November 30, 2016

Office of the Assistant Secretary – Indian Affairs
Attn: Office of Regulatory Affairs and Collaborative Action
1849 C Street, NW, MS 3071
Washington, DC 20240

Submitted Electronically to consultation@bia.gov

To whom it may concern:

The Confederated Tribes of the Umatilla Indian Reservation (CTUIR) Department of Natural Resources (DNR) appreciates the opportunity to comment on federal consultation with tribes regarding infrastructure decision-making. The CTUIR DNR has often worked with various federal agencies on infrastructure projects with the potential to impact our rights under the Treaty of 1855, 12 Stat. 945, notably, U.S. Army Corps of Engineers (Corps) permitting projects along the Columbia River. Based on our extensive experience, DNR has the following recommendations to improve consultation and improve the regulatory framework:

1. Use of Nationwide Permits (NWPs) for infrastructure projects by the Corps is not appropriate when Treaty Rights are potentially implicated or at issue;

2. The Corps’ regulations must be amended to broaden the scope of analysis;

3. The Corps’ regulations regarding historic properties, 33 CFR § 325 Appendix C, should be revised to be consistent with the 36 CFR § 800 regulations; and

4. Corps regulatory staff should be trained to have expertise in tribal issues, including Indian Treaty Rights.

This letter will discuss each of these recommendations in turn.

1. Use of Nationwide Permits (NWPs) for infrastructure projects by the Corps is not appropriate when Treaty Rights are potentially implicated or at issue.

The CTUIR DNR has commented on a number of projects reviewed by the Corps under the Nationwide Permit System, including:

a. Union Pacific Railroad Mosier Double-Tracking Project, NWP-2014-364;
b. Tesoro-Savage Crude Oil Terminal, NWS-2013-962; and
c. Global Partners Crude Oil Terminal (AKA Cascade Kelly Holdings), NWP-2007-0998;

Each one of these instances proved to be problematic and unsatisfying to the CTUIR due to limited understanding of tribal Treaty Rights by the Corps and the narrow, limited scope of review.

a. Union Pacific Railroad Mosier Double-Tracking Project, NWP-2014-364

The Union Pacific Railroad Mosier Double-Tracking Project is proposed for processing under Nationwide Permit #14 (multiple issuances) for linear transportation projects. Construction of the project will resolve a bottleneck along the UPRR line and increase capacity of the line by 25% (as
asserted by UPRR). Because the segment of track at Mosier is in the Columbia River Gorge, it is a closed system (no incoming or outgoing lateral or connecting lines between Celilo and Troutdale, a distance of 80 miles), so 25% more trains through Mosier means an increase of 25% more trains through the entire Gorge. The CTUIR objected to the authorization of this under a Nationwide Permits (see our May 11, 2016 letter attached). The Corps insisted that impacts that NWP review and Individual Permit review are the same regarding treaty rights, that potential spills are outside their jurisdiction to consider and if there are no treaty rights exercised within the immediate proximity of the Mosier Project, the narrow project area, they will proceed with a permit decision under the NWP. See Portland Corps August 23, 2016 response attached. On June 3, 2016, there was a derailment of a Bakken Crude oil train at Mosier; sixteen cars derailed, four cars caught on fire. In our September 28, 2016, letter to the Corps, we included tribal member testimony from the Tesoro-Savage Energy Facility Site Evaluation Council hearing regarding impacts of that derailment, spill and fire on the exercise of treaty fishing rights. The Corps' Portland District approved the Mosier Project on November 4, 2016, two days after the Wasco County Board of Commissioners had tentatively denied its permit for the expansion. The County Board of Commissioners ultimately denied the project on November 10, 2016.¹

b. Tesoro-Savage Crude Oil Terminal, NWS-2013-962

The Tesoro-Savage Crude Oil Terminal project proposes to ship by train and transfer to ocean-going ships 360,000 barrels of oil per day. This level of development would make it the largest crude-by-rail transfer facility in the United States. Because the facility proposed to use an existing dock that was already permitted for other purposes, the Corps proposed to authorize the new project under Nationwide Permits #3 and #12. The CTUIR Board of Trustees sent a letter to the Corps on March 28, 2014 (attached), engaged in government-to-government consultation with the Corps’ Seattle District on the matter, and expressed our opposition to the use of Nationwide Permits for this project—one which would result in four additional trains of crude oil traveling daily through the Columbia River Gorge National Scenic Area and passing by and through multiple tribal treaty fishing sites along the River. On June 4, 2015, the Seattle District ultimately relented and determined that use of Nationwide Permits was inappropriate, but only did so after a year of consultation with the CTUIR, other tribes, and other entities. Considerable time and resources were spent that could have been more productively utilized by tribal and Corps staff on other issues, including thorough and appropriate analysis.

c. Port of St Helens Beaver Dock Rehabilitation, NWP 2013-427, and Global Partners Crude Oil Terminal (aka Cascade Kelly Holdings), NWP-2007-0998

Like Tesoro-Savage, the CTUIR spent over a year trying to resolve Treaty Rights issues under the Nationwide Permit process associated with the repair, rehabilitation and expansion of half the Port of St. Helens dock near Clatskanie, Oregon. This situation was complicated by the fact that there was an application for an individual permit for expansion of the other half of the Clatskanie dock by Global Partners. The half of the dock to be improved under the NWP by Port of St. Helens was integral into work under an Individual Permit for the Coyote Island Coal Terminal, NWP 2012-56. The CTUIR

¹ The County Planning Commission had previously approved the project in September, but that opinion was appealed to the County Board of Commissioners. The County Board’s denial has not yet been appealed; the appeal period runs through December 14, 2016.
opposed Coyote Island and the Nationwide Permit work at Clatskanie associated with it due to impacts to treaty rights. Our January 26, 2015 comments discussing these related projects is attached. The CTUIR believes the NWP for the dock rehabilitation was approved, however permit for the Coyote Island terminal was ultimately denied without prejudice by the Corps after the Oregon Department of State Lands denied a necessary state permit. The CTUIR understands that the Global Partners Individual Permit was granted, though operations at the site have been discontinued.

2. The Corps’ regulations must be amended to broaden the scope of analysis.

Attached are our November 29, 2016, comments on the Millennium Bulk Terminal, NWS 2010-1025. The Millennium Bulk Terminal is a proposed coal terminal that would transfer up to 44 million tons of coal a year from rail cars to ocean-going ships near Longview, Washington. The project, if approved, would be the second largest coal terminal in the United States by capacity. In the Draft Environmental Impact Statement, the “Scope of Analysis” of the project included a small area around the project in Longview, and for aquatic resources included the Columbia River from Vancouver, Washington, to the river mouth. The analysis did not include the potential impacts from increased rail transport on tribal Treaty Rights or the impacts from climate change resulting from burning an additional 44 million tons of coal.

This narrow scope of analysis is a recurring problem and was noted in our comments on Coyote Island, Mosier Double-Tracking, Tesoro-Savage and many other projects in which the Corps refused to look beyond the immediate footprint of the project to examine potential indirect and cumulative effects on CTUIR Treaty Rights.

3. The Corps’ regulations regarding historic properties, 33 CFR § 325 Appendix C, should be revised to be consistent with the 36 CFR § 800 regulations.

Attached are our January 17, 2012 comments on 33 CFR § 325, Appendix C, the Corps’ regulations to address historic properties. These regulations are over 25 years old and there is significant dispute between the Corps and the Advisory Council on Historic Preservation (ACHP) as to whether the regulations were ever legally ratified. The CTUIR has participated in at least three formal efforts by the Corps to revise these regulations to make them consistent with the existing National Historic Preservation Act (NHPA) and the regulations promulgated by the ACHP under the NHPA. The NHPA has been amended at least five times since the Appendix C regulations were issued.

Appendix C does not reflect legislative or regulatory changes to the NHPA or the ACHP regulations under that law, 36 CFR § 800. The Appendix C regulations lack basic, critical elements such as tribal consultation, which the Corps has ineffectively sought to correct by issuing guidance documents.

4. Corps regulatory staff should be trained to have expertise in tribal issues, including Indian Treaty Rights.

In 2007, the CTUIR became aware of the construction of the Port of Arlington Barge Dock, NWP 2006-160, at a treaty fishing site. The CTUIR objected and the permit was eventually revoked. The permit denial was appealed administratively and then to the U.S. District Court in Portland, Oregon but
ultimately settled and the last of the pilings placed during dock construction were removed earlier this year. The initial Letter of Permission was issued without tribal consultation except for a brief notification to our Cultural Resources Protection Program, and without any follow-up or response to questions our staff provided. After the Corps’ initial oversight on Treaty Rights was identified, the CTUIR conducted a Treaty Rights training for Portland District Regulatory Branch staff. This training has improved consultation with the Portland District, as has their decision to hire a full-time archaeologist to review permit applications. The incident revealed fundamental, systemic problems encountered in Corps Regulatory regarding inadequate training, poor funding, significant staff workload issues, as well as high turnover. The vast difference in funding between Corps Operations and Regulatory often prevents meaningful tribal consultation and adequate staff oversight of sometimes complex Treaty Rights problems requiring legal, policy and technical review. Additional funding needs to be authorized and appropriated for regulatory staff to fully address the complex issues that arise in many permit actions.

Furthermore, current Nationwide Permit guidance, Condition 17, prohibits authorization of work if Treaty Rights will be impacted, but offers no guidance as to what Treaty Rights are or with whom to consult to determine if they are at issue. The CTUIR has repeatedly pointed this out to Corps Headquarters during the comment period for the Nationwide Permit reissuances, see attached comment letters from 2006, 2007 and 2016) but has been informed that this is a “Regional Permit issue” rather than a national one. The CTUIR DNR respectfully disagrees. As is currently demonstrated by the turmoil around the Dakota Access Pipeline and the Standing Rock Sioux Reservation in North Dakota, inconsistent application of Nationwide Permits is a national problem. The guidance for Nationwide Permits needs to include more information regarding tribal rights and resources.

Finally, the CTUIR recommends, where it has not already occurred, that each district Regulatory branch have a dedicated archaeologist on staff. “Sharing” archaeologists among Regulatory and Operations is not sufficient from our experience. Since the Portland District hired a full-time archaeologist, problems with regulatory impacts to cultural resources have diminished.

The CTUIR DNR anticipates further follow-up regarding these issues with the U.S. Army Corps of Engineers and the U.S. Department of the Interior, and would appreciate written responses to the concerns expressed herein. Please feel free to contact Audie Huber, Inter-Governmental Affairs Manager, at 541-429-7228, if you have any further questions regarding this request. Thank you.

Respectfully,

Eric Quaempts, Director
Department of Natural Resources

Attachments:
1. CTUIR FWC May 11, 2016 Comments on UPRR Mosier Double Tracking (8 pages).
4. CTUIR BOT March 28, 2014 Comments on Tesoro Savage (6 pages.)
5. CTUIR OLC January 26, 2015 Comments to the Corps on Port of St. Helens and Global Partners. (Affidavits and attachments omitted, 5 pages).
May 11, 2016

Shawn Zinszer, Regulatory Chief
Army Corps of Engineers, Portland District
P.O. Box 2947
Portland, OR 97208-2946

Re: UPRR Joint Permit Application No. 2014-364, Construction of 4.02 miles of track creating a 5.37 miles second mainline track near Mosier, OR

Dear Mr. Olmstead:

The Confederated Tribes of the Umatilla Indian Reservation (CTUIR or Umatilla Tribe) Fish and Wildlife Commission (FWC) appreciates the opportunity to provide input on the proposed track construction near Mosier, Oregon that will result in 4.02 miles of new track and a new 5.37 mile second mainline track. The CTUIR FWC has serious concerns regarding this project as it entails significant construction over two tributaries to the Columbia River and numerous wetlands, will increase rail traffic on the Columbia River and also allow for increased train speed and length. Additionally, the citizens of the CTUIR and other tribes access the river across railroad tracks, often at unmarked crossings to access the Columbia River to exercise their constitutionally-protected Treaty reserved right to fish. Increased rail traffic increases safety risks to tribal members crossing the tracks. Further, because the project potentially impacts Treaty rights, both directly and indirectly, the use of a Nationwide permit for this project is inappropriate. The CTUIR requests that the Corps of Engineers remove this project review form the Nationwide process and put it on an individual permit review process. Such a move will allow the Corps to conduct the required analyses to ensure there is little to no impacts to Treaty rights and the resources on which they depend.

The Umatilla Tribe’s Constitutionally-Protected Treaty Fishing Rights


The treaty fishing right carries with it an inherent right to protect the resource from despoliation from man-made acts. “[A] fundamental prerequisite to exercising the right to take fish is the existence of fish to be taken.” United States v. Washington, 506 F.Supp. 187, 203 (W.D. Wash. 1980).
1980). See also, Washington v. Washington State Commercial Passenger Fishing Vessel Ass’n, 443 U.S. 658, 679 (1979) (Tribes with Treaty reserved fishing rights are entitled to something more tangible than “merely the chance...occasionally to dip their nets into the territorial waters.”) The ecosystem necessary to sustain the fish cannot be diminished, degraded or contaminated such that either the fish cannot survive, or that consuming the fish threatens human health. United States v. Washington, 2013 U.S. Dist. LEXIS 48850, 75 (W.D. Wash. Mar. 29, 2013)(State “impermissibly infringed” tribes’ treaty based fishing right in Washington by constructing culverts that “reduced the quantity of quality salmon habitat, prevented access to spawning ground, reduced salmon production...and diminished the number of salmon available for harvest.”) See also, e.g., Kittitas Reclamation District v. Sunnyside Valley Irrigation Distirict, 763 F.2d 1032, 1034-35 (9th Cir. 1985)(Tribes’ fishing right can be protected by enjoining ground water withdrawals that would destroy eggs before they could hatch). This project, both in its immediate construction impacts, and its resultant long-term increase in rail traffic and speed, carry impermissible potential impacts to both the access of the treaty fishing right, and degradation of the ecosystem on which those treaty resources depend.

According to the JARPA permit document, the proposed project will construct approximately four miles of new double-track rail line, which includes two new bridges over tributaries to the Columbia River and going through multiple wetlands and adjacent lakes, many of which are spawning habitat for salmonid species listed on the Endangered Species Act. The proposal would also construct two new signal cabins, which are curiously omitted from the permit plans based on the applicant’s conclusory statement that “there are no waters fo the United States what will be affected” (Project No. 2014-364 JARPA at pp 6-7.) The project also calls for over 1.5 acres of fill to open waters and wetlands. Further, the project includes a new paved area that directs any runoff from the increased train traffic to bare ground, possibly adjacent to wetlands, for “infiltration” into the ground. Given that the runoff will largely come from train traffic, and given the 250% increase in rail traffic between 2013 and 2014\(^1\), it is likely that some type of contaminants would pollute this runoff. Any runoff that infiltrates into the bare ground will then go into the groundwater, which is often hydraulically connected to the Columbia River trow the Gorge. The potential for the project to contaminate the Columbia River and adjacent wetlands, in which listed salmonids – treaty resources that the Corps has a trust duty to protect - is a potential effect the Corps must analyze, and is another reason a Nationwide Permit should not be used. Similarly, the potential impacts from the construction of bridges, cabins and tracks over sensitive wetlands and lake ecosystems in which listed species spawn and travel through requires the Corps abandon the use of the Nationwide process.

The Project will Likely Harm the Umatilla Tribe’s Treaty Resources and Interests

This proposal will increase rail traffic in the Columbia River Gorge. In a one page document prepared by Union Pacific Railroad entitled “Union Pacific to Enhance Infrastructure in Mosier” submitted in their public outreach effort, UPRR stated:

\(^1\) http://www.oregonlive.com/environment/index.ssf/2014/07/everything_you_need_to_know_ab.html
The Federal Railroad Administration speed limit on the new track will be 35 mph. Union Pacific currently moves about 25 to 30 trains per day through Mosier. The new double track will allow us to move 5 to 7 more trains per day through Mosier.

This statement reveals several things. First, double-tracking this area will increase the railroad speed. The current speed limit in Mosier is 30 miles per hour. Second, UPRR estimates that this project will increase traffic through in the area by approximately 25%. Also, the Columbia River Gorge is essentially a closed system for trains. If seven more trains go through Mosier, seven more trains go through Rufus, Biggs, The Dalles, Celilo, Hood River, Cascade Locks, etc. Increased traffic in Mosier generates impacts up and down the Columbia in the form of additional trains, pollution, noise and risks of derailment. Finally, while train traffic in Mosier is currently limited to 30 miles an hour, trains up river, between The Dalles and Boardman, travel up to 70 miles an hour.

The increased railroad traffic all along the Columbia River, particularly in Zone 6 between Bonneville and McNary Dams, will impair the Tribe’s interests in the following ways: damage to treaty resources and the ecosystems they depend on, eradication of tribal fishing areas, impeded access to tribal fishing areas and increased risks to tribal member safety, and damage and access to cultural resources.

**The ecosystem and treaty resources will suffer catastrophic damage from accidents and spills.**

The Project would result in an increase in shipment of tank cars, many of which may carry crude oil or similarly dangerous products, traveling in the Columbia River Gorge and adjacent to the Columbia River, where many tribal fishing areas are located. Train derailments, shipping spills, and fire and explosions from those derailments are a certainty. This is evident from the cascade of derailments across the United States and Canada reported in the media. For example, on February 17, 2015, a town in West Virginia suffered the derailment of a unit train of more than 100 oil tank cars carrying Bakken crude. Fourteen of the tankers ignited in an explosion, and at least one went into the Kanawha River. Hundreds of families were evacuated, and two downstream water treatment plants were closed. Photos of the explosion and subsequent tour of the scene as reported by the Boston Globe and Newsweek are below.

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2 http://www.fogchart.com/Down/Beta/PORTLAND.pdf

Photo caption: “Steve Keenan/The Register-Herald via Associated Press.”

Photo caption: West Virginia Governor Earl Ray Tomblin surveyed the wreck site on February 17. "Many of the tanks had gaping holes in the tops where they had exploded," he tells Newsweek. Office of Governor Earl Ray Tomblin.

The day before, February 16, witnessed the derailment and spill of more than 260,000 gallons of crude oil near Timmons, Ontario. The photograph below, from the Transportation Safety Board of Canada, shows workers fighting the oil spill fire.

![Photo caption: “In this Feb. 16, 2015, file photo, provided by the Transportation Safety Board of Canada, workers fight a fire after a crude oil train derailment south of Timmons, Ontario. The train derailment this month suggests new safety requirements for tank cars carrying flammable liquids are inadequate, Canada’s transport safety board (sic) announced Monday, Feb. 23, 2105.”](image)


While the U.S. Department of Transportation is considering new standards for rail cars, newly built tanks cars do not appear to reduce the risk of accidents and spills as “both the West Virginia accident and the oil train derailment and fire in Ontario involved recently built tank cars that
were supposed to be an improvement,” but the Canadian Transportation Safety Board said these new cars still “performed similarly” to the older models. *Id.* It is an unfortunate reality that “[t]he number of gallons spilled in the United States in [2013], federal records show, far outpaced the total amount spilled by railroads from 1975 to 2012.” Clifford Kraus and Jad Mouawad, *Accidents Surge as Oil Industry Takes the Train*, N.Y. Times, Jan. 26, 2014, at A1, and [http://www.nytimes.com/2014/01/26/business/energy-environment/accidents-surge-as-oil-industry-takes-the-train.html](http://www.nytimes.com/2014/01/26/business/energy-environment/accidents-surge-as-oil-industry-takes-the-train.html). If the Project goes forward, it is only a matter of time before a similar accident brings ecological catastrophe to the Columbia River, devastating the fishery and other resources the Umatilla Tribe depends on and has worked so hard to protect and restore. A derailment and spill along the Columbia River will not only be tragic for the resource, it will also work immeasurable hardships on the many tribal members that depend on the Columbia River and its riches for their living. It will likely eradicate productive fishing areas in the immediate area of the spill, and the consequences will be along the entire River, as a spill could wipe out stocks of salmon and steelhead that are already listed under the Endangered Species Act, erasing the many years and billions of dollars of effort that has gone into restoring the resource.

**Increased rail traffic will inhibit access to fishing areas and endanger tribal members.**

On both sides of the Columbia River, tribal members cross train tracks multiple times on a daily basis to exercise their treaty fishing rights. There is a great deal of scaffold fishing up stream and downstream of the project area that is visible from satellite images on Google Earth. This fishing is most often restricted by the crossing of the railroad tracks.

The increase in the number of trains, and possibly the length of such trains, will delay tribal members’ ability to cross the tracks to access fishing areas. Such delays become acute during adverse or impending weather, when members must sometimes get to their nets in the water as quickly as possible.

The increase in rail traffic and the speed of that traffic will also increase the incidence of tribal members stuck by rail cars. Tribal members are at risk of rail-strikes when crossing the tracks to access fishing sites, In-Lieu sites, Treaty Fishing Access Sites, homes and markets for the sale of harvested fish. Recently, on February 21, 2015, a man was killed by train strike near Kalama, WA. [http://www.khq.com/story/28168097/railroad-man-on-track-dies-after-being-struck-by-train](http://www.khq.com/story/28168097/railroad-man-on-track-dies-after-being-struck-by-train). According to railroad statistics, 27 people were killed by train strikes across Washington State in 2014. In Oregon, 11 were killed in 2015. *Id.* The likelihood of train-strike fatalities, injuries and property damage will increase from the increase in rail traffic and speed that would result from the Project.

**Increased rail traffic will damage cultural and religious tribal interests.**

The increased rail traffic will affect properties and items governed and protected by the National Historic Preservation Act, the Archaeological Resources Protection Act, the Native American

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CTUIR FWC Letter to Shawn Zinszer  
Re: Mosier 5,37 Second Mainline construction  
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Graves Protection and Repatriation Act and other laws. The transit corridor passes through tribal trust and traditional use areas. There are ancestral human remains, traditional cultural properties, historic properties of religious and cultural significance to Indian Tribes, and archaeological resources and sites in these areas. Any accidents, spills, explosions and related fires can damage these properties and items, and cause irreversible loss. Similarly, the increased traffic could result in increased risks of earthquake, liquefaction, or landslide, rail caused fires (without derailment), contaminant leakage onto tracks and sites, all of which could damage cultural and religious resources.

All of the potential impacts discussed above counsel for removal of the project review from the abbreviated Nationwide process, and the conduct of a robust review under the individual permit process. Moreover, it appears the Corps does not have accurate and complete information about the project before it on which to make a decision.

The permit application contains inaccurate, inconsistent and incomplete information.

There are inaccuracies and inconsistencies in the application as well. For instance, in the November, 2014 Project Purpose and Need and Alternative Analysis, it stated that trains along this route can range up to 12,000 feet and that the siding in Mosier siding is the shortest in the 206 mile subdivision. In conversations with UPRR it was clarified that UPRR does not run 12,000 foot trains, though there is nothing preventing them from doing so. The average length of train in the Gorge is 6,200 feet, half the length referenced in the report prepared by CH2M Hill. Also, Mosier is not the shortest siding in the Portland subdivision. From our information, the Mosier siding is 6,751 feet. The Bridal Veil siding is 6,360. The report contends that “[s]tandard trains currently operating on the route can range in length up to 12,000 feet, and many of these standard-length trains are unable to use the Mosier Siding for passing.” However, most of the sidings between Troutdale and The Dalles, are less than 12,000 feet including Sandy (10,617 feet), Bridal Veil (6,360 feet), Dodson (10,617 feet), Cascade Locks (6,751 feet), and Meno (9,916 feet). A chart of the siding length and locations is attached. Further, in response to cultural resource concerns by Catherine Dickson, the contractor stated that “the total number of trains per day is anticipated to remain similar to existing levels. The existing main line track speed limit would not be increased as a result of the project.” A potential increase of 28% of train traffic is not similar to existing levels. Further, as noted above, in one pager, “Union Pacific to Enhance Infrastructure in Mosier,” the speed limit will increase from 30 mph to 35 mph. The point of all of these inconsistencies is that the information before the Corps at this time is inaccurate. The project needs an individual permit review process, not the abbreviated whitewashing of the Nationwide process.

At a staff meeting with the Corps of Engineers regarding this permit on April 15, 2016, Corps staff expressed the opinion that the increased rail traffic of this project would be an indirect effect of this project. However, the Corps also did not know whether they could deny a permit if the indirect effects of the project had more than a de minimus impact on tribal treaty rights. This is a critical issue. The CTUIR believes that any impact by Corps authorized projects on treaty rights is unacceptable. Further, whether the impacts of this project are direct or indirect, the results will increase rail traffic and that will affect tribal fishers. The CTUIR would like a formal response to the question of whether or not the increased rail traffic and the threats that increase pose to tribal fishers and potential impacts on Treaty rights are direct or indirect effects of this project.

Treaty June 9, 1855 ~ Cayuse, Umatilla and Walla Walla Tribes
Project elements have changed.

UPRR has proposed the transfer of 2.82 acres of land from the Oregon Parks and Recreation Commission (OPRC) on September 23, 2015 in order to construct the second mainline construction. On April 27, 2016, the OPRC unanimously rejected the proposal by UPRR to secure the lands from OPRC for the expansion. This denial will affect the project proposal. Since the project can no longer as designed, how will the Corps address mid-review changes?

The project is currently under county review.

Finally, the Wasco County Planning Commission is currently reviewing the UPRR application under county rules that implement the Columbia River Gorge National Scenic Area Act (Scenic Area Act). Until this use is authorized under the county review process, with all limitations and conditions, Corps review of the project under a Nationwide permit is premature. The Scenic Area Act is federal law, and county ordinances implementing that law are federal in nature. Therefore limitations on state and local authority over railroads are inapplicable to county actions under the Scenic Area Act.

Conclusion:

Until these questions are answered, it remains unclear whether the Corps is willing or able to address treaty impacts of this project. Please provide the answers to these questions to Brent Hall, Tribal Attorney at 541-429-7200.

We look forward to consulting with the Corps on this issue further to address potential impacts to treaty rights.

Sincerely,

Jeremy Wolf, Chair
Fish and Wildlife Commission
Confederated Tribes of the Umatilla Indian Reservation

Cc: Wasco County
Yakama Nation Fish and Wildlife Committee
Warm Springs Fish and Wildlife Committee
Nez Perce Tribe Fish and Wildlife Committee
Paul Lumley, Executive Director, CRTIFC

Dear Chairman Wolf:

This letter is in response to your May 11, 2016, letter (hereafter referred to as “your letter”) regarding the proposed Union Pacific Railroad (UPRR) second mainline project located in Mosier, Oregon, which is currently under our review. The U.S. Army Corps (The Corps) recognizes the Tribe’s Treaty rights and I remain committed to conducting a thorough review of this project within the scope of our Regulatory authority. To that end, I have provided responses to the concerns raised in your letter in the paragraphs below.

Use of Nationwide Permits

The Corps acknowledges that Confederated Tribes of the Umatilla Indian Reservation (CTUIR) has concerns with the use of Nationwide Permits (NWPs) for this project evaluation due to the belief that it constitutes a less than thorough review when compared to the standard individual permit process. Although certain aspects of the permit process are conducted on a national and programmatic scale for NWPs (e.g., National Environmental Protection Agency (NEPA), Public Scoping), please note that our local procedures for evaluating effects on Treaty rights, meeting trust responsibilities, and complying with Section 106 of the National Historic Preservation Act (NHPA) for projects such as this are the same regardless of which permit evaluation is used. As such, Tribal interests are given the same level of consideration irrespective of which permit process is used. Additionally, projects in Oregon authorized under the current NWP program must comply with 31 national conditions, 16 regional conditions, and 21 State 401 water quality certification conditions that are designed to ensure adverse effects are minimized. UPRR, as with any other member of the public seeking authorization under the NWP program, would be held to these same standards. The use of multiple NWPs for linear transportation projects is well-established in regulation (33 CFR Part 330.2(i)), supported in case law, and is standard practice for these types of projects.

Habitat Degradation & Fisheries Impacts
The Corps respectfully disagrees with CTUIR’s assessment of the potential impacts on fisheries and habitat that would result from this project. My staff, in consultation with Oregon Department of Fish & Wildlife (ODFW) and the National Marine Fisheries Service (NMFS), has conducted a review of the existing habitat present, its current use by salmonids, and the potential impacts on these resources resulting from the proposed project. The consultation with NMFS is documented in the January 14, 2016 Biological Opinion issued by NMFS, which was provided to your staff. Although the project would result in the loss of up to 1.63 acres of waters, those impacts are spread across six waterbodies at separate and distant locations. The impacts at each of the six waterbodies are less than 0.5 acres of impact as allowed by NWP 14. Please also note that only three of the subject waterbodies have surface water connection to the Columbia River and these provide very limited opportunity for access by salmonids through culverts. The poorly-circulated water in these ponds likely routinely reach temperatures unsuitable for salmonids. The existing habitat in the affected areas of shoreline largely consists of shot rock from the existing railroad grade and lacks riparian vegetation. Due to these conditions, the ponds largely contain warm water fish and likely provide only limited rearing habitat for juvenile salmonid species in winter when temperatures are lower. The ponds do not contain spawning habitat as suggested in your letter. In addition, UPRR has proposed suitable compensatory mitigation to offset the loss of waters in their plan titled Compensatory Mitigation Plan for the Union Pacific Railroad Second Mainline Track Project, dated June 2015, which has been provided to your staff.

Spills, Derailments, Collisions

As noted in your letter, accidents can occur from railroad operations. However, the Corps has no regulatory control or responsibility over rail operations and/or any conceivable spills, derailments, or collisions and therefore the Section 404 Clean Water Act permit is not the appropriate mechanism to address spill response or railroad safety. There are existing regulatory programs in place that provide Federal oversight of these incidents if they do occur. Most notably, the Federal Railroad Administration (FRA) has regulatory authority through 49 CFR Part 225. The FRA’s Office of Railroad Safety regulates safety throughout the Nation’s railroad industry through a diverse staff of railroad safety experts. There is also an existing spill response plan for the Columbia River Gorge, and more specifically the Bonneville Pool, which was developed and prepared, in part, by U.S. Coast Guard (USCG) and U.S. Environmental Protection Agency. This plan is referred to as the Middle Columbia River-Bonneville Pool Geographic Response Plan, dated October 2015, and can be found at the following web address: (http://www.ecy.wa.gov/programs/spills/preparedness/GRP/ColumbiaRiver/MCR_Bonneville.pdf). Notwithstanding that the Corps has no regulatory control or responsibility over
rail operations, our evaluation is based on probable impacts and it is not a given that there will be derailments, spills, or collisions in the Columbia River Gorge of the magnitude referenced in your letter. Since there is an existing rail line through the Gorge, if there is a risk for these types of incidents, it already exists as part of the baseline condition, regardless of whether the proposed second mainline is authorized. We cannot say this project will perpetuate those threats in any way above the baseline. Further, the cause of these types of incidents are typically the result of track maintenance, equipment failures or defects, and human factors. These direct causes of incidents are far removed in place and time from any Corps’ authorization of the discharge of dredged or fill material for constructing a track. We believe these issues are appropriately handled through the oversight and expertise of the FRA, EPA, and USCG as outlined above.

**Rail Traffic & Commodities**

The Corps acknowledges CTUIR has concerns relating to potential increases in rail traffic and transportation of certain commodities (e.g., fossil fuels) through the Columbia River Gorge. However, we do not have the control or responsibility to regulate these aspects of the project through our authority under Clean Water Act. The potential effects raised by the Tribe are several times removed from the action that we have regulatory authority over, which is the discharge of fill material into waters of the U.S. In addition, our understanding is the U.S. Department of Transportation’s Surface Transportation Board (STB) has regulatory authority over railroad operations and shipping. Whether there will be any increase in rail traffic and/or the type of commodities carried by rail is not foreseeable and is driven by market forces. Considering there is existing Federal oversight of these rail operations through the STB and the Corps has no authority to control rail traffic or commodities, the Section 404 Clean Water Act permit is not the appropriate mechanism to regulate rail traffic or commodities.

**Other Agency Authorizations**

It is our understanding that UPRR has withdrawn their proposal to seek new right-of-way from the Oregon Parks and Recreation Commission (OPRC). As such, the denial by OPRC referenced in your letter will not affect the current proposal. In addition, the Columbia River Gorge National Scenic Area authorization currently under review by the Wasco County Planning Commission for this project is a separate and distinct review that is independent and separate from the Corps’ permitting process. We have an obligation to make a timely permit decision regardless of whether this process is in progress or delayed.
Treaty Rights Evaluation

Your letter contains general information indicating the Tribe believes railroad operations could affect Treaty resources throughout the entire Columbia River Gorge, but did not provide the specific information we requested in a letter we sent to the CTUIR on April 25, 2016. The Corps has been working with your staff to understand how the proposed project may affect tribal Treaty rights, including but not limited to tribal fishing activities. The Tribe first raised the possibility that tribal Treaty fishing could be affected by the project in a staff-level email dated October 22, 2015. Since that time, we have had numerous discussions at the staff and Government-to-Government level, both written and verbal but have not received the specific information we requested regarding potential impacts to Tribal Treaty fishing within the project area; more specifically, those areas in immediate proximity to where impacts to waters of the US will occur associated with UPRR’s Mosier Project (Enclosure 1). As outlined in the August 22, 2016 letter from Colonel Aguilar to Chairman Burke, if the requested information is not received by September 22, 2016, we may proceed to a permit decision, which will be based upon the information contained in the administrative record at the time a decision is rendered. We must adhere to our commitment to public service to make fair, reasonable, and timely permit decisions. The Corps may consider all substantive information received prior to the date of a final permit decision.

The Corps will honor and meet our Federal Tribal-Trust responsibility, and will engage with the CTUIR in timely and meaningful consultations on this issue and other aspects of our permit evaluation. I remain committed to conducting a thorough review of the proposal within the scope of the Corps’ regulatory authority. Courtesy copies of this letter will be provided to your staff (Mr. Audie Huber and Mr. Brent Hall).

Please feel free to contact me should you have questions or concerns, or have a member of your staff contact Peter Olmstead of my Regulatory Branch at (541) 962-0401 or Ms. Misty Latcu of my Office of Counsel at (503) 808-4527.

Sincerely,

Shawn H. Zinszer
Chief, Regulatory Branch

Enclosure
January 26, 2015

Via Electronic Delivery

Michael LaDouceur  
Project Manager, Regulatory Branch  
U.S. Army Corps of Engineers – Portland District  
333 S.W. First Avenue  
P.O. Box 2946  
Portland, OR  97208-2946

Michael Turaski  
Chief, Regulatory Permits  
U.S. Army Corps of Engineers – Portland District  
333 S.W. First Avenue  
P.O. Box 2946  
Portland, OR  97208-2946

Re: Permit Applications for Project Nos. NWP 2013-427, 2007-998-1

Dear Mssrs. LaDouceur and Turaski:

Since 2013 the Confederated Tribes of the Umatilla Indian Reservation (CTUIR) and the US Army Corps of Engineers (Corps) have been engaged in government-to-government consultations at the staff level regarding the above referenced permit applications. In December, 2014, the Corps staff asked for further comments from the CTUIR. We submit those comments below. We also request a policy level meeting with the Corps as part of the ongoing government-to-government consultation process.

The CTUIR restates the questions and comments posed in the August 13, 2013 and February 28, 2014 letters.

As an initial matter, we restate the questions posed in the CTUIR’s August 13, 2013 letter to Steve Gagnon with the Corps. While Columbia Pacific Bio Refinery (Refinery) copied the CTUIR on a September 5, 2013 response letter to the Corps, the questions remain largely unanswered. Refinery’s letter takes the position that there would be no future increase in quantities of oil shipped from the dock if the proposed project is completed. This seems misleading at best, given the regional proposals to increase or begin both oil-by-rail and coal-by-barge shipments. The oil proposals are still active, and oil by rail quantities continue to increase. In addition, the Corps has not denied the Coyote Island permit application. That project if approved will result in the transloading of approximately 8 million tons of coal annually at the dock.
The unanswered questions from our August 13, 2013 letter are below. We encourage you to review the entire letter as you prepare a response.

- How many trains, and of what length, will convey the oil to the facility, per day? Week? Month?
- Is there a maximum or upper limit on the amount of oil and/or the number of trains and/or ships?
- What route will the trains take?
- Will the ships need to turn around?
- What will be the impacts from Panamax-class vessels on other navigation at or near River Mile 53? Throughout the Columbia River estuary downstream from the facility to the Pacific Ocean?
- How many auxiliary in-water services will be required (e.g., tugboats)?
- Will any dredging (including increased/alterred maintenance dredging) be required?
- What are the capabilities of the U.S. Coast Guard in the event of an oil spill at the facility? In the estuary? Along the Columbia River upstream, in the event of a rail spill that reaches the River?
- Are there any other spill contingencies?

We are still awaiting responses to these questions from the Corps. The questions remain unanswered.

Similarly, we restate the concerns we raised in our February 28, 2014 letter addressing the permit application for Project No. NWP 2013-427, submitted by the Port of St. Helens. For the reasons stated in that letter, as well as the reasons stated at pp. 5-6 of the April 25, 2014 letter from Miles Johnson, Columbia Riverkeeper, to Michael Turaski, Misty Latcu, Michael LaDouceur and Steve Gagnon, the work proposed in Project Nos. NWP 2013-47 and NWP 2007-998 cannot be viewed in isolation and subject to segmented review. That work is integral to and enables the increased shipment of fossil fuels throughout the Columbia River Basin, including but not limited to the Morrow Pacific/Coyote Island project mentioned above (NWP 2012-056). Accordingly, the comments of CTUIR, the Yakama Nation, the Nez Perce Tribe and the Confederated Tribes of the Warm Springs Reservation of Oregon on that Coyote Island project all apply to the NWP 2013-47 and 2007-998 permit reviews. We attach the following documents discussing potential and certain impacts from the proposed project (these impacts would not occur but for the Port of St. Helens or Refinery projects):

- June 27, 2014 letter from Gary Burke, CTUIR Chairman, to Col. Aguilar, Corps;
- Declaration of Robert Brigham;
- Declaration of Julius Patrick;
- Declaration of Brandon Treloar;
- June 26, 2014 letter from JoDe Goudy, Yakama Nation Chairman, to Col. Aguilar, Corps;
- Declaration of Jeffrey Goudy;
- Declaration of Patrick Luke;
• Declaration of Thomas Mosqueda;
• Declaration of Steven Parker;
• June 26, 2014 letter from E. Austin Greene, Confederated Tribes and Bands of the
  Warms Springs Reservation of Oregon, to Col. Aguilar, Corps;
• Declaration of Bruce Jim;
• June 30, 2014 letter from Silas Whitman, NPTEC Chairman, to Col. Aguilar, Corps;
• Declaration of Jack McCormack;

• Declaration of Gary Greene
• Declaration of Scherri Greene
• Declaration of Daniel Kane
• June 27, 2014 letter from Babbit P. Lumley, CRITFC, to Col. Aguilar, Corps;
• Declaration of Babbit P. Lumley;
• Declaration of Blaine L. Parker;
• Declaration of Stuart Ellis;
• Declaration of Julie Carter;
• March 28, 2012 letter from Eric Quaempts, CTUIR DNR Director, to Steve Gagnon,
  Corps;
• March 28, 2014 letter from Brent Hall, CTUIR, to Charles Redon, Oregon DSL.

Potential impacts in the lower Columbia River and Estuary must be analyzed.

Along with the impacts to the CTUIR’s Treaty reserved resources, exercise of the Treaty fishing
right, and the fishing-based culture and traditions of the CTUIR (as identified in the documents
listed above), the CTUIR is also concerned about the potential impacts to the lower Columbia
River and estuary ecosystem, including its fishery resources, from the this project, and the
extensive activities and operations it will enable. The proposed uses of the dock (reinforcement
of the existing dock for POSH and extension of the dock for Columbia Pacific) will dramatically
increase the potential shipping from the dock from what was originally contemplated or ever
experienced at the dock in its 70 year history. Increased shipments of coal and oil have the
potential to directly and indirectly impact treaty reserved salmon populations that migrate past
the Port of St. Helens. Every anadromous fish tribal treaty fishers catch passes by Clatskanie on
the way to and from the ocean and any accident at the site or towards the mouth of the Columbia
has the potential to impact these fish populations. This is the narrowest part of the Columbia
River, directing the entire flow of the basin (with the exception of four extremely minor
tributaries) through a 2000 foot wide river. Any accident here would travel deep and fast in the
Columbia to the estuary and be catastrophic.

Further, the Corps has not analyzed, nor have they sought NOAA/USFWS input on what
limitations should be placed on permitted actions in the estuary to avoid potential cumulative
impacts on salmon populations in the estuary. Without this analysis there exists no metric of
how much development is too much or if the Corps can deny a permit due to cumulative impacts. The estuary is a highly complex and productive habitat system that provides a transitional environment for rearing anadromous fishes moving between freshwater and saltwater during their life cycles. It is of critical importance to the salmonid life cycle, and its protection is an important element of the biological opinions for the Federal Columbia River Power System. CTUIR tribal members fish below Bonneville Dam. We expect there are tribal members living in the Portland metro area that fish in the area of the Port of St. Helens.

The direct, indirect and cumulative impacts from the project include, but are not limited to, the following:

- Public health and safety risks concerns from explosions or fires resulting from the transloading and/or shipment of fossil fuels;
- Potential toxic water pollution from operations that could harm fish resources, and human health and safety though consumption of contaminated fish;
- Vessel traffic and/or potential spills that may destroy, degrade or otherwise adversely affect significant scientific, cultural, or historical resources in the Columbia River estuary;
- Adverse effects to endangered or threatened species, including but not limited to anadromous salmonids, and their designated habitat.¹
- Adverse effects to Pacific lamprey, sturgeon and their habitat, trust resources of the tribes;
- Impacts of wake stranding on juvenile salmonids and other fish resources;
- Impacts of wake action on low-lying wetlands and other ecologically critical areas in the Columbia River estuary;
- Impacts of fish entrainment into ship cooling and ballast systems;
- Impacts of cooling water discharges (thermal pollution) from Panamax and other vessels, and from on-shore operations related to fossil fuels shipping and processing at Port Westward;
- Increased transport and dispersal of invasive species into the Columbia River estuary in ballast water and attached to ships;
- Impacts on air quality from diesel and other air emissions from vessels, trains, and on-shore operations related to fossil fuels shipping and processing at Port Westward;
- Increased danger of crude oil fire and explosion due to increased volume of crude oil proposed to be shipped;
- Increased risk of spill in the Columbia River and estuary due to the hazardous conditions of the Columbia Bar, which is widely known for the extreme danger to ships.

• Impacts of global warming and ocean acidification on the Columbia River Estuary due to burning and extraction of fossil fuels.

All of these potential impacts must be identified, analyzed and assessed. The proper vehicle for this process is an Environmental Impact Statement. See, Native Ecosystems Council v. U.S. Forest Service, 428 F.3d 1233, 1239 (9th Cir. 2005) (An agency must prepare an EIS when substantial questions exist about whether the proposed project “may” significantly degrade the environment.) See also, Klamath Siskiyou Wildlands Ctr. v. Boody, 468 F.3d 549, 562 (9th Cir. 2006)(“This is a low standard.”)

It is the duty of the Corps to ensure that Indian Treaty Rights are given full effect.

As an agency of the federal government, the Corps is a trustee of the Tribe’s Treaty rights. That obligation imposes a fiduciary duty owed in conducting "any Federal government action" which relates to Indian Tribes. In carrying out its fiduciary duty, it is the government's, and consequently the Corps', responsibility to ensure that Indian treaty rights are given full effect. Indeed, it is well established that only Congress has the authority to modify or abrogate the terms of Indian treaties. NW Seafarms v. US Army Corps, 931 F.Supp. 1515 (W.D. Wash. 1996), citing Seminole Nation v. United States, 316 U.S. 286. 296-297 (1942) (finding that the United States owes the highest fiduciary duty to protect Indian contract rights as embodied by treaties); United States v. Eberhardt, 789 F.2d 1354 (9th Cir. 1986).

The ability to exercise the treaty fishing right requires more than the ability to dip a net into an empty river. Rather, “a fundamental prerequisite to exercising the right to take fish is the existence of fish to be taken.” United States v. Washington, 506 F.Supp. 187, 203 (W.D. Wash. 1980). The fishery is a trust asset, and protection of that asset is part and parcel of the fiduciary obligation the Corps owes the CTUIR. In reviewing the permit applications it is the Corps’ fiduciary duty to ensure that the CTUIR’s Treaty rights, especially the fishing right, are given full effect. NW Seafarms, 931 F.Supp. 1515.

Please contact Audie Huber, Intergovernmental Affairs Manager, at (541) 429-7228, to schedule a policy-level meeting as part of the government-to-government process.

Sincerely,

Brent H. Hall

Encl.
September 28, 2016

Colonel Jose Aguilar, Commander
U.S. Army Corps of Engineers, Portland District
P.O. Box 2947
Portland, OR 97208-2946

Submitted electronically to: jose.l.aguilar@usace.army.mil

Re: UPRR Joint Permit Application No. 2014-364, Construction of 4.02 miles of track creating a 5.37-mile second mainline track near Mosier, OR

Dear Col. Aguilar:

The Confederated Tribes of the Umatilla Indian Reservation (CTUIR or Umatilla Tribe) is in receipt of two letters from the Army Corps of Engineers (Corps) regarding the expansion of Union Pacific Railroad capacity at Mosier, Oregon, both dated August 22, 2016. The first letter is from Col. Aguilar to Board of Trustees Chair Gary Burke. That letter incorrectly asserts that the CTUIR has not provided information regarding potential harm to its treaty fishing rights from the proposed project. Such information was most recently set forth in the CTUIR’s May 11, 2016, letter to Mr Zinzser in the Portland District’s Regulatory Branch. That letter also requests evidence of treaty fishing within the project area (as narrowly defined by the Corps) of the proposed double-tracking similar to what would be required to establish a usual and accustomed fishing site pursuant to the United States v. Washington cases in Western Washington and Puget Sound area. The second letter is from Mr. Zinzser and is addressed to CTUIR Fish and Wildlife Commission (FWC) Chair Jeremy Wolf. That letter is styled as a response to Chair Wolf’s May 11, 2016, comment letter on the Permit Application, which set forth the tribal concerns with the project. Based on the two Corps letters, the CTUIR believes the Corps, in its role as trustee, continues to use the wrong tests for assessing harm to tribal fisheries in the Columbia River, and further, either does not appreciate or does not understand the CTUIR’s concerns with the project.

In requesting affidavits of specific fishing activity at the narrow project area, it appears that the Corps believes that it must first identify specific fishing sites in Zone 6 in order to find impacts to Indian Treaty fishing activities. This position misconstrues the legal status of Indian Treaty fishing rights in the Columbia River in Zone 6, as well as the Corps’ role in determining impacts to Treaty fishing activities. In essence, the Corps is attempting to assume the role of a federal judge in adjudicating usual and accustomed fishing sites. The request for such evidence may be
proper in the Western Washington and Puget Sound areas, where the federal court with jurisdiction in those areas has made specific usual and accustomed area adjudications. It is not appropriate in the Columbia River, where the entirety of Zone 6 is a tribal treaty fishing area, according to the case law of *United States v. Oregon*. The proper test for interference with tribal fishing rights in Zone 6 of the Columbia River was previously communicated to the Corps in the Coyote Island permit review (see, e.g., January 9, 2014 email correspondence between tribal attorneys and Corps counsel, attached hereto.) We restate that test below.

The determination of whether or not a location is a specific, or “usual and accustomed,” fishing area is made by a federal court. To date, there has been no federal court adjudication of specific individual usual and accustomed fishing areas in the Columbia River. Instead, in 1969, the United States District Court for the District of Oregon issued an Order holding that for the Umatilla, Yakama, Nez Perce, and Warm Springs tribes:

Each of the Intervenor Tribes and their members had usual and accustomed fishing places in the Columbia River Basin, in waters now under Oregon’s jurisdiction, including areas upstream (east) from the confluence of the Deschutes River in Oregon and on the Columbia River.¹

There has never been any attempt to more specifically define the tribes’ usual and accustomed areas than the District Court of Oregon did in 1969. Instead, the federal court and the *United States v. Oregon* Parties, including the State of Oregon, adopted “areas” or “zones” as surrogates for formal federal court adjudications.

