls. A lot of those
21 old photographs, you're going to see a bucket right
22 there on a rope, and they would lower the bucket down
23 into the Columbia, drink. Well, nobody in their right
24 mind would do that now, but historically that's where we
25 drank from.

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1 And we started hearing from the elders, started
2 hearing from the tribal government officials, what can
3 we do to clean up the river so that we can have healthy
4 fish and have healthy fish to eat ourselves. And it
5 took a couple of decades, but we finally got the State
6 of Oregon to change their water quality standards. This
7 is just not too long ago, maybe four or five years ago.
8 Water quality standard is used for their own permitting
9 processes for anybody that needs a permit to pollute the
10 rivers. And they changed their water quality standard
11 to be on the basis of the tribe's fish consumption rate.
12 So instead of allowing pollution in the river up to a
13 level of six and a half grams of consumption of fish a
14 day, which is pretty small, about the size of a sugar
15 packet, they moved it up to a full salmon steak, which
16 is 175 grams per day, which is about what many Indian
17 people, actually many people eat much more than that.

18 But what Oregon did was they strengthened their
19 water quality standards to be the strongest in the
20 United States; the strongest of any other state. That's
21 based on a tribal fish consumption rate, and they
22 increased it by tenfold. So we are working very hard
23 right now to get Washington and Idaho to do the same
24 thing. We have a very good partnership with the
25 Environmental Protection Agency and we think we are on

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1 the right track to improve the water conditions for the
2 fish, for the Indian people, and for everybody in this
3 room.

4 **Q. So switching to another topic, Mr. Lumley, you**
5 **read Mr. Challenger's testimony. Do you have any**
6 **observations of his testimony?**

7 A. I do. I started reading his testimony on
8 Saturday and I didn't finish it so I went back and I
9 started reading it again today. And I have it in front
10 of me, and I have to say that I'm quite disappointed in
11 several sections that attempt to downplay the effects of
12 what might happen if there was a spill. And I can go
13 through these -- maybe I should go through these.

14 **Q. Can you indicate which --**

15 A. Which paragraph?

16 **Q. -- provision. Yes.**

17 A. I see on paragraph 49 where he says, "Recovery
18 of less than five years is typical for wetlands and
19 marshes in most instances when good response decisions
20 are undertaken."

21 And five years is a lifetime for a lot of
22 people, and more than a lifetime. It's an eternity if
23 you can't fish and the fish are dying. Five years is
24 more than the life cycle of fish. And he also qualifies
25 it as, "if good response decisions are undertaken."

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1 Well, I don't know that, and I will be honest with you
2 that we have many instances that the tribes are working
3 with to repair habitat that's been degraded without good
4 response decisions, and I don't know what kind of
5 guarantees that this -- the proponents of this proposal
6 can offer, but it probably would never be enough to make
7 me comfortable.

8 I see here on page -- on paragraph 55 where he
9 says -- he's talking about the Kalamazoo River, which I
10 believe is in Michigan, and I believe that was a pretty
11 good-sized oil spill and he said, "Very few dead fish
12 (approximately 45) were found during intensive searches
13 during the response to the Enbridge spill over 25,000
14 bbls" -- is that barrels? -- "of diluted bitumen in the
15 Kalamazoo River."

16 Well, just because you can't see the dead fish
17 doesn't mean they weren't killed. And last year we had
18 unprecedented heightened water temperatures in the
19 Columbia River. We had a very large Sockeye return that
20 came back. And somewhere between 200 and 400,000
21 Sockeye died between Bonneville Dam and the uppermost
22 dam up there by Wenatchee, several dams from us, they
23 just disappeared; died because of the temperature. They
24 can't be accounted for by harvest or tributary turnoff
25 and compared to recent data, a lot of fish died. And we

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1 looked, we asked, where are all the fish? And nobody
2 could report that they were seeing large pools of dead
3 fish anywhere. And you would think that with 200,000
4 dead Sockeye, they would show up. But they didn't. So
5 just because you can't see dead fish didn't mean they
6 didn't die. So I see this is an example, maybe an
7 exaggeration, of we can't see the dead fish, so they
8 didn't die.