The District Court’s ruling was upheld by the United States Court of Appeals for the Ninth Circuit in 1983, when it reviewed the lower court’s grant of a preliminary injunction enjoining state restrictions on tribal fishing in areas upstream of Bonneville Dam.² Time and again in this opinion, the Ninth Circuit and the Parties rely upon the “zone” system to determine where the Tribes exercise treaty fishing rights in the Columbia River.³ This approach to Treaty fishing areas continues in the orders of the *United States v. Oregon* Court. The current *United States v. Oregon* Management Agreement, which is an order of the Court, continues to treat Zone 6 as an “exclusive Treaty Indian fishery.”⁴ There are many other harvest provisions of the Management

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² *United States v. Oregon*, 718 F.2d 299 (9th Cir. 1983).
³ Note that this approach is very different than the history of the Western Washington tribes along the coast and Puget Sound. In the *U.S. v. Washington* case area, the federal court made many usual and accustomed adjudications identifying the areas and tribe(s) with treaty rights to fish at those areas. This approach, as noted by the preeminent legal treatise on Federal Indian Law, has led to almost continuous litigation over those usual and accustomed adjudications. Cohen, Handbook on Federal Indian Law, § 18.04[2][e][ii].
Agreement that use the “zone” approach to effectuate the harvest sharing requirements between the states and Treaty Tribes mandated by the *U.S. v. Oregon* Court.⁵

These holdings reflect the realities of Treaty fishing in the Columbia River. Each member of the four Treaty Tribes (CTUIR, Yakama Nation, Nez Perce Tribe and Warm Springs Tribes) may exercise a constitutionally protected Treaty right to access and engage in fishing activity at any location on the Columbia River between Bonneville Dam and McNary Dam (Zone 6). Under tribal jurisdiction, any fisher may place nets at each and every point of the river in Zone 6 (unless a tribe has created no-fishing areas like sanctuaries). This reality is not subject to debate; it has been settled by the courts. There is a clear legal right for Indian fishing at every location in Zone 6 pursuant to the *United States v. Oregon* Court Order, so a development in Zone 6 that would make fishing activity more difficult, or diminish or impede that activity, negatively impacts Indian fishing rights.

Clearly, there are certain areas in Zone 6 that are traditionally more productive and higher-use areas.⁶ But there are no applicable regulations or restrictions that prohibit tribal members from fishing different areas. Similarly, the very nature of changing river levels and flows, predation infiltration, and fish returns in the Columbia means productive areas may vary over the years. Some areas may not be fished for years, only to return to productivity once fish returns increase, hydropower or storage project operations are altered, or flows and eddies change. Such changes may also result in new areas becoming productive. The increased presence or changing patterns of predators (e.g., sea lions, terns and cormorants, or non-native fish) may also render some areas too difficult to productively fish in some years.

An inquiry about impacts to Treaty Indian fishing in the Columbia River is a much different question than whether or not there is a “fishing site” at any one location between Bonneville and McNary Dams. In order to make a “site” determination, the Corps would have to sit in an adjudicatory role with respect to the existence of usual and accustomed fishing areas, and the Corps has no jurisdiction, charter or authority to make this determination in Zone 6. The question of the existence of Treaty fishing rights is a legal question, to be determined by a court with appropriate jurisdiction and adjudicatory powers. Accordingly, with respect to a proposed

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⁵ The Federal District Court for Oregon has ongoing, continuing jurisdiction in the *United States v. Oregon* case.

⁶ Some tribes employ an administrative process of registering sites to certain tribal members. This is a ministerial process that is used to regulate user relations between and within tribes and sometimes among tribal members. The process is useful when multiple tribal members are trying to fish in the same areas at the same time, especially in years of high demand for productive areas. But it is important not to confuse site registrations with usual and accustomed determinations, which can only be made by a federal court as those are Treaty-protected rights.
Letter to Col. Aguilar  
Re: Mosier 5.37-mile Second Mainline Construction  
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Project in or along Zone 6 of the Columbia River, the answer to the question of whether there will be impacts to Treaty Fishing rights is undeniably yes. The inquiry then turns to the nature and extent of the impacts from that project.

The potential impacts of this project to the CTUIR’s Treaty fishing rights in the Columbia River are set forth in CTUIR FWC Chair Wolf’s May 11, 2016 letter. They derive primarily from the potential of increased train traffic and increased traffic of fossil fuels. The Corps takes the position that it is unable to consider these threats, and that for any impacts that occur outside the small footprint of the double-tracking project itself, the agency must essentially stand idly by and entrust regulation of them to other agencies including the Federal Railroad Administration, the Environmental Protection Agency and the United States Department of Transportation’s Surface Transportation Board. While each of these agencies may have a role in regulating the railroads, it is only the Corps that can approve the track expansion through Mosier which would allow the increased capacity of UPRR to operate transport trains along the Columbia River. Said another way, but for Corps approval of the double-track permit, the rail traffic along the Oregon side of the Columbia could not increase by up to 25%, thereby also increasing the risk of potential harm by up to 25%.

The threats posed by the project, and discussed in the May 11, 2016 letter, are very similar to the threats presented by the proposed Tesoro Savage Vancouver Oil Terminal. They include damage from derailments, spills, fires and train strikes. This is damage to the ecosystem and to personal safety. All of these risks go up with the rise of rail traffic. As you are likely aware, the Washington Energy Facility Site Evaluation Council (EFSEC) held a six-week hearing in June and July of this year regarding the Tesoro Savage proposal. The CTUIR participated in that proceeding, as did other tribal and public interest parties. The tribal testimony in that proceeding discussed these threats in detail, including under cross-examination by opposing counsel or by EFSEC members. That testimony is attached for the record and for the Corps to consider in deciding how to proceed on this permit application. It includes but is not limited to the testimony of Randy Settler, a member of the Yakama Nation who was fishing in the vicinity of Mosier project area at the time of the June 3, 2016, UPRR tank car derailment, oil spill and fire at Mosier. Mr. Settler testifies to the specific, direct impacts of the Bakken crude oil train derailment on his treaty fishing, and impacts the spill and associated fire had on his life and livelihood.

Finally, the risks posed to the Columbia River Gorge by increased rail traffic require an exacting “hard look” as is required under the National Environmental Policy Act. Train traffic poses significant risks to the resources of the Gorge, risks that were vividly demonstrated by the recent derailment at Mosier. The additional traffic that will inevitably result from this project will only magnify the impacts and increase the risks to Indian Treaty fishing, the Columbia River Gorge

Treaty June 9, 1855 ~ Cayuse, Umatilla and Walla Walla Tribes
Letter to Col. Aguilar
Re: Mosier 5.37-mile Second Mainline Construction
September 28, 2016
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and its singular assets, and an untold number of communities throughout the region. Thank you for your consideration of our comments.

Sincerely,

Jeremy Red-Star Wolf, Chair
Fish and Wildlife Commission

Cc: Wasco County
Yakama Nation Fish and Wildlife Committee
Warm Springs Fish and Wildlife Committee
Nez Perce Tribe Fish and Wildlife Committee
Paul Lumley, Executive Director, CRITFC
Hello Misty – hope you're having a good start to the new year. First, thank you for requesting something from me to aid in your consideration of the discussion we had at the District Office a while back. Second, thank you for your patience. I am attaching a memo that Brent Hall and Laurie Jordan also reviewed and endorse. I cite a couple of items from the US v. OR process in that memo, and those are attached here after the memo.

I (and others) would be happy to discuss this with you (and other) COE folks at your convenience. I believe that we do see the next step as hearing a response to our views on the proper analytical approach for consideration of Indian fishing activities in the PIR review for permit applications. Once we have that knowledge, the Tribes can decide if it wants to provide the COE additional material regarding current applications, and if so, how to provide it. Thanks again.

John

John W. Ogan
Attorney

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IRS Circular 230 disclosure:
To comply with regulations of the Internal Revenue Service, we are required to inform you that this communication, if it contains advice relating to Federal taxes,
cannot be used for the purpose of (i) avoiding penalties that may be imposed under Federal tax law, or (ii) promoting, marketing or recommending to another party any transaction or matter addressed in this communication.
Hello Misty -- Thank you for your patience on this. What I propose to do is explain again here what may seem to be a subtle adjustment to the way that we believe that the COE should review the Port of Morrow (and other) permit applications where the Public Interest Review (PIR) is required. While the adjustment may seem subtle, from a legal standpoint we believe that it is critically important.

As we've discussed, the guiding regulations for the COE are 33 CFR 320.4, including 33 CFR 320.4(a). We agree that these, along with the COE always present trust responsibility overlay, make it appropriate (if not necessary) that the COE consider impacts to Indian fishing when doing a PIR for a permit application on the Columbia. That said, we also acknowledge that there is nothing in the COE permitting regulations that specifically directs the COE to review possible impacts to Indian fishing activities. In summary, our view is that the legal/regulatory framework that the COE must work within clearly supports an investigation of possible impacts to Indian fishing, yet it lacks of specificity in how the COE should fashion the details of that investigation. And I will come back to this at the end, but we are convinced that the legal, physical, and historical differences between the Puget Sound/Washington Coast and the Columbia River above Bonneville Dam dictate different approaches to investigating impacts to Indian fishing in the PIR.

We concur with the COE that there is a two part test to apply to consider impacts to treaty fishing activities in the Columbia. This is how I would pose the considerations:

1) Does a Tribe have legal fishing rights that would be affected by the development contemplated in the permit application?
2) If yes, is there risk of more than a de minimis impact on the exercise of those rights either now, or in the future?

Where we believe that the Arlington decision went unnecessarily too far with issue 1) when the COE decided that in order to determine if there were Indian fishing rights (section 7.33) it had to determine if the location was a "usual and accustom fishing station" in 7.33.1. Sorry for the redundancy, but 33 CFR 320.4 does not require that legal determination. As the COE Arlington decision provides, the determination of whether or not a location is a "U&A" is done by the Federal Court. U&A determinations have lasting and binding legal consequences.

To date, there has been no federal court adjudication of U&A's in the Columbia River. In 1969, the US District Court issued an Order that concluded that with respect to Yakama, Umatilla, Nez Perce, and Warm Springs:

"Each of the Intervenors Tribes and their members had usual and accustomed fishing places in the Columbia River Basin, in waters now under Oregon's jurisdiction, including areas upstream (east) from the confluence of the Deschutes River in Oregon and on the Columbia River."
This determination by the District Court of Oregon was all that was necessary to move to the primary issues presented by the United States and Tribes. There has never been any attempt to more specifically define the Tribes’ U&As than the District Court of Oregon did in 1969. (See Paragraph 11 of the Order). This, as you know is very different than the history of the Western Washington tribes. In the US v. WA case area, the federal court has made many U&A adjudications, identifying the areas and tribe(s) with treaty rights to fish at those areas. As Cohen notes in his Handbook on Federal Indian Law section 18.04[2][e][ii] the Western District of Washington’s U&A adjudications for the Puget Sound tribes have been the subject of almost continuous litigation to this day.

In the Columbia River, the Court and US v. Oregon Parties, including the United States (which we see the COE as being an instrumentality of) have used "areas" or "zones" as surrogates for formal federal court U&A adjudications. Note again the 1969 Order from Judge Belloni. The "areas upstream of the Deschutes River" were identified as the U&A. Fast forward to a 1983 9th Circuit Opinion (718 F.2d 299 (9th Cir. 1983) that reviewed District Court's grant of a TRO (converted to a PI) seeking relief from state restrictions on tribal fishing in areas upstream of Bonneville Dam. This is a critical case to read, as it shows that the Courts and the Parties rely upon a voluntary "zone" system to determine where there the Tribes exercise treaty fishing rights in the Columbia River. Time and again in its Opinion, the Court equates U&As with the "zones" used by the US v. OR Parties for Columbia River fisheries management. At page 302 of the Opinion, the Court describes the controversy:

"The tribes were unhappy because they desired to fish all of Zone 6. As a result, they brought suit in district court. The court decided that the restrictions on treaty fishing infringed a treaty right to fish at 'usual and accustomed places'."

At page 304, the Court again shows that for US v. Oregon and the Columbia "zones" in the Management Agreement Court Order are indistinguishable from, and may in fact be in a true legal sense, the U&A:

"The parties also recognized that conditions can exist that require some limitation on the tribes right to fish at 'all usual and accustomed places'. Indeed the tribes have voluntarily accepted several restrictions. They fish only in Zone 6 . . . ."

And now I will fast forward to the current status. The US v. Oregon Parties have a Management Agreement and this has been entered as an Order of the District Court of Oregon. I want to emphasize this -- the US v. Oregon Management Agreement is a Court Order. That MA expires in 2017. This Court Order/Management Agreement continues to use the "Zone" approach in managing treaty fishing in the Columbia. See for example Section II.D.7 of the MA stating that "Commercial fishing in Zone 6 of the Columbia River shall remain an exclusive treaty Indian fishery." There are many other harvest provisions of the MA that use the "Zone" approach to effectuate the sharing requirements between the states and treaty tribes mandated by the US v. Oregon Court.
And now I will return to the two part consideration under the PIR of 33 CFR 320.4:

Part 1): Does a Tribe have legal fishing rights that would be affected by the development contemplated in the permit application of Port of Morrow? The answer, for at least as long as the 2008-2017 MA is an Order of the District Court of Oregon is in force, is undeniably "Yes". The Tribes have a right to access and engage in fishing activity at any location of the Columbia River between Bonneville Dam and McNary Dam (Zone 6). Under tribal jurisdiction, any fisher may place nets at each and every point of the river in Zone 6 (unless the tribe has created no fishing areas like sanctuaries). This really is not subject to any debate. There is a clear legal right for Indian fishing at every location in Zone 6 pursuant to the US v. Oregon Court Order, so a development in Zone 6 that would make fishing activity impossible or impracticable negatively impacts Indian fishing rights.

I hope I have made clear that the question of whether or not a treaty fishing right is implicated is a very different question in the Columbia River than in Puget Sound. In the Columbia, there have not been court adjudicated U&As under the Muckleshoot v. Hall, NW Sea Farms, or US v. WA standards. The Columbia is very different -- in 1969 the District Court looked only at expansive "areas" (Columbia Basin and east of Deschutes) and then transitioned to a "Zone" format for consideration of the geographic extent of the treaty fishing activities used by the Courts and Parties since the 1980’s.

We do not believe that the COE should endeavor to do what the United States, the District Court of Oregon, the Columbia River Treaty Tribes and the states of Oregon, Washington and Idaho have chosen not to do for 45 years -- that is, it should not seek to gather and evaluate evidence to make an administrative determination of what locations are or are not U&As. In fact, it is our view that this is not only bad policy, it is contrary to the existing US v. Oregon Court Order that binds the United States and clearly provides that all of Zone 6 may be subject to treaty fishing activity. We also do not believe that it would be appropriate for the COE to conduct a PIR that seeks to define the geographic extent of the treaty fishing right in a way different than the Ninth Circuit did in 1983.

But that does NOT mean that the Tribes can "veto" every COE permit under the PIR. We agree that there is a second appropriate consideration: 2) "Is there risk of more than a de minimis impact on the exercise of those rights either now, or in the future?"

We believe that the COE could appropriately request information about past, current and future fishing activity at particular location in the Columbia River (and especially Zone 6) to help determine if the activity contemplated in the permit application will risk negatively impacting treaty Indian fishing. The COE would gather precisely the same sort of site specific information that it has requested in the past in the Port of Arlington matter, and currently in the Port of Morrow matter. But it would NOT use that information to make administrative determinations about the existence of the fishing right -- the existence of the right is established. Rather, the site specific information would be used to evaluate the risk of a more than de minimis impact to treaty fishing.

3
For example, if during the PIR the COE asks for and receives information about a permit location from tribes that it has been fished in the past, is currently fished, how often, things of this nature, it will use it to make a determination of if the risk of negative impact is de minimis or that is greater than that. This is a fundamentally different determination than deciding if a right even exists.

We also believe that approaching the analysis in this way puts the COE decisions on much more stable and defensible legal footing. This analysis has the COE exercising its discretion in weighing "evidence" in its record about risk of magnitude of impacts. This is a question that depends greatly on the specific public record generated in the permitting process and it is a question of judgment the COE has been charged to exercise within 33 CFR 320.4. Most of the PIR regulations require the COE to be weighing record input and making qualitative judgments just like this. On the other hand, trying to determine if a permit implicates a Usual and Accustomed fishing area protected by the treaty is a legal question – does a right even exist? Making such quasi-legal adjudications is not consistent with the body of 33 CFR 320.4. We believe that if challenged, COE judgments regarding what the record shows for “risk of impact” will be afforded much more deference than its determinations of whether or not the right exits at all (is it a U&A?). The COE regulations charge it to do the former, while doing the latter is not called for in the regulations and is beyond the agency’s expertise and responsibility.

One last point regarding how the analysis framework we suggest makes a critical difference when COE decisions are challenged. Whether or not the COE would admit at this point that making a determination in the PIR that a location is a U&A is a quasi-judicial legal determination, when any such determination is challenged in District Court, there is no question we have put the Treaty on the firing line to adjudicate the legal point. If the COE denies a permit finding in the PIR that an area is a U&A and there is a risk of more than de minimis impact, the permit applicant will necessarily have to attack that finding – it must argue to the Court that the location is not a U&A, just as the Port of Arlington did in the Complaint it filed in the District Court of Oregon. There is no other route for the denied applicant, and the Court proceeding is all about whether or not Tribes have treaty rights at that location. The COE walks Tribes and the Treaty directly into Court. Given an entirely reasonable alternative approach for the COE that we suggest, we believe that the COE must recognize its trust responsibility to the Tribes compels it to adopt the analytical path that avoids what would seem to be inevitable and recurring treaty based litigation.
UNITED STATES of America,
Plaintiff-Appellee,

v.

STATE OF OREGON and State of
Washington, Defendants-
Appellants,

and

Confederated Tribes of the Warm Spring
Reservation, et al., Plaintiffs-
Intervenors-Appellees.

Nos. 82-3556, 82-3604

United States Court of Appeals,
Ninth Circuit.

Argued and Submitted July 6, 1983.

Indian tribes brought suit following
disagreements concerning fall, 1982 chinook
salmon run on the Columbia River. The
United States District Court for the District
of Oregon, Walter Early Craig, J., issued preliminary injunction allocating salmon among treaty and nontreaty fishermen, and appeal was taken. The Court of Appeals, Sneed, Circuit Judge, held that: (1) appeal was not mooted by expiration of 1982 fishing season, since dispute over allocation of fish could easily recur, yet evade review, between same complaining parties; (2) district court, which recognized primacy of treaty rights while recognizing claims of conservation also, acted within appropriate limits in allocating chinook salmon among treaty and nontreaty fishermen; and (3) calculation of deficit in treaty Indian share was not clearly erroneous.

Affirmed.

1. Federal Courts => 727
   A case is moot if reviewing court can no longer grant effective relief.

2. Federal Courts => 724
   Appeal by states from injunction allocating chinook salmon among treaty and nontreaty fishermen for the fall, 1982 salmon run on the Columbia River was not mooted by expiration of 1982 fishing season, since dispute over allocation of fish could easily recur, yet evade review, between same complaining parties.

3. Federal Courts => 724
   District court's calculation of deficit in treaty fishermen's share of chinook salmon during fall, 1982 salmon run on the Columbia River was not mooted by expiration of 1982 fishing season since deficit would be carried over into future salmon allocations.

4. Federal Courts => 724
   Columbia River management plan, which concerns salmon fishing and which expressly stated that it did not govern all fishing rights but provided that significant management problems would be sent to the district court, did not prevent the Court of Appeals from hearing appeal from preliminary injunction allocating chinook salmon among treaty and nontreaty fishermen for the fall 1982 salmon run.

5. Federal Courts => 776
   Question as to what type of showing of necessity springing from the need to conserve fish was required to justify limitation on Indian tribes' right to fish for salmon in all accustomed places on the Columbia River was a legal one and thus was subject to de novo review even though raised on appeal from preliminary injunction.

6. Federal Courts => 776, 814
   Abuse of discretion standard governs court's application of legal standards for issuing an injunction but standard for review of law governing the merits is de novo on appeal from preliminary injunction.

7. Fish => 8
   Indians => 3
   Efforts to protect Indian tribes' right of access do not discriminate against nontreaty fishermen and state regulation is discriminatory only if it fails to accommodate treaty rights of Indians and rights of other people; states are free to regulate their own citizens even if treaties prevent them from so regulating the tribes.

8. Indians => 3
   Indian tribes should not have their treaty right to fish for salmon in "all the usual and accustomed places" limited solely either to increase harvest of hatchery fish or to reduce deficit owed to the tribes but, on the other hand, limitations on geographical aspect of tribes' treaty rights to promote a "reasonable margin of safety" between existing level of fish stocks and imminence of extinction are permissible.

9. Indians => 3
   District court, which had substantial latitude in determining to what limits geographical treaty rights of Indian tribes should be subject in light of existing stock of wild salmon and which recognized primacy of treaty rights while also recognizing conservation claims, acted within appropriate limits in issuing preliminary injunction altering fishing season for the fall, 1982 salmon run on the Columbia River to restore some of tribes' "usual and accustomed places" of fishing, especially in absence of
showing that wild salmon were threatened with imminent extinction.

10. Federal Courts — 855

District court’s calculation of deficit in treaty Indian share of chinook salmon, following its issuance of preliminary injunction allocating salmon among treaty and nontreaty fishermen for fall, 1982 salmon run on the Columbia River, was not clearly erroneous.


Howard G. Arnett, Johnson, Marceau, Karnopp & Petersen, Bend, Or., Tim Weaver, Hovis, Cockrell, Weaver & Bjur, Yakima, Wash., for intervenor.


Appeal from the United States District Court for the District of Oregon.

Before SNEED, FARRIS, and CANBY, Circuit Judges.

SNEED, Circuit Judge:

The State of Oregon and the State of Washington bring this appeal from a now-expired preliminary injunction. The district court issued the injunction to allocate chinook salmon among treaty and nontreaty fishermen for the fall 1982 salmon run on the Columbia River. Although the parties seek to employ this appeal as the means by which a number of issues important to the management of the river fishery can be resolved, we decline to proceed entirely as the parties wish. Nonetheless, we are convinced that the expiration of the preliminary injunction does not moot this appeal. Approach in the fashion hereinafter indicated, we affirm the action of the district court.

I.

MATTERS IN DISPUTE

At issue is the right to take, and the need to protect and enhance, two types of fall chinooks, hatchery fish and the more desirable but vanishing wild salmon (brights). The hatchery fish are bred in the lower river, migrate to the ocean, and then return to the hatcheries. These fish, which do not spawn, exist in relative abundance. The brights, on the other hand, are born further upriver and return there to spawn and die. Less than half of those reentering the river reach their spawning grounds. The survival of the species is measured at any point in the river by the escapement, or number of fish passing that point. The parties agree that the escapement of brights in 1982 was dangerously low.

The disputes of the parties are not without antecedents. The parties previously voluntarily agreed that nontreaty fishermen will fish in Zones 1–5, which comprise the lower 141 miles of the river and contain both hatchery fish and brights, and that treaty fishermen will use the 130-mile Zone 6, the upper half of the river. The upper two pools in Zone 6 contain only brights, but both hatchery fish and brights can be caught in the lowest pool of Zone 6.

The district court has had jurisdiction over the case since 1969. Some of the disputes were settled when the district court ordered the parties to formulate the Columbia River Management Plan. After the parties formulated the Plan the district court adopted it. The Plan allows inriver harvesting on a 60% treaty—40% nontreaty

1. To review the previous litigation, see Comment, Sohapp v. Smith: Eight Years of Litigation over Indian Fishing Rights, 56 Or.L.Rev. 680 (1977), and United States v. Oregon, 657 F.2d 1009 (9th Cir.1982).
basis 2 once the Bonneville Dam escapement exceeds 100,000 fish. The Plan does not establish fishing locations, times, or quotas. The States regulate such details through the Columbia River Compact, an interstate agency which controls commercial fishing on the river.

The disagreements over the fall 1982 allocations, out of which this suit arises, began in August 1982, when the Compact determined that the run of brights would be unacceptably low. The Compact restricted treaty and nontreaty fishing, allowing treaty fishermen five days of fishing in the bottom 21.6 miles of Zone 6, plus a week’s fishing at one hatchery. The tribes were unhappy because they desired to fish all of Zone 6. As a result, they brought suit in the district court. The court decided that the restrictions on treaty fishing infringed a treaty right to fish at “usual and accustomed places” and was not necessary for perpetuation of brights. The court issued a temporary restraining order, later converted to a preliminary injunction, ordering two days of treaty fishing throughout Zone 6 and four days in the 21.6 mile pool. No changes of relevance to this appeal were made in nontreaty fishing.

The States appealed. Initially, we must determine whether the appeal has been mooted by expiration of the 1982 fishing season. Second, we must decide whether the district court erred in altering the fishing season to restore some of the tribes’ “usual and accustomed places” of fishing. Finally, we must confront whether the district court’s calculation of the deficit in the Indian share is clearly erroneous. We turn first to the mootness question.

II.

THE APPEAL IS NOT MOOT

[1] A case is moot if the reviewing court can no longer grant effective relief. Mills v. Green, 159 U.S. 651, 653, 16 S.Ct. 132, 133, 40 L.Ed. 293 (1895); In re Combined Metals Reduction Co., 557 F.2d 179, 187–89 (9th Cir.1977). This customary description of mootness has reduced significance to litigation such as this which is but part of extensive ongoing judicial oversight of a continuous activity. What is decided in one proceeding in such litigation will impact on future, and perhaps even on past, proceedings. Even a failure to decide may cause significant reverberations. Moreover, even when the termination of litigation can be foreseen to be reasonably proximate to its commencement, it is said an exception to the mootness doctrine applies when the claim for relief is “capable of repetition, yet evading review” and the complaining party is likely to be subject to the same harm. Weinstein v. Bradford, 423 U.S. 147, 149, 96 S.Ct. 347, 349, 46 L.Ed.2d 350 (1976) (per curiam); Southern Pacific Terminal Co. v. ICC, 219 U.S. 498, 514–16, 31 S.Ct. 279, 283–84, 55 L.Ed. 310 (1911).

[2-4] Without regard to whether the staying hand of mootness should be relaxed in “oversight litigation,” the exception certainly applies to this case. Because the difficulty of forecasting the run of fish forces the district court to issue its orders as close as possible to the start of the fishing season, and because this conflict is certain to continue, the dispute over the allocation of fish can easily recur, yet evade review, between the same complaining parties. See United States v. Oregon, 657 F.2d 1009, 1012 n. 7 (9th Cir.1982) (appeal of injunction not moot for “enduring” issues of tribal immunity and jurisdiction after fishing season expired). The calculation of the deficit in the treaty fishermen’s share also does not present a moot issue, because

2. The allocation deviates from the 50%-50% starting point suggested by the Supreme Court in Washington v. Washington State Commercial Passenger Fishing Vessel Ass’n, 443 U.S. 658, 685–87, 99 S.Ct. 3055, 3074–75, 61 L.Ed.2d 823 modified on other grounds, 444 U.S. 816, 100 S.Ct. 34, 62 L.Ed.2d 24 (1979), to compensate for ocean fishing by nonIndians.

3. Compare Sahappy v. Smith, 529 F.2d 570, 572–73 (9th Cir.1976) (per curiam) (appeal from order denying preliminary injunction to ban Indian commercial fishing moot when run had ended).
the deficit will be carried over into future allocations. And there is no evidence in the record that these issues have been mooted by a new Plan. Thus we turn to the merits.4

III.

THE FISHING RIGHT AND CONSERVATION

[5, 6] The parties by their arguments have sought to array the interest in conservation against the tribe's right to fish in "all the accustomed places." What type of showing of necessity springing from the need to conserve the fishery, the parties ask, is required to justify a limitation, spatially or temporally, on the tribes' "right to fish in all the accustomed places?" The question is a legal one and thus is subject to de novo review even though raised on appeal from a preliminary injunction. California ex rel. Younger v. Tahoe Regional Planning Agency, 516 F.2d 215, 217 (9th Cir.), cert. denied, 423 U.S. 868, 96 S.Ct. 131, 46 L.Ed.2d 97 (1975), cited in Los Angeles Memorial Coliseum Commission v. National Football League, 634 F.2d 1197, 1200 (9th Cir.1980).5

4. The States argue that the Plan deprives us of power to grant relief on the allocation of fish. They claim that the Plan provides an exhaustive list of requirements for fishing regulations and bars any attempt to rely on the right to fish at "all usual and accustomed places," a right the Plan does not mention. We disagree. The Plan expressly states that it does not govern all fishing rights. It provides that "significant management problems" will be sent to the district court, and that "[i]n any event" the district court retains jurisdiction over the case. Both provisions point to judicial resolution of unsettled questions. Furthermore, accepting the States' argument would permit the States, acting through the Compact, to determine all fishing details except those already in the Plan. Such a result is contrary to the Plan's goal of mutual agreement. The Plan does not prevent us from hearing this case. See United States v. Oregon, 657 F.2d 1009, 1016 (9th Cir.1982).

5. The States do not challenge the injunction as an abuse of discretion. The abuse of discretion standard governs the court's application of the legal standards for issuing an injunction. See Sports Form, Inc. v. United Press Int'l, Inc., 686 F.2d 750, 752 (9th Cir.1982). Zepeda v. INS, 708 F.2d 355 (9th Cir.1983), can be read to suggest that questions of law also may be reviewed more deferentially than under de novo review when the appellate court analyzes a preliminary injunction. See id. at 359 ("At the preliminary injunction stage, the substantive law aspects of the district court's order will be reversed only if the order rests on an erroneous legal premise and, thus, constitutes an abuse of discretion; at the permanent injunction stage, we freely review all conclusions of law."). This statement accurately reflects our standard only to the extent that it refers to the legal standards for issuing an injunction. The standard for reviewing the law governing the merits is de novo. See, e.g., Humboldt Oil Co., Inc. v. Exxon Co., U.S.A., 695 F.2d 386, 387–88 (9th Cir.1982) (preliminary injunction will be reversed if district court abused discretion or relied on erroneous legal premise). An error of law is often described as sufficient to show an abuse of discretion, see Miss Universe, Inc. v. Flesher, 605 F.2d 1130, 1133 n. 5 (9th Cir.1979), but there is no intent to suggest that errors of law should receive the deferential review granted other discretionary decisions.

After extended reflection, however, we decline to attempt to resolve completely the broad question the parties pose. Our disposition will be considerably more narrow, addressing only certain aspects of the broader issue.

[7] We begin by setting forth the common ground between the tribes and the States. All agree, as they must, that the tribes' fishing right encompasses access to traditional sites as well as a right to a fair share of the catch passing those sites. In ceding their territory to the United States, the tribes received a guarantee of the "right of taking fish, at all usual and accustomed places." As the district court held in Sohappy v. Smith, 302 F.Supp. 899, 911 (D.Oreg.1969), history of subsequent orders omitted:

the state cannot so manage the fishery that little or no harvestable portion of the run remains to reach the upper portions of the stream where the historic Indian places are mostly located.

. . . .

. . . .

[T]he protection of the treaty right to take fish at the Indians' usual and accustomed places must be an objective . . .
co-equal with the conservation of fish runs for other users. This decision was not appealed. See Sohappy v. Smith, 529 F.2d 570, 573 (9th Cir.1976) (per curiam). The Supreme Court also has recognized the geographical aspect of the treaty fishing right, see Puyallup Tribe v. Department of Game (Puyallup I), 391 U.S. 392, 398, 88 S.Ct. 1725, 1728, 20 L.Ed.2d 2689 (1968) ("The treaty right is in terms the right to fish 'at all usual and accustomed places.' ... The right to fish 'at all usual and accustomed' places may, of course, not be qualified by the State ... "), in addition to the guarantee of a proper quota of fish.6

The parties also recognize that conditions can exist that require some limitation on the tribes' right to fish "at all usual and accustomed places." Indeed the tribes have voluntarily accepted several restrictions. They fish only in Zone 6 and have not challenged the district court's limitation of four of their fishing days to the lower 21.6 miles of the 130-mile zone. In addition, the tribes do not quarrel with the restriction on the number of days they can fish in the zone.

This acceptance of restrictions no doubt is in recognition that some limitations are needed to preserve the population of brights. Although during the 1982 season the continued existence of brights was not imperiled, the 1981 escapement of brights near the upper end of Zone 6 was only 21,000, a record low far short of the optimal figure of 40,000. It was estimated that even without fishing the 1982 escapement was not likely to exceed 26,000.

At this point both parties shrink somewhat from the logic of their concessions and take up rather widely divergent positions. The States insist that limitations on the right to fish at "all the usual and accustomed places" are justified when necessary to enhance the population of the brights and reduce the deficit owed the tribes. The States also claim that they should be able to dictate the geographical area for treaty fishing in order to increase the harvest of hatchery fish that would otherwise be wasted. If the treaty fishermen had fished only in the lower pools of Zone 6, the States claim, they would have caught many more hatchery fish, thus reducing the deficit owed to the tribes while increasing the harvest of hatchery fish.7 The tribes, on the other hand, insist that limitations are permissible only when necessary to perpetuate the brights as a species. Put another way, only when the brights are in fact an endangered species, they insist, are such limitations permissible. And even then the tribes contend the limitations must be the least restrictive that are feasible. In substance, the States seek to enlarge the scope of the portion of the fish. The reasoning indicates that the district court correctly modified the Compact's fishing season to effectuate the right of access.

Efforts to protect the tribes' right of access do not "discriminate" against nontreaty fishermen. State regulation is discriminatory only if it fails "to accommodate the rights of Indians under the Treaty and the rights of other people." Department of Game v. Puyallup Tribe (Puyallup II), 414 U.S. 44, 49, 94 S.Ct. 330, 333, 38 L.Ed.2d 254 (1973). The States are free to regulate their own citizens even if the treaties prevent them from so regulating the tribes. See Fishing Vessel Ass'n, 443 U.S. at 673 n. 20, 99 S.Ct. at 3068 n. 20.

7. Both the Compact's regulations and the preliminary injunction achieved the 60%/40% treaty/nontreaty distribution of all fish required by the Plan. Thus the overall allocation of fish is not at issue.
power to limit fishing for conservation purposes while the tribes seek to narrowly restrict it.

[8] We refuse to accept either position as a proper statement of treaty rights and obligations. Clearly the tribes should not have their treaty right to fish in "all the usual and accustomed places" limited solely either to increase the harvest of hatchery fish, as opposed to brights, or to reduce the deficit owed to the tribes. While these purposes pursued vigorously would very likely increase the stock of brights, the price required to be paid by the tribes is too high. Either of these purposes once legitimated would tend, when implemented, to erode severely the geographical aspect of the tribes' treaty rights. On the other hand, we refuse to endorse the "endangered species" approach of the tribes. We can easily foresee instances in which limitations on the geographical aspect would be proper under the treaty even though extinction of the brights as a species was not imminent. Conservation, properly understood, embraces procedures and practices designed to forestall the imminence of extinction. Preserving a "reasonable margin of safety" between an existing level of stocks and the imminence of extinction is the heart and soul of conservation. Limitations on the geographical aspect of the tribes' treaty rights to promote that end are permissible.

[9] The district court's injunction was not contrary to the position just stated. It rejected the position of the States and, although it appears to have approved that of the tribes, its order as well as that of the Compact was designed to increase the escapement of brights during the 1982 season over that of 1981. This is confirmed by the fact that an expert of the States admitted that the difference, from a conservation standpoint, between a season like that of the court and that of the Compact is too small to matter. There was no showing by either of the parties that during the 1982 season the brights were threatened with imminent extinction.

This is as far as we need go in this disposition. The district court has substantial latitude in determining what limits, if any, to which the geographical treaty rights of the tribes should be subject in the light of an existing stock of brights. In determining what limits, if any, are necessary, the court must accord primacy to the geographical aspect of the treaty rights and invoke only such limits as required by the "comfortable margin" that sound conservation practices dictate. To attempt to be more precise on the basis of the record before us would be neither well informed action nor appropriate to the appellate function. In this case the district court in its injunction did not exceed the limits within which we think it was free to act. It recognized the primacy of the treaty rights while recognizing the claims of conservation also. We can properly ask no more under these facts. We reach this conclusion without undertaking to decide whether the Compact's regulations were "discriminatory" within the meaning of Pay- yallup I. The district court's adjustments of the Compact's regulations were within the limits we believe appropriate.

IV.

THE DEFICIT

[10] Finally, we also affirm the district court's calculation of the deficit. Our comparison of the court's findings with the record does not leave us with the "definite and firm conviction that a mistake has been committed." See Sports Form, Inc. v. United Press International, Inc., 686 F.2d 750, 752 (9th Cir. 1982) (quoting United States v. United States Gypsum Co., 333 U.S. 364, 395, 68 S.Ct. 525, 542, 92 L.Ed. 746 (1948)). We agree with the district court that the parties must take "sufficient
steps” to provide a more accurate count of the treaty and nontreaty catch.

AFFIRMED.
UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF OREGON

UNITED STATES OF AMERICA,

Plaintiff,

vs.

STATE OF OREGON,

Defendant,

vs.

THE CONFEDERATED TRIBES OF THE WARM SPRINGS RESERVATION OF OREGON; CONFEDERATED TRIBES & RANCHES OF THE YAKIMA INDIAN NATION; CONFEDERATED TRIBES OF THE UMATILLA INDIAN RESERVATION; and NEZ PERCE TRIBE OF IDAHO,

Intervenors,

vs.

RICHARD SCHAPPY; ALECK SCHAPPY; DAVID SCHAPPY; MYRA SCHAPPY; CLARA S. SCHAPPY; JAMES ALEXANDER; JAMES ALEXANDER, JR.; LEO ALEXANDER; CLIFFORD ALEXANDER; HENRY J. ALEXANDER; ANDREW JACKSON; ROY WATLAMST; SHIRLEY NCOVILL and CLARENCE TANKEAL,

Plaintiffs,

vs.

McKEE A. SMITH, EDWARD G. HUFFSCHMIDT, J.I. EOFF, Commissioners, Oregon Fish Commission; ROBERT W. SCHONING, Director, Oregon Fish Commission; their agents, servants, employees and those persons in active concert or participation with them; JOHN W. MCKEAN, Director, Oregon Game Commission; his agents, servants, employees and those persons in active concert or participation with him,

Defendants.

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As the result of pretrial conferences heretofore held at which each of the parties listed in the titles to these consolidated cases was represented by his or its respective counsel, the following issues of fact were framed and exhibits identified.

STATEMENT OF JURISDICTION
NATURE OF PROCEEDINGS

These proceedings have been consolidated by the court for trial. No. 68-513 is hereinafter sometimes called "United States vs. Oregon." No. 68-409 is hereinafter sometimes called "Schappy vs. Smith."

Intervenors are hereinafter sometimes referred to as follows: The Confederated Tribes of the Warm Springs Reservation of Oregon is called "Warm Springs Tribe"; Confederated Tribes & Bands of the Yakima Indian Nation is called "Yakima Tribe"; Confederated Tribes of the Umatilla Indian Reservation is called "Umatilla Tribe"; and Nez Perce Tribe of Idaho is called "Nez Perce Tribe."

United States vs. Oregon is an action for declaratory judgment that certain of the intervenor tribes own and may authorize their members to exercise certain treaty rights to fish for commercial and other purposes at their usual and accustomed places on the Columbia River and its tributaries, that the exercise of such treaty rights is subject to regulation by the State of Oregon only under certain conditions and after establishment of certain facts, and that certain attempted regulations thereof by the State of Oregon violate said treaty rights and are, therefore, void. Schappy vs. Smith is an action for a declaratory judgment by certain members of the Yakima Tribe against the members of the Fish Commission of the State of Oregon, hereinafter called the "Fish Commission," and the Directors of the Fish Commission and Oregon State Game Commission, hereinafter called the "Game Commission," to establish the standards governing defendants' future regulation of said plaintiffs' fishing at their usual and accustomed fishing places on the Columbia River and to declare certain attempted regulations as violations of their treaty rights and, therefore, void. In both actions, the
plaintiffs also seek injunctions pendente lite and permanently against
the alleged improper attempts at regulation, any additional relief to
which they may be entitled, including cost award, and they ask the
court to retain jurisdiction of the actions.

In United States vs. Oregon, jurisdiction is invoked pursuant
to 28 USC Section 1345 by reason of the fact that the United States is
plaintiff. Jurisdiction in both cases is also invoked pursuant to the
provisions of 28 USC Section 1331(a), relating to federal questions,
and declaratory judgments are sought pursuant to 28 USC Section 2201.
The matter in controversy exceeds the value of $10,000, exclusive of
interest and costs.

AGREED FACTS

The following facts have been agreed upon by the parties
and require no proof:

Identification of Tribes

1. The Yakima Tribe is a party to the Treaty of June 9,
1855, ratified March 8, 1859, and proclaimed April 18, 1859, 12 Stat
951. It is a recognized tribe or community of Indians composed of
the tribes and bands consolidated into the Yakima Nation by that
treaty. It maintains a tribal government and the ownership of tribal
property. Its membership is determined in accordance with the pro-
visions of the Act of August 9, 1946 (60 Stat 968, 25 USC Section
601 to 607). It presently has approximately 5,609 enrolled members.
Approximately 4,065 members live on the Yakima Indian Reservation
and approximately 1,544 live elsewhere.

2. The Warm Springs Tribe is a party to the Treaty of
June 25, 1855, ratified March 8, 1859, proclaimed April 18, 1859,
12 Stat 963. It is a recognized tribe or community of Indians
chartered by the Secretary of the Interior under Section 16 of the
Indian Reorganization Act of June 18, 1934 (48 Stat 987, 25 USC
Section 476) and has a constitution and bylaws adopted pursuant to said Act and approved by the Secretary of the Interior, and includes the Confederated Tribes and Bands of Middle Oregon, confederated by that treaty. Its membership is determined by its constitution and bylaws. It presently has approximately 1,809 enrolled members, of whom approximately 1,400 live on or adjacent to the Warm Springs Indian Reservation.

3. The Umatilla Tribe is a party to the Treaty of June 9, 1855, ratified March 8, 1859, proclaimed April 11, 1859, 12 Stat 945. It is a recognized tribe or community of Indians composed of the Walla Walla, Cayuse and Umatilla tribes, confederated by that treaty. It is organized under a constitution and bylaws approved by the Secretary of the Interior and maintains a tribal government and the ownership of tribal property. Its membership is determined by its constitution and bylaws. It presently has approximately 1,270 enrolled members, of whom approximately 678 live on or adjacent to the Umatilla Indian Reservation.

4. The Nez Perce Tribe is a party to the Treaty of June 11, 1855, ratified March 8, 1859, proclaimed April 29, 1859, 12 Stat 957. It is a recognized tribe of Indians and has a constitution and bylaws approved by the Secretary of the Interior. Its membership is determined by its constitution. It presently has approximately 2,364 members, of whom approximately 50 percent live on the present Nez Perce Indian Reservation.

5. The United States brings United States v. Oregon on its own behalf and on behalf of the Yakima Tribe, Umatilla Tribe and Nez Perce Tribe. Said tribes and the Warm Springs Tribe intervene therein in their tribal capacities asserting they are the owners and possessors of the fishing rights, privileges and immunities conferred by the above-described treaties and the representative of their members who, in accordance with tribal law and custom,
have always exercised and do exercise such fishing rights, privileges
and immunities.

Parties in Shoappy v. Smith

6. Plaintiffs Richard Shoappy, Aleck Shoappy, David
Shoappy, Myra Shoappy, Clara S. Shoappy, James Alexander, Leo
Alexander, Clifford Alexander, Henry J. Alexander, Andrew Jackson,
Roy Watlamet, Shirley McConville and Clarence Tahkeal are enrolled
members of the Yakima Tribe who assert for themselves as individuals
fishing rights under the above-mentioned Yakima Treaty with respect
to usual and accustomed fishing places on the Columbia River.

7. Defendants McKee A. Smith, Edward G. Buchschmidt and
Joseph I. Eoff are the duly appointed, qualified and acting members
of the Fish Commission which is an agency of the State of Oregon
with authority to carry out the purpose and intent of the laws of
Oregon pertaining to commercial fishing and the propagation,
distribution, protection and promotion of food fish. Defendant
Robert W. Schoning is the duly appointed, qualified and acting
Director of the Fish Commission.

8. At the time of filing these actions, P. W. Schneider
was the duly appointed, qualified and acting Director of the Game
Commission. Defendant John W. McKeen is presently, and since
February 1, 1969, has been, the duly appointed, qualified and acting
Director of said Commission. Said Commission is an agency of the State
of Oregon with authority to carry out the purpose and intent of the
laws of Oregon pertaining to sports fishing and the propagation,
distribution, protection and promotion of game fish.

Treaty Fishing Rights

9. The use of the phrase "tribes and its members"
herein shall not be construed determinative of the question as
to whether or not treatyfishings rights are tribal or individual,
or both. In June, 1855, the respective intervenor tribes and
their members occupied and exercised control over large areas of
land in central and eastern Washington and Oregon and in Idaho. They
used such lands in the manner of their culture, which was primarily a
hunting, trapping, fishing and gathering culture. They derived an
essential part of their livelihood from fishing for salmon and
steelhead for personal consumption and for trade, sale and barter
thereof.

10. Each of the treaties above described contained a provision
securing to the Indians certain off-reservation fishing rights. The
respective treaty provisions are as follows:

Umatilla Treaty (Article 1)
"...the exclusive right of taking fish in the streams running through and bordering said reservation is hereby secured to said Indians, and at all other usual and accustomed stations in common with citizens of the United States, and of erecting suitable buildings for curing the same; the privilege of hunting, gathering roots and berries and pasturing their stock on unclaimed lands in common with citizens, is also secured to them."

Yakima Treaty (Article 3)
"The exclusive right of taking fish in all the streams, where running through or bordering said reservation, is further secured to said confederated tribes and bands of Indians, as also the right of taking fish at all usual and accustomed places, in common with the citizens of the Territory, and of erecting temporary buildings for curing them; together with the privileges of hunting, gathering roots and berries, and pasturing their horses and cattle upon open and unclaimed land."

Nez Perce Treaty (Article 3)
"The exclusive right of taking fish in all the streams where running through or bordering said reservation is further secured to said Indians; as also the right of taking fish at all usual and accustomed places in common with citizens of the Territory; and of erecting temporary buildings for curing, together with the privilege of hunting, gathering roots and berries, and pasturing their horses and cattle upon open and unclaimed land."
Warm Springs Treaty (Article 1)

"...the exclusive right of taking fish in the streams running through and bordering said reservation is hereby secured to said Indians; and at all other usual and accustomed stations, in common with citizens of the United States, and of erecting suitable houses for curing the same; also the privilege of hunting, gathering roots and berries, and pasturing their stock on unclaimed lands, in common with citizens, is secured to them."

Each of the intervenor tribes and their members had usual and accustomed fishing places in the Columbia River Basin in waters now under Oregon's jurisdiction, including areas upstream (east) from the confluence of the Deschutes River in Oregon and the Columbia River.

11. Subsequent to the execution of the treaties and in reliance thereon, the members of said four tribes have continued to fish for subsistence and commercial purposes at their usual and accustomed fishing places. Such fishing provided and still provides an important part of their subsistence and livelihood. Both prior to and subsequent to the treaties, the Indians used a variety of means to take fish, including various types of nets, weirs, spears and gaff hooks. The construction of Bonneville Dam in 1938 at River Mile 146.1 raised the Columbia River mean level approximately 59 feet. The Dalles Dam, constructed in 1957 at River Mile 191.5 raised the mean river level approximately 86 feet. John Day Dam, constructed in 1968 at River Mile 215.6 raised the mean river level approximately 105 feet. McNary Dam, constructed in 1953 at River Mile 292 raised the mean river level approximately 75 feet. In each case, such raising refers to the head water immediately behind the dam; from that point the extent by which the level is raised diminishes gradually to the end of the pool. The pool created behind each dam extends to, or practically to the base of the next higher dam. One or more of the intervenor tribes and their members had usual and accustomed fishing places in and along the original bed and shores of the river above and below Miller Island. They claim, in addition to certain locations described in Exhibit A20 (a) to (k) provided for them as "in lieu sites" pursuant
to the act of March 2, 1945, as amended (59 Stat 22, 69 Stat 85) fishing
places in and along the present river boundaries. While the extent
of present usual and accustomed treaty fishing places is in dispute
among the parties, it is agreed that there are some usual and
acquainted treaty fishing places at which members of intervenor
tribes and plaintiffs in Schappy vs. Smith have continued to fish,
both above and below the mouth of the Deschutes River.

Tribal Regulation

12. From time to time each of the intervenor tribes, through
their respective governing bodies, have purported to enact
regulations governing the exercise by their respective members of
the fishing rights secured by their treaties above Bonneville Dam.
Said regulations apply to the times, places and manner of fishing.
The current regulations for each tribe are included in the Pretrial
Order Exhibits.