9 I note here on paragraph 67 where there's a
10 list -- there's a list of the salmonid species in the
11 river and also sturgeon. But I don't see chum. Chum is
12 here. Excuse me. Chum is here. I don't hear a lot of
13 discussion about -- chum are the -- I don't see any
14 discussion here about chum being the last remaining
15 spawning population on the mainstem Columbia below the
16 Bonneville Dam. They're actually not too far from where
17 we're sitting today. But they do spawn out there.
18 There are eggs out there. And I believe it was
19 Mr. Holmes -- is that his name? -- who talked this
20 morning about a tabletop exercise, if I'm getting his
21 characterization correctly, where he said that they did
22 an analysis of a spill just above Bonneville Dam and he
23 listed a fish species, but unfortunately he didn't list
24 the chum. And the chum are important because if there
25 was a spill and there were eggs in the gravel, it would

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1 be a much worse outcome for those fish than any other
2 fish in another part of their life cycle. And the chum
3 are listed under the Endangered Species Act.

4 I didn't participate in Mr. Holmes' tabletop
5 exercise, but just above Bonneville Dam on the
6 Washington side is a fairly good-sized tribal community
7 living at Fort Rains. That's one of the treaty fishing
8 access sites. We have probably 70 families that live
9 there, a lot of them year round, because they fish year
10 round. And that would be right where a train disaster
11 could be. And so I'm very worried about whether or not
12 tabletop exercise was complete in that regard if it
13 didn't include the tribal community that could be
14 affected by that kind of an exercise.

15 I also see in here, Mr. Holmes -- in
16 Mr. Challenger's written testimony, I think it's towards
17 the end here, where he talks about an explosion would
18 reduce the amount of oil that goes into the Columbia
19 River, if I can find that right now. But he did talk
20 about it in here, and a portion would burn off the oil,
21 there's no doubt about it. But if that train accident
22 occurred at our fishing village, then it would have been
23 much worse than we even saw at Mosier because that train
24 was almost to the middle of our tribal community, right
25 next to it. So I know the Mosier accident had some

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1 distance between the train tracks and some of the other
2 buildings in the area, but this is right through our
3 community, much like many of the other tribal fishing
4 villages, but I would -- I am very curious now and would
5 like to see more about that tabletop exercise to make
6 sure it was thorough.

7 I see here on paragraph 83 where he says, "While
8 it is always preferable to avoid an adverse impact,
9 there are many positive results of early restoration,
10 emergency restoration, and longer term habitat
11 improvement projects that shorten the duration and
12 severity of predicted spill impacts and bring about a
13 return of services more quickly."

14 Paragraph 84 provides an example of that, at
15 Fifteenmile Creek. But I can assure you that we are not
16 better off with a disastrous spill. There is nothing
17 that can be done to --

18 MR. JOHNSON: Objection. He's
19 mischaracterizing the testimony. And with all due
20 respect, I've been very patient here. This witness is
21 not a biologist, and they've had a number of
22 opportunities to present biologists who can explain the
23 natural resources damages process and impacts on fish
24 and other species. So I'm going to object that this
25 witness, A, is mischaracterizing the testimony and, B,

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1 it is beyond his area of stated expertise.

2 JUDGE NOBLE: In what way are you saying
3 he's mischaracterizing the testimony? He's just saying
4 if they were going --

5 MR. JOHNSON: Well, the statement he just
6 read doesn't suggest that anyone is better off. What it
7 suggests is there are ways to address impacts of a
8 spill. So he read the statement, and then he said, we
9 are not better off. And that's not what the statement
10 says.

11 JUDGE NOBLE: Do you want to respond?

12 MS. CARTER: Your Honor, I think Mr. Lumley
13 is well-qualified. He has a science background and he's
14 been living on this river for his entire life. I think
15 he's very well-qualified to comment on testimony that is
16 written. And maybe this goes to weight, because maybe
17 his interpretation may be different from another
18 interpretation, but I think it's a reasonable
19 interpretation.