State Regulation

13. The Game Commission and the Fish Commission are charged
by Oregon statutes with management of the fish resources of the State
of Oregon. ORS 506.036 provides that the Fish Commission has
exclusive jurisdiction over all fish within the waters of the state,
except as provided in ORS 506.040. The latter provides that the
Fish Commission has no jurisdiction over game fish, as defined in
ORS 496.010. The Game Commission, by virtue of ORS 496.160, has
jurisdiction over game fish in all the waters of the state. Under
Oregon statutes, salmon and steelhead are game fish only when taken
by anglers and are food fish otherwise.

14. By the Act of April 8, 1918 (40 Stat 515), Congress
gave its consent to the Oregon-Washington Columbia River Compact
which reads in full as follows:
"All laws and regulations now existing, or which may be necessary for regulating, protecting or preserving fish in the waters of the Columbia River, over which the States of Oregon and Washington have concurrent jurisdiction, or any other waters within either of said states, which would affect the concurrent jurisdiction, shall be made, changed, altered and amended in whole or in part, only with the mutual consent and approbation of both states." (ORS 507.010)

Pursuant to said Compact and the applicable state enabling legislation, the Fish Commission and the Director of the Washington Department of Fisheries periodically hold joint public hearings for the purpose of considering joint or substantially identical regulations to govern commercial fishing on the portions of the Columbia River and its tributaries which are under the concurrent jurisdiction of the two states. After approval of a resolution recommending the particular regulation by the affirmative vote of each of the two agencies (as the representatives of their respective states) each agency, in accordance with its own state laws, separately promulgates its own regulation to carry out the agreed upon recommendation.

Regulations governing sport fishing on the portions of the Columbia River and its tributaries which are under the concurrent jurisdiction of the two states are promulgated separately by each state acting through its legislature, electorate, or appropriate regulatory agency.

15. On January 28, 1969, the Fish Commission announced establishment of a 16-day commercial fishing season in the lower Columbia River for spring Chinook extending from noon, February 19, to noon, March 7, 1969, with no mesh restrictions other than those normally in effect. This action was taken unilaterally by the Fish Commission without approval or concurrence by the State of Washington after the Commission and the Washington Department of Fisheries were unable to agree on terms of a winter season.
16. ORS 506.045 provides as follows:

"There are excluded from the operation of ORS 506.136 to
506.136, 507.030, 508.025, 508.285, subsection (1) of
509.025, ORS 509.206 and 509.216, any Warm Springs,
Umatilla, Yakima, Wasco, Tenino, Wyum and other
Columbia River Indians affiliated with these tribes
and entitled to enjoy fishing rights, who have not
severed their tribal relations, in so far as it would
conflict with any rights or privileges granted to
such Indians under the terms of the treaties made by
the United States with the Warm Springs Indians on
June 25, 1855, and with the Umatilla and Yakima Indians
on June 9, 1855."

17. From time to time various officers, agents or agencies
of the State of Oregon have informally pursued policies of
nonenforcement of certain state laws or regulations against treaty
Indians, including those pertaining to seasons and areas of
commercial fishing and the sale thereof. Treaty Indians were not
required to purchase licenses to take or dispose of fish. In
addition, as an example of the above-described informal policies,
treaty Indians were allowed to fish for personal or Indian use and
purposes during periods closed to commercial fishing and by means
other than angling without prosecution or threat thereof.

18. Prior to 1957, the laws and regulations of the State
of Oregon applicable to all persons permitted commercial fishing on
the Columbia River during prescribed open seasons generally from
its mouth to its confluence with the Deschutes River, with certain
limited exceptions in the vicinity of dams and the mouths of certain
tributary streams. The mouth of the Deschutes River is located at
approximately Columbia River Mile 204.1 as measured from the
mouth of the Columbia. In 1957, following the filling of The Dalles
Dam reservoir and the inundation of Celilo Falls, the most important
treaty Indian fishing area, the Fish Commission and the Washington
Department of Fisheries jointly agreed upon and separately
promulgated regulations purporting to close the Columbia River to all
commercial fishing above a deadline located five miles below
Bonneville Dam at approximately river mile 141.1. By regulation each
of said agencies continued to provide for commercial fishing seasons of salmon and steelhead below said deadline. In addition, through the regulatory control which they have for fish landed in their respective states, said agencies continued to authorize by regulation the taking of substantial numbers of salmon for commercial purposes off-shore in the Pacific Ocean (ORS 506.146(4), (5) and (6)). Such pattern of regulation has continued to the present time, except for the changes in 1968 as described below.

19. By successive statutory enactment of the State of Oregon, dating back to 1901 (currently ORS 511.106(1)), the area under the jurisdiction of the State of Oregon east of the confluence of the Columbia and Deschutes Rivers has been completely closed to commercial fishing. Under the current statutes, including ORS 506.006(4), this closure applies to any fishing by any means other than angling as defined in ORS 506.006(1). It is the defendants' contention that these statutes are equally applicable to treaty Indians and other persons except insofar as their applicability to members of the Umatilla Tribe is prohibited by the judgments of this court in the case of Confederated Tribes of the Umatilla Indian Reservation, et al, vs. Maisen, et al, Civil No. 77-59.

20. In 1961, an informal memorandum of agreement was entered into between the Fish Commission, the Washington Department of Fisheries, the Warm Springs Tribe and the Umatilla Tribe. Said memorandum of agreement and interpretive letters are included in Exhibit A23 (a) to (f). Generally, it provided for commercial fishing by dip nets above Bonneville Dam to the mouth of the Deschutes River and for use of such gear for subsistence fishing above that point. The Yakima Tribe and Nez Perce Tribe did not adhere to or enter into said agreement. Said agreement was not officially approved by any official of the United States of America. No action was taken by any party thereto to cancel or withdraw from said memorandum of agreement until July 10, 1965, when the
Washington Department of Fisheries, by letter given pursuant to the preamble of said memorandum agreement, notified the other parties thereto that it was withdraving from the agreement. (Exhibit A23(f).)

21. Following the decision of the Supreme Court of the United States in the case of Puyallup Tribe v. Department of Game, et al (May 27, 1968) 391 US 392, and as a direct result thereof, the Fish Commission requested recommendations from its biology staff on a commercial fishery season for sockeye salmon which, without endangering the needed escapement of sockeye salmon above all commercial fishing, would provide for a commercial fishery season for sockeye salmon on the Columbia River above Bonneville Dam. No recommendations were made for any commercial fishery season above the mouth of the Deschutes River. One of the reasons for the above limitation on such recommendations was ORS 511.106(1).

Since the original enactment of the statutory predecessor of ORS 511.106(1), no consideration has been given by members or employees of the Fish Commission to establishing a commercial salmon and steelhead fishery above the mouth of the Deschutes River.

22. On June 20, 1968, the Fish Commission and Washington Department of Fisheries held an emergency public hearing and meeting for the stated purpose of acting on said recommendations and establishing a commercial fishery season for sockeye salmon above Bonneville Dam in addition to the previously adopted season for below Bonneville Dam. Citing a June 18, 1968, opinion issued jointly by the Attorneys General of Oregon, Washington and Idaho (Exhibit A28) construing the decision of the Supreme Court in the Puyallup case, the acting chairman of the joint meeting, the Director of the Washington Department of Fisheries, announced that, upon legal advice, any state authorization of fishing above Bonneville Dam must be applicable equally to all persons, Indian and non-Indian, and that "all state laws must be adhered to." This policy still exists.
23. Following the hearing of June 20, 1968, said two
state agencies agreed upon, and thereafter on June 21, 1968,
separately issued, regulations adding a summer sockeye season above
Bonneville Dam consisting of a six-day season for commercial fishing
between Bridge of the Gods and the lower end of Miller Island (at
the mouth of the Deschutes River) with gear limitations designed
to confine the fishing essentially to the taking of sockeye salmon.
The Oregon regulation was promulgated as Fish Commission Order FC-180,
consisting of enactments of Section 625-10-835 through 625-10-840,
Oregon Administrative Rules. On July 25, 1968, following a further
hearing called jointly by the Oregon Fish Commission and the Washington
Department of Fisheries to consider regulations for a fall Columbia River
fishing season both above and below Bonneville Dam the Fish
Commission promulgated orders FC-181 and FC-182, amending Sections
625-10-760, 625-10-775 and 625-10-840 and enacting Section 625-10-850,
Oregon Administrative Rules. Again the upper limit of permitted
commercial fishing was the lower end of Miller Island. The commercial
fishing permitted by FC-180, 181 and 182 was not restricted to any
particular locations or usual and accustomed fishing places and
was open generally to all persons, Indian and non-Indian alike.
Section 625-10-750 OAR, previously promulgated by the Fish Commission
states that it is unlawful to take food fish from the Columbia River,
its sloughs or tributaries except as authorized by statute or
commission regulation.

24. In adopting and enforcing ORS 511.106(1), OAR 625-10-750,
FC-180, FC-181 and FC-182, and generally in carrying out Oregon's
regulatory scheme of the fish resources of the Columbia River and its
tributaries, and in enforcing the same, defendants:

(a) Refuse to deal with the fishing by the
beneficiaries of the above-described treaties as a
separate subject when formulating regulations to
govern the taking of fish.
(b) Deny that such treaty rights invest the
beneficiaries thereof with any privileges and immunities
other than those which defendants choose to accord
to citizens generally.

(c) Contend and assert that they have no
obligation or authority to recognize or allow any manner
of exercise of the right or its exercise during any time,
at any place or for any purpose, which defendants do not
also allow to other persons.

(d) Refuse to attempt to so regulate the fishing
in the Columbia River and its tributaries as to
accord the beneficiaries of such treaty rights an
opportunity to catch, at their usual and accustomed places,
and by reasonable means feasible to them, a fair
and equitable portion of the fish which are available for
harvesting from a particular run consistent with
adequate escapement for spawning and reproduction.

In adopting their regulations and enforcing the same, defendants
have proceeded and threaten to continue to proceed on the
foregoing premises.

25. Defendants and various of their officers and agents,
claiming to act in their official capacities on behalf of the
State of Oregon, have threatened to seize nets and other properties
of members of certain of the intervenor tribes, and have threatened
to cause said members to be arrested and prosecuted for violating any
state laws and regulations pertaining to fishing for, taking of, or
possession of fish if in violation of statutes and regulations adopted
pursuant to the foregoing premises.

26. The tribes and United States of America are unable
to be a party to criminal bases brought for the violation of said
statutes and regulations and are without an adequate remedy at law
or any remedy at law whatsoever to assert and enforce the fishing
rights reserved pursuant to said treaties. The individual members
of the tribes are without an adequate remedy at law to enforce their
rights to fish in accordance with tribal law or custom because:
(a) the treaty rights that are asserted are unique and the damages
which have been or will be sustained are not susceptible of definite
monetary determination; and (b) in the case of criminal prosecutions
said Indians have no remedy at all except at the risk of suffering
fines, imprisonment and confiscation of property involving a multi-
plicity of legal proceedings.

27. An actual controversy exists between plaintiffs and each
of them and intervenors on the one hand and defendants on the other
as to the nature and extent of the treaty fishing rights of the
tribes and their members and the attempted regulation thereof by
defendants.

Conservation Matters

28. In considering the problem of salmon and steelhead
conservation in the Columbia River and its tributaries, it is necessary
to consider the entire Columbia River system. The off-shore
fishery in the Pacific Ocean has some effect on the numbers of fish
that enter the river. The salmon and steelhead that enter the
Columbia River are anadromous fish and spend much of their adult lives
in the Pacific Ocean. Therefore, they must pass as fingerlings down
the Columbia River to the sea; and as adults they must pass up the
Columbia River into the particular tributary or area where they
spawn.

29. Since 1855 there has been a decline in the salmon and
steelhead runs of the Columbia River system destined to spawn above
the location of Bonneville Dam. Such decline has been caused
principally by alterations in the natural environment of the Columbia
River and its tributaries by construction of dams, appropriation
of water for irrigation, unscreened irrigation ditches, pollution and
the like. Other factors include catches of fish by commercial and
sports fishermen. Commencing in 1933 the Federal Government has,
constructed a number of major dams on the Columbia and Snake Rivers.
A private dam, Rock Island, had been constructed prior to that time
and several nonfederal dams have been constructed since 1950. At the
present time the following dams are in existence or under construction
on the Columbia River at the river mile indicated:

<table>
<thead>
<tr>
<th>Dam Name</th>
<th>Mileage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bonneville Dam</td>
<td>146.1</td>
</tr>
<tr>
<td>The Dalles Dam</td>
<td>191.5</td>
</tr>
<tr>
<td>(Mouth of Deschutes River)</td>
<td>204.1</td>
</tr>
<tr>
<td>John Day Dam</td>
<td>215.6</td>
</tr>
<tr>
<td>McNary Dam</td>
<td>292.0</td>
</tr>
<tr>
<td>(Mouth of Snake River)</td>
<td>324.3</td>
</tr>
<tr>
<td>Priest Rapids Dam</td>
<td>397.1</td>
</tr>
<tr>
<td>Wanapum Dam</td>
<td>415.0</td>
</tr>
<tr>
<td>Rock Island Dam</td>
<td>453.4</td>
</tr>
<tr>
<td>Rocky Reach Dam</td>
<td>474.5</td>
</tr>
<tr>
<td>Wells Dam</td>
<td>516.6</td>
</tr>
<tr>
<td>Chief Joseph Dam</td>
<td>545.1</td>
</tr>
<tr>
<td>Grand Coulee Dam</td>
<td>596.6</td>
</tr>
</tbody>
</table>

On the lower and middle Snake River there are:

<table>
<thead>
<tr>
<th>Dam Name</th>
<th>Mileage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ice Harbor Dam</td>
<td>9.7</td>
</tr>
<tr>
<td>Lower Monumental Dam</td>
<td>41.6</td>
</tr>
<tr>
<td>Little Goose Dam</td>
<td>70.3</td>
</tr>
<tr>
<td>Lower Granite Dam</td>
<td>107.5</td>
</tr>
<tr>
<td>Hells Canyon Dam</td>
<td>247.0</td>
</tr>
<tr>
<td>Oxbow Dam</td>
<td>273.0</td>
</tr>
<tr>
<td>Brownlee Dam</td>
<td>285.0</td>
</tr>
</tbody>
</table>
All dams downstream from (but not including) Chief Joseph Dam and Hells Canyon Dam have facilities for the upstream fish ladder passage of anadromous fish, which work with varying success.

30. Since 1963, in establishing the times and manner of commercial fishing to be permitted under regulations issued by it with respect to the Columbia River, the Fish Commission has set an "escapement goal" for most runs of fish which goal is defined as the estimated numbers of fish which must escape above all commercial fishing in order that, considering all factors which influence the matter above that point, the greatest aggregate numbers of fish from such fish run will be produced and return down the Columbia to the Pacific Ocean. Thus, in establishing the escapement goal for a particular run the Fish Commission and its biological staff consider the losses which will occur above the escapement goal point from all causes, including natural causes, losses at dams and the sports catch on the upstream and tributaries in Oregon, Washington and Idaho. All the estimated numbers of fish in a given run in excess of the escapement goal are regarded by the Fish Commission as harvestable.

31. In the past 32 years, in general, the troll catch in the Pacific Ocean (which includes Columbia River salmon) has been stable. For the past 20 years, in general, the sports catch of Columbia River salmon and steelhead has increased. Under present regulations of the Game Commission, the entire length of the Columbia and the Snake rivers subject to Oregon's jurisdiction and many of the tributary streams thereto subject to such jurisdiction are open to angling for salmon and steelhead throughout the year except during such emergency closures as have been invoked in specific years to protect specific fish runs that were deemed to be in particularly serious condition as regards achieving adequate spawning escapement for perpetuation of the resource. In some tributaries, various open seasons are established.
32. Exhibit A32 is a joint statement prepared by fish biologists of the Fish Commission and of the United States Department of the Interior pertaining to certain conservation data and considerations with respect to the Columbia River salmon and steelhead runs. Said statement may be regarded as testimony and defendants will submit the Fish Commission authors and the United States will submit the Department of the Interior authors for cross examination.
JOINT CONTENTIONS OF ALL PLAINTIFFS AND INTERVENORS

1. Before the State of Oregon is entitled to regulate the
taking and disposition of fish by Indians at usual and accustomed
fishing places pursuant to treaties between the respective tribes and
the United States:

(a) It must establish preliminarily to regulation
that the specific proposed regulation is both reasonable
and necessary for the conservation of the fish resource.
In order to be necessary, such regulations must be the
least restrictive which can be imposed consistent with
assuring the necessary escapement of fish for conservation
purposes; the burden of establishing such facts is on the
state.

(b) Its regulatory agencies must deal with the
matter of the Indians' treaty fishing rights as a subject
separate and distinct from that of fishing by others. As
one method of accomplishing conservation objectives it
may lawfully restrict or prohibit non-Indians' fishing
at the Indians' usual and accustomed fishing places without
imposing similar restrictions on treaty Indians.

(c) It must so regulate the taking of fish that the
treaty tribes and their members will be accorded an
opportunity to take, at their usual and accustomed fishing
places, by reasonable means feasible to them, a fair and
equitable share of all fish which it permits to be taken
from any given run.

2. ORS 511.106(1), 506.006(4), and FC-180, FC-181 and
FC-182 (Oregon Administrative Rules, Sections 10-750, 10-760,
10-775, 10-835, 10-840 and 10-850, Title 625) may not, consistently
with the Supremacy Clause of the United States Constitution, be
applied so as to prevent members of the tribes entitled to exercise
off-reservation fishing rights from taking fish for subsistence
and commercial purposes at their usual and accustomed fishing places
on the Columbia River or its tributaries east of its confluence with
the Deschutes River, because such application of said statutes and
regulations is not reasonable and necessary for conservation and
constitutes an arbitrary and unreasonable total prohibition against
the exercise of such treaty rights. In addition, such application
of said regulations violates ORS 506.015.

3. It is possible by regulation to effect an allocation
of the harvestable fish in a given run between (1) the Indian treaty
commercial fisheries, (2) the Indian treaty subsistence fishery,
(3) a general population sports fishery and (4) the below Bonneville
general population commercial fishery. As a result of geographic, gear,
economic and other factors, the establishment of regulations
governing the seasons and gear for commercial fishing frequently effect
such allocation.

4. The practical results of defendant's refusal to deal
with the matter of Indians' treaty fishing as a separate and distinct
matter and to have as an objective of regulations that the treaty
Indians shall have an opportunity to catch, at their usual and
accustomed fishing places, by reasonable means feasible to them, a
fair and equitable portion of the total number of fish available
for harvesting from a particular run include the following:

(a) In many instances such refusal allows all or substantially
all the harvestable fish from a given run to be taken by those
with no treaty rights before such runs ever reach the usual
and accustomed fishing places to which the treaties apply.
Thereby defendants allocate for the benefit of those with no
treaty rights an unreasonable share of a valuable resource and
solely by their regulatory scheme place themselves in a position
enabling them to assert and present evidence that
by the time such runs reach such usual and accustomed
fishing places it has become necessary for conservation
to prevent or unreasonably restrict further harvesting
of the fish in commercial quantities.

(b) As between the tribes entitled to exercise
off-reservation treaty rights, and through a similar
process, defendants discriminate between the differing
usual and accustomed fishing places and, by that fact,
between the members of the different tribes.

5. Defendants have not undertaken, or caused to be undertaken,
any studies, research or experimentation of the extent to which
it is necessary for defendants to restrict the exercise of fishing
rights secured to Indian tribes by treaties of the United States; or,
if they have, they have not introduced the results thereof in any
hearing or public proceeding at which state fishing laws or regulations
were considered and enacted.

6. In devising, adopting and promulgating the regulations by
which they authorize the taking of fish for commercial or sports
purposes by persons subject to their jurisdiction, and in establishing,
and carrying out fishery management policies and programs and
determining conservation objectives, defendants have not given
recognition to, or proper allowance for, rights secured to the tribes
entitled to exercise off-reservation fishing rights by treaties of the
United States.

7. As a result of said wrongful acts of defendants the
tribes and their members are being unlawfully deprived of their
treaty rights, privileges and immunities and have suffered and
will continue to suffer irreparable damage.

8. Plaintiffs and intervenors are entitled to a judgment
of this court declaring that the tribes and the members entitled
to exercise off-reservation treaty rights have a right derived from
treaties of the United States to take fish at their usual and accustomed
fishing places on the Columbia River and its tributaries wherever
located which right is distinct from any right or privilege of other
individuals to take fish derived from common law or state authority
and the exercise of which is subject to state control only through
statutes or regulations which have met the tests described in
Contention No. 1 above; declaring that ORS 511.106(1) and 506.006(4)
and FC-180, FC-181 and FC-182 (Oregon Administrative Rules 625-10-750,
10-760, 10-775, 10-835, 10-840 and 10-850) cannot be applied so as
to preclude the exercise of treaty fishing rights easterly and
upstream from the upper limits from the Bonneville-Celilo fishing
area (lower end of Miller Island); and declaring that said listed
regulations are in violation of ORS 506.045.

9. The United States, the intervenor tribes and their members
are entitled to an injunction enjoining defendants, their officers,
agents and employees, from enforcing the provisions of ORS 511.106(1)
and 506.006(4) and Oregon Administrative Rules 625-10-750, 10-760,
10-775, 10-835, 10-840 and 10-850 in such manner as to prevent or
restrict members of the treaty tribes from taking fish at their treaty
usual and accustomed fishing places on the Columbia River or its
tributaries pursuant to the treaties between those tribes and the
United States.

10. The United States, the intervenor tribes and their
members are entitled to an injunction enjoining defendants, their
officers and employees, from enforcing the provisions of state laws
or regulations in such manner as to prevent or restrict members of the
treaty tribes from taking fish at their treaty usual and accustomed
fishing places on the Columbia River and its tributaries pursuant
to the treaties between those tribes and the United States without
(a) Previously having established that the imposition of state regulations is necessary for the conservation of fish, and
(b) Implementing a regulatory scheme which does not violate the standards adjudicated in accordance with Contention No. 1, above.

11. The court should grant such further and additional relief to plaintiffs and intervenors as they may be entitled to, award plaintiffs and intervenors the costs of this action and retain jurisdiction for the purpose of enforcing the judgment of this court.

12. Plaintiffs and intervenors deny each of defendants' contentions except that

   (a) With respect to defendants' contentions No. 1 through 7, said parties admit that as regards state regulation, the only sense in which the treaties secure to the treaty Indians any different, superior or exclusive rights to fish at their usual and accustomed fishing places outside their reservations than are possessed by the general population is that the treaties require any restrictions sought to be imposed by the states on such treaty Indians to meet the "necessary for conservation" test and other standards described in their Joint Contention No. 1 above whereas the states are free to adopt less stringent standards for imposing restrictions on the general population.

   (b) The intervenor tribes and the plaintiffs in Schappy vs. Smith have not made contentions in relation to defendants' contentions No. 8 through 19 pending amendments to this pretrial order made pursuant to its terms.
SEPARATE CONTENTIONS OF PLAINTIFF UNITED STATES

1. The court lacks jurisdiction to consider as a claim or counterclaim in this action Defendants' Contentions No. 15 and 19, and neither the United States nor the intervenor tribes have consented to be sued on said claims.
DEFENDANTS' CONTENTIONS

1. By virtue of the treaties entered into between the
United States and the intervenor tribes, the fishing rights reserved
to said tribes were those of fishing at usual and accustomed fishing
places in common with citizens of the then territories of Oregon
and Washington, on a non-exclusive basis, and subject to regulation
by the State of Oregon for conservation purposes.

2. The treaties entered into between the United States
and the intervenor tribes did not guarantee or grant to the treaty
tribes a special Indian right of fishing not made applicable to
other citizens, other than right of access over private lands and
exemption from payment of license fees.

3. The treaties entered into between the United States
and the intervenor tribes did not grant or reserve to the treaty
tribes a right to fish at usual and accustomed fishing places by
means not available to or permitted to other citizens.

4. The treaties entered into between the United States
and the intervenor tribes did not reserve to the treaty tribes a
"fair" or any share of any run of fish in the waters of the Columbia
River and its tributaries outside the boundaries of a tribal reserva-
tion.

5. The State of Oregon is not required to consider fishing
by members of tribes as a separate subject when formulating regula-
tions to govern the taking of fish in the Columbia River and its
tributaries.

6. Indians claiming treaty fishing rights do not have an
exclusive right to fish at their usual and accustomed fishing places
outside the reservations to the exclusion of non-Indians.

7. The State of Oregon would violate the Fourteenth Amend-
ment to the United States Constitution and Section 20 of the Bill of
Rights of the Constitution of Oregon by granting Indians claiming
treaty fishing rights, rights to fish not granted to non-Indians.

8. The treaty fishing rights claimed by and for the intervenor tribes are communal tribal rights and are not rights which may be asserted in behalf of individual members of said tribes.

9. The usual and accustomed fishing places referred to in said treaties are specific sites, as distinct from broad stretches of the Columbia River and its tributaries, no longer exist for the reasons that said fishing places were inundated and destroyed by the backwaters created by Bonneville Dam, The Dalles Dam, John Day Dam, the now inundated Cascade Locks and The Dalles-Celilo Canal on the Oregon side of the Columbia River, are at present under as much as 80 feet of water, and are covered in part by broad stretches of earth and rock fill now composing the roadbed of relocated railroads and highways on the Oregon and Washington sides of the Columbia River, all of which has destroyed and rendered unusable such usual and accustomed fishing places for fishing purposes.

10. The backwaters created by Bonneville Dam, The Dalles Dam, John Day Dam and McNary Dam have raised the Columbia River above the levels existing at the time said treaties were entered into, therefore the fishing places claimed by the plaintiff and the plaintiffs in intervention to be the usual and accustomed fishing places on the Columbia River and its tributaries are not the fishing places referred to in said treaties.

11. Treaty tribes claiming Indian treaty fishing rights on the Columbia River accepted compensation totaling some $27 million from the federal government for inundation and destruction of the usual and accustomed fishing places that were the subject of said treaties, and the plaintiff and the plaintiffs in intervention are estopped to claim a treaty right to fish at usual and accustomed fishing places by reason thereof.
12. The Yakima Indians and other Indian tribes claiming Indian treaty fishing rights on the Columbia River accepted compensation in the form of in lieu sites from the federal government for inundation and destruction of usual and accustomed fishing places by backwaters of the Bonneville Dam (Act of March 2, 1945; 59 Stat. 22, as amended by the Act of June 8, 1955 (69 Stat. 85)); therefore said in lieu sites are not the usual and accustomed fishing places that were the subject of said treaties.

13. The State of Oregon denies that the Nez Perce Tribe had usual and accustomed fishing places on the Columbia River and on tributaries thereof, including the area upstream (east) from the confluence of the Deschutes River in Oregon and the Columbia River, outside of the lands ceded by the Nez Perce Tribe to the United States.

14. Subject to the provisions of the Oregon-Washington Columbia River Fish Compact ratified by Congress, 40 Stat. 515, the state of Oregon has the exclusive power to regulate fishing by Indians claiming treaty fishing rights and persons not claiming Indian treaty fishing rights, on waters within the boundaries of the State of Oregon which are outside the reservation of the respective tribes.

15. The Yakima Tribe, the Warm Springs Tribe, the Umatilla Tribe, and the Nez Perce Tribe do not have any authority to regulate off-reservation fishing by members of their respective tribes purporting to fish pursuant to said treaties, or to punish any of their members for violation of any rules or regulations purporting to regulate said off-reservation fishing rights.

16. The State of Washington is an indispensable party to this action pursuant to the Oregon-Washington Columbia River Fish Compact ratified by Congress, 40 Stat. 515.

17. The fishing regulations promulgated by the Fish Commission and the Game Commission are based upon the best available biological, statistical and historical information.
18. The regulations challenged by the plaintiff and plain-
tiffs in intervention, Administrative Orders FC-181 and FC-182, are
necessary for the protection and preservation of the runs of salmon,
in the Columbia River and its tributaries during the time periods in-
volved.

19. Plaintiff United States of America has no authority
to promulgate regulations, 25 CFR, Part 256, purporting to authorize
regulation of off-reservation fishing by tribes claiming treaty
fishing rights.

20. Defendants deny each of the "Joint Contentions of all
Plaintiffs and Intervenors," and the separate contentions of the
plaintiff United States.
EXHIBITS

Exhibits shall be classified as follows:

Group A - Pretrial Order Exhibits. Such exhibits are those listed as such in this pretrial order and lodged therewith. With the approval of the court, they are received in evidence without further order by the court but the parties reserve the right to contradict the same by other evidence.

Group B - Joint exhibits of all plaintiffs and intervenors.

Group C - Separate exhibits of plaintiff United States of America.

  Group D - Separate exhibits of Warm Springs Tribe.
  Group E - Separate exhibits of Yakima Tribe.
  Group F - Separate exhibits of Umatilla Tribe.
  Group G - Separate exhibits of Nez Perce Tribe.
  Group H - Separate exhibits of plaintiffs in the Schappy vs. Smith case.

Group I - Defendants' exhibits.

As to exhibits in Groups B through I, the parties agree with the approval of the court that not more than two weeks prior to the trial at which the same are offered such exhibits will be listed for identification, disclosed and marked, and inspection shall be allowed. Any objections to such exhibits shall be made at that time with separate objections being made to the identification and authenticity thereof. In the absence thereof the same may be received in evidence. Any objections not made at such time shall be deemed waived.
EXHIBIT GROUP A  ~  PRETRIAL ORDER EXHIBITS

A.1 Letter from Governor Stevens to Indian Commissioner Manypenny, December 30, 1854, transmitting his first Treaty (Medicine Creek).

A.2(a) Records of official proceedings, Indian Treaty Council, Walla Walla Valley, June 9-11, 1855 (with Yakima, Umatilla, Nez Perce Tribes).

A.2(b) Letter of June 12, 1855, from Governor Stevens and Superintendent Palmer to Indian Commissioner Manypenny transmitting Nez Perce and Umatilla Treaties.

A.3 Treaty with the Yakimas, June 9, 1855 (12 Stat 951).

A.4 Treaty with the Walla Walla, Cayuse and Umatilla Tribes, June 9, 1855 (12 Stat 945).

A.5 Treaty with the Nez Perce Tribe, June 11, 1855 (12 Stat 957).

A.6 Report of the official proceedings of the Treaty Council with the Middle Oregon Tribes, June 22 to 25, 1855 (Warm Springs Tribe).

A.7(a) Treaty with the Confederated Tribes and Bands of Middle Oregon, June 25, 1855 (longhand copy).

A.7(b) Treaty with the Confederated Tribes and Bands of Middle Oregon, June 25, 1855 (printed copy) (12 Stat 963).

A.8 Yakima Enrollment Act of August 9, 1946 (60 Stat 968).

A.9(a) Constitution and bylaws, Confederated Tribes of the Warm Springs Reservation of Oregon.

A.9(b) Amendment VIII amending section 2(a) of Article III of Warm Springs Constitution, with Departmental approval letters.

A.10 Constitution and bylaws of the Confederated Tribes of the Umatilla Reservation.

A.11 Revised Constitution and bylaws of the Nez Perce Tribe with Commissioner of Indian Affairs approval memorandum.

A.12 Map, areas ceded under certain Pacific Northwest Indian treaties (also shows reservations).

A.13 Excerpts from various historical accounts re early Indian fishing in Columbia basin.

A.14(a) Report of Bureau of Indian Affairs Special Indian Agent George W. Gordon, January 12, 1889, with attached map.

A.14(b) Overlay map showing fishing sites listed by Gordon, Columbia River area.

A.14(c) None.

"The Indian dip net fishery at Celilo Falls on the Columbia River" by R. W. Schoning, T. R. Merrill, Jr., and D. R. Johnson, Oregon Fish Commission Contribution No. 17, November 1951.


Map, mid-Columbia Basin area.

Overlay to map 18(a), state and tribal open commercial fishing areas.

Area 1 inset to 18(a), state and tribal closed fishing areas.

Area 2 inset to 18(a), state and tribal closed fishing areas.

Area 3 inset to 18(a), state and tribal closed fishing areas.

Area 4 inset to 18(a), state and tribal closed fishing areas.

Area 5 inset to 18(a), state and tribal closed fishing areas.

Area 6 inset to 18(a), state and tribal closed fishing areas.

Area 7 inset to 18(a), state and tribal closed fishing areas.

Area 8 inset to 18(a), state and tribal closed fishing areas.

Area 9 inset to 18(a), state and tribal closed fishing areas.

Excerpts from Act of March 2, 1945 (59 Stat. 22) re in-lieu sites, Bonneville reservoir.

Site description, Big White Salmon in-lieu site.

Map for Big White Salmon in-lieu site.

Site description, Wind River in-lieu site.

Map for Wind River in-lieu site.

Site description, Little White Salmon in-lieu site.

Map for Little White Salmon in-lieu site.

Site description, Lone Pine in-lieu site.

Map for Lone Pine in-lieu site.

Site description, Cascade Locks in-lieu site.

Map for Cascade Locks in-lieu site.

Map of Columbia River segment showing location of in-lieu sites.


Celilo inundation agreement with Yakima Tribe.

Celilo inundation agreement with Umatilla Tribe.
1. A.22(c) Celilo inundation agreement with Warm Springs Tribe.
2. A.22(d) Celilo inundation agreement with Nez Perce Tribe.
3. A.22(e) Corps of Engineers letter of March 26, 1957, regarding effect of The Dalles Dam on Indian fishing rights.
4. A.23(a) to A.23(e) 1961 agreement among Fish Commission of Oregon, Washington Department of Fisheries, Umatilla Tribe and Warm Springs Tribe and Washington's withdrawal therefrom.
7. A.26(a) to A.26(d) Conservation regulations of Yakima (a), Umatilla (b), Warm Springs (c), and Nez Perce (d), Tribes with BIA letters of approval.
10. A.29(a) to A.29(e) Regulations, Fish Commission of Oregon, excerpt from Chapter 10-625.
11. A.29(b) Regulations, Fish Commission of Oregon, FC 180.
12. A.29(c) Regulations, Fish Commission of Oregon, FC 181.
13. A.29(d) Regulations, Fish Commission of Oregon, FC 182.
18. A.33(a) 1967 Corps of Engineers Fish Passage Report, Columbia and Snake Rivers.
19. A.33(b) Table from forthcoming 1968 Corps of Engineers Fish Passage Report.
Excerpts from 1967 status report as above (Spring Season).

"Regulation of commercial fishing gear and seasons on the Columbia River from 1859 - 1963" by Henry O. Wendler, from Washington Department of Fisheries Fisheries Research Papers, December, 1966.

"The effects on salmon populations of the partial elimination of fixed gear on the Columbia River in 1935" by D. R. Johnson, W. M. Chapman and R. W. Schoning from Oregon Fish Commission Contribution No. 11.


Oregon Game Commission Catch Statistics for Salmon and Steelhead.

Excerpts from Annual Report by Indian Agent R. R. Thompson, dated August 14, 1855.

Table of estimated distribution of maximum runs of salmon and steelhead trout to the Snake River System in percent and number. Prepared by Fish and Wildlife Task Force on Federal Power Commission hearing on High Mountain Sheep Dam.

Designated portions of deposition of Edward G. Huffschmidt taken December 19, 1968:

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Page 30-D Pretrial Order.
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**A.46**

Designated portions of deposition of Arthur L. Oakley taken January 3, 1969:

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Page 30-E Pretrial Order
DISCOVERY.

The entry of this Pretrial Order shall not preclude
further discovery proceedings.

ACTION BY THE COURT.

The court has ruled:

1. The motions of the four intervenor tribes to intervene
in United States vs. Oregon were granted with the consent of the de-
fendant. Thereafter on motion of the defendant the court struck from
the complaint the allegation that the action was brought also on be-
half of "all other tribes similarly situated."

2. In both actions the court ruled that the case was not
required to be heard by a three-judge court pursuant to 28 USC, Sec-
tion 2281.

3. In both actions the court held that the State of
Washington is not an indispensable party and that the action should
proceed among the parties before it. (See Defendants' Contentions No.
16.)

4. In Sohappy vs. Smith the court held that the plaintiffs
therein had standing to sue as individuals and therefore denied the
defendants' motion to dismiss based on alleged lack of standing.

5. In Sohappy vs. Smith the court ruled that it was not
deprived of jurisdiction by the Eleventh Amendment to the Constitu-
tion of the United States.

6. In United States vs. Oregon the court has under advise-
ment the plaintiff's motion to dismiss for lack of jurisdiction and
consent to suit the defendants' counterclaim against the United States
challenging the authority of the United States to issue the regulations
in 25 CFR, Part 256, and of the tribes to adopt regulations governing
off-reservation fishing of their members. (See Defendants' Contenten-
tions No. 15 and 19.)
TRIAL

1. No demand for jury trial has been made.

2. There are segregated for separate hearing and determination the issues of whether, on the basis solely of the agreed facts and the pretrial order exhibits, category A, and any evidence presented in contradiction of said pretrial order exhibits, the plaintiffs and intervenors are entitled to prevail on their joint contentions Nos. 1 and 2, or defendants are entitled to prevail on their contentions 1 through 7. Following said determination the remaining issues shall be tried, as appear necessary, and as ordered by the court.

NOW, THEREFORE, the parties, through their attorneys, having at pretrial conference before the judge agreed to the foregoing, it is hereby

ORDERED that the foregoing pretrial order shall not be amended, except by consent by all parties or by order of the court.

Additional contentions can be added by plaintiffs in Sohappy vs. Smith, and by any of the intervenor tribes following disposition of the segregated issues, insofar as such contentions relate to matters left unresolved at that time, and exhibits pertaining to such unresolved matters may be added by all parties as provided in the "Exhibits" section of this order.

DATED, at Portland, Oregon, this 24TH day of February, 1969.

[Signature]
United States Judge

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2008-2017

United States v. Oregon

Management Agreement

May 2008
7. Treaty Indian Fisheries

The fall season treaty Indian fishery shall be managed in approximate accordance with modeling summary results annually described in Attachment A and Part II.D.3 of this Agreement. Commercial fishing in Zone 6 of the Columbia River shall remain an exclusive treaty Indian fishery. The actual fishing dates, gear restrictions, and other shaping measures with respect to this fishery shall be defined by the tribes in-season as the fishery progresses.

8. In-Season Review

The Parties shall meet in-season to review run size updates and the fisheries that have occurred up to that point. If that review suggests that the States of Oregon and Washington or the Columbia River Treaty Tribes will be unable to achieve the fisheries or harvest sharing objectives described in Part II of this Agreement by continuing to adhere to the harvest rates set forth in Part II.D.3.b, and c, or Part II.E.3 and 4, the Parties may, by agreement, adjust those harvest rates. The total URB harvest rate resulting from such an adjustment shall not exceed those shown in Table A3. The total Group B index steelhead fall season harvest rate resulting from such an adjustment shall not exceed the rates shown in the abundance based harvest rate schedule shown in Table A4.
URB means: Upriver bright fall Chinook salmon.

USACOE means: United States Army Corps of Engineers.


VIE means: Visible Implant Elastomer or Visual Implant Elastomer, a means of marking fish by injecting a small amount of colored or fluorescent material under the skin.

WDFW means: Washington Department of Fish and Wildlife.

YIN means: Yakama Nation.

YKFP means: the Yakima/Klickitat Fisheries Project that is the subject of a Memorandum of Understanding Between the Confederated Tribes and Bands of the Yakama Indian Nation and the State of Washington, dated May 19, 1994.

Zones 1-5 means: The statistical zones of the Columbia River commercial fishing area downstream from Bonneville Dam, as defined in Section 635-042-0001 of the Oregon Administrative Rules. Zones 1 through 5 encompass the Columbia River mainstem easterly of a line projected from the knuckle of the south jetty on the Oregon bank to the inshore end of the north jetty on the Washington bank, and westerly of a line projected from a deadline marker on the Oregon bank (approximately four miles downstream from Bonneville Dam Powerhouse 1) in a straight line through the western tip of Pierce Island, to a deadline marker on the
Washington bank at Beacon Rock.

**Zone 6 means:** The statistical zone of the Columbia River treaty Indian commercial fishing area upstream from Bonneville Dam running from Bonneville to McNary Dams.
BEFORE THE STATE OF WASHINGTON

ENERGY FACILITY SITE EVALUATION COUNCIL

In The Matter Of:
Application No. 2013-01

TESORO SAVAGE, LLC

VANCOUVER ENERGY DISTRIBUTION TERMINAL

HEARING, Volume 16
Pages 3727 to 3906

ADMINISTRATIVE LAW JUDGE CASSANDRA NOBLE

9:02 a.m.
July 21, 2016
Red Lion Olympia
2300 Evergreen Park Drive Southwest
Olympia, Washington 98502

REPORTED BY: Micheal A. Johnson, RDR, CRR

Buell Realtime Reporting, LLC
1325 Fourth Avenue, Suite 1840
Seattle, Washington 98101
206.287.9066 | Seattle
360.534.9066 | Olympia
800.846.6989 | National
www.buellrealtime.com
(Witness sworn.)

JUDGE NOBLE: Thank you. Please be seated.

STUART ELLIS,

having been first duly sworn,

testified as follows:

DIRECT EXAMINATION

BY MS. CARTER:

Q. Mr. Ellis, for those of us who have been here 16 days we always start out with, keep it slow for the court reporter. So, Mr. Ellis, please state your full name for the record, please.

A. My name is Stuart Ellis, spelled S-t-u-a-r-t, last name is E-l-l-i-s.

Q. Please summarize your education and training.

A. I have a bachelor's degree in fisheries science from Oregon State University. I've been employed by the Columbia River Inter-Tribal Fish Commission for the past 16 years. Prior to that I worked for five years for the Northwest Indian Fisheries Commission, and before that I did a series of seasonal jobs doing research projects for Oregon Department of Fish and Wildlife.

JUDGE NOBLE: Mr. Ellis, you're already speaking too fast.

THE WITNESS: Sorry.

BY MS. CARTER:
Q. We all do it. Mr. Ellis, you filed testimony in this case. Do you still stand by your testimony?

A. Yes.

Q. Okay. So can you briefly describe --

JUDGE NOBLE: Ms. Carter, could you identify yourself too for the court reporter.

MS. CARTER: Oh, I'm sorry. I'm Julie Carter, attorney for Columbia River Inter-Tribal Fish Commission.

JUDGE NOBLE: Thanks.

MS. CARTER: I apologize.

BY MS. CARTER:

Q. So Mr. Ellis, can you briefly describe the management of the Columbia Basin fishery.

A. Yes, I can. The Columbia Basin mainstem fisheries are managed according to a court ordered agreement under the US v Oregon court case under a management plan for that agreement. It's a ten-year management agreement that dictates abundance-based harvest rates and treaty and non-treaty sharing within the mainstem fisheries.

Further, the tributary fisheries throughout the Columbia and up into Idaho are managed under -- by relevant tribal and non-treaty co-managers. And then there's a number of stocks in the Columbia that have...
impacts in various ocean fisheries, and those fisheries are managed under a variety of comanagement processes through the Pacific Fishery Management Council and Pacific Salmon Commission for fisheries clear up to Alaska that catch Columbia River fish.

Q. Thank you. Give us some background on general trends of salmon and steelhead abundance in the Columbia in the recent years.

A. Yes. Since -- there were some significant declines over time in Columbia Basin salmon runs, but since 2000, we have seen runs increase sometimes dramatically to runs that -- in the late '90s, we had runs of -- total runs, annual runs of around half a million fish, and runs since 2000, total salmon and steelhead returns, adult returns to the Columbia -- of the upriver stocks tested for above Bonneville Dam have been close to 2 million, and in 2014 there were almost -- it was over 2.4 million.

Q. So is there variability in these runs?

A. Yeah. The salmon runs are cyclical. They go up and down, but gradually the -- a lot of these runs have been doing better and better as the region, the ratepayers, the Bonneville Power Administration and US taxpayers have invested heavily in salmon recovery efforts that have helped rebuild these runs.
Q. So do you -- please.
A. I might add that we do have a number of very weak runs in the basin. Most of the weak runs are at least stable and some of the weak runs are actually increasing as well. But some are very, very small still.

Q. So do you have numbers pertaining to different populations of fish?
A. Yes. So the salmon/steelhead runs are dealt with in a -- by both species and stocks within species. For Chinook salmon, we generally refer to them in three different stocks of fish, overall stocks, the spring Chinook, summer Chinook and fall Chinook. Spring Chinook runs are comprised of a variety of fish that spawn throughout the basin, both above and below Bonneville Dam. Their upriver run sizes, the run sizes for fish growing above Bonneville, have averaged close to 200,000 fish, a little less in the past ten years.

The summer Chinook runs are generally going far up river, most of them go up in the upper Columbia and those runs have been smaller at -- they average around 70,000 fish per year.

Fall Chinook runs are quite large. We've had -- in the past ten years, we've had just for the -- just the upper river fall Chinook has averaged over 600,000
fish, and we've had some record runs in recent years. Sockeye have also been doing very well, except for the Snake River Sockeye. The Sockeye runs have averaged close to 300,000 fish in recent years, adult returns, and steelhead also around 300,000. Coho, upriver coho, a smaller run of about 120,000. And then there's very small runs of chum in the Columbia as well.

Q. So can you explain, do salmon spawn in the mainstem of the Columbia?

A. Yes, salmon do. There's a fairly substantial spawning population of fall Chinook and some chum right below Bonneville Dam along the shore and along some of the islands right below Bonneville. There's also been documented Chinook salmon spawning in the area just downstream from the John Day Dam. And so those would be the primary mainstem spawning areas. It's possible that there is a little bit of spawning around some of the mouths of the lower river tributaries, but probably not much spawning in the end part of the river down below there.

MS. CARTER: So Ms. Mastro, if we could pull up Exhibit 5214, please.

BY MS. CARTER:

Q. Mr. Ellis, are you familiar with this chart?

A. Yes. This is a chart on water travel timing.
It was prepared by Mr. David Benner, with the Fish Passage Center. The Fish Passage Center is a publicly funded organization that deals with data management, and they assist with the research on different issues in the Columbia Basin. And the Fish Passage Center and their staff are heavily relied on by virtually all of the agencies managing fisheries in the Columbia and considered very good work.

Q. So you regularly -- regularly use this information in your job?

A. I do, yeah. We use these types of data, as well as a number of other data sources that the Fish Passage Center helps coordinate and maintain.

Q. So before I ask my next question, I'm going to ask a general. What is a smolt, if you can give a definition of that?

A. Smolts are defined as fish that are ready to leave their -- the streams where they were born and begin their migration to the ocean.

Q. Thank you.

A. And they're considered smolts throughout their migration until they enter the saltwater.

Q. So what are the total number of smolts in the Columbia River?

A. That's a little bit of a challenging question,
but I'll start with the hatchery smolts, because we have the best information on the hatchery smolts. So for upriver -- and, again, these are programs upstream from the Bonneville hatchery and on upstream. We release about -- the planned releases are about 95 million smolts per year. Lower river hatchery programs, including the Willamette River, release smaller numbers of fish, but in recent years those have averaged around 54 to 55 million per year.

And we don't have great numbers on the wild smolts because it's -- they're very challenging to figure out exactly how many of them there are, but undoubtedly wild smolts number in the millions of year -- in the millions of fish per year.

There is, of course, some level of mortality as the smolts move downstream through the hydrosystem and things, but still, the National Marine Fishery Service did an estimate just back in 2014 where they made an estimate of about 155 million smolts that successfully reached it to Tongue Point, which is down just a few miles up from Astoria. So it's a significant number of fish that are able to out-migrate from the Columbia each year and its tributaries.

Most of the hatchery smolts are released from hatcheries during a time frame of March through June.
Some releases are earlier or later. Most of the fish begin their migration downstream at that time. That's typically about the time that we think most wild smolts are beginning their migration, but and then the bulk of the migration out toward the ocean is in the spring and early summer and into the -- it kind of dies down toward the end of the summer, but there are actually smolts in the river basically year round. Not -- some fish will actually hold over at various points in the mainstem and finish their migration outward the following year. And so there's a variety of life histories involved and not all the fish are always doing the same thing, which, of course, makes them challenging to count as well.

Q. So is it safe to say that the numbers of smolts changes by season?
A. Yes, that would be correct.
Q. Is there different numbers in the fall?
A. Much smaller numbers in the fall. The more successful life history strategies are to enter the ocean in the summer when it's more productive, but you'll have smolts that are holding over and continuing to rear in the fall, but there won't be quite as many of them.
again. But your voice is dropping off at the end of your sentences and you're speeding up.

THE WITNESS: All right.

BY MS. CARTER:

Q. So moving to -- a little bit different. Can you explain the fishery sectors in the Columbia River?

A. Yes. There's a variety of what we term fishery sectors, which are different groups of people fishing for different kinds of purposes. I'll start with the non-treaty fisheries. There is a -- still a fairly substantial non-Indian commercial fishery that occurs in the area from Bonneville Dam down to the -- or Beacon Rock down to the Columbia River mouth.