20 JUDGE NOBLE: I'm overruling the objection.
21 He's qualified to say that the tribes -- the tribe will
22 not be better off.

23 So you may continue with your answer, unless
24 you already finished it.

25 BY MS. CARTER:

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1 **Q. Mr. Lumley, can you -- which paragraph number**
2 **was that you were talking about?**

3 A. Paragraph 83, and then paragraph 84 immediately
4 following refers to the Fifteenmile Creek, a spill that
5 occurred there. And there's a statement here that says,
6 "During the response, barriers to mitigation [sic] were
7 removed immediately upstream to the spill site to
8 improved future habitat use. Many miles of stream were
9 made available to steelhead spawning with demonstration
10 of fish passage and year one, helping to avoid
11 potentially significant impacts --

12 THE REPORTER: I need you to slow down.

13 THE WITNESS: I'm very sorry. Do you want
14 me to read it again?

15 THE REPORTER: Yes.

16 A. "During the response, barriers to mitigation
17 were removed immediately upstream of the spill site to
18 improve future habitat use. Many miles of stream were
19 made available to steelhead spawning with demonstration
20 on fish passage in year one, helping to avoid
21 potentially significant impacts to steelhead with
22 possible net gains."

23 JUDGE NOBLE: Excuse me, Mr. Lumley. I
24 think that people who have been following your reading
25 are saying that you said "mitigation" in the first

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1 sentence. You may have misread that.

2 THE WITNESS: During the response barriers
3 to mitigation.

4 JUDGE NOBLE: It's "migration," I think.

5 THE WITNESS: I'm sorry. Migration. My
6 apologies. I read it wrong three times. So the word is
7 "barriers to migration."

8 MR. JOHNSON: Your Honor, I'm going to
9 object again. Does counsel have questions for the
10 witness, or is this just going to be a narrative of a
11 page-to-page readthrough of Mr. Challenger's testimony?

12 JUDGE NOBLE: I think the question
13 originally was how he differed with the testimony. And
14 so I guess that's what he's doing, is going through,
15 pinpointing places he disagrees with.

16 But I would ask whether the witness is
17 almost done with this phase of his testimony. We do
18 have that testimony that the council can read, and if
19 he -- instead of reading from the testimony he would
20 direct his comments and tell us where he's commenting
21 about and then just proceed with his own testimony,
22 might be better.

23 And I also note that the court reporter is
24 needing a very brief break. So I'm looking for a place
25 that would be convenient.

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1 MS. CARTER: I've got one more question
2 after this and maybe, Mr. Lumley, you can answer --

3 THE WITNESS: Can I finish? I only have one
4 more.

5 JUDGE NOBLE: Sure. And then we'll have one
6 more question from counsel and then we'll have a brief
7 break.

8 THE WITNESS: The reason why I was asked
9 about testimony, Your Honor, was because I had concerns
10 about its potential bias, and so I was going through the
11 concerns that I have. The final one I have is on
12 page -- is paragraph 87. And the last sentence reads,
13 "As a result, impacts are expected to be largely
14 temporary and more significant impacts will be
15 localized." But that's rather subjective unless you're
16 living there and living the life. I don't -- I can't
17 express enough how different it is when you're -- when
18 you're experiencing it, and it would be not just an area
19 where the accident or spill occurred, it would cover a
20 wide area. So this is another example of it being
21 minimized.

22 And, finally, at the end of -- at
23 paragraph 101 he states, "Given the analysis that
24 predict a very low likelihood of spills" -- and then he
25 goes on. And I realize that he signed his testimony

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1 in -- May 12th of this year. That was before the
2 accident in Mosier. And so I realize he might have
3 thought that when he signed it, but now we've had an
4 accident, and I don't -- I can't agree with it now, that
5 it is very low likelihood because it's a hundred percent
6 likelihood, because it did occur. So that concludes my
7 review of Challenger's testimony in the areas that I
8 found very concerning.

9 JUDGE NOBLE: Thank you. And did you have
10 one more question?

11 MS. CARTER: That will be all before the
12 break. I have a few more.

13 JUDGE NOBLE: All right. I would like this
14 brief to be -- I would like this break to be brief, and
15 so we can just break for five minutes. And we'll be
16 back on the record -- well, eight minutes, at 4:35.