There are substantial non-Indian recreational fisheries that occur throughout the mainstem and almost all tributaries for a variety of species, fisheries managed by all three states. There are also some fisheries that are subsistence fisheries by what we call non-treaty tribes in some of the upper Columbia areas.

Then for the treaty fisheries, the fisheries managed by the four tribes with treaty fishing rights, we also divide the fisheries into different sectors. I'll start with the fisheries sector that the tribes regard as kind of their most important fisheries, which are their ceremonial fisheries. These are fisheries
that primarily occur in the spring. They're typically managed with permits and they send crews out to fish targeting the spring Chinook but catching other species as well. And these fish are used for a variety of ceremonial and sometimes subsistence purposes.

None of these -- these fish are not allowed to be sold and they're all -- they're all utilized by the tribes, and each tribe runs their own spring ceremonial fisheries directly.

And then they -- we further divide our fisheries sectors into two other primary sectors, which one is our platform and hook and line fishery. This is a -- we group platform gear and hook and line gear just together just because they're regulated similarly. But the platform fishery is really a historic fishery that's done -- they build wooden platforms along the river. This is a fishery that some of you may have seen photographs from Celilo Falls, the most famous ones where people build platforms out over rapids and falls. There is still some platform fishing in tributaries like that, but this is where it evolves, from the Columbia. And they fish large nets called hoop nets, or sometimes dip nets, that are lowered into the water and a bag-like net is attached to this hoop and it's rigged so that the fish swim into the bag and get tangled up in there and
then they haul the whole thing out and get the fish out.
So that's our platform fishery.

And then along with that, some fishers fish with
hook and line gear, using the same sorts of rod and reel
gear that recreational fishers would use. This platform
hook and line fishery can be -- it's often a subsistence
fishery, but it can be utilized for commercial purposes
as well.

And then the final sector, which actually is our
largest sector in terms of the number of fish caught, is
our gillnet fishery, which uses two types of gillnets.
One is called a set gillnet, where nets are anchored
either to shore or to buoys out on the river and the
nets stay stationary, or roughly stationary, during a
fishing period and the fishers come and check the nets
and get the fish out of the nets, but reset the nets in
the same spot so the nets kind of stay out in the water
for a certain period of time.

And then associated with that, we also have a
drift net fishery which utilizes similar gillnets, but
the nets are floated down the river with a boat and they
float for sometimes a mile, sometimes more, and then
retrieve the net with the fish and then go back upstream
and do that again.

But the set gillnet fishery is our largest
fishery in terms of number of participants and catch and is primarily used for commercial purposes. We also have a small sturgeon fishery that can use gillnets or longline gear, setline gear. So those are our fishery sectors.

Q. Thank you. I'm going to take a step back, look at definitions, because you threw a lot of term of art out there. So who are the non-treaty tribes and the treaty tribes, because I don't think we introduced those?

A. So the--there is the Colville tribes and the Shoshone-Bannock tribes. So the Colville tribes are in the upper Columbia up in Washington and the Shoshone-Bannock tribes are way out in Eastern Idaho, are both considered non-treaty tribes in that they did not sign the same type of treaties that our four tribes, the Warm Springs, Nez Perce, the Umatilla, and the Yakama Nation signed with the federal government. So their fishing rights are--well, I'm not an attorney, but they don't--they don't have the same--the same rights to fish as our tribes do, and so they typically have separate, smaller arrangements with the states and federal government to get fish but don't have the same rights to the fish.

Q. And then you mentioned other non-treaty
fisheries. Who would that be?

A. Yeah. And we typically count the non-treaty tribal catch as part of the non-treaty catch.

Q. Great. Thank you. Describe the amount of fishing effort in the tribal fisheries.

A. So we've -- for our platform hook and line fishery, we did a survey just back in 2014 where we came up with a count of right about 400 fishing platforms between Bonneville and McNary dams. The vast majority of them are between Bonneville and the John Day dams. Not all of these platforms are fished all the time, but most of them we think are fished at least part of the year, and many are fished on a very regular basis.

And then for our gillnet fisheries, the effort varies by season with our -- when we do spring commercial fishing, we have had average net counts of -- for the set nets of about an average of around 300 or so, with peak counts in the spring being over 400. And in the summer, it's a real similar level, about 300 with a peak going over 400 nets.

In the fall, however, fisheries are much larger and our average net counts in the past ten years or so have -- you know, weekly fishing period. These are all weekly counts -- have been -- they've averaged around 500 fishing nets, the set nets, and with our peak net
counts in many of the weeks in the peak of the fall run have gone over 750 nets.

Q. So how are the fishers organized when they connect this fishery?

A. So our fishers -- the tribal fishers tend to fish in crews, which are typically comprised of family members, but not always. Sometimes more distant associations. But there's typically a crew chief that will often own the boat or sometimes boats and own most of the gear. This might be a father or an uncle in a family. And then there are various crew members that fish with them. And these crews, they vary in size from just a couple of people to, oh, probably -- you know, you might have big crews of ten or more people. They're organized like that.

They -- I can get into a little bit of the -- of how their fishing activity is -- well, it's a very place-oriented fishery. Our fishers, they typically fish in sites that their relatives or their families have controlled for sometimes generations. They sometimes register these sites with their tribes. These sites give them a level of exclusivity to different fishing areas, and they -- they're treated almost like property rights.

So these sites -- some fishers have several
sites, some fishers have very few sites. There are at
least a few productive sites. Not all fishing sites are
equally as productive. Some just simply because of the
layout of the river are much more productive in terms of
catching fish. And so the -- and because of this
place-oriented aspect of this, fishers, if they were to
lose access to a site, they would not necessarily have
access to other equally productive sites, or in some
cases they might not have access to any other fishing
sites at all.

So our tribes, they -- historically the tribes
have fished up and down the Columbia River over wide
expansive areas; but individual tribal families and
groups often have only fished within certain areas. And
so our tribes -- for instance, our tribes have never
given up their claim to rights to fish throughout what
are termed their usual and accustomed fishing areas,
which our tribes claim is a very large part of the
basin. And this is a much larger area than our tribes'currently -- currently authorized fisheries in, but it
really makes it so that individual fishers are
definitely very geographically oriented to certain
fishing places along the river.

Q. Thank you. So tell me about commercial
marketing of salmon.
A. Our tribes have invested very heavily in making efforts to increase the marketability and the economic value of our commercial catch. When I first started working for the Columbia River Inter-Tribal Fish Commission, in the fall season, fish being sold to wholesale buyers were -- in a good year, fish prices started out for what we call bright Chinook salmon, which are the highest grade of fish, at maybe like 60 cents a pound and would drop to 30 cents a pound.

For some of the other species, prices were sometimes down around a nickel a pound for a fish being sold to wholesale dealers. But our tribes, through a series of efforts of both training fishers to -- our fishers often undergo what we call HACCP training, which is -- it's a federal -- it's spelled H-C-C-P and -- H-A-C-C-P, excuse me. And it's an acronym that is basically a -- teaches federal food sanitation and handling guidelines that has helped our tribes take better care of their catch. We've spent a lot of time courting various wholesale fish dealers, processors, retailers to try and get them more interested in our catch. We've made efforts to help our tribes find ways to upgrade their equipment and their skills, and our tribes are doing a much better job at taking care of their catch. Ice is much more readily available now.
than it was a while back. And as a response to all of these efforts, prices paid by wholesale fish dealers have gone way up to sometimes over $5 a pound in the spring. Actually this -- this spring, in the very late spring, we had a couple of wholesale dealers that paid between like 7 and $9 a pound for a while for spring Chinook. So those are very high prices. Fall Chinook salmon typically are going -- and the prices start out in the $3 range, those kind of numbers. So these are huge increases.

And we also have a number of tribes that sell fish direct to the public. This is a little bit unique up here in the Puget Sound area, selling fish direct to the public doesn't occur at nearly as high a level among tribal fisheries as it does on the Columbia. In some cases maybe as much as like 15 percent of our commercial catch is sold direct to the public, and these prices can be -- can be much higher. It is my understanding that right now many fisheries are asking and getting prices that may range between 7 and sometimes more than $10 a pound for fish being sold direct to the public.

This fishery -- the direct-to-the-public sales are harder to track. When fish are sold to wholesale fish dealers, there was a paper trail on those fish called a fish ticket, which is basically a receipt that
both the buyer -- the fish buyer and the fisher sell to track the sales. But we don't -- we're not able to maintain quite the same recordkeeping on the direct-to-public sales, and so we don't -- we don't have super good information on the exact monetary value of those sales or exactly how much it is, other than it's -- we have certainty that it's quite substantial.

JUDGE NOBLE: Ms. Carter -- I'm sorry, Mr. Ellis, were you finished with your answer?

THE WITNESS: Yeah.

JUDGE NOBLE: I think we need to take a break, and so I'm sorry to interrupt the direct testimony here, but it is well past time for the normal break and so, Mr. Ellis, excuse us for interrupting your testimony.

THE WITNESS: That's fine.

JUDGE NOBLE: We'll be back in 15 minutes at 10:55. Thank you. We're off the record.

(Recess taken from 10:41 a.m. to 10:59 a.m.)

JUDGE NOBLE: We're ready to go back on the record. Ms. Carter?

BY MS. CARTER:

Q. So we're going to return back to the commercial fisheries on the Columbia River. What other species do tribes fish for?
A. So besides salmon and steelhead, the tribes also have subsistence fisheries for both lamprey and smelt. And these fisheries -- well, lamprey fisheries historically used to occur throughout tributaries and falls throughout the basin. Lamprey populations are quite depressed. Most lamprey fishing currently occurs at Willamette Falls, and there's a little bit that occurs at places like -- in the Deschutes River. Smelt fishing, also done for subsistence occurs primarily in the Cowlitz River, and occasionally when the smelt returns to the Sandy -- smelt returns, smelt occurs in the Sandy as well.

Additionally, the tribes have commercial fishing for both shad, which are a very abundant non-native fish, and also commercial fisheries for sturgeon which, of course, are a native fish. Our sturgeon fisheries are fairly small compared to salmon fisheries. Most sturgeon fishing is done in the wintertime and -- but occasionally sturgeon fishing can be done throughout other times of the year. Salmon -- excuse me, sturgeon have -- they've got generally stable populations upstream of Bonneville, but they're pretty small and they do fluctuate. Sturgeon spawning occurs in the mainstem down below the dams, primarily, in the tail races of the dams, and sturgeon -- successful sturgeon
spawning is very limited by the proper flow and
temperature conditions for the eggs to survive. And so
while our sturgeon populations are depressed, it's a
fairly lucrative fishery in that they get pretty good
prices and the fish, of course, grow quite large. And
so it's a pretty important fishery, especially in our --
in the wintertime, when sometimes there's not a lot of
other economic activity for tribal members to make money
at.

Q. So you referenced "flow." How familiar are you
with physical conditions along the Columbia River?

A. So both from managing data and dealing with data
like the exhibits shown, but then I also -- I've done a
number of -- I've done probably -- well, well over 100
low-elevation flights over the Columbia River counting
fishing nets. And it's one of the regular aspects of my
job. So I'm quite familiar with how the river looks
from an altitude of around 800 to about 1500 feet above
the water.

Q. So can you describe some of the factors that
affect how tribal fishers carry out their fishing, like
factors that affect their success in fishing.

A. Yes. So the tribal fishers face a number of
challenges, everything from very cold water in the
winter to changes in pool elevation, changes in flow,
the aquatic vegetation, the weather and wind. There can be high winds and -- and even in recent years, crowding has become a challenge to fishers with the number of wind surfers that we have out on the river and other recreational people doing things on the river, but people come all -- from all over the world to wind surf in the high winds and waves of the Columbia River up in the Columbia River Gorge, and it does complicate some of our tribes' fishing activities with the number of people that are out sharing the river with them.

Q. So we're going to take a little step back because this chart that we have up here, can you describe -- can you talk about this chart?

A. Yeah. So the significance of this chart really primarily has to do with smolts and the smolts' survival. It's quite well documented that salmon smolts from upriver have a much higher survival at higher flows, which also have faster travel times. So if -- in this chart you'll notice up in the top section that as the flows increase, what we call the water transport time, which is basically the -- if you take an imaginary, you know, random average particle of water and followed it downstream, how long would it take to get from point A to point B. And as flows go up, that speeds up. The travel time's reduced and that is
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1 strongly associated with better smolts survival.
2 So the one aspect of this thing that's I
3 think -- well, there are a couple aspects with this that
4 are of relevance to this hearing, are simply that
5 with most of the larger majority of the smolts coming in
6 the spring or summer, that tends to be higher flows. We
7 get flows up at McNary sometimes in the spring of
8 400,000 CFS. Our tribes have made a lot of efforts to
9 get the river managed according to what we call a more
10 natural hydrograph, which means you have high spring
11 flows with lower summer and fall flows, more like
12 historic conditions, which is better for fish survival.
13 But it complicates assessing how many smolts might be
14 exposed to an event like an oil spill, just because,
15 depending on the time of the year and the location,
16 they'll -- the smolts will be in the river in a certain
17 reach for different times, depending on the flow and
18 where you are in the river, and, you know, the smolts
19 will be migrating downstream. Smolts are generally
20 believed to migrate at generally the same speed as the
21 water is moving. They migrate fairly passively. That's
22 not, you know, always the case, but that's typically how
23 they are migrating.
24 And so, you know, if there were a spill,
25 figuring out exactly how many smolts might be affected
is kind of complex. At certain times we have very high numbers of smolts in the river. The Fish Passage Center that prepared these data also made some estimates that at Bonneville Dam during the peak smolt out-migration, we can see anywhere from six to pretty close to 14 and a half, almost 15 million smolts in a five-day period. It averages something around 9 million smolts per day. But of course that's variable. That's kind of in the month of April and May when there's really a lot of smolts going through. So all of those factors will greatly complicate assessing what numbers of fish might be in the river if there were a spill at some certain time and some certain place.

Q. You used the term "migrating passively." Can you elaborate on that?

A. So they -- they're basically, you know, swimming enough to, you know, maintain stability. Sometimes smolts actually even will face upstream and migrate backwards. They're not -- they're not just swimming aggressively in a downstream direction trying to get to the ocean. They tend to float and just kind of go along with the current, to a large degree. There's variation in that, of course, but that's basically kind of how they do it.

Q. So likewise, on the flow, can you talk about
fluctuation of reservoir levels?

A. Yeah. So the federal hydropower projects are managed for a mixture of flood control and power production and transportation. And so all of those factors together means that the Columbia River is a very actively managed river. The Corps of Engineers has basic standards in place which they use to manage things. It varies by place. The Bonneville reservoir has an average fluctuation reservoir level that goes up and down as much as seven feet. The Dalles reservoir is a little smaller criteria, it's around five feet average. And then it's -- it's higher than that in the John Day reservoir, that they can have even larger fluctuations. In fact, overall for them -- even within the criteria which the corps uses to manage things, they can change these reservoirs up to anywhere from 12 to almost 20 feet in elevation change. And they can actually change the -- change the reservoir levels fairly quickly. You can see changes in reservoirs where the water can go up and down several feet in a day easily. And these happen throughout the years, throughout the -- during different days of the week and then during different times of the years.

And it's quite apparent because, as I mentioned, I fly over the river quite often and since a lot of the
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river is riprapped along the reservoir, so there's, you know, big rocks and cobble and things along the edge of the railroad tracks and freeways, you can actually see water marks going up and down so you can tell which way in effect the tide is going during that period. So it's quite apparent. And that has the effect -- I mentioned that many of the tribal nets are anchored to points out on the river. And if the reservoir makes a sudden and large change in elevation, nets could even break free or move around so they're not fishing as well.

Q. So would you say it's similar to an ocean tide?
A. It can have the appearance much like an ocean tide.

Q. So switching a little bit, can you describe issues with wind?
A. So wind is also a significant factor that affects fishing. Most fishers -- well, at least from what fishers tell me, they tend to like a little bit of wind. It actually helps them catch fish. For whatever reason it makes fishing a little better. But the winds can be quite high.

The organization I work for, we employ a hydrologist/meteorologist who -- he monitors winds. He sends out e-mails to an e-mail list of fishers to warn them of -- if it's going to be windy. He provided me
with some data compiled from National Weather Service reports that shows that in the summer months in --
around Hood River, the average peak daily winds are up
around 13 miles an hour, but the peak winds during this
time in the summer months when it can get quite windy
can be sustained winds for over a minute of 60 miles an
hour. So you get very high gusts at some times. We
typically fly in the wee hours of the morning, basically
at daybreak because it's a little calmer then. It can
be simply too rough to fly at low elevations in the
afternoon in the summertime.

In the winter it can also be bad -- the winds
can occur any time day or night because of storm events
and things. In Hood River, again, the weather service
has data that can be compiled into curves showing
probability of certain winds and, again, the wind in the
January, February kind of months at Hood River, there's
roughly a 50 percent -- or about -- excuse me, about a
40 percent probability that winds will be over 15 miles
an hour, peak winds, during the day. And so it -- wind
is a big deal and it can create a lot of headaches for
fishermen trying to manage their gear and fishing out on
the river.

Q. So can you describe some of the issues the
fisheries have with aquatic vegetation.
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A. So aquatic vegetation, there's a number of species of aquatic plants, we call them macrophytes because they're big, as well as algae growth, some of which is these filamentous types of algae that grows in the river. Some of these are native species. There's some introduced species in the Columbia. But during the summer, these vegetation -- as the river temperatures warm, this vegetation can grow into very large mats that can be seen from the air. These mats of vegetation can -- they grow and they break loose and they float downstream. They can clog fishing nets quite easily. I've seen over the years a number of nets that just in the course of a day or so, if a fisher has had trouble getting out to them, can look like they're about to break free, practically, from the amount of vegetation that collects in them.

And then also for a set net that stays out, in some areas, this filamentous algae will grow just kind of on a daily basis. In many cases fishers actually have to remove their nets from the river sometimes on a daily basis to clean them. Sometimes you can clean it off with a garden hose, but I've heard many people often have to resort to things like pressure washers to clean their nets; otherwise, they just don't fish effectively.

MS. CARTER: Thank you. I have no further
JUDGE NOBLE: Cross-examination of Mr. Ellis?

CROSS-EXAMINATION

BY MR. JOHNSON:

Q. Mr. Ellis, I'm Dale Johnson. I'm one of the attorneys for the applicant.

MR. JOHNSON: Ms. Mastro, could you pull up Exhibit 185, page 8, please.

BY MR. JOHNSON:

Q. I'm sorry, it takes us a minute sometimes to get these things up. Here we go. Takes us a minute to get these exhibits up.

MR. JOHNSON: Okay. Thank you. Could you just blow that up a little bit so we could see the graphic there.

BY MR. JOHNSON:

Q. And once the exhibit's displayed here, Mr. Ellis, I just want to ask if you recognize it and what it predicts. There we go. So do you recognize this exhibit?

A. Yes -- well, I certainly recognize the map. It's a fairly commonly produced map or ones very much similar to it.

Q. And my specific question relates to treaty tribe
JOHNSON / ELLIS

1 commercial fisheries. And based on this map, it's my
2 understanding that those commercial fishery sites are
3 upriver of the Bonneville Dam; is that correct?
4 A. Primarily. The tribes do have a small bank
5 fishery just below Bonneville Dam which at times can be
6 used for commercial purposes.
7 Q. Okay.
8 A. The Yakama Nation further does some commercial
9 fishing in some of its tributaries in this area on the
10 Washington side, and occasionally the Nez Perce tribe
11 has done a little bit of commercial fishing in the Snake
12 basin in the Snake River.
13 Q. But all of those locations are upriver of the
14 proposed Vancouver Energy terminal, correct?
15 A. Yes.
16 Q. Okay.
17 MR. JOHNSON: Thank you. Nothing further.
18 JUDGE NOBLE: Any cross -- any redirect?
19 MS. CARTER: No, I don't have any.
20 JUDGE NOBLE: Council questions?
21 Mr. Snodgrass?
22 MR. SNODGRASS: Just a question making sure
23 I heard the wind speed on the river right. Did I hear
24 in August the average peak of the 24 -- of a day is
25 13 miles an hour; is that right?
THE WITNESS: Yeah, both -- in late June and then the winds tend to -- it's June, July and then into -- yeah, into August as well, the peak daily winds are about 13 miles an hour.

MR. SNODGRASS: How would that compare to say Vancouver or here?

THE WITNESS: They would be substantially higher because the -- there's a lot of -- there's a lot of calmer days that go into that average in an area like right around here. So those -- the daily peak winds, you know, are more likely, at least in the Portland area, to be, you know, on average they'll be down closer to, you know, in the 5 to 10 range more likely.

MR. SNODGRASS: What would the average daily peak be at Hood River in January or February?

THE WITNESS: The average -- the average daily peak during that time is going to be -- I'm thinking back to the charts that I got these from. I said it's about a 40 percent chance of winds about 15 miles an hour. And so if an average is right about that, 50 percent, it will be a little less, in probably the 12-to-14 miles an hour range, something like that.

MR. SNODGRASS: Thank you.

JUDGE NOBLE: Mr. Stohr?

MR. STOHWR: Good morning, Mr. Ellis. A
couple of questions. First I wanted to follow up on Mr. Johnson’s question in terms of the river and tribal -- tribal rights. Would the tribes assume or have the courts given any direction in terms of tribal treaty rights for below Bonneville?

THE WITNESS: Again, not being an attorney, I'll give you my non-attorney answer, is that our tribes do not have adjudicated boundaries to their usual and accustomed fishing areas, but our tribes do claim substantial rights -- or substantial -- they claim rights to a substantial area of the lower Columbia River and maintain that they do, in fact, have rights to fish in these areas. You know, as part of the comanagement process, it's been more efficient to work out management agreements that get people to fisheries they desire, and so that's kind of been the way the tribes have gone with that.

MR. STOHR: Another question having to do with the Endangered Species Act. I didn't hear you talk about that too much. How many endangered stocks do we have in the river and where do they -- where do they go? Where do they live?

THE WITNESS: We have -- I believe it's 12 different listed stocks of salmon and steelhead plus smelt are listed as a threatened species. Green
sturgeon in the lower Columbia River are listed as a threatened species. And so there's quite a number.

Some of these populations are quite small. Some of them have actually fairly -- some of our -- some of the individual groups of listed spring Chinook can have actually very -- not only small population size, but very narrow timing. So their timing in the spring pretty much -- you know, most all those fishermen go through in just a few weeks. And so they -- with these very small groups of fish, anything that affects those fish could affect a large portion of them in a small amount of time. So, yes, the ESA concerns are a significant concern that we all try and work around to, you know, work on recovering these fish and -- while still providing harvest opportunity on more abundant groups, and so we have to work hard to control our impacts on any of these listed groups.

MR. STOHR: Thank you.

JUDGE NOBLE: Mr. -- excuse me. Mr. Shafer has a question.

MR. SHAFER: Mr. Ellis, thank you very much for your testimony today.

One question, and I'm going to need to ask for your forgiveness of my ignorance on this, but as a source of income to the tribes, the fishing as a source
of income, is it the primary source of income, is it one
of several primary sources of income or would you say
it's a secondary source of income?

THE WITNESS: Of course not every single
tribal member fishes. But of our tribal -- but a
substantial portion of the tribal members do fish. And
of those -- of the tribal members who fish, most fishers
would gain a significant portion of their annual income
from fishing. Other jobs that they might do in the
offseason, oh, some of them, you know, like drive a
truck or -- you know, work in the logging industry or
things like that, those would be generally secondary
jobs, so fishing would be their main source of income.
And for many of our fishers it is their sole source of
income. And so we have, you know, a large number of
fishers who that's about it. If they don't get to do
commercial fishing, they don't make any money. And so
it's a big deal, especially for tribal communities which
historically have had very high unemployment rates and
very high levels of poverty.

MR. SHAFER: Thank you.

JUDGE NOBLE: Mr. Lynch?

MR. LYNCH: Good morning. Thanks for your
testimony.

I was interested in a response you gave to
Councilmember Stohr's question, and you said that there's, for example, small spring Chinook run that have small numbers and also a narrow window. We had some testimony earlier in this proceeding where a witness said, well, if there, in fact, is an incident that impacts fish, it probably wouldn't affect the population, and besides that, there are mitigation measures that could be taken to help fish re-establish. What are your thoughts if there was an incident on the river that would, in fact, affect this run of small spring Chinook?

THE WITNESS: So, again, depending on the timing and the location, I would say that that -- that that testimony would have been a very optimistic outlook potentially because of the fact that -- one of the ways we monitor this is with these small electronic tags. They're RFID tags that put out an electronic signal and we have monitoring projects for many wild populations of fish. So you can look at their timing at the different hydropower projects where these signals are picked up. And in many cases, some of these very small upper Columbia wild populations, the upper Columbia spring Chinook, for instance, they're actually listed as an endangered species, not simply a threatened species, as Snake River Sockeye are. These fish can -- the large
majority of these fish can pass Bonneville and other projects within just a couple of weeks. And some of these -- some of the spawning populations of some of these very small tributary groups number sometimes in the hundreds of fish. So you could have, under certain scenarios, a -- really, a substantial portion of certain spawning aggregates of fish in a very short time in a very short -- in a narrow geographic area.

MR. LYNCH: What about the concept that habitat improvements as mitigation could help re-establish the population?

THE WITNESS: So habitat improvements are something -- well, that the tribes are huge believers in the benefits of doing these things, but the reality is that the benefits of habitat improvements are very long term and unfortunately sometimes kind of uncertain on outlook. It takes an enormous effort to fix a habitat to where it's fully functioning as a good ecosystem again. It's very expensive. The benefits pay out over decades sometimes, rather than right away. So it's -- and for some of these populations of fish or small groups of fish, subpopulations, you know, the risks of low abundance in the short term could -- it might not match up with the benefits of simply rushing to do more habitat restoration than we're already doing right now.
MR. LYNCH: And my last question, you haven't mentioned bull trout, and I was just curious if you could give us your thoughts about the populations of bull trout on the Columbia and where they might be located.

THE WITNESS: Yeah. So bull trout are a species of -- it's a rather large trout generally. They spawn and rear generally in high mountain areas. They really prefer pristine habitats, but they -- they have a lifecycle sort of like salmon but not quite, in that they migrate downstream and often rear in larger rivers, including the mainstem of the Columbia, and then migrate back up into the tributaries to spawn and stuff. So there are not large numbers of bull trout in the Columbia mainstem, but they do occur there, and they are a listed species as well, and they could also be impacted on these things because in the Columbia, they are more -- when they are there, they're more of a resident-type fish that are going to just be living and rearing in the Columbia.

MR. LYNCH: Thank you.

JUDGE NOBLE: To my left, questions?

Mr. Siemann?

MR. SIEMANN: Good morning. You mentioned that the smolts' survival is increased by the speed of
the river; is that correct?

THE WITNESS: That's one of the factors, yes. It's a -- travel time is generally considered an important factor in the smolts' survival.

MR. SIEMANN: Are there efforts to increase the flow in the river that would increase the speed of the river?

THE WITNESS: One of the management practices that has helped generally increase travel time is the spring and summer spill program that's required in the Columbia River. So spilling water over the dams can help increase travel time. And then simply managing the overall -- you know, we've got reservoirs that go clear up into Canada. And so there's an abundant -- well, there's -- it's not as much water as people want, but there is -- there's a large number of, shall we say, levers that you could pull at different reservoirs to funnel more water down during the time when smolts are in the water. So it's a factor of several different management practices, but certainly the spill program is associated with improved travel times and better smolts' survival.

MR. SIEMANN: And what I'm trying to get at is, this is sort of in some ways unrelated to your testimony, but the speed of the river at the Vancouver
Energy terminal, there's been some discussion about
booms. And so I'm sort of curious, does this translate
into the speed of the river at that site and efforts --
what I'm wondering about is are efforts to increase flow
for salmon likely to increase the speed of the river at
the Vancouver Energy site?

THE WITNESS: You know, I'm afraid I'm not a
hydrologist, and so that question is probably a little
bit beyond my level of expertise.

MR. SIEMANN: Fair enough. All right.

Well, thank you very much.

JUDGE NOBLE: Other questions, to my left?

MR. MOSS: I do.

JUDGE NOBLE: Mr. Moss?

MR. MOSS: Good morning. We heard some
testimony earlier in this proceeding to the effect that
were a tribal fishery disrupted by the event of an oil
spill, that the tribal fishers could simply move to
another location. I would like to hear what you think
of that testimony.

THE WITNESS: So I -- again, I would say
that that is a simplification of the reality. So, you
know, clearly in the map shown on the screen, there's,
you know, 150- some miles of river that the tribes are
fishing in. So, yeah, in theory you could, you know,
fish someplace else. But the reality, again, is that with the systems that the tribes have in place, certainly you can't readily pick up your fishing platform and move it without a great deal of work. But with our system of registered sites and if not registered at least they are kind of considered family property at these geographic locations. So if I were a tribal fisher, I couldn't just readily pack up and move someplace else because I would likely be in somebody else's spot or I would be in a spot that would simply not be -- have the same quality of fishing as the spot that I was in.

So the risk of displacement is -- it is -- it is real, and depending again on where an event would happen and possibly when, it would not be a really easy thing for fishers just to pack up and move to some other place.

And the other, you know, aspect of this is if we had a big spill, it could really seriously damage our ability to market commercial fish. The public perception of fish from a -- you know, from, you know, an area that they're looking at the news footage of, you know, oil leaking out of something, could be quite devastating to the ability to actually -- you know, even if you had a -- had a place to fish, you might not be
able to sell the fish you caught.

MR. MOSS: Thank you.

JUDGE NOBLE: Any other questions from the council?

With regard, Mr. Ellis, to your last answer and in a previous answer where you talked about usual and accustomed places, do you know if the tribes that you work with consider the family locations that are customary as any limitation on tribal ideas about usual and accustomed places?

THE WITNESS: No, not really. Because the -- while, again, an individual family may claim a certain site or group of sites for their particular -- their family, you know, the tribes, of course, have lots and lots of families, and in many of these families, you know, their oral histories had them migrating around in much wider areas than they currently kind of are. You know, they -- historically, the tribes had access to all kinds of areas where different family groups or at different times of the year they'd be able to access, but -- but, yeah, they -- it wouldn't really be the same thing to say that just because a family only has access to certain sites right now, that their tribe as an ancestral group didn't have and doesn't still have access to a very large area.
JUDGE NOBLE: Thank you.
Any questions based upon council questions?
MR. JOHNSON: No, Your Honor.
MS. CARTER: Yes, actually, I have quite a few.

REDIRECT EXAMINATION

BY MS. CARTER:

Q. First, I wanted to clarify something. You said that spill increases travel time, but you meant decreases travel time, correct?
A. Yeah. No, I meant to -- yeah. I meant to say it increases the speed at which they get downstream. So, yeah, decreased travel time.

Q. I just wanted to clear that for the record.
A. Thank you.

Q. Based on your response to Mr. Lynch, you were talking about different populations that could be detrimentally affected. Would that also apply to lamprey?
A. Yes. So we have extremely depressed populations of lamprey, especially in the upriver areas. There's very small populations in the Snake Basin, the Umatilla, the Yakima and Deschutes, but the lamprey don't -- they don't -- they don't key in on their home area quite to the same degree of -- that salmon do. Salmon have a
fairly high degree of fidelity to their -- the stream
where they were born. Lamprey less so. But just simply
due to the very small numbers of fish going back to
certain areas, you know, it -- a spill could be very
problematic. With the lamprey in the Deschutes, you
have railroad tracks going into the Deschutes and to my
understanding they do haul oil up and down the Deschutes
River, and if there were a spill in the Deschutes,
there's just a very, very small number of lamprey in the
Deschutes, and they could be really severely affected.

Q. Well, on that question -- elaborating question,
in this map, would -- from your understanding would unit
trains full of crude transit along this Zone 6 fishery
area?

A. Yes. I -- well, I -- from the air, I have seen
what I believe to be oil trains on both sides of the
river on a fairly regular basis. They seem to be fairly
easy to spot from the air because, at least my
understanding is the oil trains -- it's pretty much just
oil cars, the engine usually is separated from the car
by a -- they usually put a hopper car or two between the
engines and the tanker cars, but there are long strings
of black cars. I've seen them on both sides of the
river, you know, on a fairly regular basis.

Q. So if there was a spill, would it be possible to
lose a generation of fish from a spill?

MR. JOHNSON: Objection. Your Honor, first of all, this is going beyond the scope of the council's questions. And secondly, it's getting beyond the scope of this witness' qualifications as an expert.

JUDGE NOBLE: Overruled.
You may answer.

A. So because most salmon species have a wide-ranging lifecycle in that they're -- the adult returns come from a series of ages, they don't all return at the same age, coho less so, but the other species tend to have a variety of age classes, it's unlikely that you would wipe out a -- an entire population. But, again, since some of these -- some of these populations are small, if a certain age class of fish were heavily impacted, it could -- it could take a population group quite a while to recover from that disruption and that could be a real negative thing.

BY MS. CARTER:

Q. And finally, Mr. Stohr asked about the ESA list of species. Do all of these species on the ESA list of species, do they transit down through the lower river past this facility that would be located in Vancouver?

A. Yes. Well, so they're -- some of the listed groups have populations in tributaries downstream from
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the proposed terminal site. And so those ones, you know, they would just be in the downstream areas, but all of the rest of them would have to migrate down -- up and down past this terminal.

MS. CARTER: Thank you. No further questions.

JUDGE NOBLE: Thank you, Mr. Ellis, for your testimony. You are excused as a witness.

THE WITNESS: Thank you.

JUDGE NOBLE: We have just 15 minutes until noontime. Can I ask about the next witness, whether we could get started with that witness?

MR. HALL: Your Honor, Brent Hall on behalf of the Confederated Tribes of the Umatilla Indian Reservation. Our next witness is Ms. Kat Brigham. I do not believe her testimony will be that long. I think we could get most of the way through optimistically.

JUDGE NOBLE: Good. Let's start it.

MR. HALL: So the tribe will call Ms. Kat Brigham. There she is.

JUDGE NOBLE: Ms. Brigham, could you raise your right hand, please.

(Witness sworn.)

JUDGE NOBLE: Thank you. Please be seated.
KATHRYN BRIGHAM,
having been first duly sworn,
testified as follows:

DIRECT EXAMINATION

BY MR. HALL:

Q. Ms. Brigham, could you state your name and spell it for the record.
A. My name is Kathryn Brigham, K-a-t-h-r-y-n, Brigham, B-r-i-g-h-a-m.

Q. Thank you, Kat. I'm going to start with the same comment we start with every witness in this proceeding. We have a court reporter taking down your testimony. So to the extent you can speak slowly, I think that will help all of us.
A. Okay.

Q. Kat, did you file written direct testimony in this proceeding?
A. Yes, I did.

Q. And do you adopt that testimony under oath today?
A. Yes, I do.

Q. Can you briefly summarize your qualifications?
A. Well, I was appointed to the Confederated Tribes of the Umatilla Indian Reservation's Fish and Wildlife Commission in August of 1976. Slow down. Okay. All
right.

I have been involved in fish issues up until December of 2015. I was a Fish and Wildlife Commission member and an elected official for the Confederated Tribes. I attended a number of fish issue meetings, such as the Columbia River Inter-Tribal Fish Commission, the Pacific Salmon Commission, the North Falcon Fisheries Management Council meetings that occurred, and I was a policy member to the US v Oregon process.

And during that time frame, I met a lot of people. One of the ones I really -- we really enjoyed working together with was Billy Frank, Jr. He was the chairman of the Northwest Indian Fish Commission. And one of the things we talked about and how we need to be working together was because we all agreed that this was all Indian country at one time. But we still have a place in the Pacific Northwest for Pacific salmon. And so we got together in 2008 and we developed a brochure that was brought back to Washington, D.C. to educate and to let federal agencies know how important salmon is to the Pacific Northwest.

We were really pleased with that brochure, and so in 2012 we did the same thing, only this time we were able to bring in three additional commissions from the Great Lakes area. So we had five commissions who were
talking about the importance of salmon to our way of life, our future and our history.

So salmon is important and it's part of our culture, part of today and part of the next seven generations and beyond. And as tribal leaders and tribal people, we have been taught more than once to talk about and think about our next seven generations. One of the things that my grandfather said was that you fight real hard for today, but not at the expense of your children, your children's children and their children. That's why we talk about the next seven generations and beyond.

And as part of this process we went to Washington, D.C. I would say more than one -- it averaged out about once a year, where we would go to Washington, D.C. to talk about the importance of salmon, what the tribes were doing and testified at a number of different hearings.

Q. Thank you, Kat. That's once a year going back to D.C. for the last 40 years?
A. Yes.

Q. Thank you. Now, you mentioned you've been involved on fish issues since December 2015. You didn't stop fishing in December 2015?
A. No, those are -- that was as an elected
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official. I married my husband in 1965, and he's a commercial fisherman on the Columbia River, and I have been fishing on the Columbia River since then. In the beginning I fished on a regular basis, but once I got on as an elected official, it was off and on, but I was very lucky I was able to go fishing last week on the Columbia River. And so it's something we still do as a family and it keeps us together. And I think it's also important for you to know -- I know you were asking questions about families.

The Brigham family and many other tribal families have been fishing on the Columbia River from generation to generation. And as our family, we have currently four generations in our family who are fishing. My great-grandson was able to go fishing last year and is looking forward to fishing this year and next year. And one of the questions he asked me was, is my children going to be able to fish? I said, hopefully, yes, so you'll be able to teach your children and their children that this is something we've been doing from generation to generation.

Q. Thank you, Kat. I would like to move into the rebuttal portion of your testimony today. Have you had the opportunity to review the prefilled testimony of Brian Carrico?
A. Yes, I have. And I have three concerns. One is the timing in which we started fishing, the second is the area in which we were fishing and the third is the safety risks. So I'll go to the first one, to the timing. It kind of sounds like we started in 1977 fishing in the Columbia River. Actually we've been fishing on the Columbia River since time immemorial. Like I said earlier, this is four generations -- not counting, you know, my father -- my husband, my daughter, my grandson and my great-grandson. That's just four generations. And before then there was several generations before then. And so we've been fishing on the Columbia River for a very long time, for generations.

The other one is the area in which we fish. There was some discussion about the Zone 6 area. Yes, that's a Zone 6 area which we have a commercial fishery, but at the same time, like I said earlier, when Billy Frank and I were talking about it, this was all Indian country at one time and we used to travel and fish all over the Pacific Northwest. We have fishing rights that go down to the mouth and up into the tributaries of the Columbia River. Right now we are even having annual trips up to Montana to go hunting for Buffalo. So our travel as tribal people has been over the Pacific
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Northwest quite a bit. So to say that we were just fishing in Zone 6 is not accurate at all.

Q. I think the third one was the potential impacts from rail traffic.

A. Yes, the third impact was safety risk. I read that and my thought is, you know, he's identified some crossing areas. Well, I'm just going to give myself as an example. My daughter and I were fishing, and we went and drove up I -- Highway 14, we pulled off the road, we parked our pickup and we walked over the tracks. There's no path. The path across that is one we made. And so it's -- and we went down to fish off of our platform. And I know for a fact that we are one example of people going over tracks, and it's not because there's a road there or a path there; it's because that's where we're going to go cross to go to our fishing platforms along the side of the river. So there's a lot of areas that are not necessarily on the map that shows where we have been going across the tracks to go fishing along the Columbia River.

The other thing is the safety. I guess just within my family alone -- I didn't think I would cry.

Q. Take your time, Kat.

A. I'm sorry. Just within my family alone, I've lost three members to the railroad crossing and all of
them were fishermen and it was in the spring of each year. I lost a nephew. He was a very young man and he was coming back to the in-lieu site after fishing, and later lost his sister, and that was in 2006. And then in 2008, lost my niece, who was also fishing along the Columbia River. Then in 2010, I lost my cousin, who was fishing up at Alderdale, and he was crossing the tracks with his boat and trailer and he got hit by the train as well.

And so when you talk about the safety risks of -- to tribal people, I think it's much higher than what is actually stated there. Because we cross those tracks on a regular basis to get to those fishing sites. And the other thing too is we have talked to each other about saying why didn't you hear the trains, and it's because of the wind and, you know, things like that, that you don't -- and the train coming around the bend that you don't necessarily hear those things. So the risk is high. It's not something that is -- that just because we've got a guard that keeps us from crossing the tracks doesn't mean that's where we're going to cross.

Q. Kat, I'm sorry to ask you one more question on this topic. Can you tell the council whether the cousin you lost in 2010 near Alderdale was crossing at a grade
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or somewhere off the road?

A. He was crossing on Alderdale. He was going across the area -- I don't think they had a crossing at that time, and so he was just crossing the tracks to go -- bring his fish home. Because I think it was the end of the season.

Q. And, Kat, when you say "Alderdale," that's the Alderdale in-lieu site?

A. Yes, it's up there on the John Lake Pool.

Q. Thank you. Kat, let's move on.

A. Okay.

Q. Let's talk about the testimony of Dr. Elliott Taylor. Have you had a chance to review that testimony?

A. Yes, I have. And, again, I have two concerns. One was that the -- I mean, if water were to spill -- it was more likely to spill on land than in water. And so out of curiosity yesterday, I drove from -- I'm from Pendleton, Oregon. And so I drove across the river just below McNary Dam, and I came down into Vancouver. And in coming down here, I identified three different -- 23 sites where a railroad is actually crossing the water or the railroad track is -- has water on both sides because of a pond or -- you know, that's been created by the railroad tracks going along the Columbia River. And so the tracks are right along the Columbia River and
they're -- if you get -- the sand didn't make them stay there. These are huge rocks that were brought there. So if the oils were to occur -- spill were to occur, the rocks will not absorb them. They would go into the water.

And then the other thing would be the water itself, a long time ago, when my husband and I first started fishing, we were able to put our nets in on Monday and pull them out on Friday without a lot of vegetation on it. And as Stuart was talking about, now we have to take our nets out and some places we're lucky that we can leave them in. It's not -- we can shake them out, the nets out, and remove the vegetation. But in other places, we have to take the nets out every morning while we're pulling our gear, bring them to shore and use the power wash to clean those nets out so they're fishable so that we can catch fish in the evening.

Q. And, Kat, what do you think this vegetation means for some of the conclusions Dr. Taylor drew about oil and water?

A. I don't think it's going to move very fast. I think, you know, the vegetation in the Columbia River has grown substantially. I can tell you from some of the fishing experiences, sometimes we've caught more
seaweed than fish. We've got a boat load of seaweed and very few fish. So the vegetation in the Columbia River has grown considerably.

Q. Kat, I think you mentioned you went fishing last week.

A. Yes, I did.

Q. And did you see vegetation in the water at that time?

A. Yes, I did.

Q. And --

MR. HALL: I'm laying a foundation, Your Honor.

BY MR. HALL:

Q. And did you take pictures?

A. Yes, I did.

Q. Thank you.

MR. HALL: Ms. Mastro, could you bring up Exhibit 5330-1 TRB, please. Thank you, Ms. Mastro.

BY MR. HALL:

Q. Kat, do you recognize this picture?

A. This is a picture of my daughter putting out the net after we've washed it, power washed it. It's going out in the evening so we can run it the following day.

Q. Thank you.

MR. HALL: Your Honor, the tribes would move
to enter Exhibit 5330-1 into evidence.

JUDGE NOBLE: Is there any objection?

MR. JOHNSON: No objection.

JUDGE NOBLE: 5331 [sic] will be admitted.

MR. HALL: Thank you. Ms. Mastro, can you go to 5330-2, please.

BY MR. HALL:

Q. Kat, do you recognize this photo?

A. Yes, I do. This is a picture, again, of my daughter Terry and then my grandson Brigham. They're running the gear. And this is one of the nets that we're able to keep out at night, but at the same time while we're running the gear -- you can't see it, my grandson has his hand up like this, but in his hand is a stick that he's weeding the net with to clean the net. And then my daughter -- and then you'll see on the side of the boat, the black marks, that's where the algae's falling from his shaking and moving the net, and then my daughter Terry is also shaking the net as it's going out, to try to remove the vegetation from the net so it can be fishable in the evening.

Q. And, Kat, does this activity they are doing with the net always clean the net so that you can keep fishing it?

A. Always. This is -- I don't have an all-girl
crew anymore, but I used to. I was -- as they said --
not the chief, but I was the head of the crew and I had
my daughters. I have three daughters and my sister, and
all of us were fishing on the Columbia River. But one
of the things we always made sure that happened was when
these nets were pulled, we pulled out all of the
vegetation that we could. And one of my daughters
says -- used to tell me, we had to pull every morsel.
That was just to be able to get the nets clean so that
they would be able to catch fish.

Q. Kat, I'm going to try one more time. Do you
ever have to do anything else than what they're doing to
get the nets cleaned?
A. Power wash them. Yes. We have power washed our
nets to keep them clean. And like I said earlier, when
we power wash them, we pull nets and the fish in at the
same time, and then we take the nets out and bring them
to shore and get a power washer to wash them. And we
pull -- as we're pulling the net out of the boat, we'll
pull the net out and somebody will stand there and power
wash the net as it's being pulled out and then it
will -- the net will fall onto the ground, and then once
we've got it ready to go out, then we put the clean net
back onto the boat so that it can go back out onto the
river.
JUDGE NOBLE: Mr. Hall, I think -- I'm not sure, but it seems like there's a numbering issue with these exhibits. I think it's 5530, photograph 1 and photograph 2.

MR. HALL: You are right, Your Honor, and I just realized -- I didn't remember that's the numbering protocol being used in this proceeding. So I think having -- have Ms. Brigham talk about these two photos, now I'll offer Exhibit 5330 into evidence.

JUDGE NOBLE: Correct. 5330 is admitted and it consists of two photographs. So I don't think there is a 5331?

MR. HALL: That is correct, Your Honor.

JUDGE NOBLE: Change that.

MR. HALL: I have one more question of Ms. Brigham, Your Honor.

BY MR. HALL:

Q. How many generations are on this boat?

A. Four. My husband, our three -- my husband, my daughter and my grandson.

MR. HALL: Thank you. No further questions at this time, Your Honor.

JUDGE NOBLE: Cross-examination of Ms. Brigham?

MR. JOHNSON: No questions from me.
JUDGE NOBLE: Council questions?

Mr. Stohr?

MR. STOH: Thank you, Ms. Brigham. We've talked quite a bit about harvests, and a little bit about comanagement, et cetera, but I'm interested in your view as a tribal leader on the habitat issue and how you think that issue might relate to our decision about this facility.

THE WITNESS: Well, as Stuart stated, you know, we view habitat as a very important part of rebuilding salmon. And he's right, in that it takes a while for salmon to rebuild there, but there's also many other benefits for the habitat. When we rebuild, protect and restore the habitat, not only are we rebuilding that habitat for salmon, but we're also creating cleaner water, cooler water. We're also creating the habitat for the trees to have the air, you know, cleaner.

So we view the habitat as something that is very important. In fact, one of the things that we have been taught prior to the treaty, is that we have to take care of the land so the land can take care of you. If you don't take care of the land, where are you going to go?

And so we have been working on rebuilding
the habitat for generations so that we can have the land in which we live on that we love and want our future children -- future generations to live on. Because I don't think any of us are going away. I do know that, you know, on the Hanford, this was an area that was a tribal area, but we had to move from there. But I also know that non-Indians lived there, and nobody can live there now. And so that's what we're trying to prevent.

MR. STOHR: Thank you.

JUDGE NOBLE: Any other questions, to my right? To my left?

Mr. Rossman.

MR. ROSSMAN: Thank you for traveling and for your testimony today.

You had mentioned in your testimony most recently working with tribes in the Great Lakes area on the salmon brochure; is that right?

THE WITNESS: Yes.

MR. ROSSMAN: Do you know if those tribes have a similar reservation of rights to take fish at their usual and accustomed places?

THE WITNESS: Some of them do. And it's just like what Stuart was talking about, some tribe -- well, there are over 500 tribes in the United States. And some of them have a treaty where the treaty
guarantees us the right to go fishing, hunting, all of those types of things. Some of them have executive orders and some terms have been terminated and then restored. But all of the -- our first foods, our traditional foods, are something that we all work to protect and restore.

MR. ROSSMAN: Thank you.

THE WITNESS: You're welcome.

JUDGE NOBLE: Before we go, Ms. Brigham, I have a question. Could you tell the council what -- of what importance -- the salmon and other fish that you take, of what importance are they to you, your family and your tribal members?