17 (Recess taken from 4:29 p.m. to 4:39 p.m.)

18 JUDGE NOBLE: We're back on the record. You
19 may continue.

20 MS. CARTER: Okay. Just for the time, we're
21 probably three-quarters of the way done and if we hit
22 5:00, are we going -- can we extend it a little bit to
23 finish or --

24 JUDGE NOBLE: Off with your head.

25 MS. CARTER: Is that on the record?

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1 JUDGE NOBLE: I'm sure it is.

2 MS. CARTER: I deserve that.

3 JUDGE NOBLE: I think we should just finish
4 up with the witness if it's not going to be hours.

5 MS. CARTER: No.

6 BY MS. CARTER:

7 Q. Okay. Mr. Lumley, again, changing. Describe
8 some of the other impacts to first foods that the
9 commission and its member tribes are addressing in
10 partnership with federal, state and local governments.

11 A. Is the question about other impacts?

12 Q. Yes.

13 A. We are -- in addition to all the work we're
14 doing with the salmon, we are also assisting the tribes
15 with global climate change issues, because it's
16 affecting all of our first foods. The salmon are coming
17 back at different times of the year than they should,
18 the deer are not where they're supposed to be and
19 they're dealing with disease and pests that they didn't
20 normally have to deal with. The berries are ripening
21 much earlier than expected, and the roots in some cases
22 are all but disappearing from their normal locations.
23 So the commission's member tribes have asked us to help
24 find funding for them so that they can develop their own
25 climate adaptation plans.

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1 We also have some fairly new issues with our
2 berry fields, our huckleberry fields, with non-Indians
3 coming through with these metal cones that strip all the
4 berries off the bush. Even those that are not ripe,
5 takes all the leaves off as well and it sometimes kills
6 the bushes. So we're trying to fend that off as well.

7 But all the tribes are dealing with their first
8 foods as priorities in their programs, and they've asked
9 the fish commission, where I work, to focus primarily on
10 salmon. But I will be honest with you, it's very
11 difficult to separate out one first food from the other
12 because they are all connected in some way through this
13 broad ecosystem. So in order for us to assist the
14 tribes in an ecosystem, it covers all of the first foods
15 that come into play at some point or the other.

16 **Q. So what are the commission tribes doing -- let**
17 **me rephrase that again.**

18 **Are the commission member tribes putting**
19 **together their own salmon restoration plan and**
20 **strategies?**

21 A. Actually we did put together our own salmon
22 restoration plan in the mid 1990s. It's called
23 Wy-Kan-Ush-Mi Wa-Kish-Wit, which I will spell for you.
24 W-y dash K-a-n dash U-s-h dash M-i, second word is W-a
25 dash K-i-s-h dash W-i-t. And that means spirit of the

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1 salmon.

2 The tribes got very frustrated in the mid 1990s
3 after several salmon species began to be listed under
4 the Endangered Species Act, and the frustration was
5 because the -- all of the impacts through all of the
6 salmon's life cycle were not being addressed, yet there
7 was this unhealthy focus on shutting down the tribal
8 fishery. And so we developed our own salmon restoration
9 plan that looked at the salmon's entire life cycle, all
10 life stages and developed policy and technical
11 recommendations for -- not just ESA listing but for full
12 recovery. When we signed our treaties in 1855 -- our
13 understanding is these salmon runs would continue unto
14 perpetuity, and when we signed those treaties there were
15 somewhere between 16 and 30 million fish coming back.
16 We're not going to settle for a lesser goal of just ESA
17 listing when we are entitled to full productivity of the
18 salmon runs as when the tribes signed their treaties in
19 1855. And so this salmon restoration plan was intended
20 to strike much better balance in favor of the salmon and
21 also for the interests of the tribes as protected in the
22 treaties of 1855.

23 MS. CARTER: Ms. Mastro, Exhibit 5116,
24 page 7, please.

25

CARTER / LUMLEY

1 BY MS. CARTER:

2 Q. I'll wait till this comes up. So I'll go ahead
3 and ask a question and then as it comes up, we'll refer
4 to the chart. Can you describe the magnitude of
5 investments that the Bonneville Power Administration is
6 making in restoring the Columbia River salmon, sturgeon
7 and lamprey?

8 A. The entire northwest region contributes to this
9 amazing effort to restore salmon in the Pacific
10 Northwest, the Columbia River Basin. And that didn't
11 just come about by accident. It came about by extreme
12 pressure from the tribes and many others which resulted
13 in the northwest power conservation act, if I got the
14 act name right. Some people refer to that as the
15 Northwest Power Act. And that set up a system whereby
16 ratepayer dollars -- so when you -- ratepayer dollars
17 are when you pay your electric bill, a portion of that
18 funding goes to the Bonneville Power Administration to
19 restore fish and wildlife that have been impacted by the
20 development and operation of the federal hydropower
21 system. It's not taxpayer funding. This is ratepayer
22 funding, and the Bonneville Power Administration is the
23 federal agency in charge of that program.

24 As a part of that Northwest Power Act, the four
25 states' governor's offices identify members from the

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1 Northwest Power and Conservation Council, that's Oregon,
2 Washington, Idaho and Montana, and they established a
3 fish and wildlife program of priorities. And there are
4 several sovereigns and non-sovereigns that participate
5 in this fish and wildlife program, funding over
6 \$300 million a year for fish and wildlife restoration
7 and protection activities. This is one of the largest
8 programs like it in the world.

9 I was at a national -- international conference
10 not too long ago and heard the Columbia River described
11 as once producing more salmon than any other place in
12 the world, now produces more hydropower than any other
13 place in the world and has the dubious honor of also
14 having the largest single-species recovery program than
15 any other place in the world. So it's a very large
16 program for just salmon. And the tribes are a big part
17 of this program and the reason why it is the way it is.
18 That is in large part by the tribes' treaties reserved
19 fishing right and our Supreme Court victories and all of
20 the other lawsuits that we've been involved in to
21 achieve full mitigation.

22 I will tell you that from a tribal perspective,
23 I've heard this many times in tribal governments, that
24 this is not anywhere close to full mitigation even. And
25 the reason is because the hydropower system has so

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1 degraded the ecosystem that the salmon depend upon, that
2 even this amount of funding isn't anywhere close to full
3 mitigation.

4 MS. CARTER: So, Ms. Mastro, can you zoom in
5 on the numbers, I guess, on that page, zoom in a little
6 bit and maybe you can speak to this.

7 MS. MASTRO: More?

8 MS. CARTER: No, I think that's good.

9 BY MS. CARTER:

10 **Q. Can you see that, Mr. Lumley?**

11 A. I can see it now. I couldn't see it before.

12 MR. JOHNSON: Objection to relevance, Your
13 Honor.

14 MS. CARTER: Your Honor, this is what he was
15 speaking to. This is costs on salmon restoration.

16 JUDGE NOBLE: What is your problem with the
17 relevance of this?

18 MR. JOHNSON: What do the costs of salmon --
19 salmon restoration as it relates to the Bonneville Power
20 Administration have to do with the Vancouver Energy
21 terminal?

22 JUDGE NOBLE: I think I can tell what the
23 relevance of that is, but perhaps you would like to
24 express what your idea is.

25 MS. CARTER: Your Honor, perhaps my expert

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1 can speak to that, unless you want me to answer that.

2 JUDGE NOBLE: It was a relevance objection,
3 so --

4 MS. CARTER: Well, as Mr. Lumley testified,
5 the tribes had exerted a great deal of energy and
6 investment into this Wy-Kan-Ush-Mi Wa-Kish-Wit -- sorry,
7 Wy-Kan-Ush-Mi Wa-Kish-Wit restoration, spirit of the
8 salmon plan.