THE WITNESS: The importance of salmon is part of our history. I mean, we have stories about how we have fished on the Columbia River. So it's part of our history, part of our future today -- operations today. I mean, it's our way of life. I mean -- and just -- just like I said, I'm one example of a family that fishes. But out of our family, all of us fish, all of us take care of the fish, all of us are planning for the future and all of us live off of that fishing income.

In fact, because of the tribes working with the states to rebuild salmon runs, we -- we're one of
the successful families, and we have just opened up what we call Brigham Fish Market in Cascade Locks two years ago. If we hadn't had fish as part of our income or part of our livelihood, this would not be possible; but at the same time we are also like some of the fishermen that Stuart talked about, over the bank sets. That's how we made our living. And the process is that we have ceremonial fish first, where we have our traditional gatherings to share the salmon, and then the subsistence fish, where we catch fish for ourselves and for our families and for other tribal people, and then the commercial.

So subsistence is generally in the spring, and then the summer -- or ceremonial is generally in the spring where we catch all our fish to put it away for traditional reasons. And then for -- then the summer is subsistence and then the fall is the commercial. And that's when we -- that's why the big difference in the nets, but it's a very important part of our livelihood.

JUDGE NOBLE: You mentioned the ceremonial importance as well. Could you explain to the council briefly about the cultural importance of salmon annual fish.

THE WITNESS: Annually, we have ceremonies for salmon. I mean, each tribe has what we'd call a --
well, there's a Salmon Feast on the Columbia River which is held, we like to say, generally the first weekend in April, but it's when the salmon come. And then it's the Root Feast and the Huckleberries -- oh, I forgot our Celery Feast is in February, but all of those feasts are where we are giving thanks to our food returning, but we also are sharing that food with our community for it coming back.

But ceremonial is not only for the first foods returning, but ceremonies are for weddings, for namegivings, tribal members receiving their Indian name, and then also for services and rejoinings. Because once you've lost a family member, you're not supposed to participate in activities for a year, and then generally within a year, or up to a year, people will rejoin so they can participate in traditional activities again.

JUDGE NOBLE: And are you familiar with the term "first foods," I think it is?

THE WITNESS: Yeah, yeah.

JUDGE NOBLE: Could you -- is salmon part of that concept?

THE WITNESS: It is very much. Our first foods are water, salmon, big game, roots and berries. For the Umatilla tribe, we've taken a whole different approach on planning for our first foods, in that we are
BRIGHAM

now looking at our Department of Natural Resources, where when they look at land management for grazing, for hunting, they look at what impacts it has to our salmon and to our big game.

And then for our planning department, which is the zoning part and for grazing, those types of things, they look at the impacts to our salmon and our big game and our roots and berries.

So our first foods are things that are very important to us. In fact, our treaty of 1855 would not have been signed if it hadn't been guaranteed access to our first foods so that we can practice our culture, continue our way of life and plan for the future.

JUDGE NOBLE: Thank you, Ms. Brigham.

Questions based upon council questions?

MR. JOHNSON: None, Your Honor.

MR. HALL: No further questions, Your Honor.

Thank you.

JUDGE NOBLE: Ms. Brigham, thank you very much for your testimony. You are excused as a witness.

THE WITNESS: Thank you. And I apologize for being emotional, but I didn't expect it.

JUDGE NOBLE: Not necessary. Thank you.

All right. Am I understanding correct that we have a 1:00 phone call?
your right hand, please.

(Witness sworn.)

JUDGE NOBLE: Thank you. Please proceed,

Mr. Hall.

MR. HALL: Thank you, Your Honor.

AUDIE HUBER,

having been first duly sworn,

testified as follows:

DIRECT EXAMINATION

BY MR. HALL:

Q. Audie, could you state your name and spell it for the record, please.

A. My name is Audie Huber, A-u-d-i-e H-u-b-e-r.

Q. Thank you. And, Audie, I've known you for a number of years. You are the fastest speaker I have ever met. And so for this proceeding, we're going to work -- and we might need you to slow down for the court reporter. Thank you.

A. Glad to see that the person with the tranquilizer dart in the back of the room is not necessary.

Q. Audie, did you file written direct testimony in this proceeding?

A. Yes, I did.

Q. Thank you. And do you have any clarification to
that testimony?

A. Yes. I would like to clarify that in my testimony I identified that there was an incident where a rock had rolled down a hill and struck a train causing a diesel leak. Further review of documents indicate that the rock had rolled down the hill, was on the tracks and struck by the train causing the diesel spill. The remainder of the facts were -- remain the same. The train drove on and spilled over several miles.

Q. Thank you. So with that clarification, do you adopt your testimony under oath today?

A. Yes, I do.

Q. Thank you. Audie, are you an enrolled tribal member?

A. Yes. I'm a member -- an enrolled member of the Quinault Indian Nation.

Q. Thank you. Could you briefly outline your qualifications.

A. I am currently -- I should start over. I began work in -- at the Confederated Tribes of the Umatilla Indian Reservation after my first year of law school in the summer of 1995. At that time, I interned in the cultural resources protection program as a policy analyst. I worked closely with the archaeological staff. I worked there the following two summers, the
summer of '96 and the summer of '97. After I graduated law school in 1998, I began work as a policy analyst in cultural resources program. I -- shortly thereafter, I assumed the position of acting deputy director of DNR, and two years after that, I became intergovernmental affairs manager, where I work closely with our ecological resource staff on cultural resources and treaty rights protection issues.

Q. Thank you, Audie. How has your work with the tribes for the last almost 20 years dealt with archaeological cultural resource and treaty rights issues?

A. Well, I work with a number of federal agencies, making sure that the tribes' treaty rights and cultural resources are protected. I review projects with federal, state and private entities and evaluate whether treaty rights and cultural resources will be impacted and then work on ways to mitigate those impacts.

Q. Thank you. Are cultural resource and treaty right issues closely interconnected?

A. Yes. Treaty rights are the exercise of rights that the tribes have had since time immemorial. Cultural resources, the archaeological sites, are associated with those archaeological -- with those treaty rights.
The archaeological sites are usually associated with the gathering of food because people need to eat. So you'll find a lot of archaeological sites -- sorry, I will slow down. So you'll find a lot of archaeological sites associated with hunting, fishing and gathering locations, as well as other cultural uses.

Q. Thank you, Audie. Have you had much interaction with the railroads that have tracks along both sides of the Columbia River?

A. Yes. I've worked extensively with Union Pacific Railroad, as well as working with Burlington Northern, on -- to a lesser extent. I've worked on a variety of permit review projects of railroad developments, both on the Columbia and on reservations. I've worked on habitat restoration projects, treaty right access issues, spill response and spill response planning. Let's see. I think that more or less covers it.

Q. Okay. Thank you.

A. Oh, actually I also worked with the Federal Railroad Administration, meeting with them and corresponding with them regarding regulation of railroads.

Q. Thank you. Audie, have you reviewed anyone else's testimony in this proceeding?

A. Yes. I reviewed Jo Reese's testimony.
Q. And do you have any observations about her testimony you would like to share with the council?

A. Yes. In reviewing her testimony, I was struck at how little mention there was of archaeological resources along the Columbia River. The testimony itself made a distinction between archaeological resources and historic resources. It mentioned twice that she had reviewed historical resources in Washington but had reviewed historic and archaeological resources in Oregon. This struck me because along the river, along the Columbia, is some of the most dense archaeological sites in Washington and in Oregon, specifically, Celilo and Wishram are one of the most longest, continuously occupied sites in the northwest in America at over 10,000 years.

Q. Thank you. Do these archaeological sites extend beyond Wishram and Celilo along the Columbia River?

A. Yes. This was a -- this was --

MR. JOHNSON: Objection, Your Honor. I'm sorry. Your Honor, the scope of this testimony goes beyond -- certainly beyond the scope of Mr. Huber's testimony in his prefiled testimony, as well as the statement of his qualifications regarding archaeological resources, to which there was no foundation for his expertise provided related to archaeological resources.
MR. HALL: Your Honor, may I respond?

JUDGE NOBLE: Yes, please respond.

MR. HALL: Thank you, Your Honor. If I heard Mr. Audie -- Mr. Huber correct, and we can have it read back, I think he's testified that for the last almost 20 years, he's worked with the archaeological staff at the Columbia River regarding projects -- regarding protecting treaty right resources, cultural resources, from impacts of projects that might disturb these archaeological sites.

And this is -- as far as going beyond the scope of his prefilled testimony, I'm sorry if this wasn't clear, this is rebuttal testimony to the prefilled direct testimony of Ms. Jo Reese.

JUDGE NOBLE: I will allow the testimony. And as far as foundation, I find that this witness has sufficient foundation, based upon his experience and education, to testify in accordance with the questions that have been asked so far.

MR. JOHNSON: Your Honor, if I may, just to preserve, again, latitude in our rebuttal case to call witnesses now in response to this testimony. We decided not to call our witness related to this because there was no prefilled testimony from the other side. And so now that they're presenting testimony with regard to
these issues, we would ask for latitude in our rebuttal case to respond.

JUDGE NOBLE: Thank you, Mr. Johnson. Latitude is in the nature of rebuttal testimony because it's necessary to be able to respond. So, yes, you'll have such latitude. Hopefully it won't take up too much time.

MR. JOHNSON: Well, we know we have two days to get it done.

JUDGE NOBLE: Thank you.

Please proceed, Mr. Hall.

MR. HALL: Thank you, Your Honor.

BY MR. HALL:

Q. So, Audie, how many of these recorded archaeological sites are there along the Columbia River near the rail lines?

A. There are thousands of sites up and down the Columbia River. For instance, in Klickitat County, there are over 500 sites that have been recorded within a half mile of the Burlington Northern line.

Q. Audie, in paragraph 11 of her testimony, Ms. Reese discusses her company's effort to compile map books of archaeological and historic resources for the rail transportation corridor. Do you have any comment on those map books?
A. Yes. I reviewed those maps. Those maps have a half-mile buffer around the Burlington Northern line, yet only identified 44 sites within a half mile of the BNSF line. Additionally, they reference historic resources, once again creating uncertainty about whether they considered archaeological resources.

My own research and work with our staff have identified on an order of magnitude more archaeological sites in that particular area. Like I said, Klickitat County area -- the area along here contains Silo Village, one of the most -- longest most continuously occupied sites in North America. It's 10,000 years of occupancy. You would expect to find much more archaeological materials and recorded sites in association with that.

Q. So, Audie, just for clarity's sake, when you say the report only identified -- when you say Ms. Reese's work only identified 44 sites, are you talking about a specific county?
A. Yes. In Klickitat County.
Q. And --
A. I just used that word.
Q. Okay. And can you remind us how many sites you've identified in Klickitat County?
A. Around 550 within a half mile of the Burlington
Northern line.

Q. **Do you have any thoughts on the difference between the numbers?**

A. I really can't tell. Like I said, in her prefiled testimony, she indicated that she looked at historic resources on the Washington side and historic and archaeological resources on the Oregon side. Did I say that backwards?

Q. No.

A. Okay. There are various possibilities of why only -- there are only 44 sites, including only looking at eligible sites in Klickitat County, there are only about 40 sites that have been determined formally eligible for the National Register of Historic Places in the Washington Heritage Register, but I can only speculate. All I have are the numbers that were in the report. The methodology was extremely unclear.

Q. Thank you, Audie. **Do you have any other observations regarding Ms. Reese's testimony?**

A. Yes. In paragraph 16, I believe it was, the last paragraph in her prefiled testimony, it indicated that she believed that normal operations of the railroad would not impact archaeological or historic resources along the corridor, and she believed that in the event -- unlikely event of a spill, that the railroad
had engineering instructions that could mitigate impact -- any impacts to archaeological sites along the route. I don't know of any burning train that will respond to an engineering instruction or a stop-work order.

Q. Thank you, Audie.

MR. HALL: Your Honor, with your indulgence, I would like to use two demonstrative exhibits with Mr. Huber for him to display some of these resources and their location along the rail track. They have been shown to opposing counsel and at the time they were shown I understood there was no objection.

MR. JOHNSON: No objection.

JUDGE NOBLE: I would like to have them marked as exhibits, unless they're something that can't be left with the council.

MR. HALL: I'll lay a foundation and then asked for them to be marked.

Can we do that quickly?

Ms. Mastro, could you put on screen Huber petroglyph map, please.

JUDGE NOBLE: Could I ask one other question?

MR. HALL: Yes.

JUDGE NOBLE: This isn't something that
needs to be kept confidential?

MR. HALL: This one is not, Your Honor.

JUDGE NOBLE: Thank you.

MR. HALL: I appreciate the question.

BY MR. HALL:

Q. So, Audie, does this map look familiar to you?

A. Yes, it does.

Q. Did you participate in the creation of it?

A. Yes.

Q. Okay. Can you describe for us what it displays?

A. This map displays various resources along the Columbia. This is specifically in Klickitat County. Right here is the Dalles Dam, shortly upstream from there is Horsethief Lake State Park. At Horsethief Lake State Park is She Who Watches, a rock image on -- at the park. Shortly further upriver is KL77. I gave a broad border around this site as to not identify it specifically so as not -- the risk release itself.

Q. And, Audie, what is KL77?

A. KL77 is an archaeological site that was discovered when it was impacted by the operations of Burlington Northern Railroad when they were grading their right-of-way a few years back. Specifically, it's several burials in association with the Wishram Village which is around Celilo. It was impacted by railroad
crews. It was identified by a property -- nearby landowner, and was subject to a damage assessment for cultural reasons.

MR. HALL: Ms. Mastro, can you put on the screen Huber photo, please.

JUDGE NOBLE: We will have to give these numbers and Ms. Mastro will be able to tell you what number will be appropriate.

MR. HALL: Thank you, Your Honor.

BY MR. HALL:

Q. Audie, do you recognize this photo?

A. Yes. This is the photo of She Who Watches, a rock image that is at Horsethief Lake State Park. This area is within about 120 feet of the Burlington Northern line and is in association with several other rock images along that assault outcrop, as well as other rock images that have been placed there in the park by the corps of engineers that have been moved from along the river prior to inundation of the Dalles Dam.

Q. Are some of the other rock images closer to the railroad?

A. Yes. They're approximately a hundred feet and a little bit less.

MR. HALL: At this point I will stop, and I would move to offer this exhibit into evidence.
Ms. Mastro, I think the next number is 5331. Does that sound right?

MS. MASTRO: That's correct.

MR. HALL: And the exhibit will consist of the two pages, the map and the photo.

JUDGE NOBLE: Just one number. 5331, is there an objection to 5331?

MR. JOHNSON: No objection.

JUDGE NOBLE: 5331 is admitted.

BY MR. HALL:

Q. Audie, what is the importance of cultural resources, such as rock images, to the tribes?

A. Cultural resources represent the concrete, physical evidence of the tribes' presence and relationship to their tribal ancestors here. These are the sites that represent the cultural record of the tribes being here since time immemorial. These are the tribal members' sensitive place. This is where they've been. This is where their ancestors did the same things they did; gathering food, hunting, providing for their families. Rock images, specifically, often convey a sacred nature to members, but archaeological sites themselves are that physical connection to the land that they can see where their ancestors were and what they did.
Q. Thank you, Audie. So we've talked about the number of archaeological sites along the rails and you've given us two specific examples with this exhibit. You haven't talked about the types of risks that derailments and spills pose to these types of cultural and archaeological resources. Can you share with the resource -- some information about that?

A. Yes. Spills, particularly of crude oil, can result in contamination of materials, contamination of the ground, and often spills require excavation and removal of the contaminated soil. Most archaeological sites are underground and previously undisturbed, many of them are undisturbed. In the event that there's a spill and a removal action, that has the strong potential to impact archaeological sites.

Also, contamination of the archaeological material, such as wood and other type of materials, can prevent the site from being analyzed, making it hazardous to both the archaeologists and contaminating the cultural resources themselves making them incapable of being, say, carbon dated.

Q. And how about fires, Audie? Do you have any thoughts on fires?

A. Yes. Fires are particularly damaging to surface deposits of archaeological materials. They can damage
even the salt. Oil fires, with their intensity and duration, pose a particular problem and will have a strong potential of impacting archaeological resources, including resources such as She Who Watches.

Q. I have one question about identification of these sites along the rails. I think you used the word "recorded," but I'm not sure. Did you use the word "recorded sites"?

A. I may not have. But those 550 sites -- or over 500 sites I referenced in Klickitat County, those are sites that have been recorded and are on the database maintained by Washington Department of Archaeology & Historic Preservation. And I would also like to mention something that I forgot to mention, and that is, I discussed how important cultural resources are to tribal members about their -- the reference to their history, their connection to the place. But these are -- these are unique resources that are priceless and irreplaceable. They cannot be restored in the event that that site is excavated. The best they can do is data recovery, and that takes away that -- the materials in the ground, the in situ presence that tribal members can feel and see when it comes to their connection to this spot.

Q. Thank you, Audie. One last question. At
paragraph 8 of her testimony, Ms. Reese talks about contacting and coordinating with tribes. To your knowledge, did she ever contact the Umatilla tribe?

A. No.

MR. HALL: Thank you. No further questions at this time, Your Honor.

JUDGE NOBLE: Thank you.

Cross-examination?

MR. JOHNSON: No questions.

JUDGE NOBLE: Council questions?

Mr. Shafer?

MR. SHAFER: Mr. Huber, thank you very much for your testimony today.

Much has been said in our hearings here on the Mosier event. Were there any archaeological sites that were damaged as a result of that event, the derailment in Mosier, or if not damaged, are there any at risk or even any in close proximity?

THE WITNESS: I understand that there was a village site that had been identified, but I don't think that -- or actually, I didn't -- didn't get all the information on it. I was unable to respond to that spill because I was off in DC at the time, but I was monitoring it through the calls and the Yakama Nation had cultural resource staff on the scene. I believe
they recently identified groundwater contamination, and I think that has the potential to impact archaeological sites that are nearby. There are -- as far as I know, I believe there are archaeological sites near that scene.

MR. SHAFER: Okay. Last question, and given the significant amount of rail traffic up and down the Gorge, does the DNR track or keep inventory of damage to sites as a result of train traffic?

THE WITNESS: In the event -- like KL77, it was identified as being impacted. There was a damage assessment, and those reports are on file with Washington Department of Archaeology & Historic Preservation. There was another spill of hydraulic fuel by UPRR around the Cascade Locks; it was earlier this year, late last year. In the event there is an impact to an archaeological site, they do do damage assessments, or they tend to.

MR. SHAFER: And since records have been kept, I mean, how -- could you give us an approximate idea of how many incidents have occurred that have affected archaeological sites?

THE WITNESS: I can't give you a good number, but I do know that the railroad -- their operations are not subject to Section 106 of the National Historic Preservation Act. So they -- they're
not under an obligation to survey their land for archaeological resources. It's typically, projects will result in requirements of surveys, but the railroad themselves do not typically survey their -- the entirety of their lands for these resources.

MR. SHAFER: Thank you.

JUDGE NOBLE: Any further questions, to my right? To my left?

Could I just ask you, Mr. Huber, if you could just describe the kinds of things that are typically found at these archaeological sites.

THE WITNESS: Most often they're lithic scatters. I mean, there's lots of burials along the river, but lithic scatters are -- the technology they were using was spear points and made out of obsidian and other salt, and that tends to stick around, unlike bone which tends to decay. So a lot of archaeological materials are -- when you get past a thousand years, tend to be stone tools.

JUDGE NOBLE: Thank you.

THE WITNESS: Sorry. But, yes, a lot of stone tools, but there's also -- they'll find fire-cracked rock, which indicates a house pit where people were living and cooking. You could find char from fires for cooking, and any nature of stone tools
HUBER

that were used for nets, weights and spear points, a
variety of materials.

JUDGE NOBLE: Can you -- what can you learn
from the placement -- you mentioned that the placement
of these archaeological resources is important. Could
you explain that?

THE WITNESS: Well, their existence in situ
I believe is -- pertains to a connection between tribal
members and their history. This is where their
ancestors lived, died, gathered food, supported
families, raised families. Is that your question, or
was it more about what can we learn from these in situ?

JUDGE NOBLE: You were saying that when they
are moved that their value has been diminished or
destroyed, something to that effect.

THE WITNESS: Yes. When -- a lot -- one of
the ways that archaeologists typically mitigate impacts
to sites is data collection. They dig up the site and
take everything off and then curate it. That diminishes
the value to the tribal members by removing that --
those materials that are a physical connection to the
site of their ancestors. Similar in a way -- I've been
involved in the Kennewick Man case now for 20 years next
month, and -- where we've spent many years and many
resources trying to get these remains and artifacts back
to where they were from in order to restore to the tribes that identity, those -- their ancestors get back in the ground where they were from.

JUDGE NOBLE: And what did you mean by "adjacent to the railroad"?

THE WITNESS: Oh, regarding the presence of archaeological sites or --

JUDGE NOBLE: Yes.

THE WITNESS: -- the number of archaeological sites?

JUDGE NOBLE: I'm talking about distance. What would you consider adjacent?

THE WITNESS: Adjacent, the -- take She Who Watches, for instance. She's about 120 feet from the railroad tracks. The numbers of archaeological sites I discussed earlier were within a buffer that was in the maps of Reese. The 500 artifacts was within a buffer of a half mile.

JUDGE NOBLE: Thank you. Questions based upon council questions?

MR. JOHNSON: None, Your Honor.

JUDGE NOBLE: Mr. Hall?

MR. HALL: None, Your Honor.

JUDGE NOBLE: All right. Thanks very much, Mr. Huber. You are excused as a witness. Thank you.
very much for your testimony today.

THE WITNESS: Thank you.

JUDGE NOBLE: Do we have another witness?

MR. LOTHROP: Yes, Your Honor. Your Honor, I would like to call Mr. Blaine L. Parker to the stand.

JUDGE NOBLE: Mr. Parker, would you raise your right hand, please.

(Witness sworn.)

JUDGE NOBLE: Thank you. Please be seated.

You may proceed.

MR. LOTHROP: Thank you.

BLAINE L. PARKER,

having been first duly sworn,

testified as follows:

DIRECT EXAMINATION

BY MR. LOTHROP:

Q. Blaine, can you spell your first and last name for the court.

A. Yes. B-l-a-i-n-e, Parker, P-a-r-k-e-r.

JUDGE NOBLE: Mr. Lothrop, you probably want to identify yourself.

MR. LOTHROP: I'm sorry. Thank you, Your Honor. My name is Robert Lothrop. I am an attorney representing the Columbia River Inter-Tribal Fish Commission.
BY MR. LOTHROP:

Q. Blaine, you and I have known each other for a long time, but I've got to ask you some questions about your background.

A. Ages.

Q. Where are you employed and in what capacity?

A. Rob, I work at the Columbia River Inter-Tribal Fish Commission in Portland, Oregon. I am employed as a fisheries biologist and I've been there since 1991.

Q. Thank you. What materials did you review in preparing for your testimony today?

A. I reviewed the draft EIS, the Challenger written testimony and video, as well as Dr. Taylor's video and written testimony.

Q. Were you present for Mr. Bayer's testimony?

A. Yes, I was.

Q. Thank you. Do you have any corrections to make to your testimony, which is Exhibit 5207, that you would like to make?

A. Yes, I would. On page 7 of the testimony -- of my written testimony, there was a clerical error that starts on sentence 10 and ends on sentence 12. Starts out, "Some estimates." It's that sentence. What it should say is that the increase in shipping from the proposed activity would approximately 50 percent --
LOTHROP / PARKER

would increase -- excuse me -- would be approximately
50 percent of the total ballast discharge that currently
occurs in the Columbia River downstream of Bonneville
Dam, not the volume of the river.

Q. Thank you, Mr. Parker. With that change in
Exhibit 5207, do you adopt that testimony under oath?
A. Yes, I do.

JUDGE NOBLE: Mr. Lothrop. You might not
have been here, but the testimony -- the prefiled
testimony is being handled the same as the transcript.
Although this has been given an exhibit number
previously, it won't be an exhibit, it will be part of
the testimony.

MR. LOTHROP: Thank you, Your Honor.

JUDGE NOBLE: So we will withdraw it as 5207
and put it in the pile with testimony.

MR. LOTHROP: Okay.

JUDGE NOBLE: Thank you.

BY MR. LOTHROP:

Q. And, Blaine, you still adopt this testimony --
A. Yes, I do.

Q. -- with the correction? Thank you.

Please describe your professional experiences at
the Columbia River Inter-Tribal Fish Commission.

A. I began at the commission in 1991. Initially, I
worked on a predator-prey project, also commonly known as the Northern pikeminnow project. I supervised -- or assisted in supervising eight different crews that fished at mainstem projects throughout the Columbia and Snake Rivers to remove pikeminnow, which were eating juvenile salmon near the dams. Soon after that, about -- I did that for about three or four years. And after that, I transferred and began working on white sturgeon, and have worked actively on white sturgeon research and management, habitat, disease investigations and a variety of other things with white sturgeon since 1994.

In addition to that, I have worked on Pacific lamprey in the mid to late '90s, with regard to movements, tracking studies, data collection and overall -- just increase in the knowledge about Pacific lamprey as it relates to tribal and cultural aspects of the use of that fish for the tribes that I work for. We worked with other co-managers on maintaining and actually enhancing productions for the Pacific lamprey at that time.

In the late 1990s, I began working on invasive species. It was fairly uncommon at that time, but it was becoming an issue on the radar, primarily because of aquatic zebra mussels that had been introduced to the
Great Lakes complex by an inland shipping from overseas in Europe and parts of the Middle East.

I became active within that arena on behalf of the tribes that I worked for via the commission. I participated and still participate in regional forums, such as the Columbia Basin 100th Meridian working group that's based in the Portland area.

I served on the Oregon invasive species council for a couple years in the early 2000s when it was created. I currently sit on ISAC, which is Invasive Species Advisory Committee. This is located in Washington, D.C., and it is a subgroup of NISC, which is National Invasive Species Council. During these times, I was still working on white sturgeon.

Within the last four or five years, I became active in working with tribal and state comanagers on addressing the issues of perseverate predation on juvenile salmonids from birds, primarily Caspian terns and double-crested cormorants. So that's an overview of what I've been active in in the last 20 years.

Q. Thank you, Blaine. Can you describe some of the field research activities that you have conducted and, in particular, that your -- those activities and your experiences on the Columbia River.

A. As I mentioned earlier, I worked on the
predation project. Those activities occurred on the Columbia River but on the mainstem dams proper. We had field crews out there from the spring through the summer and the fall. We worked days and nights in a variety of weather and conditions. A lot of the sturgeon work that I participated in the past has been directly on the river, utilizing boats and fishing gear to either sample or collect sturgeon. Generally speaking, we would work -- we work year-round with white sturgeon. We conduct winter surveys with tribal fishing crews for population assessments, as well as overall species composition of what's out there in the river system along with white sturgeon utilizing gillnets, set lines and a variety of other methods and gears.

We've been out there when boats were freezing up. We've also been out there when the wind's blowing 60 miles an hour and 100 degrees. So I've kind of seen and done it all. I've worked on the Columbia from the estuary all the way up to the Rock Island Reservoir, which is near the town of Wenatchee, Washington, and up the Snake River to the confluence of the Snake and the Salmon River in Idaho.

Q. Blaine, from your personal experience, what is the Columbia River like when the wind is blowing 60 miles an hour?
A. It's like the North Sea. It's blowing. The waves are really being ripped apart by the wind. It's very, very difficult to even keep your footing in the boat. We try not to be out there, but every so often, we were out there and the wind comes up. We know it's coming, but we have to get our gear out of the water. It can be bitterly cold in the wintertime; ice formation on equipment as well as boats. Again, not something we advocate or -- we normally try not to be out there, but sometimes we have to get out there to remove equipment.

And it can be very, very hot and still, at which time you can see all sorts of different conditions in the river. You can see clear down to the bottom, in some places, and you can see weed mats and fish swimming. It's always -- it's always a new scene every time you go out on the river.

Q. Thank you. I would like to ask you some questions about invasive species and ballast water discharges. Why would you generally be concerned about invasive species in the Columbia River ecosystem?

A. The Columbia River is currently an ecosystem in peril. Mainstem -- hydro development has taken a once free flowing system and created a series of lakes and reservoirs. Many of the hydrologic features that created the Columbia and also the species that were
involved with it, no longer exist.

In addition, it's made it a habitat for invasive species, anything from zooplankton to invertebrates and even invertebrate fishes. Plants, other animals, such as nutria, Spartina grass, millfoil in the water, all these -- all these animals, plants and microorganisms change and further reduce the overall vitality of the Columbia River. We don't need any more.

Q. So the testimony of Bayer, Gunderson and Roscoe describe measures used to address organisms found in ballast water. Can you summarize those types of measures?

A. The two types of measures either consist of mechanical or chemical treatments in the ballast. The ballast is water, of course, that is taken on -- if a ship is going to come into port and pick up a load of grain or other cargo, it needs that ballast to maintain the equilibrium of the ship. So they pull that water from the port of origin, and they can either treat that water with chemicals or some sort of filtration or, more commonly, they do what's called open water exchange or ballast water exchange, generally done 50 miles offshore, in which the tanks that contain ballast are opened and water is exchanged with the open ocean for the original port-of-origin ballast water, which may be
salt or it may be freshwater or it may be a combination thereof. The goal of this is to flush out as many of the microorganisms and/or other -- and other organisms that are in the water of the water of origin. By transferring that water out, you change the salinity and other chemical factors of the water and most of the organisms, if they're of a freshwater, brackish water nature, most likely will die or be washed out to sea.

JUDGE NOBLE: Mr. Parker, you need to slow down.

THE WITNESS: Sorry about that. It's that Coke I had at lunch, I guess.

BY MR. LOTHROP:

Q. So, Blaine, is this -- are these methods perfect?

A. They're pretty good, but they're not perfect. There's numerous reports and information, samplings, just that animals do survive this exchange and federal regulations allow a minimum of 10 organisms per cubic meter to survive, but at the same time having evidence that it was actually exchanged.

Q. Blaine, you said "minimum." Did you mean maximum?

A. Minimum of 10 organisms per cubic meter.

Q. A residual of 10 --
A. Residual per cubic meter. So large ships will have many thousands of cubic meters of water.

Q. Shifting topics a little bit -- well, let me ask one more question about invasive species. Are there other river and estuary systems on the West Coast that have had significant problems with invasive species?

A. Yes. The one that comes to mind is the San Francisco Bay system with the San Joaquin and Sacramento Rivers that flow into the bay. At last count, there was over 280 non-native organisms that are currently found in the San Francisco Bay and surrounding waters.

Q. Okay. Shifting subject matter a little bit. Mr. Challenger offered examples in his written and oral testimony about salmonid fish species and potential effects. Your testimony addressed non-salmonid species. Could you go into your concerns for some of the non-salmonid species that might be affected by an accidental oil release?

A. Well, three groups are -- three species of fish come to mind. That would be Pacific lamprey, white sturgeons, as well as eulachon, or often called smelt. Those three species, they're all either resident or anadromous fish and all have varying degrees of residents in the river, but all would be very subject to
impacts from oil.

Q. So let's take eulachon or smelt as a first example. Can you describe the life history of smelt for the council and address what life stages might be particularly sensitive to an oil spill?

A. Eulachon are a fairly small marine fish. They are anadromous, meaning they spawn in freshwater. But they spend about 95 to 98 percent of their time in the ocean. But when they do come into freshwater, it's to spawn. The juveniles -- the eggs are laid over gravels in large rivers, such as the Cowlitz River. They're fertilized and they hatch in a fairly rapid manner, within a few days, depending on the temperature, and then they drift to sea. Were some accident to occur during the smelt -- the smelts' spawning period of time, it would impact both adults that had returned of several year classes, as well as the outgoing juveniles that were resulting from that particular spawning event of that year.

Q. Thank you. I think this has been discussed previously, but are eulachon listed under the Endangered Species Act?

A. They are.

Q. You mentioned lamprey. Can you please describe the life cycle of lamprey and the status of lamprey in
A. Pacific lamprey are the second most longest species of fish in the Columbia River. They'll live up to approximately 11 years, the bulk of which is spent in freshwater. Their life cycle is actually very similar to salmon. Adult returning lamprey enter the river systems in the spring. They will move to their spawning areas and overwinter and spawn the following spring, digging reds that are smaller and more cylindrical than you would see from the salmon. Both the adults, soon after spawning, die. The juveniles, upon hatching, tend to drift down into quiet areas that have very fine silts and sediments and that's where they spend the next five to seven years of their life, depending upon the location, actually living in the sediments. They filter feed on drifting organic material that comes downstream, using a fleshy fold at their head. They're blind. They look more like a leech at that age, at that stage of life. Upon -- and as they tend to grow larger in size, every year as they move downstream and into a larger more dynamic habitat as cobble and larger substrate size, they outlie great in the late winter, early spring. They go through a process where they've actually -- they metamorphose into an organism that now looks like a juvenile lamprey, going from what looks
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like a leech or a worm into an animal that actually has
gill pores and eyes and a functional disk. They become
very silvery, like a juvenile salmon, and they tend to
follow the river current downstream like juvenile
salmon. They don't actively swim downstream. They just
kind of drift downstream. They tend to drift deeper in
the water column and make their way out to the ocean,
where they will rear for several years, parasitizing
fish and other organisms in the ocean, before then
returning to spawn and dying, completing the life cycle.

Q. So a few more questions about lamprey. What
life stages of lamprey might be particularly sensitive
to an oil spill?

A. All freshwater life stages would be very
sensitive to an oil spill. The juveniles, of course, as
I just mentioned, are actually living in substrate.
They could be subject to complete coverage of, you know,
oil that has, you know, settled in or is aggregated and
covered their rearing areas. They could physically
ingest the oil in their feeding processes. Adult
lamprey, either in their migration stage or their
overwintering stage, they tend to spend a lot of time in
nooks and crannies in the rocks, resting and waiting for
their spawning in the spring, would also be subject to
impaction and -- just through basic respiration of water
if the oil was to be moving downstream to wherever the animals were living. They don't tend to actively move out of those areas. They tend to settle in those areas for long periods. So contact -- direct contact would be one of the concerns.

Q. So in his testimony, Mr. Challenger mentioned that he worked on remediating the effects of a herbicide spill on Fifteenmile Creek. Are you familiar with where Fifteenmile Creek is?
A. Yes, I am.

Q. And where is that?
A. Just on the eastern edge of the Dalles. So you have the Dalles in Portland.

Q. And it's a tributary flowing --
A. Flowing into the Columbia River.

JUDGE NOBLE: Mr. Parker, could you talk a little slower, please, for the court reporter.

THE WITNESS: Thank you.

JUDGE NOBLE: And he would also like you to speak a bit louder.

THE WITNESS: Okay.

BY MR. LOTHROP:
Q. Are lamprey present in Fifteenmile Creek?
A. Yes, they are.

Q. Can you describe the remediation that was done
in Fifteenmile Creek and whether that was intended to address lamprey?

A. The remediation that was done was done primarily to address issues for steelhead passage and spawning. The remediation specifically consists of removing an old weir that was downstream of the existing fish ladder which is still there today. The weir had fallen in disuse; it was more of a blockage. And it was removed as part of the remediation process for the impacts of the pesticide spill that occurred in the creek. And at that point, it was completed in the fall of the same year, which is fall 2000, and -- but no work was specifically done for Pacific lamprey. It was only for salmons.

Q. Was the chemical found in lamprey in subsequent years?

A. Yes, it was. A recent survey of a number of tributaries in the Columbia Basin for juvenile lamprey and pesticides that may or may not be occurring in those habitats was conducted, and they did do sampling in the lower area of Fifteenmile Creek and found the same chemical, oxyfluorfen, I believe is what it's called, and that was present 12, 13 years after the area had been remediated and cleaned, and it was found both in the substrates and the sediments as well as the juvenile
lamprey that were found in that same area.

Q. Thank you. Let's talk a little bit about the life history of sturgeon in the Columbia River. Can you describe the sturgeon life history, please.

A. Sturgeon are the largest and oldest, longest living fish in the Columbia River system. They're endemic to the Pacific Coast of the US and Canada. Sturgeon may live to be in excess of 100 years of age and grow over 13 or 14 feet in length and weigh over 1,000 pounds. They are the iconic fish of the Northwest, from my perspective, because I work with them, I guess. But they're an amazing animal. But they're an animal that has a very long timespan. Juvenile sturgeon -- or in order to become an -- adult fish tend to -- or mature males at about age 15 to 20 and females tend not to spawn until they're at least 25 or 30 years of age before their first spawn. A female may only spawn on an average of every two to five years for their life. Spawning occurs generally in large, high-velocity turbulent areas. Historically, that would've been downstream of like Celilo Falls or other near gorge areas in the Columbia River and Snake River systems. Today it often occurs primarily downstream of mainstem projects in the spring. They spawn in water temperatures that range from
the lows -- I'm -- in centigrade, 12 to up to maybe 17
to 18 degrees C, which is mid 50s to the low 60s
Fahrenheit. Spawning is a -- somewhat of a communal
affair. Females will be followed around by a number of
males and as she releases her eggs, those eggs are
fertilized by the males. The eggs, upon contacting
freshwater, become very, very sticky and adhesive. And
as they drift down to the milt, they're fertilized.
These fertile sticky eggs will then drift down to the
bottom of the river and stick to logs, rocks, whatever
they contact. They incubate for a week to ten days,
depending on water temperatures. The juvenile sturgeon
then hatch, not looking like a sturgeon, but looking
like little tadpoles. And similar to lamprey, they go
through a metamorphosis over the next six weeks where
they will gain -- grow fins, their mouth will develop
and they will begin feeding. At about six weeks of age,
they're about an inch long and look like a miniature
adult sturgeon. And they will spend the bulk of their
life rearing right on the river's bed, feeding on a
variety of organisms of which changes as they grow
larger. They'll start on very small silk plankton and
other critters and as they get large, they'll transfer
over to small clams, crayfish, other fishes. And as
they become adults, they will feed on large invertebrate
fish, clams and a variety of other organisms. The ones in the estuary will feed on shrimp and clams. They pretty much can eat whatever they want. But they don't have any teeth. They just inhale it. But, again, they're feeding on the bottom, and a lot of times you'll catch sturgeon and their mouth area is colored the color of the sediment from them rubbing around in the sediment, feeding on clams or shrimp or whatever other organism they might be feeding on in the location.

Q. So, Blaine, remind you to slow down a little bit.

And can you describe some of the concerns you might have about how an oil spill would affect sturgeon in its life history?

JUDGE NOBLE: Mr. Parker, can you do it slowly?

THE WITNESS: We'll try.

A. Juvenile sturgeon or incubating eggs would be impacted from direct contact with oil, potentially being either suffocated or chemically impacted from the oil. Eggs are very, very delicate. I have spawned sturgeon and there's very -- you have to go through a number of protocols to make sure the eggs remain fertile and viable even in a sterile hatchery situation.

Eggs in the Columbia are often subject to
temperature changes and impaction debris in the water. So eggs would be a concern for direct contact, as well as even aggregations of oil and materials.

Juvenile sturgeon are very benthic-orientated. As I mentioned earlier, they're eating stuff off the bottom. But they're not particularly fussy about what they're eating. So they could easily ingest oil and, again, from a culture situation, they're a fairly delicate animal. You can -- they will look like large sharks when they're big. They're still very delicate and very easily lost.

At a small size, they're -- you know, the chemicals in oil would be a very difficult thing for their metabolism and their digestive systems to assimilate, although I've never fed oil to them. They didn't evolve with oil.

The larger fish foraging in the benthos, eating clams, other organisms that -- living in there would also be ingesting oil and having direct contact with those as well. They also feed in the water column, so they will feed on fishes, particularly near dams. So again, contact and ingestion would be my concerns.

BY MR. LOTHROP:

Q. Would sturgeon -- if oil persisted in the environment, would sturgeon be persistently exposed to
that oil?

A. Potentially they would be. Sturgeon do move around. They have home areas. They tend to spend large amounts of time in favored habitats. And if oil was in that area, they most likely would be -- they probably wouldn't leave that area unless it was really, really bad. But if there was settled amounts of it in the area, they would probably stay there.

JUDGE NOBLE: Mr. Lothrop, we're going to try something else this afternoon. We're going to try two short breaks.

MR. LOTHROP: Okay.

JUDGE NOBLE: And so I didn't want to interrupt your testimony, but I think we need to go off the record for ten minutes. We will come back at 2:15.

MR. LOTHROP: Okay.

JUDGE NOBLE: Thank you.

(Recess taken from 2:06 p.m. to 2:19 p.m.)

JUDGE NOBLE: We're ready to go back on the record.

Mr. Lothrop?

MR. LOTHROP: Thank you.

BY MR. LOTHROP:

Q. Blaine, also if you would speak with the microphone closer, I think that might be helpful to the
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reporter.

A. I'll try.

Q. So, Blaine, Dr. Elliott Taylor, at paragraphs 46 to 49 of his testimony, talks about oil particulate aggregates. Do you recall what types of particulates form these aggregates when oil is present in the water?

A. I'll just go with my memory as far as trying to find it.

Q. That would be fine.

A. Yeah. Both organic and inorganic particulates, meaning small pieces of material, would be the basis for forming those oil particulate aggregates -- or particles, excuse me. So bits of sediment, sticks, rocks, twigs, bits of organic plant material, all would help to form those particles.

Q. So you were here for the testimony of Kathryn Brigham?

A. Yes, I was.

Q. And she talked about aquatic vegetation. Are you familiar with aquatic vegetation in the Columbia River?

A. Yes, I am very familiar with aquatic vegetation in the Columbia River.

Q. Can you describe some of your experiences with regards to aquatic vegetation?
A. During our sturgeon sampling when we set out gillnets for juvenile sturgeon -- it's a process we call indexing where we go to the same site every year -- the nets have fairly small mesh, probably about -- maybe two inches, about half what you'd see in a chain link fence. And many times we will start to pull the net after it's been sitting in the river overnight and it's like it's locked to the bottom of the river because there's so much material that has been swept into that net.

As we pull it on the boat, the float line that has the corks, the bottom line which is weighted, or called the lead line, they tend to come together so they bag all that material. And as we bring that on board the boat, we're -- similar to what Kathryn Brigham was talking about, they were knocking the material out. We do the best we can, but we don't want to lose the fish and other organisms that we were trying to catch in the first place. So we bring the whole thing in the boat. And we're working on boats that are close to 30 feet in length, six or seven feet across, have sides that are several feet high, and we will fill the front half of that boat with aquatic material time and time again. Yeah, it's phenomenal how much material is out in that river.

Q. Does it vary seasonally? Could you just
describe the seasonal variation, if it does.

A. Yeah, it varies seasonally. Most of the plants tend to grow in the spring and summer and die back or senescence in the fall and through the winter to the root material that is in the sediments. In some places the plant material, particularly if it's milfoil, which also is an invasive species by the way, can reach 20 or 30 feet in length, particularly if the water is clear, and large concentrations will form away from the main channel where it's a little -- where the river is slower and it's a little bit warmer. But then as that stuff dies and breaks loose in the fall, it tends to kind of, you know, drift downstream or sink and almost roll underwater, you know, kind of like waves, I guess, because that's what it looks like when it gets into the nets. You can get boats' motors wrapped up in it. It's a big problem.

Q. So based on your research -- or based on -- I'm sorry -- Dr. Taylor's testimony and your own research, do you think that oil could get bound up with this aquatic vegetation?

A. Yeah. I don't see how it would avoid it, because there's so much material out there. Any bend in the river or a wide spot where there isn't a lot of current, there's a bed of weeds, aquatic macrophytes,
and the oil, depending on where it drifted, would drift
either through or right over the top of this material
and pretty much just kind of wad up right there, I would
think. It's almost like an underwater fence.

Q. So you said this -- the aquatic vegetation dies. What happens when it dies? Does it -- where does it go?
A. It generally just sinks to the river bottom. It doesn't -- it decays eventually, but initially it just
sinks to the river bottom versus floating on top.

Q. So if it was contaminated with oil, would you expect that oil would also go to the river bottom?
A. Yeah, if the oil and the weeds were together, I would expect they would go to the river bottom. I'm not
totally familiar with how that would look, but you don't see weeds floating on the top in the wintertime.

Q. And I would like to talk a little bit about the ecosystem of the bottom of the river. Earlier you used the term "benthos." Can you describe in a little more detail for the council what you mean by benthos?
A. It's a term we learned in limnology. It's the benthic, or the bottom of the river. Things that are
benthically oriented live at the bottom of the river. And as such -- it's just a term we use on a regular
basis to describe things either that live or are in contact with the substrate of the bottom of the river.
Q. Can you describe the ecology -- what's happening in the ecosystem in the benthos?

A. It's a very dynamic area, depending in large part on what type of substrate is there, "substrate" being is it sand? Is it clay? Is it large boulders? That somewhat -- that and the current dictates what sort of life is there. The current really will dictate the bottom.

If you have strong currents through an area, it will scour out the fine stuff, the sand, the silt, the clays, to where there's just large rock or bedrock or cobble. These are all specific terms that are used by stream researchers. They refer to different sizes of particles.

So if you were to look in an area of the Columbia, for example, the Hanford Reach, which is upstream of McNary Dam, it's the last free-flowing section of the Columbia River. That's where all the -- Stuart Ellis mentioned the fall Chinook are spawning up there. It's primarily cobble, which is rock about the size of, say, a grapefruit up to a basketball. The animals and the organisms that live there are very different than organisms that you would find in, say, Bonneville Reservoir, in areas where it's fairly silty or clay-like.
Q. And what kind of organisms do you think you would fall in the benthos, and would they be little or big or both?

A. Again, it goes back to particle size. If you have fine material, sand, silt, you could have juvenile lamprey living in it; you would have a variety of what are called macroinvertebrates. For anybody who's a fly fisherman, that's your nymphs. It's small worms, maybe little clams.

As you transform into systems that have more gravel and rock, you would get crayfish. You will still have some clams, but you'll have different kinds of macroinvertebrates, all of which are the basis of the food chain for the rest of the organisms in the river. Sturgeon, for example, will feed in a variety of areas. They'll feed on mudflats and they'll be eating clams in those areas. They will move into areas where there's more cobble and rock and they'll root around in there and get crayfish.

A favorite place for them to feed is near the grain elevators because the spilled grain piles up on the river bottom which then attracts fish and crayfish, and the sturgeon will move in there and that's kind of a unique microhabitat, but the fish and the critters are somewhat adaptable to that. So it's a very diverse
community down there.

Q. If oil were to contaminate the benthos, can you say what effects might occur to the ecosystem, the benthic ecosystem?

A. Well, assuming that oil is not a natural part of that ecosystem to begin with, you would probably expect to see some loss of life either through suffocation -- they can't -- if they're covered in oil, they can't breathe. It would also potentially cover food. Organisms, I'd say larger fish like sturgeon or other fishes that would eat that, they might continue to forage in those areas because they're adapted to feed in those areas. But oil by itself isn't part of that ecosystem right now. So when you introduce something that's not part of that area, the animals either -- if they can leave, they may leave; if not, their -- particularly those that live in the sediment are kind of stuck where they're at. They're not going to get up and leave.

Q. So a couple more questions. Can you characterize, broadly speaking, the amount -- the time that sturgeon and lamprey have been on this planet?

A. Longer than us. Seriously, they -- in the fossil records, both lamprey and sturgeon go back hundreds of millions of years. They're both very
primitive fish. They're both cartilaginous fish, meaning, they're primarily cartilage. They're not a bony fish like, say, a salmon or a bass. The presence on sturgeon of the bony scoots or plates links them evolutionarily to the very primitive fishes. Well before T-Rex walked this earth, there were sturgeon and lamprey in their present form in the waters of the world. That's part of the -- for me, the satisfaction of working with an animal like a white sturgeon. They're very unique and they're very dynamic.

Q. And then, finally, Stuart Ellis talked a little bit about the status of lamprey in the basin. Can you give us your sense of the status of lamprey?

A. Yeah. Presently -- I'll go back, historically, lamprey -- Pacific lamprey and -- there's other lamprey species as well, but when I talk today, it will be specifically talking about Pacific lamprey -- were incredibly numerous.

I read some recent material from an elder of one of our tribes who talked about lamprey so thick in a creek they looked like hair on a rock. So lamprey are this long and about that big around. So imagine a large boulder, maybe the size of this table, and it's literally covered. And I've seen pictures of that, and it's amazing. They were incredibly numerous, millions
Upon millions.

Because they were not a sport fish, they were never really counted. People would just -- you know, for a non-tribal people, they were viewed as a trash fish or potentially even a predator.

Sea lamprey in the Great Lakes that were introduced there by the Saint Lawrence Seaway are an exotic predator in that system and they feed on the native fish in the Great Lakes.

Pacific lamprey evolved in kind with the fishes of this system, of the Columbia and other coastal rivers. So they do their feeding in the ocean. They don't feed in the river. They simply come up and spawn and reproduce and then they leave.