9 Likewise, and similarly, the federal agents
10 at Bonneville has invested a great deal of funding for
11 salmon restoration. It's very important to look at
12 the -- holistically this system. There's a lot of
13 energy and effort to restoring a very important
14 resource. And we're talking today about something that
15 may cause impact and detrimental harm to that resource
16 and how much money this could -- this could impact, I
17 guess.

18 JUDGE NOBLE: The objection is overruled.
19 The witness may answer.

20 THE WITNESS: Thank you, Your Honor.

21 A. I was about to be asked a question about a
22 number on a chart up there on the table.

23 BY MS. CARTER:

24 Q. **No, as I said, you've seen this document before,**
25 **haven't you?**

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1 A. Yes, I have. And another big part of this
2 hydropower system and the fish and wildlife program is
3 the fish that are listed under the Endangered Species
4 Act, there is quite a bit of legal activity with the
5 federal Columbia River hydropower system. In fact,
6 there was a recent ruling from a judge calling into
7 question the legality of the current ESA biological
8 opinion. And I note that the baseline of information
9 used for the analysis does not include the Tesoro Savage
10 proposal. That is a significant potential impact that
11 could cause great harm to endangered species and it is
12 not included, and if this proposal moves forward, it
13 could call into question the entire biological opinion
14 and its validity and potentially could even undo several
15 fish and wildlife programs that have taken great success
16 of late in bringing back some of these endangered fish.

17 MS. CARTER: I have no further questions.

18 JUDGE NOBLE: Cross-examination?

CROSS-EXAMINATION

19
20 BY MR. JOHNSON:

21 **Q. Thank you, Mr. Lumley. I'm Dale Johnson**
22 **representing the applicant this afternoon. The**
23 **exhibit -- that table that you said was an important**
24 **table for you, I think it was 5218.**

25 MR. JOHNSON: Can you pull that up,

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1 Ms. Mastro, please.

2 BY MR. JOHNSON:

3 Q. And to move things along, I'm going to ask you a
4 couple of other questions and when we get it up there,
5 we'll go back to that. You talked about the Navy --
6 couple -- midair collision situation. Was that a claim
7 under the Federal Tort Claims Act; do you know?

8 A. I don't know the answer to that.

9 Q. Okay. And then you also talked about tribes
10 having claims to usual and accustomed places below the
11 Bonneville Dam. Are you familiar with the term
12 "adjudicated"?

13 A. Can you define that for me, please.

14 Q. Well, I'm asking you if you're familiar with the
15 term, because I --

16 A. It's a legal term.

17 Q. Okay.

18 A. I believe it means a court has ruled on it. Is
19 that correct?

20 Q. Well, I'm not going to answer -- I'm not going
21 to tell you. But if that's -- if that's your
22 understanding. Do you know if the tribes have any
23 adjudicated usual and accustomed rights below the
24 Bonneville Dam?

25 A. I'm not quite sure I understand the word

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1 adjudicated, so I'm not quite sure if I can answer the
2 question. I can tell you that the tribes have not gone
3 to court to assert a right for usual and accustomed
4 places in that area. We have not challenged it. We
5 have not challenged it in court. Did that answer your
6 question?

7 **Q. I think so. Another way to put it would be if**
8 **you're aware if any court has established that there is**
9 **a usual and accustomed place below the Bonneville Dam,**
10 **right? I think you've answered that.**

11 **A. I'm not quite sure if there's any place in the**
12 **Columbia River that has had that status, to be honest**
13 **with you.**

14 **Q. Okay. Now we have the chart up, so we can see**
15 **that. Draw your attention to -- boy, it's tough to see**
16 **on the --**

17 **MR. JOHNSON: Can you blow that up at all?**
18 **Okay. Right there. There you go.**

19 **BY MR. JOHNSON:**

20 **Q. About halfway down the page, you see where it**
21 **says the "Grays Harbor Rail Terminal"?**

22 **A. Uh-huh.**

23 **Q. Do you know the status of that project?**

24 **A. It's proposed.**

25 **Q. Are you sure -- are you sure about that?**

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1 A. No, I'm not, because the chart says it's
2 proposed and I take it on its face value that it's
3 proposed.