So moving towards present day, as the region was developed, as hydroelectric dams were put into the system, as drainages were diverted, as water was taken away from -- or diverted out into fields, lamprey numbers began to decline. By the late -- mid to late '90s, their numbers had dropped substantially from what they were 20 or 30 years ago. There was initial -- at least some counting down back in the '60s, and then it was curtailed because it was deemed to be too difficult.

But there is a precipitous drop in there, and we feel that was likely due to the Snake River dams that were
put in place, Ice Harbor, Lower Monumental, Little Goose, and also lower granite dams.

A lot of the lamprey habitat was up actually in Idaho. The clear water system, Dworshak Reservoir was created behind Dworshak Dam. That's a 700-foot tall barrier to lamprey. There's hundreds and hundreds of perfectly good miles of lamprey habitat behind that project that were cut off from returning adults. So throughout the system, lamprey are present but in very, very reduced numbers.

It's been a focal point of our commission and our member tribes to restore this traditionally important fish to as much of the habitat that it can still survive in to this day. So that's also been a big effort on the part of our commission to bring those animals back. But probably 10 percent of what used to be here is what's here today. They've been petitioned twice for listing. Both times they've been turned down, primarily because there wasn't enough data collected on the distribution and past -- what's the word we're looking for? -- past abundances. A lot of the information is historical but not collected in a format that is more of a scientific-type format; hairs on a rock is what it is. It paints a pretty good picture, but it doesn't give you a count of them.
Q. So, Blaine, when you say "petitioned to be listed," can you explain a little bit more about what listed as what?

A. Listed under the Endangered Species Act and the annals were actually -- the Fish and Wildlife Service was the folks -- was the agency that had received the petition. Because they spend most of their life in freshwater, they're technically a ward of the Fish and Wildlife Service versus like salmon, which are managed and overseen by the National Marine Fisheries Service, marine fisheries versus freshwater fish. But both times that petition for listing under the Endangered Species Act has been denied.

MR. LOTHROP: I think that's all the questions I have at this time.

JUDGE NOBLE: Cross-examination?

CROSS-EXAMINATION

BY MR. JOHNSON:

Q. Mr. Parker, I'm Dale Johnson. I'm one of the counsel for the applicant in this case.

A. Good afternoon.

Q. Good afternoon. First of all, are you familiar with the Endangered Species Act consultation with the National Marine Fisheries Service and National Fish and Wildlife Service related to this project?
JOHNSON / PARKER

A. I haven't seen any information that any consultation has been done at this point.

Q. Okay. Turning back to where you started, you corrected your testimony on page 7 of your prefiled testimony where you had previously said that some estimates or that ballast water releases would be approximately 50 percent of the entire flow of the Columbia, or 6 million cubic meters -- says metrics of water. And I believe you changed that to read, will be approximately 50 percent of the total ballast water downriver of the Bonneville Dam; is that right? I was trying to write.

A. Yeah. What I had originally written was that if the project was -- went forward, that the shipping that would come in to receive the oil, the volume of that ballast water would be approximately 50 percent of the entire volume of all shipping that currently enters the Columbia River at this time, which is approximately 12 million gallons -- 12 -- excuse me, 12 million cubic meters. And it is based upon the stuff that I read in the -- the material I read in the DIS, the shipping that would be entering the system would contribute approximately 6 million cubic meters of ballast water into the Columbia River.

Q. Okay. And what's your understanding of the
JOHNSON / PARKER

1 vessel count that would be based on?
   A. If I recall correctly, the vessel count was
2 approximately one ship per day, a large one.

3 Q. Okay. Do you know how many vessels -- piloted
4 vessels transited the Columbia River last year?
   A. No, I do not.

5 Q. Okay. If I told you it was somewhere around
6 1400, would that surprise you?
   A. It wouldn't surprise me. There's a lot of ships
7 out there.

8 Q. And what size vessels are you assuming when you
9 reached this conclusion about the volume of ballast
10 water?
   A. It would be the standard size tankers that would
11 be brought in to -- the number was written down some
12 place in one of the materials. I can't recall exactly
13 where it was. But at the time I -- when I wrote my
14 materials, that was something -- I didn't fabricate it.
15 I didn't estimate it. It was written down some place.

16 Q. Okay. And how about were you -- are you taking
17 into consideration the potential additional vessel
18 traffic in the river?
   A. No, strictly just new shipping just for the
19 project.

20 Q. Okay. All right. You also testified early in
JOHNSON / PARKER

your testimony about wind conditions in the river. Were you referring to the conditions in the Gorge or downriver?

A. Every place I’ve worked in the river it’s blown.

Q. Okay. And you made an analogy to the North Sea. Presumably that wasn’t -- you didn't mean that literally, did you?

A. Video footage I’ve seen of the North Sea, yeah.

Q. Video. So you --

A. I haven’t been on the North Sea, no. Wouldn’t want to be.

Q. Fair enough.

MR. JOHNSON: Nothing further.

JUDGE NOBLE: Redirect, Mr. Lothrop?

MR. LOTHROP: Nothing at this time.

JUDGE NOBLE: Council questions?

Mr. Stone?

MR. STONE: Good afternoon, Mr. Parker.

THE WITNESS: Good afternoon.

MR. STONE: Are you aware of any documented cases whereby ballast water has created an infestation of species in the Columbia River Basin?

THE WITNESS: There is a number of Asianic copepods that have been introduced by ballast water.

MR. STONE: I'm not sure what that means.
MR. LOTHROP: And you might need to spell it for the court reporter.

THE WITNESS: Copepods are a small zooplankton critter, "critter" for, you know, lack of a better -- they're a small zooplankton. A copepod is actually a class of organism. It's c-o-p-e-p-o-d-s, I believe. They have lived their entire life in the water column. They feed on other organisms. And these organisms, having been brought in by a ballast water, likely from San Francisco Bay where they're also very common, this inter-shipping back and forth between, say, San Francisco and Seattle and Portland and British Columbia tends to move things back and forth. They have actually displaced other native copepods, based upon the monitoring work that's been done in the estuary. It's just one example.

There's a myriad of organisms that have been brought over via ballast water because there would be no other way for them to have reached the other shore, say from Korea or Africa or some other place. Classic example are Chinese mitten crabs. Native to Asia, China, very popular food source, but they began to show up in San Francisco Bay in the late '80s, early '90s and in a fairly significant population explosion. Actually was clogging up parts of the delta water system that
feeds both fields, as well as the cities out of the delta. They're catadromous, meaning that they rear -- they spawn in saltwater, but they rear in freshwater and they live off detritus, the small organisms, plant material in rivers and large estuary areas. These animals -- there was a lot of concern they were going to start eating salmon eggs, because they were moving up into the San Joaquin and Sacramento Rivers. Since that time their population has declined a little bit, but they're still very present up there.

MR. STONE: So if I understand your testimony, if a ship takes on ballast water in San Francisco Bay and transits to the Columbia River, they are not required to do a ballast water exchange in the open ocean before entering the river?

THE WITNESS: They are required.

MR. STONE: They are required.

THE WITNESS: Yes.

MR. STONE: So you're saying that any possible transfer of invasive species from San Francisco Bay to Columbia River is just a remnant of a residual -- this ton of organisms per cubic meter of water limit that you mentioned earlier in your testimony?

THE WITNESS: Not everybody does their ballast water exchange. People have been pretty good
about it lately, as both Washington and Oregon have
increased their ballast water monitoring programs. But
not everybody does. Even when they do a ballast water
exchange, depending on the complexity of the internal
structure of the ship, it doesn't mean that saltwater
gets into all those areas. So there's opportunities for
organisms to persist and be transported and released.

MR. STONE: Thank you.

JUDGE NOBLE: Other questions? To my left?

All right.

Any questions based upon Mr. Stone's
question?

MR. LOTHROP: None.

JUDGE NOBLE: Mr. Parker, thank you for your
testimony. You are excused as a witness.

THE WITNESS: Thank you.

JUDGE NOBLE: Well, when I looked at the
witness list -- we can go off the record.

(Recess taken from 2:45 p.m. to 2:46 p.m.)

JUDGE NOBLE: Back on the record.

MS. CARTER: Yes, Your Honor. As of
tomorrow -- I apologize for not filling up today. I
thought we would go longer. Tomorrow we're going to
have Mr. Wilbur Slockish. He's a fact witness, a tribal
fisher and he has experience with spills, and he will be
rebutting Mr. Challenger.

Next we'll have Ms. Elizabeth Sanchez, S-a-n-c-h-e-y. She's also a fact witness. And she will be discussing Mosier and the tribal response to Mosier.

Next we'll have Randy Settler, who is also a fact witness and he's a tribal fisher and will also be discussing Mosier. Those three do not have prefiled testimony. They're all fact witnesses.

Fourth we will have Mr. Roger Dick. He has prefiled testimony. He has tribal fisher experience and also rail safety, and he will be rebutting the testimony of Mr. Challenger, Mr. Schatzki and Mr. Carrico.

Finally, we will have Mr. -- excuse me, Dr. Zachary Penney. He has prefiled testimony. He will be speaking about the oil spill response on salmonids, and he will be rebutting the testimony of Mr. Challenger.

JUDGE NOBLE: Is it your belief that tomorrow will be a full day, or do you think that we should ask for additional witnesses to be on deck? I know there's a concern about having enough time for the proponents to complete their witness list.

MS. CARTER: So we can have Dr. Stanley Rice, and he has prefiled testimony and he'll be speaking to environmental aquatic impacts from -- oil
spill impacts to aquatic resources. Sorry.

JUDGE NOBLE: Thank you. I appreciate you
making him available. Thank you.

Is there anything we need to do on or off
the record before we adjourn for today?

MR. JOHNSON: No, Your Honor.

JUDGE NOBLE: In that case, we are adjourned
until tomorrow morning, Friday, the 22nd of January
[sic]. Thank you all. July.

(Hearing Adjourned at 2:49 p.m.)
BEFORE THE STATE OF WASHINGTON

ENERGY FACILITY SITE EVALUATION COUNCIL

In The Matter Of:
Application No. 2013-01
TESORO SAVAGE, LLC
VANCOUVER ENERGY DISTRIBUTION TERMINAL

HEARING, Volume 17
Pages 3907 to 4117
ADMINISTRATIVE LAW JUDGE CASSANDRA NOBLE

9:01 a.m.
July 22, 2016
Red Lion Olympia
2300 Evergreen Park Drive Southwest
Olympia, Washington 98502

REPORTED BY: Micheal A. Johnson, RDR, CRR

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PROCEEDINGS

JUDGE NOBLE: Good morning, everyone. We're back on the record before the State of Washington Energy Facility Siting Council in the Matter of Application No. 2013-01, Tesoro Savage LLC Vancouver Energy Distribution Terminal.

Is there anything we need to take up on the record before we begin with the testimony for today?

MR. JOHNSON: Not from the applicant.

MR. LOTHROP: Not from the Columbia River Inter-Tribal Fish Commission.

JUDGE NOBLE: Mr. Lothrop, are you ready to call your first witness?

MR. LOTHROP: Yes, Your Honor. I would like to call Mr. Wilbur Slockish, Jr., to the witness stand.

JUDGE NOBLE: Mr. Slockish, am I pronouncing your name correctly?

THE WITNESS: Slockish.

JUDGE NOBLE: Slockish?

THE WITNESS: Yes.

(Witness sworn.)

JUDGE NOBLE: Thank you. Please be seated. You may proceed.

MR. LOTHROP: Thank you, Your Honor. Good morning, Your Honor, and members of the council. I
LOTROP / STOCKISH

would like to proceed with Mr. Slockish now.

WILBUR SLOCKISH, having been first duly sworn, testified as follows:

DIRECT EXAMINATION

BY MR. LOTROP:

Q. Mr. Slockish, can you spell your first and last name for the court reporter.

A. W-i-l-b-u-r S-l-o-c-k-i-s-h.

Q. Thank you. I'd like to talk to you about some of your experiences growing up, to help give the council here an understanding of your relationship with fishing, your heritage as a tribal member and the importance of first foods and the places where these first foods are found, so I'm going to ask you a series of questions about these topics.

When were you born?

A. I was born on September 19th, 1944.

Q. And when was Celilo Falls inundated?

A. 1957.

Q. Can you please describe some of your experiences at Celilo Falls before it was inundated by the Dalles Dam in 1957.

A. Yes, I can. I was there after other fishing places that were utilized were flooded out by Bonneville
Dam, so we utilized that area, my father and my family members. I did not actively fish there because I never conducted -- had my first salmon ceremony done yet. So I used to pack the fish and -- for the older fishermen and I would receive pocket change for doing this activity.

Q. You mentioned your first salmon catch and ceremony. Can you describe what that means to the council?

A. It's a very special time, because that's when you enter the fisherman's row. We never bothered the salmon until we were taken down to the river by our father and allowed to harvest the first one. And when we got the first one, it was put aside and then we had a dinner ceremony and that fish was preserved, either in a can, in jars or dried, or other forms, salted, and given to an older fisherman in the hopes that his knowledge and his fishing ability would be transferred to the young person that was doing his first fish ceremony.

Q. Thank you. After Celilo Falls was inundated, where did your family mostly fish?

A. We mostly fished on the Klickitat River. There was -- a lot of species of the same fish that was in the Columbia River were migrating up the river to spawn.

Q. I think most of the council members know where
the Klickitat River is. It's prominent in the state of Washington, but could you describe, generally speaking, where the Klickitat Basin is.

A. It's centered there in Lyle, Washington. It empties into the Columbia there at Lyle. There's villages -- there's village sites and limited quarters up in Klickitat in a place called Wahkiacus and then on -- further on up the river to the Twin Bridges.

Q. Thanks. Did you catch lamprey at the falls on the Klickitat River?

A. Yes. I was able to harvest lamprey eels in a little stream called the Hungry Horse. It was a camp there where the people stayed. There was a little house on the hill and there was a little small stream, creek, or however you want to describe it, but there was a wall there and it was wet and the -- with water coming over, and they would suck their way up the hill there to get into the stream to go on up. So we was able to harvest the lamprey in that location.

And also under the family fishing scaffold up there at the main falls, I used to catch a few there that I was able to process right there and cook over an open fire, if I didn't feel like going to get something, so I would harvest the eels to eat right there off our fishing platform.
Q. Did the numbers of lamprey in the Klickitat River decline during your life?

A. Very dramatically. There's very few in -- there's a place called Swale Creek there at Wahkiacus, and there used to be all kinds of fish in that stream. And then the farming activities up on the plateau where Centerville, Washington, is by Goldendale, the farmers started utilizing that water and dried up the stream, and it's really a trickle. And the same thing happened there at the Hungry Horse camp. There's a gravel pit and there's other kinds of farming activities up there, and they dramatically altered the water for the lamprey to go into that area. And up there at a place called Twin Bridges, there was a sandbar and I used to follow my brother -- my deceased brother, up to that area there and we'd go trout fishing and all of that. The ammocetes were within that sandbar and we could see them. And when I first saw them, I thought they were -- they're earthworms, but, no, they said, these are lamprey. They're ready to head out.

Q. Mr. Slockish, you talked about eating lamprey. Did your parents feed you lamprey?

A. Yes. That was one of the main foods, along with the salmon. It was utilized in memorials, dinners, also at the funeral, at death dinners, the last dinner that
LOTHROP / SLOCKISH

1. we would share with a deceased person. And as a child,
2. the dried eels, one of the main things that I -- I don't
3. remember, but my mother told me when I was a baby, that
4. was what was used to break my teeth through when I would
5. start suffering from the teething process. The eel
6. tail, dried eel tail, was -- the oils would soothe the
7. gum -- and as we chewed on it, then that would help
8. break the teeth through.

Q. After the decline of lamprey in the Klickitat
9. River, did you fish elsewhere for lamprey?
10. A. Yes. In the early to middle '50s, maybe '59 or
11. so, we utilized the Fifteenmile Creek to gather eels.
12. There was a large sum there. It's right next to where
13. the Dalles Dam is now, and we used to go in there and
14. get four, five sacks of eels, depending on how strong we
15. were then, fill them maybe half full, because when they
16. get in there, they're pretty heavy to pack and only the
17. adult males could pack almost a full sack. But I used
18. to be able to pack out a half of one. And they were
19. distributed to the family members to do whatever they
20. wanted to do, whether to dry them or store them or
21. however, that was up to them, but we distributed them
22. out to our family members.

Q. Who introduced you to lamprey fishing at
23. Fifteenmile Creek?
LOTROP / SLOCKISH

A. My stepfather. He's the one that introduced me to Fifteenmile Creek.

Q. Do you still fish for lamprey at Fifteenmile Creek?

A. There was a spill there and we were told to stay away from there and we would be informed when it was safe to go back into there, and we were never -- because they had fences up around it to keep people out while they were cleaning that. And for a long time, there was a small -- I guess it was a chemical trailer because they told us to stay away from it, but we couldn't go in there and harvest the lamprey anymore and then they -- that company that was doing it, said they would inform us when we would have the ability to go back in there and harvest lamprey again, and to this date, I have received no response saying it's safe to harvest in that area.

Q. After Fifteenmile Creek, where did you go fishing for lamprey?

A. I utilized the falls at Willamette, at the Willamette River falls, and I developed a rash on my hands. I went there twice, and it still bothers me today because my head -- you get extremely wet in that area, and sometimes my head has that same sensation that my hands had at that time, and also around my eyes, and
it itches and burns, but I put some lotions on it and it eases it. But today I won't go and harvest eels there because of the concern of those rashes.

Q. Mr. Slockish, did you ever fish for lamprey commercially?

A. No, I did not. They were to us for distribution to your family members. There's a little store in Dalles that I went into that's called Meyers Market, and in there, there was lamprey for sale for sturgeon fishermen to utilize to catch sturgeon. And when I saw that, I asked Homer, why is he doing that, and he says fishermen want it, they want to catch sturgeon. I said but these foods are very sacred to us because they're one of the first ones that come back in our meals with the salmon and they provide us with a lot of things, but I don't know where he was getting them, but they were sold for bait, and there's other of our food sources that are being commercially exploited and close to extinction.

Q. How did it make you feel to see the lamprey being sold?

A. It hurt my -- it's hard to describe the feeling because of -- it was a cultural and spiritual value that was deeply affected because of being used for something else than its purpose. Yeah, the sturgeon like to eat
those, but it was up to them to harvest on their own when they would get them, not make them stationary for bait purposes and recreational activities. And to me that was insulting.

Q. **Today when you have the opportunity to eat lamprey, in what setting are they available to you?**

A. At -- we just had eels here last Sunday up in a longhouse at Hehe, Oregon, and lamprey on the table, and I was able to partake of them at that time. And it's very few and far between that -- I reluctantly -- they weren't Willamette River eels. I hope -- I think they were caught at Sheers Bridge up there on the Deschutes River. And those ones I have no problem partaking of there into my meal.

Q. **Mr. Slockish, you used the term "eels." Are those the same as lamprey?**

A. To -- when I was young, that's -- their name was -- what I learned was assum, and that translated to eel, so that's what we call them. And to me, the teachings that I had, that's what I still follow, the naming of those.

Q. **Mr. Slockish, did you review the video of Mr. Challenger's testimony?**

A. Yes, I did.

Q. **So in his written testimony, Mr. Challenger says**
LOTHROP / SLOCKISH

that federal laws guarantee that the -- to the public, that the loss of natural resources will be compensated. Was that your experience following the spill at Fifteenmile Creek?

A. No. I have received no compensation whatsoever, and I get asked a lot of times, well, what is the value of your loss? I can't place a monetary value on my spiritual being and my cultural awareness and my cultural teachings. To me, it's priceless. And when asked -- kept asking me -- sportsmen, how much would it take for you to ease your conscience? I told them, I said, you can bring me all the gold in the world, you can bring me all the gold, silver, all of your precious metals, you can print me hundred dollars bills for a thousand years and you would never have enough to pay me for my cultural spirit.

Just like at the Dalles Dam when it was created, we got $3,000 for a one-time payment, but yet the value and the feeling that I have when I harvest these lamprey, these salmon and the animals that -- the deer and the elk is not -- no value can be placed on it from my perspective because it's priceless.

Q. We're going to shift topics just a little bit. Some of the witnesses in this proceeding have made statements that seem to infer that the tribal fishery is
confined to Zone 6 of the Columbia River. What information was handed down to you by your elders with regard to the rights -- the fishing rights that were reserved in the treaty of 1855?

A. From the words of my grandfather, my father, we would access salmon clear down to the ocean mouth, and we've never abandoned that concept. We reserved those areas because they were utilized prior to contact, and that document confined us to an area, but those still retained the right to harvest the aquatic beings within those areas.

They're not a toy to us. They are life, the water and all of the animals. They said what they would do for us, and they would -- as long as we keep the water clean and all of that, they would return to take care of us spiritually. And it's not only that, but it's mental. It is so hard to express the mental part of it. When we're deprived of it, that is a mental stress that we endure and the physical, spiritual. What everybody seems to forget, we're mental beings too, is also connected with all of these cultural values. Because when you harvest it, your mind is very well connected to the animal making that sacrifice to feed you, to clothe you. So when we're limited into the areas, there have been -- that is a mental stress that
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we have to endure. But we have survived so far due to this limited capacity that we can travel to those areas because of the fences and private property can -- no one can enter. So that part is very disturbing.

Q. Do you still fish for salmon?
A. I wish that I was out there right now with my children. But my grandson, he said it was time for me to sit back and they would take over the duties and they would provide me with the fish that I needed whenever I needed it. And he said, you've earned that, grandpa, you just need to sit on the bank and we'll do this, we'll take care of it. You can do things for us. You can still patch the nets and hang nets and all of that, but the fishing, you're too old and you're too slow. So those were his words. And he's only ten years old.

Q. Does your family bring you salmon?
A. Yes, they do. I have -- my freezer is full. I've got 30, I think, hanging in the dry shed being dried. I've got another 20 being smoked. So I have -- they've provided well for me.

Q. And is this salmon an important source of food to you and your family?
A. Yes, it is. Because, again, I state, when you catch one, that's a good feeling. And I can remember that, when I caught my first one and then when I caught
my last one. And the feeling is -- it's undescribable
the feeling that you get when you harvest in there and
giving him thanks that he's made the sacrifice to feed
you, to utilize him in those ways of drying and smoking
and meals. So they're very important in that aspect and
that feeling is priceless.

Q. Mr. Slockish, yesterday, Kathryn Brigham talked
about -- a little bit about her relationship with Billy
Frank, Jr. Did you know Billy Frank, Jr.?

A. Yes, I knew him. He was a great man. But when
he first started, the labels that people like him, when
they're arrested, is not a good one. And he also
assisted me in my court proceedings and reminded us
that, you know, these animals, these fish, this aquatic
creature is placed here for our use and benefit by the
creator, and as long as we take care of them, it will
take care of us. So, yes, he was a good man.

Q. And where have you fished for salmon on the
Columbia River?

A. From above the tri-cities to Astoria. I didn't
stay there too long because those big ships coming in, I
thought they were trying to run over me, so I
reluctantly pulled away from there because of -- just
like the barges on the river now, they can't stop. So I
didn't want to jeopardize myself and the people that
LOTHROP / SLOCKISH

were with me. So in the interest of our safety, I reluctantly went back up to -- into this area up here, on the Columbia River, I mean.

Q. Earlier in this proceeding, Mr. Ernie Niemi testified about cultural values and how hard it may be to express those values in economic terms, and I believe that Mr. Challenger also testified about cultural values and the difficulty of translating that. In this regard, could you share with the council where you were yesterday and what you were doing.

A. Yesterday I was up at Sheers Falls at a salmon culture camp, and within that little camp there was members of the Nez Perce, Umatilla, Warm Springs and Yakama Nation young people, and they asked -- I was asked to describe our fishing activities and all of -- whatever else. And I pointed at the river, and I said, take a look at that water. What do you see? And they said, water. I said, do you know that when these salmon come back, they've swam a long ways from up around Alaska and other areas back down and they're coming up this stream to spawn. Take a look at that water, and our people understood this, and I said, what do you see? And they said, water flowing. I said, see that water that's going upstream? That's one of their trails. They will find that. And they look a little further up
and there's a little waterfall there. I said, there's numerous more obstacles to get over, so he conserves his energy following those trails and he's strong enough yet to go over that little falls because he has bigger ones ahead. So wherever he can find those water flows upstream, he will ride them and those are their trails. Out all of the other resources that are here, I explained to them about what the trees do for us, what the water does for us, the rock, everything, what the deer and the elk, how they provide us with clothing, tools, shelter, our shoes, our moccasins and the other things that we needed, the nettles, we utilized all of them in our life. We had to make our own. The trees, some of the oak tree and the willow tree provided us with the hoops that we utilized. So everything is connected in our daily life. The rock, he provides, combined with the tree, the wood through the fire to heat those rocks. The willows provide the frame for our sweat lodge where we put the rocks into. The antlers of the deer was utilized as our pitch forks to put those rocks into that little pit. So they're all connected.

So it is -- children, we need to revive this in our children, because they didn't seem interested and I said, when I was young, I had no electricity. I had -- my light was a lamp, oil lamp. And we had a
battery-operated radio. We could listen to it one hour a night because of the price of that battery. But you guys have your games, you guys have your TV and you need to put those aside and learn these values so you can protect them in the future.

And they started listening really closely then, and I -- they asked me an example. And I said, well, here's an example that I remember that my parents told me about the wolf. The wolf is very instrumental, they said, because he said, my role is here, is to take the old, the sick and the injured animal, the deer and elk and other species that are in different areas. He said, I will take care of them. So when you hunt, you will always have clean, healthy animals to feed yourself and your family, to utilize in the clothing that you will get out of those hides that were tanned.

So we need to bring all of those teachings back to the young people. I said, so they -- they said that they were going to go home -- because at the end of the session -- I talked with them for over two hours. And it is hard to express everything that role that they play in -- the cedar tree provided us with our canoe. Also the cedar roots were utilized in creating our baskets, water-tight baskets, that were part of our gathering of the water to take to our home quarters. So
we need to take care of it.

And one of the things there is that -- just like modern day now, not everyone was a fisherman or a hunter. We've got all different talents. In those days, we had carvers that would carve the canoes out, utilizing fire to burn them out. Toolmakers to make -- to clean the fire, the ash out of their -- and the rocks to smooth it. So even the tree provided us with some things of -- got a crack in there, the sap would be used to patch that canoe.

So everything has a role in our life. And it's hard to get them all out, what they do for us, it seems, what they said they would do for the coming people when we were placed here. And you can't do it in one hour, two hours, because everything in this world has a role in our life at that time before the contact altered our areas.

There was a wintertime activity that we went through, teachings, because from the spring to the fall, we were gathering our foods, processing and storing them, trading them for different areas. We had our trade routes and our school time was in the winter. Because we had our talents, like knowledge of the medicinal plants. Someone would have that talent and skill to use those medicines that the plants provided us
with. So just like today, there's people that are --
can draw, artists. It was the same back in that time.

And so they had a real interest in learning, and
they all said, that they were going to go home --
because I told them, I said, you need to question your
older people, your elders, your grandparents, your
mother and your father of what these roles, these
plants, what are they -- what they did for our daily
life. And they said, we're going to go home and start
asking questions of our grandparents. And to me that
was a good sign that our people are again thinking about
our cultural, spiritual and mental well-being through
the gifts of this land that the creator placed here for
us.

MR. LOTHROP: I have a couple more
questions, Your Honor.

BY MR. LOTHROP:

Q. And I feel bad, I apologize, Mr. Slockish, for
this next question. But does the loss of these first
foods and first resources, does it make it more
difficult to carry on these teachings and cultural
practices?

A. Yes, it is, because you don't have the materials
there to physically show them because they have to see
it in person, and it is very difficult. Because just
Like in the school system, they have these flash cards and they would display them to us. So it is very difficult if we lose a species, very hard. And one of the ones that I have a concern about now is the huckleberry. It's being badly vandalized up there for economic gains. There are people going in and using metal cones, killing the plant, breaking of the branches and that kills the plant. And I remember a teaching from my grandparents that all -- everything had a role. And fire would control the underbrush so the berries would always be strong and big and lots of them. And the whole village will do a control burn in the huckleberry area and the next year it would be big. And that's why when I see and hear of these big fires that are occurring currently, is because some of our teachings and all of that, there was never that events happening in ours. But our science has been ignored and called a fallacy and paganism and all of that, but we did know those things. The food was abundant with our science.

Q. So my final question, so, Mr. Slockish, you're involved in a number of forums dealing with salmon and lamprey, I believe. Can you briefly describe some of the work that's going on, just very briefly, to rebuild salmon, lamprey and other things, and is that important
to view as a tribal person?

A. It's very important for me as a retired tribal fisherman. Because when they were here -- placed here and that comes down to that teaching, everything needs to be taken care of, whether it's the water -- and really, because with our science, we could drink water anywhere. Today, no, because of the things that happened. And the salmon, their habitat has been very degraded through all of the industry that practices. I always hear, well, this is a free market. I said, well, nothing is free. I said, my resources, what I called resources at that time, what are called resources now, whether it's a salmon, a tree, a rock, are being utilized to the detriment of our animal life, plant life, air. So, yes. And as long as we can take care of this water, we will always ensure that my children and the other grandchildren and everybody's grandchildren -- because this land provides for not only my people but everyone that is here. So to me we need to take care of it.

All along these river drainages, the ocean, the economic gains, is it worth the cultural values? I live here. I'm not going anywhere. I've been displaced from harvesting my lamprey at the Klickitat River, at Fifteenmile, at Willamette because of my reluctance to
endure the chemicals or whatever it is that is affecting me. I wish that they understand it. I don't want -- all of us -- we all need to understand, we breathe this air, we utilize this water to cleanse our body, to cook with, all of the activities and water is utilized in everything that is done, whether it's in the mining industry, the nuclear industry, the chemical industry. All of them utilize water to generate the steam, and it's utilized in the dam building part to generate the power.

And when you mentioned Billy Frank, I always remember his one statement that he said, when you turn on the light, look at it as a salmon. And I'll never forget that, the words that he utilized, that saying and that phrase. So please be mindful of the ones that can't speak for themselves but we try to emphasize to importance of their value to us. It's priceless. No -- nothing can replace those values. So I hope that is understood from my teachings that I've learned from my ancestors and I continue to hand down to my generations so that my future generations will be able to utilize the gifts of this land.

Q. Thank you, Mr. Slockish.

MR. LOTHROP: Your Honor, I have no more questions at this time.
SLOCKISH

JUDGE NOBLE: Cross-examination?
MR. JOHNSON: No questions, Your Honor.
JUDGE NOBLE: Council questions?
Mr. Moss?
MR. MOSS: Mr. Slockish, thank you for being here today and giving us a lot of important insight into cultural values that you've talked about. I have one question for you that's more of a technical nature, though, and that is concerning the Fifteenmile Creek incident, you mentioned some sort of a spill occurred there. I don't believe you said when that spill occurred. Do you recall the year?
THE WITNESS: I can't recall the exact year, but it -- I think it was the late '80s.
MR. MOSS: All right. That's good enough.
Thank you very much. It gives me a sense of perspective. Thank you.
JUDGE NOBLE: Any further questions, to my left? To my right?
I just have one, Mr. Slockish. I didn't hear what your tribal affiliation was. You may have said that, but what is your tribal affiliation?
THE WITNESS: My tribe is Klickitat.
JUDGE NOBLE: Thank you.
THE WITNESS: Located there around the Lyle,
JOHNSON / SLOCKISH

Washington, area and down to Bonneville and below.

JUDGE NOBLE:  Thank you.

Are there any questions based upon council questions?

MR. JOHNSON:  Just one.

CROSS-EXAMINATION

BY MR. JOHNSON:

Q.  Mr. Slockish, in response to Mr. Moss's question about the Fifteenmile Creek incident, was that the truck tanker spill, pesticide spill?

A.  Yes.

MR. JOHNSON:  Thank you.  Nothing further.

JUDGE NOBLE:  Mr. Lothrop?

MR. LOTHROP:  No further questions, Your Honor.

JUDGE NOBLE:  Mr. Slockish, thank you very much for your testimony this morning and you are excused as a witness.

THE WITNESS:  Thank you all for listening to me.

JUDGE NOBLE:  You're welcome.  Thank you.

Are you ready with another witness?

MR. SEXTON:  Yes, Your Honor.  Good morning, my name is Joe Sexton.  I'm one of the attorneys representing the Yakama Nation, along with my colleague,
who is present and you'll hear from shortly, Amber Penn-Roco. And at this time, I'd like to call Elizabeth Sanchey to testify.

JUDGE NOBLE: Could you please repeat her last name for me.

MR. SEXTON: Yes, Your Honor. Elizabeth Sanchey.

JUDGE NOBLE: Ms. Sanchey, would you raise your right hand.

(Witness sworn.)

JUDGE NOBLE: Thank you. Please be seated. You may proceed, Mr. Sexton.

MR. SEXTON: Thank you, Your Honor.

ELIZABETH SANCHEY, having been first duly sworn, testified as follows:

DIRECT EXAMINATION

BY MR. SEXTON:

Q. Good morning, Ms. Sanchey. I'm going to be asking you some questions regarding your work for the Yakama Nation and your experience as a Yakama Nation tribal member this morning, but first can you please state your name and spell your last name for the record.

A. Elizabeth Sanchey, S-a-n-c-h-e-y.

Q. Thank you. Are you an enrolled member of the
Q. And do you fish, Ms. Sanchey?
A. Yes, my family does fish in Zone 6.

Q. And where is Zone 6?
A. Zone 6 is in the area to the Bonneville Dam Pool. My family fishes at Bridge of the Gods which is at Stevenson, Washington.

Q. How does your family fish there?
A. We currently fish on platforms or scaffolds. We start in about March and then usually end in November. We follow the fish runs. The first catch of every type of fish, whether it's a spring Chinook or a summer Chinook or blueback, or sockeye we call them, that first catch, we always give away. We believe it brings us good luck, plus it helps feed the elders of our family that no longer fish.

Q. Okay. I'm going to shift gears a little bit. What's your current occupation?
A. I'm the environmental manager for the Yakama Nation. I'm almost the hazmat lead for the Yakama Nation.

Q. And how long have you held this position?
A. Six years.

Q. What did you do before you became the
environmental manager?

A. I have a bachelor of science degree from Heritage University. Shortly after that, I worked as an EMT for a number of years, and then I worked for Wapato Irrigation Project as an irrigation systems operator, and then I moved into administrative duties.

JUDGE NOBLE: Ms. Sanchey, could you speak a little bit slower, please.

THE WITNESS: Sorry. Thank you.

BY MR. SEXTON:

Q. Great. Do you have any -- you mentioned you worked on hazardous material and oil spills. Do you have any training specific to that?

A. Yes. I have a 40-hour HAZWOPER, so it's a hazardous materials worker emergency response. I received that last year in May, and an eight-hour refresher is required to maintain that certification. I've worked in hazardous materials emergency response for a number of years, probably dating back to 2004, starting with the irrigation program and then in my current position.

Q. And I'm sorry, you may have said, but I'm -- perhaps didn't hear. Who gives the training for the certification that you have?

A. The training that I received was certified by
Q. And again, how often is that training that you received?
A. So once you receive the full 40 hours -- it's one week of intense training. Once you have received that, every year you're required to do an eight-hour refresher.

Q. And in your work for the Yakama Nation, how often do you respond to hazardous material spills?
A. We probably do maybe a dozen spills a month. We live in a high-traffic area because of highway 97 and I-82. There seems to be a lot of semi-truck accidents and that sort of thing. We're also an agricultural area, so there are pesticide spills and small diesel spills. So approximately ten to 12 a month.

Q. In your capacity as an environmental manager and working with hazardous materials, do you regularly work with other governments?
A. Yes. So we often work with Washington State Department of Ecology. Recently we've started working with Oregon DEQ and then, of course, with the EPA.

Q. And do you sit on any other boards or groups with respect to these sort of responses to hazardous waste spills?
A. Yes. I am currently the Yakama Nation
representative for the Northwest Area Committee, Region 10 response team, and that consists of the US Coast Guard, EPA. Yakama Nation is one of two tribes on that committee. The other tribe is Makah. And we meet on a quarterly basis to look over disaster preparedness and regulations and rules added with -- having to do with hazmat.

Q. As the Yakama Nation environmental manager and in your position responding to these hazardous material situations, how do you respond to them, I guess?

A. If there was a spill?

Q. Yes.

A. So if there was a spill on the reservation, notification would either come from EPA or from Ecology, depending on the location of the spill -- sorry, that's really distracting.

MR. STONE: For us too.

A. We would either get a phone call, sometimes a text message. If it's in the middle of the night, a phone call goes to the Yakama Nation tribal police which, in turn, we have a system set up on who's on call and they'll notify us that way. We then go and get our -- I gather my hazmat team -- I have a team of ten -- and decide who wants to go, who can go. Fortunately or unfortunately, I'm not sure, we're on
call 24/7, and so that limits our ability sometimes to have a personal life, but when you love what you do, you do it.

So once we gather a team, we report to the incident and decide what needs to be done. If we need to meet with law enforcement, say it's a truck accident, of course, the first concentration is to make sure the people involved are okay, and then towing of the vehicle and then the emergency response starts either in coordination with that or directly after the vehicle's been removed. We do a lot of vehicle accidents. So we will put in -- if it's in the middle of the night, which seems to happen quite often, we will just put in emergency measures for control until the daylight hours where we can gain a better understanding of what's going on. It's one of those spur of the moment, you have to make a decision very quickly and so we've gotten really good at making quick decisions.

JUDGE NOBLE: Ms. Sanchey, you're speeding up.


BY MR. SEXTON:

Q. So broadly speaking, in this facet of your job, you're tasked with responding to and then cleaning up or containing hazardous waste spills for the Yakama Nation?
A. Sorry, can you repeat the question?

Q. Sure. Broadly speaking in this facet of your job of working with your hazmat team, you're tasked with cleaning up hazardous waste spills for the Yakama Nation?

A. Yes. The expectation from my tribal leadership is that any time there's a hazardous waste accident or spill on the reservation, my program is to be there from the beginning to the very end.

Q. Can you describe the areas of your responsibility in terms of geography?

A. Yes. The areas of responsibility on the reservation are boundary to boundary, if you will, from the north to the south of the town bridge, clear to Satus Pass at the summit, which is the southern boundary, to the face -- the east face of Mount Adams, which is the western boundary, and then down to Mabton, Washington which is the eastern boundary.

In addition to that, we also respond to any of the ceded areas where there may have been an accident off the reservation. And then if there is an accident in our reserved rights areas or our usual and accustomed areas, we respond to those also.

Q. Can you describe -- you mentioned ceded lands or ceded areas. Can you describe what those are?
A. Ceded areas are the areas that the Yakama Nation gave to the federal government during the treaty of 1855 and in return we have our reservation, we have our ceded lands. Ceded lands remain to be able to fish and hunt, gather foods, medicines and practice our religion in those areas, although they are not part of our reservation.

Q. So we have the reservation, you respond to ceded lands and then you mentioned other areas, reserved areas. Can you describe those areas please?

A. Reserved rights areas are areas outside of the reservation, outside of the ceded areas, but areas that we have practiced collecting our fishing, our hunting, gathering foods, medicines. These areas are often outside of the state of Washington, but we still have reserved rights as guaranteed by the treaty.

Q. Again, shifting gears a little bit, when you go to a larger spill or situation, can you describe how you work with other governments.

A. When we arrive on the scene, normally it's emergency response. And so once the emergency's gotten under control and the cleanup is beginning to get set up, we often form what we call a unified command. And that unified command, it's -- I think of it as a triangle. We'll have the federal entity which is often
the US EPA, they'll have the state ecology normally and then the tribe. And so I'm the tribal on-scene coordinator for the Yakama Nation. And we set up this group, much like you, a board that makes decisions for the cleanup and for the actions that take place during that event.

Q. And were you involved at a hazardous material spill or situation that happened at Sulfur Creek?

A. Yes. That incident happened March 2015. There was a used oil -- used motor oil holding tank on a farm that was breached. The wind caused damage to the fill port and it began to leak. It traveled, I believe, 14 miles through an irrigation system to a natural creek and then out to the Yakima River. Initially, Ecology contacted me to say, hey, we have a problem. My staff and I responded. I believe it was on a Sunday. And we arrived shortly before Ecology arrived, secured the confluence of the Yakima River and then began to backtrack, and it took us approximately three hours to figure out where the oil was coming from. That cleanup went on for two weeks. Because, as you can imagine, going through the irrigation system's piped areas through the town of Sunnyside, out through the grates, there was a lot of natural vegetation damage. There were 50 barnyard geese that we thought were black, ended
up they were actually white but covered in oil. So we had to do a lot of cleanup. And we formed the unified command. We sat with Ecology, US EPA and the responsible party to get that cleanup accomplished.

Q. So aside from Mosier, which I'll get to in a moment, have you had any experience with hazardous materials involving trains that you've responded to?

A. Yes. In September of -- I believe it was 2013 or '14, there was a Burlington Northern train traveling near McNary Dam. They were heading west, and a boulder had come off the side of the hill, punctured the locomotive's diesel tank. That train continued on for an additional 14 or 15 miles, leaking diesel fluid all the way through, till it could get to a place where the train could be serviced. That's pretty rocky terrain in that area, not a lot of places -- flat areas to get equipment in.

Once the train stopped, it lost -- I can't remember -- maybe 300 gallons in one spot. And the funny thing about that is, we were never able to locate all of the diesel on the bank of the river. We have monitoring wells in place. We know that the diesel -- some of it we were able to pull out of the immediate ground, but the basalt layer is holding that diesel in place. So that's an ongoing -- that's an ongoing
cleanup, I guess you could call it. All we can do is monitor. Oftentimes they will put -- they'll pump oxygen through the wells to add bugs to help break down the diesel that's in the ground. But that was one of the weird ones where you know it's there, but you just can't find it.

Q. Did you respond to the Mosier train derailment on Friday, June 3rd of this year?
A. Yes.

Q. And where does Mosier fall in the areas we described previously as areas of your responsibility?
A. So Mosier is in Oregon. It's on the bank of the Columbia River, what I would call the reserved area for the Yakama Nation.

Q. And in terms of initial notice and your response, can you describe what happened in Mosier.
A. Mosier occurred on a Friday afternoon, around noon actually. I had taken the day off from work. It was my six-year anniversary of my position, so I was taking a break. I got a text message from one of our tribal councilmen saying, hey, I heard there's a train on fire in the Columbia Gorge; what do you know? So then I began calling Ecology and EPA, trying to figure out what was going on. At that time, Ecology had no knowledge of what was going on. EPA did. Shortly
thereafter I started getting e-mail after e-mail, phone call after phone call saying, we have a problem, it's an oil train, it's on fire and it's on the banks of the Columbia.

Q. So you received notice. What time did you leave to head to Mosier?
A. I believe we left around 1:30, 2:00.

Q. And you headed straight to Mosier at that point?
A. Straight to Mosier. We did stop in Goldendale and meet up with Department of Ecology emergency response team. We knew it was going to be a struggle to get access to the community of Mosier because of traffic, so at that time we were trying to figure out how we were going to do that. Ecology decided that they were going to go on to Bingen, Washington. At Bingen they were going to take a boat and go across to Mosier. Because my crew and I were pulling our response trailer, and in our response trailer we have 800 feet of river boom in addition to other absorbents, I can't pull that across the river. So we went on ahead and accessed I-84 to get to Mosier, which was an absolute nightmare. Traffic was backed up for miles bumper to bumper. So we took it upon ourselves to drive on the right shoulder, having to get out and often direct traffic around a disabled vehicle or a construction area. We finally
caught up to an Oregon State Trooper, said, hey, we need some help. And he said, I can't help you, keep going, keep doing what you're doing. He did radio ahead to the next officer and tell them, you know, these guys are coming through, they're on the way to the oil spill. It ended up taking us about two and a half hours to get to Mosier.

By the time we finally got to the turnoff to Mosier, it was my -- my truck with a response trailer, my crew vehicle behind me, an additional two to three cars behind us, where the other firefighters responding seen us going, so they jumped in line behind us. That was probably one of the most difficult responses I've ever been involved in. The traffic delayed the response to the incident.

Q. So what happened once you arrived in Mosier?

A. Once we arrived in Mosier, we got off at the off-ramp, talked to the state patrolmen there that was stationed and we pull up and you see this huge cloud of just black smoke, flames. And the officer tells us, you have to access across the bridge and that's the bridge over the rail, and he said don't stop, just go, just go, just go. And so we went on forward and there was a change in temperature, probably 10 to 15 degrees, just going across that bridge because of the heat. You could
feel the heat coming off that fire through your windows. We pulled into town and it was absolutely apocalyptic. There were fire trucks everywhere. There were exhausted firemen just sitting here and there. It was absolute chaos. We parked our response vehicle and went to the incident command. At that time, the incident commander was with the governor of Oregon, so we waited. And I have to give credit to the firefighters that were there, but there was no organization. Everybody -- it was chaos. It was absolute chaos.

Q. So what happened at that point? You're waiting to speak with incident command?
A. Yeah. We're waiting for incident command. We needed to check in and let them know what kind of resources we have, personnel and then what kind of equipment we have, an extra trailer for use. One of the fire chiefs, I believe he was from Hood River, came up to me and said, hey, we're going to go ahead and start pulling water out of the Columbia, to which I think we have an active fishery going on, there's endangered species, we've spent millions upon millions of dollars restoring the lamprey, or some population, we need to protect those things. So I asked him, do you have a permit from the Army Corps to pull water out of the river. I realize it's an emergency situation, but I was
SEXTON / SANCHEY

concerned. Of course, he didn't. And then about that
time a gentleman from the Army Corps of Engineers who
happened to be on site came up and approached me and
said, hey, I'm here. I understand we have a trust
responsibility to the Yakama Nation, as your federal
partner, what can we do to help? So once that happened,
we were more welcomed to be there. Before that all they
wanted us to do is write down our cultural concerns and
then send us on our merry way. I know my direction from
my leadership. I know that my -- the expectation they
have on me is to be there. So I dug my heels in, I put
my elbows out and we maintained our position, eventually
becoming part of the unified command at Mosier as the
tribal on-scene coordinator.

Q. So how long did you stay on scene that night on
June 3rd?

A. That night I believe we stayed until maybe 2 in
the morning. There wasn't a whole lot we could do. It
was -- at that time it was fire. It was fire response.
It was dangerous, so we just kind of held back. For one
thing, we didn't want to access that bridge to get out
of town. We were nervous to do that. And time just
flew by, and we realized how exhausted we were. So we
returned home that evening or morning, what have you.
And then the next day, Saturday, we got up, got on a
conference call with EPA, Ecology, DEQ, all the involved parties, kind of formulated a game plan and then we headed back down to Mosier.

Q. And how long overall were you at Mosier during this time?
A. Our initial arrival was about 4:00 on June 3rd, and I believe the last day we were on site was June 17th.

Q. So that's about two weeks?
A. Two weeks, yeah.

Q. Thank you. Can you describe the work you did throughout those two weeks.
A. Myself, I was the tribal on-scene coordinator, so I was stationed at unified command. We had a meeting about every hour, so I wasn't really allowed to leave the area. My staff, however -- I had cultural resource monitors in place, so any digging, any type of ground disturbance, my cultural monitors were there. I also had staff that would go out and monitor the booms that were put out in the Columbia River. We did have some oil reach the river. So we would look for anything additional, anything outside the booms; they would do that twice a day. I also had staff working with the EU, the environmental unit. That unit would go out and look at the water sampling, the sediment sampling, check the
vegetation, that sort of thing.

Q. Did Yakama tribal elected leadership ever go to the Mosier site?
A. Yes. The Monday following the train accident, my tribal chairman and a handful of other council were allowed to go out on a VIP tour of the area to look at the damage. It was kind of quick. And at that time, they were able to look at the derailed trains, the disturbance to the wastewater treatment plant and then they were able to access the beach.

Q. Was that the only time they went to Mosier?
A. No. On Thursday, June 9th, Yakama Nation held a healing ceremony in Mosier on the banks of the Columbia River. We had a religious ceremony, and we invited all of the responders that were able to attend to be there with us. In our religion we use singing and drums. And so they came down to the banks of the Columbia and we sang seven songs and kind of released ourselves and asked for prayers for the area.

I'm tasked with -- my task was tasked for speaking for those things that cannot speak for themselves, protecting the environment, some may say, but we feel that that healing ceremony, that cleansing ceremony needed to happen. Up till that point there was problem after problem, equipment breaking down, people
getting heatstroke or heat exhaustion. It was triple
digits all week long, of course. And once we had our
healing ceremony and prayed on the area, things happened
to go very smoothly. There was no more equipment
failure. It’s our beliefs that we have to protect the
land and the land will protect us, so having that
religious ceremony was important.