4 **Q. All right. When was this chart updated last?**

5 A. May 12th, 2016.

6 **Q. Okay. And is it your understanding that the**
7 **Imperium Renewables project involves crude oil?**

8 A. That's my understanding, yes.

9 **Q. Okay. Did you ask anybody to go back and verify**
10 **that?**

11 A. The comment here says, "Company announced it
12 will not accept crude."

13 **Q. Okay. So is that your understanding, then?**

14 A. That's my understanding, yes.

15 **Q. Okay.**

16 A. So that's an update. Right-hand column,
17 "Notes," is meant to include updates on proposals. I
18 believe if you go up even above, for example, you can
19 see, "Coal, Gateway Pacific," where it says, "Proposed,
20 permit denied."

21 **Q. Okay.**

22 A. At least the right-hand column is meant to be an
23 update.

24 **Q. Okay. So have you subtracted out the number of**
25 **train trips associated with those projects that are no**

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1 longer in existence?

2 A. The chart is still there in the way it is. I
3 haven't necessarily done any math on the chart. I was
4 surmising a little while ago that about 14 trains per
5 week, oil trains per week.

6 **Q. For the Vancouver Energy project; is that right?**

7 A. For the non-Vancouver Energy project.

8 **Q. I see. Okay. And do you -- have you accounted**
9 **for the change in status of certain projects reflected**
10 **on this chart?**

11 A. I believe so.

12 MR. JOHNSON: Okay. Nothing further.

13 JUDGE NOBLE: Any redirect?

14 REDIRECT EXAMINATION

15 BY MS. CARTER:

16 **Q. Mr. Lumley, that chart is just used for**
17 **management of development policy and trying to**
18 **understand all the different potential impacts and**
19 **current impacts of these projects, correct?**

20 A. That's correct.

21 MS. CARTER: That's all. Thank you.

22 JUDGE NOBLE: Council questions?

23 Mr. Shafer?

24 MR. SHAFER: Mr. Lumley, one question. And
25 thank you for your testimony today.

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1 Early in your testimony, you made reference
2 to Supreme Court rulings which, if I understand
3 correctly from you, that that sustained or protected the
4 tribal interest and needs and concerns. Specific to the
5 Vancouver Energy terminal, are you of the opinion that
6 this project could be prevented solely on the basis of
7 threats to tribal first foods?

8 THE WITNESS: The question is, am I of the
9 opinion that the treaty rights and the Supreme Court
10 rulings could stop this project? Is that what your
11 question is?

12 MR. SHAFER: Well, that was just as a
13 general background. But based on your experience, my
14 question is relative to this project, do you think it
15 can be prevented solely on the basis of threats to
16 tribal first foods?

17 THE WITNESS: That is -- this will be my own
18 opinion and not the opinion of tribal governments, and
19 I'll explain why, but my opinion is yes. The reason why
20 I'm clarifying this as not a tribal opinion is because
21 the risk of putting the tribes' treaty rights on the
22 table are very serious. It could be a ruling that would
23 be negative and would have lasting impacts that would go
24 for untold generations. And so the tribes will not put
25 their treaty rights out there unless they are very

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1 positive of an outcome. But in my opinion, the proposal
2 does create great risk to our first foods that are
3 protected in those treaties.

4 MR. SHAFER: Thank you very much.

5 JUDGE NOBLE: Other council questions?
6 Any questions based upon Mr. Shafer's
7 question?

8 MR. JOHNSON: No, Your Honor.

9 MS. CARTER: Wow, 5:00. No.

10 JUDGE NOBLE: All right. Well, Mr. Lumley,
11 you are excused as a witness and thank you very much for
12 your testimony today. Thank you.

13 We have come to the close of the day. Is
14 there anything else we need to do on the record before
15 we go over the testimony plan for tomorrow?

16 MS. BOYLES: Yes, Your Honor. The opponents
17 rest.

18 JUDGE NOBLE: Thank you.

19 MS. BOYLES: The court reporter will rest
20 soon.

21 MR. JOHNSON: That's what you think.

22 JUDGE NOBLE: The plan was for the rebuttal
23 testimony to start Tuesday afternoon, but now it can
24 start in the morning. I assume you're prepared to do
25 that, Mr. Johnson?