Following that ceremony, there was a press
conference held that the Yakama Nation hosted. We had a
very, very good response to the press conference. It
was for leadership of what we call the four river
tribes: Yakama, Umatilla, Nez Perce and Warm Springs.
It also happened that Robert F. Kennedy, Jr. was in the
area and he came and spoke. And it was -- it was good.
I think that needed to happen to move the project along.
Everybody needed to clean their hearts and minds.

Q. Following Mosier, have you been given direction
to do anything else with respect to that incident?
A. Yes. My tribal leadership has asked me to
prepare a letter to Gina McCarthy, who is the
presidential appointee head of the US EPA. There's a
lot of concerns. Oftentimes when people think of
fishing on the river, they think of salmon. And
although salmon's important, it's important to our diets
as native people, we also have to think of the lamprey
or the eels. And when the oil was reaching the river, it was coming through an outflow pipe from the wastewater treatment plant. That outflow pipe was about eight feet offshore. So when the oil bubbled up, it bubbled up eight feet offshore. One of my main concerns was the lamprey. They live in the sediment. So we know that there is some damage there. We've asked for a government-to-government consultation with Gina McCarthy to share our concerns, to share our concerns not just with the Mosier incident, but with all transportation of fossil fuel through the Columbia River Gorge. It's not just a scenic area to us, it's our lifeblood.

Although the Yakama Nation is located in central Washington, we are river people. We always have been. Since time immemorial, we've been fisher people. And we've been raised -- I've been raised that if we don't take care of our foods, they won't take care of us. If we don't go and catch the salmon and provide them in our diet and bring them to the table, they won't be there for us anymore. So if we're not going to protect them, then we're not Yakama people. So that's the lifeblood of who we are. And we want to make sure that Gina McCarthy understands that, that it's not just -- it's not just commerce. It's not just something we do because we can. It's something we have to do. It's
something we've been trained to do. It's in our blood.

Q. Have your leadership given you direction in your work regarding these matters with respect to mitigation for these impacts that you described?

A. Yes. Immediately following Mosier wrapping up, Union Pacific reached out to me and offered to mitigate damages received. While Mosier was occurring, during the first week, the pool -- the Bonneville pool was held static by the US -- by the Army Corps. And that thinking was, if there was oil in the water, let's keep it within the booms, let's keep it off the shore. So they held the pool static, which was fine in the beginning, but when that pool is held static and the water's not moving, people aren't catching fish. And so there was -- there was a subsistence impact and there was an economic impact. Union Pacific was aware of that. I brought it up at one of our unified command meetings that Union Pacific was at, and I asked that since we've eliminated the threat to the Columbia River, if we could get the water moving in the pool again. And so there was a consensus vote, which is how we do things at unified command, and we opened the gates and the water started moving again, which so happened that evening my dad was able to catch six salmon, which was great. Before he wasn't catching anything.
Sexton / Sanchez

1 But Union Pacific, knowing that we've been
2 impacted, wanted to mitigate. Well, there's no word in
3 the Yakama language for mitigation. Mitigation is not
4 something we do. Much like my elder who spoke before me
5 said, you could offer us a million, trillion dollars for
6 the rest of our life and it's not going to be enough.
7 Mitigation is not part of our language.

8 Q. Earlier in your testimony, you mentioned you
9 have cultural monitors. Can you describe, I guess, why
10 or the nature of the Yakama Nation's concerns with
11 respect to cultural resources?
12 A. As I stated, Yakama people have been river
13 people since time immemorial, and not just Yakama
14 people, Warm Springs, Umatilla and Nez Perce and
15 Klickitats. There's been several tribes in that area.
16 And with people being in the area comes tragedy, death,
17 loss, but also village sites and homesites. So
18 throughout that area, there's cultural sites every step
19 of the way. Twenty miles upriver from Mosier on the
20 Washington side is a significant site called S'kin
21 Village, something that we just met with the Bonneville
22 Power Administration over a fairly large site that is on
23 the records, it's in the maps, it's -- we're aware of
24 it. Well, there's also sites throughout that we, as
25 Indian people are aware of, that aren't on the maps that
Department of Archaeology doesn't know about. So while we were onsite, there was a discovery made which I will -- I'm not able to speak about, but just because on the map there was no sites doesn't mean there wasn't anything there, and that's important to understand. Often we don't publish or make people aware of our sites because of looting or damages. It's a way of protection.

Q. Thank you, Ms. Sanchey.

MR. SEXTON: That's all the questions I have for you.

JUDGE NOBLE: Cross-examination?

CROSS-EXAMINATION

BY MR. JOHNSON:

Q. Ms. Sanchey, I'm Dale Johnson. I'm one of the attorneys for the applicant. Thanks for being here this morning.

With regard to the McNary Dam diesel spill that you discussed, BNSF is responsible for paying for that monitoring and cleanup effort, is it not?

A. I believe they are. They used an environmental consultant firm, Kennedy Jenks, who was on site and has put the monitoring wells in place. So my belief is that BNSF is responsible for that.

Q. Okay. And do you -- as part of your hazmat
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1 responsibilities, do you coordinate with BNSF regularly, or is there a program that you participate in?

   A. The short answer is no. BNSF is very difficult to work with. They like to keep us at bay. They don't prefer to meet with us. They actually hired a Yakama tribal member as the tribal liaison in efforts to reach out to the Yakama Nation, I'm assuming, but, no, not at all.

   Q. Okay. So you don't think that liaison effort has been productive?

   A. No.

   Q. Okay. Are there other tribes, either in or outside Washington, that have similar hazmat capabilities to the Yakama?

   A. Possibly. Not within the state of Washington that I'm aware of.

   Q. Okay. So in your general geographic area on both sides of the river, so to speak, is it primarily a Yakama Nation responsibility?

   A. When you're looking at the four river tribes, it would be Yakama Nation.

   Q. Okay. All right. And with regard to the Sulfur Creek incident, do you know how long it took to identify that a leak had even occurred?

   A. I'm unsure how long it took to identify. The
way it was -- was identified is the community started noticing blobs of black oil coming down the creek, not knowing where it came from. So I am unsure how long it had been leaking before the calls from the community started coming in.

Q. Okay. And that was -- it was identified by private citizens who noticed it?

A. Yeah. People out walking their dogs.

Q. Okay. All right. You also, in discussing the Mosier incident, talked about your first -- your first, I guess, notice of the incident, I thought you said coming from a tribal member. And then you said you received a number of e-mails and calls. Were those e-mails and calls, or some of them, part of activation of a response plan?

A. I don't believe so. When you get into hazmat work and you form a team and you have an emergency response, it kind of becomes a brotherhood and we all look out for each other. So as things start to pop up and as notifications start to go out formally, everybody reaches out to each other to make sure everyone is on the same page. An official notification did not occur until late in the afternoon. I believe we were already in route to the scene when we were officially notified.

Q. Okay. And as part of your duties as the hazmat
coordinator, you are part of a regional response plan; isn't that correct?

A. Whose regional response plan?

Q. Well, a regional response plan.

A. We do serve on the Northwest Area Committee regional response team for EPA. So as far as federally, yes, we are.

Q. Okay. But do you coordinate at all with the -- I thought you said you coordinated with the Oregon Department of Environmental Quality and the Washington Department of Ecology. Is that --

A. Mosier was the first time we've ever worked with Oregon DEQ. And we have worked with Ecology in the past. As far as having a response -- a regional response or a coordinated effort with Ecology, that's something I've worked very hard on within the last year. So it's difficult to understand because the Yakama Nation works at a federal level, we're federal partners with the federal government, we're not partners with the state, and so building those relationships is something I have been working on.

Q. Okay. And just to confirm, and I think I know the answer to this at this point, but the Yakama -- you were the only tribal entity as part of the unified command during the Mosier incident; is that correct?
JOHNSON / SANCHEY

A. We were the only tribal on-scene coordinator at Mosier. However, Umatilla did come by and take a look and share their concerns, as did Warm Springs.

Q. Okay. And you described some -- when you -- your arrival at the scene there in Mosier and you -- I think you used the word "chaos." Have you reviewed the testimony of the Mosier fire chief, Jim Appleton, in this proceeding?

A. Yes, I have.

Q. Okay. And do you dispute his opinion that the response actually went quite well that day?

A. I do not dispute that. I have a different perspective.

Q. Okay. And what resources were on scene when you arrived?

A. A dozen or so different fire units. The firefighting effort assumingly went well, but my view is more from a hazmat perspective, environmental perspective. I'm not a trained firefighter, so I can't speak to that.

Q. Fair enough. And at the time you arrived and you got inside the incident command center, were there representatives of the Department of Ecology there?

A. When I arrived at the overpass to access Mosier, the Department of Ecology team was just coming across
JOHNSON / SANCHEY

the river in the boat. So they arrived shortly after us.

Q. I'm sorry. I keep forgetting this was on the Oregon side of the river.
A. Yes.

Q. So how about DEQ representatives? Were they there?
A. I do not recall them being there at that time.

Q. And a corps of engineer -- you talked about a corps of engineers representative approaching you. Were there corps representatives there when you arrived?
A. There was one.

Q. And was the BNSF reaction team on site when you arrived?
A. This wasn't a BNSF issue.

Q. So is it your testimony that there was not a BNSF -- I'm sorry. I apologize. As I told the council, it's been a long four weeks. The Union Pacific reaction team, was there a representative on site at that point?
A. When I arrived?

Q. Yes.
A. Not to my knowledge.

Q. Okay. Do you feel that your efforts and your response made a meaningful contribution to the overall response at the Mosier incident?
JOHNSON / SANCHEY

A. Absolutely.

Q. You also talked about equipment failure. What specific equipment failures were you referring to?

A. I don't recall talking about equipment failure.

Q. I'm sorry, I thought that you talked about in the aftermath of the incident, that there were equipment failures and there were people who succumbed to heat exhaustion and some other things, and I was just wondering what equipment failure you were referring to?

A. If I said that, I apologize. I don't recall saying that.

Q. Okay. Fair -- sorry. I didn't mean to cut you off. Was there something else?

A. There were people with heat exhaustion. It was triple digits. It was an oil train fire. It was hot.

Q. Okay. And you also talked about oil bubbling up in the river. Can you just describe that more fully. What specifically was bubbling up?

A. So when the train derailed, it took out the wastewater treatment plant. It cracked and destroyed at least three of the manhole covers, and I believe 10,000 gallons of Bakken crude accessed the treatment plant. The outflow pipe from that treatment plant was eight feet offshore into the Columbia River. That's how the oil entered the river, was through the outflow pipe. So
it was coming out of the outflow pipe and bubbling up to
the surface.

Q. So when you say "bubbling," so there was crude
oil bubbling up?

A. Yes.

Q. Okay. And that was contained by an oil
containment boom, correct?

A. A series of three.

Q. Okay.

MR. JOHNSON: No further questions.

JUDGE NOBLE: Cross-examination? Excuse me.

Redirect? I apologize.

MR. SEXTON: Your Honor, just one really
brief, brief question, just for clarification.

REDIRECT EXAMINATION

BY MR. SEXTON:

Q. I believe, Ms. Sanchey, you had mentioned
equipment failures in the context of the religious
ceremony -- the cleansing ceremony that had taken place,
and the difference between -- I don't know if you have
personal knowledge of those failures, but I just wanted
to refresh your recollection with respect to that and
see if you had anything to add on that.

A. Thank you. I did say that. I apologize. The
reason I said that is one of the gentlemen, the head of
the hazmat team from Union Pacific, a gentleman by the name of Rob -- Robert -- I can't recall his last name -- he said that they been experiencing equipment failures up to that point. That's not something I witnessed. That was something that I was told when he come to thank me for having the religious ceremony, come to me with my leadership at that.

MR. SEXTON: Thank you. That's all the questions I have at this time.

JUDGE NOBLE: Council questions?

Mr. Snodgrass?

MR. SNODGRASS: Good morning, and thank you for coming to testify. A couple of questions. One, in terms of the -- you mentioned earlier in your testimony of a spill from the, I believe, Sulfur Creek, if I'm getting my locations right, from the motor oil container. Do you know what the total gallons spilled is, ballpark?

THE WITNESS: I believe it was in the ballpark of 2500 gallons.

MR. SNODGRASS: Okay. What sort of cleanup -- how was -- was in -- was that removed from -- how did the cleanup on that work?

THE WITNESS: That's -- the cleanup -- there was a lot of environmental damage at that point in time...
SANCHEY

along the banks of the river. And then there happened
to be a marsh that had the inflow pipe open, so there
was damage to the marshlands. There was a lot of
on-the-ground moving tumbleweeds that were covered in
oil and having to remove soil that had been
contaminated.

In addition to that, there was having to
clean out the entire irrigation system in that area.
That's -- that probably took a good week and a half.
And then also we had to bring in an avian cleaner to
take care of the birds that were there. And it wasn't
just the barnyard geese, but there were native ducks and
other geese in the area that were covered in oil. It's
interesting, when they get covered in oil, they start
to -- they float on the water, but they'll go in circle
after circle after circle exhausting themselves. So
although this occurred on the Oregon side, there were
impacts clear to Prosser in Washington.

MR. SNODGRASS: I think you mentioned that
was in 2015 or '14. So what is the current status of
the river? Are there fish in it?

THE WITNESS: I believe the status of the
river is -- has repaired itself. There were -- there
was no work done within the mainstem of the Yakima River
at that time. Disturbance to access the sites that were
contaminated would have caused more harm than good.

MR. SNODGRASS: I see. And just some
questions about your experience in the Mosier incident.
You said it took two and a half hours. Was that to get
from Goldendale to Mosier?

THE WITNESS: Roughly.

MR. SNODGRASS: And in that trip, were most
of the other vehicles in front of you emergency -- as
best you could tell, emergency responders or other
traffic or --

THE WITNESS: It was other traffic. And
they were basically at a standstill.

MR. SNODGRASS: How long would that drive
normally take, if you know?

THE WITNESS: Let me backtrack. First, I
can -- I believe we left Toppenish at 1:30, and I
believe we got on the site at Mosier between 4 and 4:30
so that would have been three hours. That trip normally
from Toppenish would have taken us an hour and a half.

MR. SNODGRASS: And it sounded like you had
a little bit of assistance in that you said you had --
you talked to one Oregon trooper who couldn't
necessarily wave you up but at least could talk to the
people in front of him.

THE WITNESS: The initial ask from us to the
trooper was to have an escort. And he basically said, I can't do that; you're going to have to keep doing what you're doing. However, he did radio ahead to the next trooper to let him know we were coming so that that trooper just waved us through and didn't stop us at that roadblock.

MR. SNODGRASS: And then later you said you somehow -- I missed that part of the testimony or I forgot it. But you were able to use -- you know, use the shoulder or something and you said some of the other fire trucks followed you at that point?

THE WITNESS: We were, from just past Biggs all the way to approximately Hood River, driving on the shoulder exclusively. And we had firefighters and personally owned vehicles following us, not fire trucks.

MR. SNODGRASS: Thank you.

JUDGE NOBLE: Other questions, to my right?

Mr. Stone?

MR. STONE: Good morning, Ms. Sanchezy. I'm sorry if I missed this in your testimony, but you mentioned that on your first trip to Mosier, you were hauling your hazmat response trailer which contained a boom. Is that the boom -- was that eventually used to put out in the river that we saw in the aerial photographs?
THE WITNESS: No. Two environmental cleanup companies, Clean Harbors and NRC Environmental arrived on site. They deployed their boom. We had our boom there as an extra.

MR. STONE: Okay. Were those response companies called on site by Oregon DEQ or the Union Pacific Railroad or --

THE WITNESS: I'm not sure.

MR. STONE: Okay. Thank you.

JUDGE NOBLE: Other questions? To my right? My left?

Mr. Stephenson?

MR. STEPHENSON: Thank you. I'm interested in the unified command, and I'm not an attorney on these things, but it seems to me that you brought unique and important authority perspectives, expertise and also another person to the command, and so I'm wondering are there things we can do to make that -- not because of you, but because there's many people there that need to be part of that command, are there things that we can think about, drills or tabletop exercises or something, and are you invited to those, are there things that we can think about to make that smoother so when we have these incidents that require fast response, we can have a fast response?
THE WITNESS: Thank you. Initially when we arrived on site, local jurisdictions had no idea what to do with us. What do we do with the tribe? Do we just talk to them, take notes and send them on their way? It wasn't until our federal partner and this partner, being Army Corps of Engineers, knew what to do with us, knew that we had a place -- we had a right to be there and that we needed to have a seat at the table. I believe it would help in the future -- preferably we don't have another one of these incidents, but if we do in the future, that local jurisdictions understand how tribes fit into the equation. We do get invited to tabletops, but it's always at the federal level, very rarely at the state level, and definitely not at local jurisdiction levels. So just an understanding of how tribes -- not just the Yakama, but tribes fit into the equation is important.

MR. STEPHENSON: Thank you.

JUDGE NOBLE: Any further questions?

Mr. Rossman?

MR. ROSSMAN: Thank you for your testimony.

We've heard earlier testimony that the applicant in this case has done tabletop exercises to model a spill response in the river associated with this project. Do you know if the Yakama Nation was invited
to participate?

THE WITNESS: I don't believe so.

MR. ROSSMAN: And I know from the application, that there were some letters sent to cultural resources officers in your tribe requesting information about cultural resources on site or any cultural resource concerns. Have you at all been involved in any conversations about that with reference to this project?

THE WITNESS: No, I have not. I don't do the cultural resources portion. I have a member of the cultural resources program that works with my hazmat team, but as far as any response, I'm not aware of that. That's not my program.

MR. ROSSMAN: So to your knowledge, there haven't been conversations about sort of the interaction between hazardous material response and cultural resources within your tribe relative to this project or with the applicant relative to this project?

THE WITNESS: I don't feel comfortable answering that because I don't have that knowledge.

MR. ROSSMAN: Got it. Thank you.

JUDGE NOBLE: Further questions to my left?

I just have one clarification, Ms. Sanchey. You were mentioning about the 2014-2015 event that you
SANCHEY

responded to, and you said that you saw -- talking about the bird -- impacts to the birds and geese and other native birds. You said you saw impacts all the way to Prosser, and Prosser is quite a bit far from the river and uphill. Can you describe what impacts you're talking about there?

THE WITNESS: So we were able to launch boats -- well, actually let me back up. In the middle of the night this happened, towards evening, so then we had an evening -- had to go out in the middle of the night and track it. For whatever reason, there was pools of oil traveling to Prosser.

The reason Prosser is so -- sticks out in my mind so much is we have a fish hatchery there that takes in river water for the habitat. So we had to go and make sure -- first of all, secure that area with booms and then have that hatchery switch from river water over to well water. There was sheening up on the banks and in some of the vegetation. But like I said, because of the way the -- the access point, we didn't get involved in the river work; it would've done more harm than good.

JUDGE NOBLE: And that would have been the Yakima River, not the Columbia River?

THE WITNESS: The Yakima River.

JUDGE NOBLE: Thank you for that.
Any questions based on council questions?

MR. JOHNSON: No, Your Honor.

MR. SEXTON: No, Your Honor.

JUDGE NOBLE: Ms. Sanchey, thank you for your testimony this morning. You are excused as a witness.

THE WITNESS: Thank you.

JUDGE NOBLE: Thank you.

I think this is a good time for the morning break. It's about a quarter till 11. We will be in recess for 15 minutes or a little less, till 10:55.

(Recess taken from 10:44 a.m. to 11:01 a.m.)

JUDGE NOBLE: We're back on the record.

Mr. Sexton, do you have another witness?

MR. SEXTON: Yes, Your Honor. I would like to call Randy Settler to testify, please.

JUDGE NOBLE: Mr. Settler, would you raise your right hand, please.

(Witness sworn.)

JUDGE NOBLE: Thank you. Please be seated. You may proceed.

MR. SEXTON: Thank you, Your Honor.
SEXTON / SETTLER

RANDY SETTLER,
having been first duly sworn,
testified as follows:

DIRECT EXAMINATION

BY MR. SEXTON:

Q. Good morning, Mr. Settler. I'm going to be asking you some questions regarding your experiences as a tribal fisher this morning, but first can you please state and spell your last name for the record.

A. My name is Randy Settler. I'm a Yakama enrolled member. My name is spelled R-a-n-d-y, my last name Settler is S-e-t-t-l-e-r.

Q. Thank you, Mr. Settler. What is your current occupation?

A. Currently, I'm a commercial tribal fisherman. I fish near the location Stanley Rock, Koberg Beach.

Q. How long have you been a fisher?

A. My father was a fisher and his father was a fisher and myself, I've been brought up in fishing, so about 53 years, I'd say.

Q. Okay. And when were you born, sir?

A. 1955.

Q. Have you had any other jobs or work that are related to fishing?

A. Yes. I was the fish and wildlife law and order
SEXTON / SETTLER

community chair for the Yakama Indian Nation from 1997 to 2001. I've worked in fish processing and marketing most of my life. Served on the Pacific Salmon Treaty as a southern panel alternate for 15 years. So I've pretty much worked around the fishing side of things most of my life.

Q. And you were present this morning for Mr. Slockish's testimony; is that right?
A. Yes, I was.

Q. Okay. And you heard him talk about the Fifteenmile Creek herbicide spill; is that right?
A. That's correct.

Q. Did you -- did you have any experience with that spill?
A. Well, not personally, but I resided near Fifteenmile for all my grade school and high school years and I fished Fifteenmile for lamprey and steelhead and bass and in other areas. So I know that river -- that Fifteenmile Creek quite well, yes.

Q. Did you know any other tribal fishers who were impacted by that spill?
A. Oh, yes. That particular spill, as the outflow meets the Columbia, it goes downriver along a large platform area which is commonly referred to as the Lone Pine in-lieu treaty fishing area. And so there's 30 or
Sexton / Settler

40 tribal members. A lot of my family still reside in that area. And so those platforms were all shut down and people were told they could not fish because of the contaminates in the water there. So, yes, I do know.

Q. What happened to some of those people who were unable to fish during that herbicide spill at Fifteenmile Creek?

A. Well, they couldn't earn any money, and there was gillnet fishery going on, and several of them took old boats that they probably would have never been on and they moved upriver and they went gillnetting. A few of them I know, they drowned during that -- just shortly after that chemical spill in that Fifteenmile. They would've never left those fishing platforms if there wasn't a chemical spill. So they drowned in the Columbia upriver as a result of having to move and try something else to make a living.

Q. How many people do you know, sir, that passed away in that respect?

A. From the chemical-related spill?

Q. Yes, sir. You described people that had -- that took to boats from their platforms because they couldn't fish their platforms.

A. Well, I believe there was three in that boat that capsized. But two were from the platforms. The
other fellow was — was a set-net fisherman. So the two from the platforms went up to assist that person who was fishing already upriver and they drowned in that -- that boat accident.

Q. Shifting gears a little bit, sir, were you present at or near the site of the Mosier derailment on June 3rd of this year?
A. Yes, I was.

Q. What were you doing that day, sir?
A. Well, I serve on the Columbia River Inter-Tribal Fish Commission, much like our chief, Wilbur Slockish, Jr. I'm a commissioner as well, and I work closely with the Yakama Nation fishing staff because I am a Yakama Nation commissioner, and I received a text message as I was traveling east on Highway 14. Highway 14 is on the Washington side of the Columbia, and I was going to my fishing location, Stanley Rocks Treaty Fishing Access Site, which is one mile east of the Hood River bridge there on the Oregon shore. And my location was -- I was in the tunnels on Highway 14 and I received this text from one of the fishery staff, Mr. Steve Parker, and he said -- the text says, I have a train derailment with a car leaking; are you near your fishing location? And I texted him back and said, I'm on route, and he asked me to take pictures if I could.
Q. So you're on route to your fishing location nearby, relatively speaking, Mosier, and you receive a message regarding the derailment. What happens after that?

A. Well, we immediately noticed the traffic situation getting a lot worse, and they closed 84 and the traffic crossing the bridge at Hood River became congested. And we were able to make it to the Oregon side, and I parked my vehicle in the Hood River marina. I called my family members who fish with me who were at Stanley Rock one mile east of Hood River, and I had my fishing camp there and my boat, and I asked them to drive up to the Hood River marina and pick me up because 84 -- Highway 84 was closed. And I knew the only way that we were going to get around was by boat. So they came up to pick me up at the Hood River marina.

Q. So your family picks you up at Hood River marina. And where do you go from there, sir?

A. Well, we fueled up. You know, we didn't know what our day was going to be like, and I have an 80-gallon tank on my boat. So we pulled up to the fuel dock and started trying to get the fuel attendant to come down and give us fuel, and we were there with the Sheriff's Department and they were doing the same thing. They were trying to fuel up their boat.
Q. After you fuel up, did you take -- did you go back out on the river somewhere?

A. Oh, yes. We then immediately traveled upriver about five or six miles to the oil train derailment, and we took pictures as we went up to the oil train derailment near Mosier there.

Q. What were you doing besides taking pictures? Was there any other reason you went up there to see the derailment?

A. Well, we were fishing our set nets, which are -- they're just like a ring on your finger, but they're 24-inch -- 24 feet in circumference. And then we tie a bag net on that metal ring, which is five-sixteenths spring steel, and the bag net, you set it in the back. And as the fish are moving upriver in their migratory travels, they swim into those hoop nets, and we check them and we take the fish out and harvest them. And that's why I was originally going back up to this site when I got the text message, was to tend to the gear -- the hoop sets. So we -- instead of tending to our gear, we drove straight up to Mosier because it was -- by that time I had received phone calls and -- from the Inter-Tribal Fish Commission staff, and they were all very concerned. I had received calls from the chairman of the Yakama Nation. A number of people were
already been notified about the oil train derailment.

Q. So how long were you there in the water near Mosier during the derailment?

A. Well, it was a pretty calm day, so we can travel 55 miles an hour, 60 miles an hour on my boat. And we only stayed around probably an hour. We went to the outflow of Rock Creek to see if we could view any oil that was seeping out. There was no visible oil that was -- we observed, and we took pictures of the train and the smoke plume and we got as close as we felt that we wanted to be because we were worried about explosions. We didn't know if there was going to be an explosion. And we could witness, you know, the Columbia River Inter-Tribal enforcement vehicle traveling up and down the bank. That was the only enforcement vehicle that we saw.

Q. In the water?

A. No. They were on the bank.

Q. Okay.

A. They were driving back and forth on the road there with their lights on.

Q. So you were there at the Mosier -- or near the Mosier derailment site for about an hour. What did you do after that?

A. Well, while we were there, we talked with the
Oregon State Police. They brought their boat in about 45 minutes after we arrived. And then we figured there wasn't anything we did -- we could do. We offered to help the county deploy the deployment booms because we're all, you know, fishing people that get in and out of the banks and work on the Columbia River commercially so we're pretty skilled at what we do. They told us that they didn't need any help, so we traveled, you know, four miles from the oil train derailment to our fishing camp, which is called Stanley Rock Treaty Fishing Access Site. And there we parked our boat and we got off and started doing our normal activities. Well, we checked the hoops as soon as we got back there to take the fish out of the nets.

Q. And then what happened after you checked the hoops for fish at your camp?

A. Well, I mean, it was -- you know, we basically stared at the traffic because the traffic was completely stopped and people were being rerouted over to the Washington side, and the traffic was just all up and down Washington Highway 14, and did, you know, our normal activity. And other tribal fishermen in that camp, there's about 30 of us that reside at that treaty fishing access site in trailers and tents. You know, we all were there and talking about, you know, the oil
train derailment.

One of the longest standing fishing families, the Georges, they were stuck in the traffic and they couldn't get across to the Oregon side and they sent me a text message and said, we're stuck on the Washington side, we want to come back to our camp, because they were actively fishing with hoops themselves, and they asked if I could send my boat over to the Bingen marina, which is right across the river from my camp and then bring them back so they could take care of the fish that they caught. And so I sent my two nephews across river with my boat and picked them up and they came back.

Q. So this is all around mid-afternoon on June 3rd; is that right?
A. That's correct.

Q. And you -- I believe earlier in your testimony, you had mentioned that there is -- it was relatively calm; is that right?
A. That's correct. It was an easterly wind.

Q. Was there any smoke from the fire from the derailment at the camp?
A. Yes. I'm sorry. Yes, there was a considerable amount of smoke. I don't know what to -- how to describe it, but the smoke that was coming off was billowing out and it was black. And as you -- my camp
is downriver of that location and we had a light, easterly wind that was blowing the smoke due west down the river right over Highway 84. And below that smoke, you could -- it wasn't as dark. Where the black smoke was, you couldn't see through it, but below it, there was almost like a reddish discoloration below that and it was traveling all the way over the top of our fishing site. And that was something we were all observing there at the camp.

Q. Did you feel any effects of -- from that smoke?
A. Yes. My conversation with the other fishing crew when they came in on my boat when they had to be transported across the river was -- the conversation went, can you taste the burning tire, because we've all -- grew up together and we know what -- as kids we set tires on fire before. And we were, like, yeah, it tastes like a burning tire, you know, and we were talking about that. And we're all tribal fishing guys so we get dirty so we just wear tank tops, and then we can go to the shower and shower up. And I mentioned to the other tribal fishermen, I said, can you feel that? And we started talking about actually having something on our skin. And I grabbed a towel and stuff and said, I'm going to take a shower, and I'm telling our fishermen that fish for me that we're pulling out of
here because, you know, the taste and the feeling of
the -- almost like a flake that was coming down on your
skin.

Q. And what happened later that evening at the
camp?

A. Well, everybody left. I mean, the price of fish
at that time was about $7.50 a pound. So if the fish
averages 15 pounds, it's about $100. And some people
catch more fish than others and some people make a
harder effort at it. And for my catch, there was other
tribal fishermen that was catching twice as much as what
I am, but they have five times more fishermen fishing
and they're running a lot more of the big hoops than I
am. And the location where I am located, it's about
four miles, and in between that four miles from the
train derailment and in between that location, there's
several platforms a mile and a half closer to the train
derailment on the Oregon side and they have a lot more
platforms there and they fish a lot more hoops there.
That fishing family is made up of Warm Springs and the
Yakama tribal members.

And we were talking, and I said, well, I'm
leaving. And Glenn George, who is -- I consider one of
the oldest ones, I think he is the oldest one, like I
am, in that fishing family, he said, I'm levering too, I
don't want my guys tasting burned tire or having anything on their skin from the oil train derailment. So as far as I know, my nephews who run their own hoops, they left. There's three of them. And five of the Georges, myself. So about nine -- nine of us that was fishing on that side, we all left.

Q. So everyone left that evening. That's still -- we're talking about the evening of June 3rd; is that right?

A. Well, I think we left in the -- right around 4:00 everybody was trying to get out of there.

Q. Okay. And you mentioned a feeling on your skin and the taste in your mouth. How did you feel that evening?

A. Well, I don't go to doctors. I don't know -- my mother's 83 and she doesn't go to a doctor at all unless she's near dying. And it's just something that we as tribal people try and stay away from it. I developed a sore throat and started coughing. 9:00, 10:00, I started feeling like I had an empty stomach and I drank too much coffee or something like that, and then I didn't feel well. So that persisted about three days, you know, where I was coughing and a little bit of a sore throat; not an extreme sore throat, but enough that I noticed it.
SEXTON / SETTLER

Q. Is that usual for you?
A. No. I don't get sick.

Q. So you all stopped fishing on that Friday. Did you suffer any direct economic impact from stopping fishing, then, because of the derailment?
A. Well, I was catching about seven salmon a day. When I went to my hoops, they had been checked earlier, I had two salmon in. So seven salmon times 15 pounds or so. That's about 100 pounds. 7.50 a pound, you know, which is about $750, maybe, times two. So we lost out on fishing time. But I didn't feel that I wanted people that -- in my family exposed to those kinds of conditions. I was concerned about the people in Hood River as well because the plume -- if it goes by me, it had to go by the people in Hood River as well.

Q. So you stopped fishing Friday. Did you fish Saturday?
A. No, I didn't.

Q. Okay. When did you return to start fishing again?
A. We came back Monday.

Q. Okay. And you mentioned other fishers -- well, first of all, let me back up. Do you fish on Sundays, sir?
A. By tribal law we cannot fish on Sunday.
Q. Is that specific to Yakama law?
A. Yes, it is. And Warm Springs or Nez Perce or Umatilla, they can fish on Sunday, but Yakamas are prohibited.

Q. So that other family you mentioned, the George family I believe it was, did they return Saturday?
A. No, not that I'm aware of. I returned on Monday and I witnessed them on Monday, but they weren't fishing.

Q. Do you know whether they returned Sunday to fish, sir?
A. No, I think they returned Monday as well.

Q. You -- earlier in your testimony you mentioned you took a couple of photos of the derailment and resulting fire. I would like to take a look at a couple of those and talk about them with you.
A. Okay.

MR. SEXTON: So if I can, first, I would like to talk about what's Exhibit 5302.

BY MR. SEXTON:

Q. Can you see that picture okay, Mr. Settler?
A. Yes, I can.

Q. Can you describe what this picture is?
A. Well, this is a picture taken from my boat. This is as close as we got to the mouth of Rock Creek,
and we're looking south, kind of like southeast from the front of the boat. And there's an opening there for the mouth of the Rock Creek to flow into the Columbia, and we were trying to observe if there was any oil that was coming out of the mouth of Rock Creek. That was about 2:20, I think, in the afternoon.

Q. 2:20 in the afternoon on June 3rd?
A. Yes, it is.

Q. Thank you.

MR. SEXTON: And if we can pull up Exhibit 5300, please.

BY MR. SEXTON:

Q. Can you see that picture okay, Mr. Settler?
A. Yes, I can.

Q. Can you describe, is this a photo that you took?
A. Yes, it is. It's from my camp there at Stanley Rock Treaty Fishing Access Site. And that is a view of the oil train derailment and the smoke that is traveling west from an easterly wind. And you can see the bluff there on the Oregon shore and parts of I-84 and the rail that travels there.

Q. And, again, this was June 3rd; is that right?
A. Correct.

Q. When you returned to camp after you had been at the site of the derailment?
Q. And are there fishing sites between that camp and the site of the derailment?
A. Yes. There is one mile and a half -- approximately one mile, one mile and a half, there's a point where that rock -- footing of the mountain there comes down to the river. On the point there, there's several fishing platforms and that's fished by the other family that stays in the camp. There's the Warm Springs and Yakamas that fish together right off that point. They have several platforms, I'd say three or four, five platforms off that point.

Q. And once again, sir, really quickly, you mentioned winds were light that day. Is that in your experience usual?
A. Well, I live near the wind surfing capital of the world. That's what I'm told. I do know that people come to the Hood River area because there's winds that blow there 265 days of the year. That's what is advertised in -- that is truly a reason they come there is because of the high winds. And so the -- my experience is winds from 15 to 35 miles an hour are real common. So, yes, I think that's kind of uncommon to have such a light wind, you know, but it does happen some days.
JOHNSON / SETTLER

Q. Thank you.

MR. SEXTON: Your Honor, that's all the questions I have at this moment.

JUDGE NOBLE: Cross-examination?

CROSS-EXAMINATION

BY MR. JOHNSON:

Q. Mr. Settler, I'm Dale Johnson. I'm one of the attorneys for the applicant. Have you sought any compensation for the economic damages that you discussed from the railroad or anyone else?

A. No, I haven't, Dale.

Q. Okay.

A. No, I haven't.

MR. JOHNSON: Thank you. Nothing further.

JUDGE NOBLE: Any redirect?

MR. SEXTON: No, Your Honor.

JUDGE NOBLE: Council questions?

Mr. Shafer?

MR. SHAFER: Mr. Settler, thank you very much for your testimony.

This is a difficult question, but I just -- with you here, could you please share your thoughts and feelings, if there were some type of an incident which impacted your business to the point that it put you out of business, what would this do to you? Could you --
are you okay to share some thoughts and feelings about that? You spoke to how many generations in your family have been fishing and obviously this is your work and your business, so could you share some thoughts with us on that?

THE WITNESS: Well, yes, Greg, and I see you're a commissioner with Clark County. The location that I fish at, we had a fishing site dispute with another tribe there and my brother was beaten severely with steel bars. And I lost my brother. He's the only one I had. And we grew up together. We slept in the same bed. He was older than me. He was an athlete, well liked, and he looked out for me. And after he was beaten, you know, we continued to fish, and I fish not because so much that it's the only thing I do, because I do construction work, other types of work and make good money. But the Inter-Tribal Fish Commission have four tribes, and of those tribes, I fish ceremonial for three of the tribes, the Yakamas, the Nez Perce and the Umatillas, I have assisted over the course of my life. I currently do that right now.

When we die -- when we lose our life here on this earth, we take our family into a longhouse, and I'm a ceremonial fisherman for a longhouse. And it's truly something when you can see the detail from the tribal
SETTLER

perspective of having a ceremony for someone that you love and they passed on. So it might not mean a lot to some people, but when you have that kind of recognition from more than one tribe and many bands and we all come together and we share in that kind of ceremony, it's important.

And even though I lived most of my life or all my life along the Columbia River and I have generations of family that lived in that same area, the Hood River area, we don't leave, you know. The only ones that we've got recorded documentation of leaving, they were sold as slaves by the army and relocated in Idaho -- or recognized in Idaho in Nez Perce country, and we came back to our land.

But it's different, you know, when you ask a question of a native person, you know, the price or how it would mean to someone, it's not the same response that you'd have, because you're a citizen of the United States and you're a citizen of the state of Washington. And this world has been affected by the relationship that the United States government has and the states off of the resources of this land. And these resources to me, I believe, were God-given to our people. They were aboriginal rights, and we were placed on this land by our creator. And so when we witness things like the
SETTLER

degradation of our water, like the degradation of our air, we don't want to relocate, we don't want to go to some other place. We want those things to stop. We want to have this land for the generations of our younger people.

And so I don't know if that answers your question, Greg, but, yes, it would be devastating. It would be devastating if we'd seen an accident like this that truly went into the river and leaked out a lot of oil into the river. I think this is a fortunate accident given its location, was easy to contain, but it's not over.

MR. SHAFER: Thank you very much.

JUDGE NOBLE: Other council questions? Any questions based upon council questions?

MR. JOHNSON: No, Your Honor.

MR. SEXTON: No, Your Honor.

JUDGE NOBLE: Mr. Settler, thank you very much for your testimony this morning. You are excused as a witness.

THE WITNESS: Thank you, Your Honor.

JUDGE NOBLE: Thank you.

MS. PENN-ROCO: Good afternoon, Your Honor.

My name is Amber Penn-Roco and I represent the Yakama Nation. The intervenors would like to call Roger Dick,
JUDGE NOBLE: Mr. Dick, would you raise your right hand, please.

(Witness sworn.)

JUDGE NOBLE: Thank you. Please be seated. You may proceed.

ROGER DICK,

having been first duly sworn,

testified as follows:

DIRECT EXAMINATION

BY MS. PENN-ROCO:

Q. Roger, just a reminder to speak slowly as we have a court reporter here that's taking down your testimony. Can you please state and spell your name for the record.

A. My name is Roger Dick, Jr. My first name is R-o-g-e-r, and the last name is Dick, D-i-c-k, and Junior is spelled in the normal way.

Q. And you're an enrolled member of the Yakama Nation?

A. Yes.

Q. Can you please describe your current position and duties.

A. I am the harvest coordinator for Yakama Nation fisheries, so I handle the day-to-day fishery management
PENN-ROCO / DICK

duties. I supervise the collection of fishery data. I generate the harvest estimates. I also generate fishery models, fishery modeling and I advise the tribal council.

Additionally, I'm a member of the US versus Oregon Technical Advisory Committee. Technical Advisory Committee forecasts the salmon runs on the Columbia. The Technical Advisory Committee reaches consensus on in-season harvest management with run size updates and catch updates. And TAC, or the Technical Advisory Committee, also reconstructs the runs both seasons.

Q. And how long have you been in this position?
A. I started in this position in September of 1999, so a little over 16 years.

Q. And prior to your current position, what did you do?
A. I started at the biologist level with the Yakama Nation in October of 1997. I started on the Satus Watershed Restoration Project. Before that I was a student.

Q. And can you please describe your educational background.
A. I have a bachelor of science in fisheries from the University of Washington.

Q. Can you please describe your experience in
fisheries and working with tribal fishers.

A. So much like Wilbur and Randy that testified earlier, I grew up along the Columbia River in a fishing family. So I've been fishing since a very young age and been around fisheries. I've mostly fished platforms and gillnets on the Columbia. And also my father worked for Yakama Nation fisheries since 1977, and I used to ride along with him to work when he would go monitor the tribal fishers.

JUDGE NOBLE: Ms. Penn-Roco, I've noticed that you are reading the questions that are identical to the prefiled testimony, and I want to make sure you knew that the council has already been able to read the prefiled testimony.

MS. PENN-ROCO: Yes. And that was my last question that was from the prefiled.

JUDGE NOBLE: Thank you.

MS. PENN-ROCO: My apologizes.

BY MS. PENN-ROCO:

Q. Have you reviewed your prefiled testimony?

A. Yes.

Q. And was the testimony accurate?

A. Yes.

Q. And you stand by your testimony?

A. Yes.
Q. Can you briefly summarize your testimony.

A. So my testimony was about the impacts that the proposed terminal would have on treaty fisheries. The two biggest impacts would be on access and safety. So the current fisheries in Zone 6, like has been mentioned, the railroad tracks run along the river and the tribal members have to cross the tracks in a lot of cases to access their fishing sites. So access itself is affected by the amount of train traffic. So if there's going to be more trains from the oil being transported through, that will have an impact.

And then also there's a safety issue with crossing tracks, because a lot of the treaty fishing sites are often remote areas and there's not always, you know, railroad crossings and that type of thing. But that's the basic summary.

Q. Earlier it was suggested that in response to a spill, tribal fishers could merely move to a different fishing site. Could you explain why this would be difficult?

A. Okay. So the two main fishing methods in the treaty fisheries are the platform fishery and the set gillnet fishery. And both of these are shore-based where the tribal fishers establish the fishing sites, like we just heard from Mr. Settler. He kept referring
to Stanley Rock, kept referring to a specific site. So the tribal members develop and establish their fishing at very specific sites, very specific locations, and it has to do with the way the fishing is done and catch rates. And so you can't just go anywhere along the river and, you know, put up a platform and put hoop nets in, like Mr. Settler described, and expect to have good catch rates. There's very specific conditions and Mr. Settler referenced back eddies and deeper water and stuff like that.

So the Yakama Nation actually registers the commercial gillnet sites. So those are registered all up and down the river. The platforms are not registered but they're established through the traditional means of recognized usage and the sites are associated with -- either with an individual or a family and that was -- Mr. Settler referenced that and he kept referring to this family and this individual to the site. And the tribal fishers are very territorial. And so most all of the good spots in Zone 6 have already been taken. So if there were an area to be closed and fishers had to relocate, it's not as simple as just picking up and going to a different area as say it would be like the sport fisher or something. That's going to be a lot more difficult to go to a different area and, you know,
there's already fishers -- you know, they've already
taken up the good spots. So the fishers coming in would
have to seek out new spots, and it's a long and
difficult process.

Q. And there are differences in catch rates between
fishing sites; is that correct?
A. Yes.

JUDGE NOBLE: Mr. Dick, wait -- there's a
mower going on behind us and so it's difficult for us
and the court reporter to hear you. So if you could
speak up just a little bit -- the mower is gone.

THE WITNESS: Yeah, earlier I think it was a
weedwacker, but now they've moved on to mowing. But,
yeah, I'll speak into the microphone and speak louder.
I'm sorry.

JUDGE NOBLE: Good. Thanks.

BY MS. PENN-ROCO:

Q. We were talking about whether there are
differences in catch rates at different fishing sites.
A. Oh, yes. Yes, that's exactly what I was getting
at. That's how the tribal fishers establish their
sites, based on where they could have the best catch
rates. And so the water depth, the flow of the water,
you know, whether it's a back-eddy or not, you know,
things like that all affect the catch rates.
Q. **How difficult is it to assign a monetary value to cultural resources?**

A. This is a very interesting question. And I've heard this question quite a bit over the years, especially in my job because we do have commercial fisheries. And like Wilbur and Randy testified earlier, this concept of assigning a value to the treaty fishing is very difficult to describe. It's very difficult to try to convey it. When I think about it, you know, the treaty fishing is really integral to who we are as a people. And it would be the same thing -- the best I can explain it is it would be like asking the average US citizen what kind of value would you put on the right to vote, the right to free speech, the right to freedom of religion, you know, the things that are integral that make a US citizen a US citizen. That's the level that treaty fishing has for the tribal people.

Q. **And for those tribal fishermen that try to obtain compensation for the closure of a fishing site, how difficult is it for them?**

A. Okay. So I was involved in an attempt to file claims. There were some military jets that collided above the Columbia River -- they fell into the river in the proximity of Arlington, Oregon, and Roosevelt, Washington. And so we had our summer gillnet fishery
going at the time, and there was a portion of the river that was closed and there was an attempt to file claims. And what we found is that it's very difficult with the tribal members -- the difficulty comes from two reasons. The first is the tribal members are not very good about documentation, and there's a specific reason for that. So there is -- the most documentation is with commercial fisheries, and for fish that are sold directly to wholesale buyers, there's receipts or -- they're referred to as fish tickets. And so there are those. But a lot of the sale can come from buyers that don't do the fish tickets. If they're sold directly to retailers, restaurants, casinos, et cetera, if they're sold directly to the public, a lot of times there won't be a receipt or documentation of any kind. And that's just on the commercial side.

With subsistence fisheries, that's the fish that people take home and eat and distribute to other family members and things like that, there's usually not much documentation on that part at all.

And then the ceremonial part of the catch, the part of the catch that will be used for ceremonial purposes, there's -- again, there's really not a lot of documentation.

On the harvest management side, we do collect
data. You know, we subsample the fisheries and we expand for -- in the normal ways fish -- catch estimates are developed, but, you know, going to specific fishers, the data isn't specific down to that level and anonymity is really big -- it's a really big concern with the data collection. So our data monitors are not writing down the families or the names or stuff. They just go into different areas and they're collecting just the data on, you know, the number of fish that were caught and how many piers and how much time and that sort of thing. They're not writing down any names. So that's not a good way to document things.

The big reason the tribal members are not very good about documenting their catch, documenting their sales is there's a lot of fear that the information will be somehow used against them in the future. So income derived from treaty-related activities, like fisheries, are not taxable, but the tribal fishers are very fearful that, you know, that may not hold or that somehow -- you know, if they keep a lot of records and stuff, that somehow it's going to be used against them.

The second thing that made it difficult is that -- kind of going along with what Randy and Wilbur talked about, there's a really big negative view on the idea of selling our treaty rights. And from the time I
was a young kid, and I think this is pretty typical for most of the tribal fishers, we're told a lot that it's really bad to take compensation in lieu of fishing. It kind of goes back to the Dalles Dam payment. When the Dalles Dam was constructed, there was a payment and it was distributed to the tribal members, and I think there was -- the lesson from it is that the value of money that comes from that is not -- you know, it's really small compared to what is actually lost to the tribal people. And so from those two things, you know, it was really difficult to get the tribal members to fill out the claims and it was really hard to document things properly and it was really difficult.

Q. Shifting gears a bit, how do oil spills impact fishing sites?

A. So the most immediate effect would be if an area was closed, then the -- whatever sites in the closed area are not accessible for fishing. You know, and like has been spoken about, you know, that could be a shorter duration in a smaller area.

The other impact would be if -- you know, how the oil movers through and what happens to it, you know, if it is in the sediment or adheres to the aquatic plants or that type of thing, you know, if there's residual oil. You know, the fish have a really strong
sense of smell and are probably going to avoid that area.

The last thing is there's a big stigmatism with spills and contamination, and the tribal fishers will be really leery, really cautious of going back into the area to fish again. Like Randy was saying, a lot of times they'll even just vacate the area themselves. So both the catch rates and also the effort can be affected.

Q. Can you please explain what in-lieu treaty fishing access sites are.

A. Okay. So in the analysis that was done by Carrico -- I'm not sure if I'm pronouncing that correctly, but there was a lot of reference to the in-lieu and treaty fishing access sites. And what those are is they're sites that have been built by the corps of engineers to replace sites -- fishing villages that were flooded by the construction of Bonneville Dam. And there was -- I don't remember the details off the top of my head, but there was a number of acres that were promised to the tribal fishery for the villages that were flooded, but it's only for the effects of Bonneville Dam, so it wouldn't carry down to the project area in Vancouver.