1 MR. JOHNSON: We are, Your Honor, and I'm
2 looking for my list of witnesses here, so if you can
3 bear with me. One other thing while I'm doing that,
4 Your Honor, we do have one witness tomorrow, and that is
5 Ms. Jo Reese. She'll be testifying about cultural
6 resources in rebuttal to some testimony from Mr. Huber,
7 and we would request -- I've conferred with opposing
8 counsel. We would request that she be allowed to appear
9 by telephone. I know that's been a bit unwieldy.

10 Y, however, I think it's worked better here
11 than it did in Olympia and it will be relatively brief
12 testimony. So that's a request of you, Your Honor.

13 JUDGE NOBLE: And there's -- what would be
14 the reason for that?

15 MR. JOHNSON: She has a number of
16 conflicting scheduling issues, and to get her in -- to
17 get her in and out, it's just -- we're able to make her
18 available by phone and not as easily to make her
19 available by -- in person.

20 JUDGE NOBLE: Well, I don't want to be
21 unreasonable. So I think as long as we're able to make
22 it work, that will be fine.

23 MR. JOHNSON: All right. And then do you
24 want me to run through the list of rebuttal witnesses
25 or --

1 JUDGE NOBLE: For tomorrow. The public
2 needs to know what witnesses are expected and what the
3 subject of their testimony is so that they can --

4 MR. JOHNSON: Okay. And then I promised
5 Ms. Boyles a copy of this and haven't had time to get it
6 to her, but I'll go ahead and walk through it. So it
7 will be Dr. Elliott Taylor who has testified both
8 prefiled and live. Again, he'll be talking about spill
9 response, fate and transport of spilled oil, and he has
10 rebuttal to Rice, Ellis, Brigham and Holmes.

11 Then Greg Challenger, who also has testified
12 both prefiled and live, talking about impacts of spills
13 on species, rebutting testimony of Niemi, Rice, Ellis,
14 Penney, Holmes, English, Slockish, Parker and
15 Mr. Lumley.

16 And then again, Jo -- Ms. Jo Reese by
17 telephone.

18 We have Dr. Kelly Thomas, who filed prefiled
19 testimony. He'll be testifying about risk incident to
20 facility incidents and insurance matters, rebutting
21 testimony of Dr. Sahu, Garcia and Blackburn.

22 Then we have Captain Marc Bayer, who has
23 already appeared, to discuss vessel operational
24 practices and issues related to air-related -- vapor
25 tightness and other things, addressing the testimony of

1 Dr. Sahu.

2 And then we have Mr. Brad Roach, who will
3 discuss oil markets, economic need for the project and
4 responding to testimony from Mr. Goodman. That's it for
5 tomorrow.

6 And then we anticipate -- we expect on
7 Wednesday just -- because we've been promising this,
8 Dr. Chris Barkan, who is not a rebuttal witness -- well,
9 although he'll provide some rebuttal testimony, we'll
10 call -- we'll reserve to call him on direct. That will
11 be Wednesday morning.

12 JUDGE NOBLE: And Wednesday, that will be in
13 the morning?

14 MR. JOHNSON: Yes, Dr. Barkan will be in the
15 morning on Wednesday.

16 JUDGE NOBLE: And Dr. Barkan will also be by
17 phone?

18 MR. JOHNSON: No, no, he's here. He's able
19 to travel and he's here.

20 JUDGE NOBLE: All right. Is there anything
21 else we need to do before adjourning for today?

22 MR. JOHNSON: The only other thing I would
23 say about tomorrow, Your Honor, is if you could bear
24 with us on the order. I mean, that's the order we'd
25 like to present. However, we have some witnesses flying

1 in as late as tomorrow or early tomorrow morning, so we
2 might need to adjust something.

3 JUDGE NOBLE: That's not a problem. Are
4 we -- thank you very much, Mr. Johnson.

5 We are adjourned for the day until tomorrow
6 morning at 9:00.

7 (Hearing adjourned at 5:05 p.m.)

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