An interesting thing about the construction of
the in-lieu treaty fishing access sites is, I think there were six original sites that were built, you know, a long time ago, like the 1950s or so, but it was -- it wasn't nearly the acreage that was promised. And so there was a whole bunch of new sites that were built starting back in the late 1980s and through the '90s and 2000s, and I think the last one was completed about five years or so ago. And it's interesting, you know, if you think about -- you know, there was a lot of impact to a lot of communities when the dams were built and some whole towns and homesteads and things. And those were, you know, relocated immediately, my understanding of it. But the treaty fishing access sites, it took decades.

And so my understanding of it is the corps of engineers basically had to find land that was available that they could try to purchase. And so a lot of the sites are close to a lot of the treaty fishing areas, but a lot of them are not. So just looking at the in-lieu treaty fishing access sites themselves, it's not completely representative of where the actual fishing sites are. So a fishing site is where a platform would be built or where a gillnet would be attached to the shore. That's a fishing site. But the in-lieu treaty fishing access sites, they're more like campgrounds, and
the tribal members do use them when they're fishing but they're different from a fishing site, per se.

Q. So do tribal fishers only fish in areas around these sites?

A. No. There are some in-lieu treaty fishing access sites that are really close to a lot of the fishing areas, but there's a lot that are not. And the tribal members are accessing the river, you know, all up and down, you know, throughout -- so a lot of times they're, you know, driving off on, you know, the remote dirt roads that run along the tracks or other roads to access their fishing sites.

Q. So those sites are not necessarily a good gauge of the location of all of the tribal fishers fishing sites?

A. That's correct.

Q. What do you have to say to those who believe the tribe's interest is limited to the Zone 6 fishing zone?

A. So I think Elizabeth Sanchey covered some of this in her testimony, and I'm pretty sure Wilbur and Randy touched on it also. So most of the treaty fishing is in what's referred to as Zone 6, from McNary Dam to Bonneville Dam. We've also recently established some bank fishing as far down as Beacon Rock, but, you know, my understanding, the position of the Yakama Nation is
that none of the usual and accustomed fishing areas have been relinquished. And so the U&A areas extend over a much larger area, you know, that go downstream of Bonneville Dam, you know, quite a ways. They go upstream, you know, up the Columbia, even out in the lower Snake.

And so most of the fishing in the Columbia does occur in Zone 6 and right below. But there's a lot of fishing in other areas. Especially -- so if there's not fishing in the mainstem Columbia, a lot of times they'll be fishing in tributaries that are really close. So like we have a fishery up on the Icicle River, which is a tributary to the Wenatchee River, but we don't do a lot of fishing out in the Columbia River, you know, say, up around Wenatchee or Brewster or that area. So the Yakama Nation has maintained fishing in the Cowlitz River for smelt in Southwest Washington and also for lamprey in the Willamette at Willamette Falls.

Q. And would you say that the Yakama Nation's interest is not just in the harvest of fish?

A. Yes. So harvest is the most visible and, you know, there are several court cases governing the harvest, but I think, like Elizabeth Sanchez testified, you know, really the Yakama Nation and the other tribes are working to establish co-management. And the really
big thing that the tribes are trying to do is we're
trying to rebuild the runs. So all the aspects of the
salmon's life cycle come into play, not just the
harvest. The habitat side -- and I think Elizabeth
works a little more on that side. There's, you know,
the hydro component. The hatchery component or the
production component is really big with the tribes. I
know all four tribes have production programs that are
all aimed at rebuilding the runs. And, you know, the
sentiment always is, on the tribal side, that we're not
just rebuilding the runs for the tribes; we're working
to rebuild them for everybody.

MS. PENN-ROCO: Thank you. Those are all my
questions.

JUDGE NOBLE: Cross-examination of Mr. Dick?

CROSS-EXAMINATION

BY MR. JOHNSON:

Q. Morning, Mr. Dick. I'm Dale Johnson
representing the applicant. Just a couple quick
questions. The military jet collision that you
described, was that -- that was the claim against the
United States; is that right?

A. Yes.

Q. Okay. And do you happen -- I realize you're not
a lawyer, but do you happen to know what process that
involved? Was it, for instance, do you know if that was
under the Federal Tort Claims Act or some other federal law?

A. I believe it was. And my reason for saying that is -- like I was saying, it was really difficult to get
the information from the tribal members, and from what I remember being told by the attorneys was the time ran
out and it was -- that tort claims sounds familiar.

Q. Okay. Thanks. Have you personally ever been
involved on behalf of the tribe relating to a claim
against a responsible party under the Oil Pollution Act?

A. I can't recall any.

Q. Okay. And a similar question, have you ever
been involved on behalf of the tribe as part of a
natural resource damages assessment as a tribal trustee?

A. I haven't been involved directly in that, but I
know different parts of our program, those terms do
sound familiar. I know different parts of the program
do work on issues like that, but I haven't been involved
personally, myself.

Q. Okay. Thank you. And related to your
discussion of the difficulty of -- involving claims,
has -- are you aware of any outreach efforts by the
tribe or even any federal agency to dispel the concerns
that result in a lack of recordkeeping or the idea that
acceptance of compensation will result in forfeiture of a right?

A. Yes. Salmon marketing became a huge issue during the '90s. The runs got really low and the prices got really low. So the recordkeeping -- so we had a lot more tribal fishers starting -- selling a lot of their catch over the bank and directly to retailers, and so there's been a long effort to educate the tribal fishers on the benefits of recordkeeping and issuing receipts and things, not only for themselves but also for their customers. And some of that has taken hold and they will issue receipts and stuff, but there's just this long -- it's been really difficult. They're really leery of the idea of being told one thing and then later finding out it's something different. And the salmon marketing has done really well and I think they do issue more receipts and things than they used to, but they're not -- I don't know how long they hold onto those receipts and it's really difficult to get them, you know, to divulge that type of information.

MR. JOHNSON: Thank you. Nothing further, Your Honor.

JUDGE NOBLE: Redirect?

MS. PENN-ROCO: Just a clarification.
DIRECT EXAMINATION

BY MS. PENN-ROCO:

Q. There would be typically no proof of sale for salmon consumed personally or used for ceremonial purposes?

A. That's correct.

MS. PENN-ROCO: That's all.

JUDGE NOBLE: Council questions?

MR. SNODGRASS: Good morning. I guess we're almost in the afternoon. Just a couple of quick questions.

In terms of the -- I was struck by there's some additional information on rail incidents that's been provided over the last couple of days, as we learned about the case of the train hitting a rock and not the rail and having a spill. To your knowledge, in -- have you heard of any cases of a train derailing in the general area where we're talking about but not spilling? Not having any release of oil in that area? Are you aware of any?

THE WITNESS: No. No.

MR. SNODGRASS: Turning to the issue of the safety of crossing the tracks, can you give us a general sense of what is the status of warnings of coming
trains. There's none? There's some?

THE WITNESS: So it really depends on whether there's an established actual crossing or not. And so like with reference to the in-lieu treaty fishing access sites, those would all have the normal railroad crossings, you know, have the lights or even the gates that come down. When the tribal fishers get out into the more remote areas to access sites, a lot of times there's really nothing. They're just going along the tracks and then crossing where they need to, that type of thing. So there could be really no safety apparatus at all.

MR. SNODGRASS: Are there longstanding platforms or tribal fishing sites that have that status where there's no warning at all?

THE WITNESS: Yes. There's a good number of them. There's a lot of fishing that occurs up and down the river. And depending on which side of the river they're on, especially with the freeway on the Oregon side, the freeway, you know, there's not a lot of smaller roads and things that would have the normal safety apparatus on them. It's just more the -- I think it's more like a service road for the railroads that the tribal fishers are just using.

MR. SNODGRASS: Is sort of the danger of the
use of the road or your sense of it, any different for trains that are heading westbound versus eastbound?

THE WITNESS: I haven't really thought about that. But I can't think of any reason why there would be a difference. You know, a train is a train.

MR. SNODGRASS: In this case is your concern mostly -- we heard testimony recently that there -- I can't remember exactly what it was, but there would be some of -- some of the trains will return via the eastbound route, oil trains will return empty. And I don't know to what extent it was. I do not remember it. Were you aware of that or is your concern just about the oil trains going through heading into Vancouver?

THE WITNESS: With relation to the fishery, the concern is going to be both. It's going to be both -- the trains traveling in both directions and, you know, whether the trains are filled with oil or whether they're empty, it doesn't make that much difference except there's a bigger danger of a spill if they're carrying oil. But otherwise, there shouldn't be much difference. The danger is there both ways.

MR. SNODGRASS: Thank you.

JUDGE NOBLE: Other council questions?

Mr. Siemann?

MR. SIEMANN: Good afternoon now. Thanks
for being here.

In your prefilled testimony and today, you've talked a lot about the risk of crossing the railroad tracks and the risk of -- well, mostly of the risk crossing the railroad tracks and the effects of the oil spills. And the applicant's lawyers, counsel, have often talked about the fact that, in fact, already there is oil -- there are oil trains coming along the tracks; there are already quite a number of trains crossing the tracks. And so in effect this is not a change from nothing to something; this is a slight change in the -- well, potential change in the volume because they in some ways disputed that even, but it would also be an increase in the amount of oil.

Can you help us understand how you think about that change, and how we should think about that change relative to the concerns that you've voiced today?

THE WITNESS: Right. So the way I would characterize it is it's not a situation where I would consider it to be really low risk or really safe as it is. You know, growing up on the river and fishing, you know, I was always taught from a young age that the train tracks are very dangerous and stay off of them. It's a very dangerous situation as it is. And any
increase is going to make that danger even more so and, you know, especially if the trains are carrying oil. So there's danger even, you know, no matter what they're carrying, if it's sawdust or grain or whatever. But, you know, carrying oil, there's a lot more danger, especially from a fire or spill or that type of thing. You know, even if the increase in train traffic is, you know, marginally an increase, it's -- the only way I can put it is it makes an already dangerous situation even more dangerous.

MR. SIEMANN: Thank you.

JUDGE NOBLE: Other council questions? Are there questions based on council questions?

MR. JOHNSON: No, Your Honor.

MS. PENN-ROCO: No, Your Honor.

JUDGE NOBLE: Mr. Dick, thank you very much for your testimony today. You are excused as a witness.

THE WITNESS: Thank you.

JUDGE NOBLE: And it's time for our noon break. We will be in recess until 1:15.

(REcess taken from 12:15 p.m. to 1:18 p.m.)

JUDGE NOBLE: Everyone ready to go back on the record?

MR. LOTHROP: Yes, Your Honor.
JUDGE NOBLE: Would you please call your next witness.

MR. LOTHROP: Your Honor, members of the council, I would like to call Dr. Zachary Penney.

JUDGE NOBLE: Dr. Penney, would you raise your right hand, please.

(Witness sworn.)

JUDGE NOBLE: Thank you. Please be seated.

Mr. Lothrop.

MR. LOTHROP: Thank you.

ZACHARY PENNEY, having been first duly sworn, testified as follows:

DIRECT EXAMINATION

BY MR. LOTHROP:

Q. Dr. Penney, do you adopt your written prefiled direct testimony as a true and correct version of your testimony in this proceeding?

A. Yes, I do.

Q. Thank you. I'd like to acquaint you with the council a little bit as we proceed. I think your qualifications are unique, in my experience, and worthy of a little bit of time in your testimony. So can you please describe your educational background.

A. Sure. I did my bachelor's degree in science at
Sheldon Jackson College in Sitka, Alaska, which is a wonderful place to study salmon.

JUDGE NOBLE: Dr. Penney?
THE WITNESS: Yes.
JUDGE NOBLE: You are speaking too fast for the court reporter.
THE WITNESS: Okay. I'll slow it down.
JUDGE NOBLE: Thank you.

A. For my master's degree, I did that at the University of Victoria in Victoria, British Columbia, in earth ocean sciences.

BY MR. LOTHROP:

Q. **Slower.**
A. Wow. And I did my Ph.D. at the University of Idaho in 2013, and that was in natural resources with an emphasis in fisheries.

Q. **Thank you. Does your family have history working with salmon or fishing for salmon?**
A. Yes, they do. I am an enrolled member of the Nez Perce tribe. I grew up in Idaho. The Nez Perce are one of the four member tribes of the Columbia Inter-Tribal Fish Commission.

Q. **Slow.**
A. My brother -- most of my family are educators, but a lot of my family are involved in the restoration
LOTHROP / PENNEY

of fisheries, particularly salmon and steelhead in tributaries to the Columbia, that includes the Snake River, the Clearwater and others, and so my family has a deep investment in salmon and steelhead restoration. I grew up -- this is something you won't find on my CV. Being a Nez Perce tribal member, unlike Wilbur Slockish and others that fished in the lower Columbia, my family fished in the tributaries of Idaho using traditional methods that includes dip net, gaff and spear. And so my relationship to the salmon is in a different area, but it's also quite old. So in a way I kind of grew up in two different worlds; one in academics and the other one from the Nez Perce culture.

Q. Are any of your family members directly involved with the fisheries for the Nez Perce tribe?
A. Many are, but if I were to keep the list low, my brother is the hatchery manager for Nez Perce Tribal Hatchery which is a fall Chinook hatchery.

Q. What's the migratory pathway of Snake River fall Chinook?
A. Like a lot of Pacific salmon, Snake River fall Chinook, generally, when they leave freshwater out of the Columbia, the majority of them turn north and swim as far as the Gulf of Alaska. Migration routes vary by salmon species, but fall Chinook are often feeding in
herring-rich areas like in -- near Sitka, where I did my bachelor's, and they'll spend several years feeding, putting on size before they return back to freshwater to spawn. So a lot of our fish go north, but there are some stocks, like there are some coho that do turn south. They're generally smaller populations. And then steelhead have a tendency to go a variety of places. They've found steelhead as far, I guess in this case, west as Japan and in parts of Asia in ocean migration.

Q. So is it just coincidence that your educational background followed the migratory pathways of the Snake River fall Chinook?

A. I think it's coincidence, although it was quite -- you know, it's always nice to see where they go. As some of the tribal testimony this morning described, we're very intimately connected with those fish. And so in the Nez Perce culture, we were always told that salmon would leave our native areas to go out to far off places and bring back gifts back to the people. So that was a good part of my education, to actually go see where they go and who -- it isn't just the Nez Perce people they enrich, but residents of British Columbia and Alaska and all sorts of places.

Q. Let's talk a little bit about your areas of study and your master's and Ph.D. programs, if you
A. Okay. I'll try not to speak too esoterically. You know, bachelor's, kind of your basic core courses in fisheries. But for my master's degree, I specialized in Sockeye salmon, Sockeye salmon stocks that will trail to southeast Alaska. A lot of my focus as a researcher in academics has been related to life history. And what that means is the overall life cycle in terms of spawning, generally, so the adult portion, as we say, of the salmon life cycle. I'll try to keep it slow.

So for my master's, I studied otolith microchemistry of Sockeye, which is essentially ear bones in bony fish. They're wonderful structures. The best way I can describe them are kind of like getting -- like an onion. They have several layers, growth layers; they grow as the fish grows. And as they grow, it records some environmental information. And so my master's dealt with some technology that more or less analyzed all those different growth regions in that otolith to reconstruct the life history, as well as provide some information in relation to where that fish actually came from.
So a lot of the -- as I think has been discussed in some of the testimony, salmon and steelhead have high site fidelity, meaning they generally return to the region to spawn where they were born, and those areas have very specific chemical signatures in the water. And so that's what my master's dealt with.

My Ph.D. work was focused on steelhead returning to the Columbia, specifically the Snake River. And that study was in bioenergetics, so more or less the science of how energy is used in fish, how they get that energy, how they use that energy. And steelhead are different than their salmon counterparts. So like Chinook, Sockeye, coho, pink salmon, they all spawn once. They're known as semelparous species. And a lot of people are aware of that. They spawn once.

Q. Can you say it, semelparous, again?
A. Yeah, semelparous, s-e-m-e-l-p-a-r-o-u-s.

Q. Thank you.
A. And steelhead are iteroparous, i-t-e-r-p-a-r-o-u-s [sic]. Humans are iteroparous, meaning we can spawn more than once. But steelhead rarely spawn more than once. And a lot of that has to do with energy. So just to -- I could go way in the weeds. I get excited when I talk about fish and talk faster, so I'll try to keep this slow.
When fish return to freshwater to begin spawning migrations, in general they stop feeding. When they stop feeding, it's actually -- this might sound counterintuitive but, it's actually to save energy. It takes a lot of energy to run your digestive tract; sometimes up to 40 percent of your basal metabolism goes to running the digestive tract. So fish turn that off when they get back to freshwater on their way back to spawn.

Q. When you say "fish," you mean salmon or --
A. Salmon and steelhead.

Q. Okay.
A. And I don't want to get too far into the evolution of why. Maybe we can later, but -- of why salmon and steelhead developed into that life history to go to the ocean leaving freshwater. But they come back, they stop feeding and, depending on the species and how far they have to go, they arrive at various points of maturation. So not all salmon arrive back to freshwater immediately ready to spawn.

In the case of the Columbia and Snake Rivers, they may have over 500 miles to swim. So it doesn't make sense to arrive back in freshwater immediately ready to spawn. There is a lot of -- it's scientific jargon, gonadal maturation, the eggs need to still get
ready, the testes still need to be developed as these fish migrate and that sometimes can take months. Steelhead, summer-run steelhead, return the summer before they spawn in the following spring, so they're almost in freshwater for more than eight months before they actually spawn. So during that time that they're in freshwater, there's still a lot of development going on, even though they're not feeding.

So a lot of my Ph.D. research went into how the energy is used and, generally, what happens is steelhead run out of gas. They get up, they use all their energy to migrate, to develop secondary -- more or less develop sexually. A lot of energy has to go into eggs. Generally the females are a lot more important than the males, but that kind of goes for a lot of different species. And by the time they need to turn around back, they're more or less running on fumes. And the way the Columbia River and Snake River are now, it's reservoirs; whereas, they used to be able to return on the current, they're running on very limited energy supply and most of them are probably succumbing to exhaustion before they reach the ocean again.

Q. Thank you. Can you describe some of the research that the Columbia River Inter-Tribal Fish Commission is doing with regard to steelhead.
A. Absolutely. Along the very same lines I just described, the Columbia River Inter-Tribal Fish Commission is involved in the science, the practicality of reconditioning steelhead kelts. So a post-spawn steelhead is known as a kelt. And because --

Q. You might want to spell kelt.

A. K-e-l-t. Because steelhead can spawn more than once, when you have very low populations of fish, this is different than what you get with a Chinook. Once those fish get up to spawn, it's over. You know, they spawn once, they die. Because steelhead do have that ability to spawn more than once, if you have an endangered fish or population and you can actually get those fish to spawn again, that can actually be a very powerful restoration tool. So the Columbia Inter-Tribal Fish Commission is looking at ways to do that with some of the steel populations that are either threatened or endangered.

Q. Thank you. In conducting that research, and I don't want you to get too far into the weeds, but could you give us a sense of the employees who are involved in that and what their qualifications -- some of their qualifications.

A. Absolutely. So my capacity at the Columbia Inter-Tribal Fish Commission is the science department
manager. I'm relatively new, but it is the largest department at the Columbia Inter-Tribal Fish Commission. I have over 30 scientists, more than, I do believe, 15 of them have master's or a Ph.D. level. I have a world-renowned genetics lab in Hagerman, Idaho, which are doing some pretty incredible things with thermal adaptation in salmonids or salmon steelhead.

In addition to that, I have habitat experts. The Columbia Basin is a highly modified area. And looking at ways that improve habitat can increase fish populations. I even have data management specialists to help our tribal members with dealing with lots of numerical data. And I also, of course, have a lot of scientists that look at the impacts of hatcheries and how hatcheries can be used to restore fish in the Columbia Basin.

Q. Thank you. So your prefiled direct testimony does -- addresses the overall salmon life cycle, but I would like to spend just a little bit more time talking about the -- sort of the back 25 percent of the salmon life cycle, the adult phase. And what kind of physiological changes. What's going on and what kind of factors might affect the success or lack thereof for those fish?

A. Certainly. So I think better as it pertains
Q. Slower.

A. What Rob was talking about is the spawning migration portion. So let's just keep that as when fish re-enter freshwater and are beginning their migration. It varies upon species, about the time that they return, how far they have to go. But a lot of salmon and steelhead return to freshwater in an immature state, which you will hear a lot of times somebody refer to salmon migrating back upstream as adults. You go by more or less the fish definition of adult. An adult is actually a fish that has the ability to reproduce, that is, sexually mature.

Most of the salmon returning up the Columbia, essentially the early ones, like spring Chinook, are sexually immature. There are still a lot of things going on internally and it may take, as I said, several weeks to months before those fish actually reach maturity. And for them to reach maturity, one of the reasons that salmon and steelhead go to the ocean is to get bigger but also accrue a lot of fat. I kind of treat the salmon life history and steel life history almost like an energy game. In order to move from one phase to another, you have to have enough energy to move onto that next phase. So while they're out in the ocean,
they're building energy to be able to complete migration back to their spawning grounds to be able to finish the development of either their eggs or their testes and in some cases changes in their morphology.

So if you've ever seen a spawning salmon, you've seen that they have sometimes very vibrant colorization. The heads change. They get what we know as kypes, which is just k-y-p-e-s. A lot of stuff happens when they return back. And that energy has to come from somewhere.

So you heard me mention earlier that they stop eating. All of that energy is coming more or less internally. It's coming from their muscle tissues. It's coming from their fat that's stored in their guts, essentially. All that energy is coming from within them, and that has to be used to finish those maturation processes.

When fish get stressed or they have to move around obstacles, whether they're natural or manmade, energy gets used. If fish experience stresses maybe outside of their control, that also stresses the fish and it requires energy and that can be disruptive to that process.

Q. So, Dr. Penney, would you consider spilled oil could potentially be a stressor for these fish that are
becoming adults?

A. I do believe it would be a stressor, just as any chemical spill would.

Q. Could you talk a little bit about Sockeye, and with particular reference to the migration in 2015 of Sockeye into the Columbia River.

A. So in 2015, the Columbia Basin was in draught in a variety of places. It did not have the snow pack that we normally do. And because Sockeye tend to migrate right around the peak time of the summer when our water temperature is warm in the Columbia, they ran into unprecedented water temperatures. I didn't mention this, but perhaps it's obvious, but salmon and steelhead are cold-water fish. That's one of the main reasons why they like to go north.

So in 2015, the water temperatures were well beyond their thermal optimum -- as we say, more or less the temperature they would rather not be in. It was too warm. And that warm water stressed out the fish. Because these fish had a spawning migration to make, they had a place to get to, a lot of them tried to wait. There are places on the way up the Columbia that are cold-water, as we'd say, refuges. Some of those are near the Deschutes River, some of them are near the Little White Salmon River. So the fish tried to wait,
but they can't wait forever. So some of those fish did have to enter that really warm water. And it is important to note, warm water is a stress. It doesn't matter if a fish enters -- if a Sockeye enters 75 degree water, it doesn't automatically kill them. What it does is it stresses them. It will eventually kill them, but what eventually kills them is sometimes a secondary problem from that stress.

So in a lot of cases last year in 2015, a lot of those fish got different types of infections. And while they're also trying to battle those infections over -- the estimates I saw most recently, between 80 to 90 percent of those fish did not make the final migration to the spawning grounds. They succumbed due to warm temperature and the secondary effects of that.

How we know that is that we based our estimates of the migration of what we see in Bonneville Dam, the lower-most passable dam, and we kind of look at how those Sockeye make their way up to the known Sockeye tributaries. And we just saw the numbers decrease and decrease and decrease.

One of the problems in the fisheries is it's hard to actually see fish. You often don't know where they died and what killed them. But in this case, a lot of the Sockeye that disappeared in the Columbia likely
died due to a variety of infections and either became sturgeon food or just went back to the environment, but we know a majority of those fish did not spawn.

Q. Is the fish commission staff involved in marking the Sockeye at Bonneville Dam?

A. We are. We do have a crew at Bonneville Dam that does mark fish on their way up to help us get an estimate of how passage works, but we also are very careful that when water temperatures are getting close to the thermal optimum of many of these fish, we stop marking as to not stress them out.

Q. Let’s talk a little bit about fish populations using Sockeye as an example. Can you give the council a sense of the Sockeye populations that are present in the Columbia Basin and their relative sizes?

A. I think I can from a very general sense. There are several separate Sockeye populations in the Columbia Basin. Some of them are much larger than others. If I was to think back to the five-year estimates, Sockeye returning to the Okanagan Basin, which actually enters into Canada, was one of the most robust populations we have in the Columbia. We have just a tad under 250,000 fish that have on average returned to that system.

Lake Wenatchee is also -- which is in Washington, another Sockeye population that is quite a
LOTHROP / PENNEY

bit more robust than some of the others that we have, and I do believe that those numbers on average for the past five years are just a bit under 50,000 is a close estimate. There are other places in the Columbia Basin where the populations are not robust. One of those just happens to be in Idaho in the Snake River in Redfish Lake. On average, those Sockeye numbers have been deemed about 1200 fish. So it's kind of a good example. We're talking between 250,000 versus 1200 fish. They're -- in the '90s, Redfish Lake was in pretty bad shape. There was one year when -- if you've ever heard of the term "Lonesome Larry," when one poor male Sockeye returned back to the lake with nobody to spawn with. So that lake's on life support.

And there are other lakes that the tribes and the states are working to reintroduce Sockeye where they have been extirpated by either dams or other habitat factors. In the Deschutes, there's generally less than 100 fish that return, and in the Yakima, generally I think there's less than 500 adults that return. So we do get a fair amount of variation in terms of the overall population numbers between some of those systems. Some systems are very healthy or healthy and some systems are almost extinct.

Q. Is any one of those populations listed under the
Endangered Species Act?
A. I do believe the Redfish Sockeye, for sure, is listed.

Q. Thanks. So Mr. Challenger talked a little bit about population effects and an oil spill. What -- can you share your view with the council about what concerns you might have about an oil spill occurring during the large migration of Sockeye up the Columbia River?
A. A lot of what Mr. Challenger said, you know, it made sense to me, but he was perhaps generalizing a bit too much, you know, when he says it might affect some individual fish. I think -- you know, I would disagree with him on that. It's not so much about individuals. When it comes to Sockeye, I would probably be more concerned about individual populations.

The Columbia River is a mixed stock system. We have stocks going to Washington, to Idaho, to Oregon, to Canada, and oftentimes they like to swim in aggregate. They like to swim in schools together. And so the effects of, you know, acute -- maybe acute toxicity killing a lot of fish. So maybe you have 15,000 Okanagan fish, but if you only have so many Redfish Bay -- or Redfish Lake Sockeye, that's a pretty substantial number. So to overgeneralize like that, I do think that is dangerous.
Q. So the conditions that Sockeye encountered in 2015, you said this very warm water, have the commission scientists also been looking at potential climate change effects in water temperatures?

A. Yes. We have several scientists that are evaluating different aspects that climate change might cause to fish in the basin. A lot of those studies aren't necessarily always directly related to fish, but related to the environment that fish live in, water temperature obviously being a big one. Fish being cold-blooded animals, more or less, their metabolism is regulated by the temperature in the water. If you get increases in the water temperature, you get increases in metabolism. So if you have a limited gas tank and you're not refilling it, elevated water temperatures can cause you pretty substantial problems. But also for -- not just adults, but these are cold-water fish. They rely on cold-water systems, and I think if the predictions are correct about -- the Columbia used to be what I would call a two-flood system. We have high mountains in Idaho and in British Columbia. We would get melting that would create one flood pulse, and eventually the higher mountains would melt -- or snow in the higher mountains would melt and we'd get a second flood pulse and keep the river cool well into the early
1 summertime and the fish relied on that.
2
3 What we're faced with you is snow melt coming off much earlier, the hydrological cycle has completely changed. Can the fish adapt fast enough to that? Maybe not. Probably not. Especially with reservoirs in the system. So a lot of our research is looking at how that change in hydrograph by some of these extreme weather changes that we're seeing -- doesn't necessarily need to be warming. It could be the loss of snow melt at strange times. We're looking at the effects that might have on different populations within the territories of the four tribes that make up the Columbia Inter-Tribal Fish Commission.

Q. Thanks. So just to make sure I got this. So that -- those climate change scenarios may --

MR. JOHNSON: Objection.

MR. LOTHROP: Go ahead.

MR. JOHNSON: Your Honor, for the record, we object to this line of questioning. The whole point of prefiled testimony in this case was to allow the parties to understand the issues so that we could plan our case accordingly and prioritize witness testimony. This witness is now testifying about something that was not included in his prefiled testimony. He's testifying about a topic that wasn't addressed by Mr. Challenger.
And it puts us in the situation now of, two days away, having to reassess our case, bring back additional witnesses, prepare them to address an issue that has been on the radar screen for months and months and months, and it appears that what the tribes are doing here is they are making up their case as they go along, and that eviscerates the purpose for why we did prefilled testimony in this case.

We raised this issue yesterday, you know, and then we heard witnesses talk -- changing positions with regard to ballast release. We had new testimony about cultural resources, and none of this is new. So we're going to object to this line of questioning related to climate change and its impacts on the Columbia River. It just does not comport with how the system that we worked for months to complete in terms of issue identification and prefilled testimony was intended to work.

JUDGE NOBLE: Response?

MR. LOTHROP: Thank you, Your Honor. The record in this proceeding I think would benefit from additional information on climate change. It's a very significant issue facing the northwest, as well as the resources on the Columbia River. Mr. Johnson I think fairly enough points to the absence of climate change
information in our direct filed testimony. That doesn't mean it's not an issue. We did file substantial commentary on that document we can't name regarding climate change. And I think importantly, there are some fundamental equities at stake here with respect to our participation in this proceeding. We have not had years and years to prepare for it. We're doing our best with limited resources, and I'd say that Dr. Penney is here, testifying roughly four days earlier than he actually anticipated testifying. He had to change personal appointments to do that. That's fine, we're happy to make that accommodation. It's important to the tribunal.

But that said, one of the equities that we're looking at is an -- a very substantial application that was -- an amendment to the application that was filed weeks before the proceeding. We really had limited opportunity to respond to that. The record's staying open. And I think with regard to the duration of the record in this proceeding, you know, if Mr. Johnson's clients need to respond to this, I think there's probably opportunity for them to do so. So with that, Your Honor, I conclude my remark.

JUDGE NOBLE: All right. Thank you. First of all, with regard to the prefiled testimony, there
really weren't constraints placed upon that such that the testimony couldn't be added to, and almost everything witness has done just that. When prefiled testimony has been filed, there has been additional testimony that was direct testimony that was presented live in this hearing. And so I see no reason why this witness can't do that.

It seems essentially an issue of notice, as you're discussing, Mr. Johnson, and a concern about being able to rebut or respond to the testimony. I certainly would be open to or accepting testimony in rebuttal that was responsive to it and would actually expect that.

And then with regard to the issue of climate change, first of all, it is an issue; it is a stated issue. I made an abstract of all the issues before this started so that I would remember everything that was safe to be an issue, among the many, many issues that were presented in the written material. So it is an issue -- it is at issue.

And also, several of the witnesses have mentioned climate change as a background condition to what they were testifying about, general warming of waters and other conditions related, as they said in their testimony, to climate change. And this witness
seems to be also doing the same thing. I don't see him testifying about climate change, per se. I think he's testifying about the effect of warming waters on fish and he's attributing that to climate change just as a background statement, from what I can see. And I ask you, Mr. Lothrop, is this witness going to continue to expound upon climate change as a subject in and of itself?

MR. LOTHROP: No, Your Honor.

JUDGE NOBLE: Well, because of all of those reasons, I'm going to overrule the objection and allow this testimony.

MR. LOTHROP: Thank you, Your Honor.

JUDGE NOBLE: He was in the middle of his answer.

BY MR. LOTHROP:

Q. Go ahead, Dr. Penney.

A. I was going to ask, where were we?

JUDGE NOBLE: Would you like the court reporter to read the question back?

THE WITNESS: Yes, please.

JUDGE NOBLE: You were in the middle of an answer. So let's -- the court reporter can read the question, though.

MR. LOTHROP: Certainly.
BY MR. LOTHROP:

Q. And I will continue on from there. May be a stressor that could add to the stresses associated with a potential oil spill?

A. Yes. I mean, I think that's exactly what we're going at. It's not so much about climate change. It's about the amount of stresses that these fish can take. That is an added one that will be exacerbated in just the way the Columbia River exists now with reservoirs which kind of act as solar sinks. The water's not moving very fast. And so that is just, yeah, an added stressor onto those fish that will occur in the future.

If I was to be able -- let me just bring this back to the fish. You know, I talked about these fish coming back in more or less -- say, they're trying to complete reproduction. They still have maturation they need to complete. While they're not carrying fertilized embryos, to me in a way, it's never good to stress out a creature that's pregnant or about to be pregnant. So that's -- I think if there's something you get from my testimony, added stresses, whether it be warm water, whether it be a chemical spill, it doesn't need to be oil, can disrupt that portion of the life cycle.

Q. Thank you. So shifting a little bit,
Mr. Challenger also talked about, I believe, the differences between impacts to a wetland versus impacts to wetlands, plural. Can you describe the role that wetlands play in the Columbia River Basin and your perspective on the question of wetland versus wetlands.

A. Well, it's -- it should be broad. There are different types of wetlands. There are wetlands that occur in the estuary and there are wetlands that occur in the freshwater areas. I'm assuming that Mr. Challenger was talking about wetlands in the estuary. Those areas can be important, particularly for juvenile salmon or smolts in route to the ocean. They do provide areas of refuge for foraging. Some species like chum salmon, which spend a very limited amount of time in freshwater before they head out, utilize those areas to put on a fair amount of growth before leaving. Unlike the main river system, which tends to have currents, these areas slow the water down, provide a lot of different types of habitat, cover for fish to hide under and provide areas for insects and things like that to breed and can provide a very rich feeding ground before they undertake the final marine migration. So wetlands, especially in the estuary, can be a very important point that salmon stop, especially young salmon, before going out to the main ocean.
Q. Are the wetlands in the Columbia River now similar to what they were a hundred years ago?

A. No, they're not. Like the rest of the river system, you know, shipping traffic has changed the -- well, through diking and through dredging, has changed how that lower portion of the Columbia looks, just people building in the floodplain, which is something humans tend to like to do, has changed the floodplains and the wetlands substantially. So I do believe there's somebody else's testimony in here, maybe the Columbia River estuary group, did provide some numbers and my recollection of those numbers is probably about 70 percent of the vegetative wetlands in the Columbia River are gone. So I think to your point, it's not so much wetland versus wetlands. If you have very little of something left, one wetland can be substantial.

MR. LOTHROP: Thank you, Dr. Penney. That's all the questions I have for now.

JUDGE NOBLE: Cross-examination,

Mr. Johnson?

MR. JOHNSON: No questions, Your Honor.

JUDGE NOBLE: Council questions?

MR. MOSS: I have a question.

JUDGE NOBLE: Mr. Moss?

MR. MOSS: Good afternoon. You mentioned at
one point in your testimony that due to some sort of warm water stressing and so forth, that there was an occasion in 2015 when 80 to 90 percent of returning fish of some population that I didn't write down did not make it back to the spawning grounds. Do you recall that?

THE WITNESS: I do recall that.

MR. MOSS: What type of salmon was that?

THE WITNESS: Those are Sockeye salmon.

MR. MOSS: My question, though, is what is the usual percent that make it?

THE WITNESS: That make it to the spawning grounds?

MR. MOSS: Yeah.

THE WITNESS: It is highly variable on environmental conditions. But generally, again, not to get too far in the weeds, usually when the fish return back -- or maybe I can explain it this way. There will be fishery harvests. There's not a ton of natural predators left like we see in Alaska, so there are not a whole lot of predation by bears and things like that. So generally harvest from sport anglers, tribal anglers is the main probably mortality those fish are experiencing and that varies. It varies based on the size of the run. If it's a very low run size, oftentimes fisheries are constrained. So if there's a
PENNEY

low number of Sockeye coming back, we're going to say, well, we're not going to fish that many because there's only so many that we should take. In big years, there might be a lot more take, but generally there are -- we deal with individual populations, there are what we would call escapement numbers that we're after, so the number of spawners that we want there to actually be make sure the population stays robust. So it is highly variable. It's not a hundred percent, but it's generally much better than, in this case, 10 to 20 percent.

MR. MOSS: What would be a healthy return?

THE WITNESS: In terms of number or percentage back?

MR. MOSS: Percentage.

THE WITNESS: Let's see. If we had 100,000 Sockeye pass Bonneville Dam, I would expect -- they're highly fecund animals, you know, something between 40 and 50 percent, but generally I think it's higher than that.

MR. MOSS: Okay. Good. Although we don't have too many Sockeye sport fishing seasons anymore.

THE WITNESS: No, we don't. Hopefully we will. It's another good year this year and the water temperatures are staying relatively cold, so let's hope
MR. MOSS: That would be great. You mentioned the term "thermal optimum," and I just wondered what that is.

THE WITNESS: Sorry. Yeah, that -- that was jargony. As a cold-water fish, you know, through time, there's been measurements about, kind of, what temperatures fish prefer to be in, and there are levels of temperatures that fish operate best in -- as the cold water, operate best in. That they run -- you know, just further physiology, that that's, you know, all metabolic function is at its optimum. If the water gets too cold, they slow down.

There is a point, though, if it gets too warm that it causes, you know, a lot of different types of heat stress, just like humans can get heat exhaustion. Different fish have different levels of temperature that they can tolerate. So like a large mouth bass, which can live in warm water, can tolerate temperatures up to 80 degrees. A Sockeye, once temperature gets probably above 70 degrees, is starting to feel pretty bad. It's just the way those fish evolve. They're evolved to a certain temperature. So a thermal optimum is probably for a Sockeye similar, between 60 and 65 degrees. Once you start getting
outside of that, the fish get stressed.

MR. MOSS: And are the temperatures in the Columbia River during recent periods on average higher and lower within an acceptable range of that optimum, or are we seeing a trend in one direction or the other?

THE WITNESS: From what I have seen, again, I have to attribute some of this to the reservoirs which have slowed the water down, so they do tend to heat up faster. I do believe that we’ve seen water temperatures warming up. As we see that in other things too, like more plant growth in places where you never saw plants before. The water is slow enough for plants to grow. So I do believe we are seeing the water warming.

MR. MOSS: So this would become a persistent source of stress to which the addition of other stresses would magnify the difficulty of having these populations remain robust.

THE WITNESS: Yes. There’s a lot of work right now going into what I mentioned earlier, these thermal refuges. A lot of the fish that come into the Columbia, especially in the summertime, steelhead are probably the best example of this, do utilize thermal refuges, so cold-water tributaries that tend to stay cold longer. And if they can, they’ll hold in those areas until the mainstem cools down enough for them to
move out. Steelhead sometimes can spend weeks to months in a refuge -- a cold-water refuge before they decide to take off for their final migration. So there's a lot of work right determining how can those salmon and steelhead utilize that while the mainstem continues to get warmer.

MR. MOSS: Thank you for your responses.

JUDGE NOBLE: Mr. Stohr?

MR. STOHR: Thanks, Dr. Penney. A couple of questions. You talked quite a bit about stress impacts on mature or nearly mature salmonids. I didn't hear you say much about other life stages, even though your testimony refers to some of those portions of a life cycle. Could you talk a little bit more about potential impacts of stress on -- or stressors on other life cycle stages?

THE WITNESS: Absolutely. I was trying to stay away from that because I do believe Dr. Rice will talk in length about the embryonic period, which I would agree is probably -- the embryonic period or marble stage are probably the most sensitive to -- again, it doesn't need to be oil, but any type of chemical stressor.

So I think, you know, if I was to think about my testimony, if I put it at the most basic level,
it was, you know, adult salmon swim up and juveniles
swim down. When the juveniles swim down, the
physiological process, there's also another -- the
physiological process occurs in the smolting process,
which that is where this -- the juvenile salmon are more
or less adapting to life or getting ready to adapt to
life in the ocean. And it's -- that's also stressful,
and they may spend several weeks in the estuary more or
less going through the changes that they need to live in
salt water. For example, in freshwater, a lot of the
water exchange occurs between the gills and the
bloodstream. When fish get into the ocean, they have to
drink more water because salt more or less dehydrates
them. So I mean, there's all these physiological
changes occurring. And so, again, as -- it's just an
added stressor and, you know, disruptions to that. If I
was to put this even more simply, the Columbia River is
a highway, and a lot of different populations have to
use that. Whether you're going to destinations
upstream, back home in Idaho, Washington, Oregon,
British Columbia, if everybody gets held up going down,
that causes problems to the life cycle. Now, are they
acute? Does it kill them? I don't have the research to
back that up. Does it cause stressors and stress them
out? I would be comfortable in saying, probably, yeah.
MR. STOHR: Thank you. Another topic. You briefly mentioned shipping vessels and -- as being one of many impactors of wetlands. Could you talk a little bit more about what you see in terms of -- what you know about shipping vessels and their impacts to wetlands or other critical habitat?

THE WITNESS: It would be mostly -- I actually think speculation. I was more thinking about the broad terms of how, you know, to keep shipping channels open and stuff. We're constantly modifying that area. There certainly are plenty -- there's research of, you know, the effects that large ships and their wakes cause to erosion and things like that, but I'm not an expert on that and so I would be out of my element by telling you one way or the other that those are the effects. But certainly just answer -- human impacts in that lower river to make sure that those shipping channels remain open does have habitat effects. But getting into the -- deep in the weeds about, you know, the various ecosystem functions that it might affect, I probably shouldn't go there.

MR. STOHR: Great. Thank you.

JUDGE NOBLE: Mr. Snodgrass, if you could just -- Mr. Siemann had a question.

MR. SIEMANN: Good afternoon. You mentioned
that the chemical signature of the water sort of helps
guide these salmon back to their natal streams, right?

THE WITNESS: Yes.

MR. SIEMANN: And I was just curious if
there's a possibility that an oil spill could alter that
chemical signature such that it could mess with that
guidance mechanism.

THE WITNESS: I think it could, but it
really depends on when and where that oil spill occurs
and what life stage is swimming through it. Basic
definition of what we call imprinting juvenile salmon
occurs where they were born. So their olfactory system
more or less identifies the signature and, you know,
they have an amazing ability to -- I mean, they're out
in the middle of the ocean, all of a sudden they decide
they know exactly where to go back to, it's kind of
amazing.

If an oil spill or some chemical spill and
they had water occurring during that period, it
certainly could cause issues to that imprinting. I
think some of the areas we're talking about aren't
necessarily close to tributaries. It depends on I guess
to the extent of that spill and how masked it might make
signatures in the water. You know, I guess it would
depend on the matter of degree of the spill. But I do
PENNEY

think that if it occurred at the right time and the
right place, it could have impacts. Now, the -- yeah,
it would really depend on when it happened and where it
happened.

MR. SIEMANN: Could that potentially have
population impacts as opposed to individual impacts?

THE WITNESS: It certainly could. You know,
if -- if fish can't find their way back and they spawn
where they're not supposed to or they just get lost and
don't make it, yeah, that could be a problem.

MR. SIEMANN: Do you know of any sort of
examples in the literature of something like this
occurring where there's been some study of that? I'm
just sort of curious as to what the fish might do or if
there's any evidence, I suppose.

THE WITNESS: There is stuff in the
literature, but, again, I would be without -- I don't
know that intimately. Dr. Rice will be testifying later
today, or perhaps next week, could probably speak more
to that. There is some literature, but, again,
sometimes when we talk about literature, sometimes
there's a big difference between what happens in a
laboratory and what actually happens to field -- what
happens in field studies. So I don't think I'm
comfortable enough with myself to say, you know, one way
PENNEY

1 or the other kind of what the actual effects would be on
2 the natural system. But there could be.

3 MR. SIEMANN: Thanks.
4 JUDGE NOBLE: Mr. Snodgrass?
5 MR. SNODGRASS: Good afternoon. Just a
6 question on -- essentially on rates of recovery. I
7 think the state -- the point made earlier in the
8 testimony, I think of Dr. Challenger, distinguishing
9 between an individual and population impacts sort of
10 implied to me that there would be a relatively quick
11 rate of recovery if a species or subspecies was impacted
12 by an oil spill. And so I just wonder what your
13 knowledge is about that.

14 THE WITNESS: Yeah, I mean, it did make me a
15 little uncomfortable. You know, sometimes we see with
16 fisheries, assuming you leave everybody alone and
17 there's no other big stressors in the environment, which
18 I don't know if we can say that for the Columbia River,
19 but you leave them alone and you don't fish on them, if
20 they tend to make a lot of babies, sometimes fish
21 populations can bounce back really quickly if humans let
22 them.

23 In the case of the Columbia, which is
24 already a highly modified system and my point earlier
25 about the different fish stocks that might be traveling
together, certainly if you -- if the Okanagan Sockeye stock took a big hit, is there -- there's still probably enough spawners that they would be okay. If something like the Redfish Lake Sockeye population took a big hit, I'm not sure that it would be okay.

MR. SNODGRASS: Related to that, have the -- I think you mentioned the Snake, Yakima and Deschutes Rivers as examples of some of those lower number populations. Have they been low for a long time?

THE WITNESS: They have been actually. Some of them have been zero. They're more or less being brought back from the dead. The Deschutes and I do believe Cle Elum are reintroduction projects. And so they're trying to kick-start those populations back again, which is -- sometimes what happens when you kick-start a population, they're just not going to come back in gangbusters; sometimes it takes time for them to build again. So I guess to a degree, you know, another -- a disruption like that can cause issues to restoration efforts.

MR. SNODGRASS: Thank you.

JUDGE NOBLE: Any other questions, to my right?

To my left?

Mr. Rossman?
MR. ROSSMAN: If you'll forgive a couple of ignorant questions along that same line, I guess I'm wondering if a species is extirpated from a particular area, what is involved in trying to reintroduce it?

THE WITNESS: Generally -- okay. I mean I think it varies on a case-by-case basis, but before I pursued my Ph.D., I did run a project restoring coho to the Clearwater River. They were extirpated by the Lewiston Dam, which is no longer there. In this case in Idaho, the reason why coho never restored is they had trouble with the donor stock to begin with and then there also just actually wasn't a whole lot of public support for it, but it was important to the tribes.

And so generally, what you want to do is, if you're going to restore something to a specific area, we found through genetics that, you know, salmon in many geographic areas have very specific genetics that allow them to either make a long migration distance or, you know, have a certain life history type. So you want to try to match that as close as you can. Sometimes you're trying to pull from a stock that's already robust that can actually provide some donor individuals. But from a perfect perspective, we also like to give enough credit to these species in that they do have sometimes quite a plastic life history. Before all these areas were here,
this was covered in glaciers. And there are natural
catastrophic events that happen, Mount St. Helens, for
example, can wipe out salmon stocks and salmon do find
ways to recall. So sometimes if you just give them a
chance, one of the things that we would also always want
to make sure of is we're not making a genetic bottleneck
either. You can't generally start with, you know, a few
individuals and get continually inbreeding. It does --
you do need to have some genetic diversity in there. So
that's something that we also consider.

MR. ROSSMAN: Thank you. That's helpful.
And I guess -- to what extent would it be possible
analytically to identify the particular populations that
were most stressed and the particular times that they
were most likely to be in the river such that one could
understand particular times that a spill or other impact
would be harmful, or is it such that they're so many
different stages of those and so many different
populations that much of the year some population that's
got a small number would be vulnerable?

THE WITNESS: We do have a decent grasp
right now. Again, our lab is just one of many that does
genetic analysis. And whether it's a hatchery or wild
stock, we're doing better at identifying those fish in
the times they come up because a lot of the
identification doesn't necessarily need to be related to, you know, if there was going to be an oil spill or something like that. Even our fisheries, we want to make sure our fisheries aren't having strong impacts on stocks that are really low. And so that's something that we're already trying to get a grasp on. You know, if somebody's catching this many Snake River Redfish Sockeye, maybe we want to stop that fishery, those fish are passing through them. So we actually -- it's not perfect and it's getting better every day. So we already do have some of those capabilities. There is literature even through just basic tagging information, some of those Sockeye stocks, they have various tags that we put on them to identify them and we can identify those tags when they pass a dam so we say oh, geez, those Snake River Sockeye pass mainly during this time of year. And so we do have some idea of when fish are in the river. But sometimes when they're in very large groups, that's where the problem is -- gets into -- we get into problems. So we do have a decent idea of, you know, kind of when certain stocks are moving through, but, you know, if -- but if they're caught, like in a fishery, we can at least sample them and we know where they -- you know, where they die. Something that's environmental, where we can't see them or sample them
after they die, that's kind of -- we have no idea.

MR. ROSSMAN: Got it. So conceptually, at least, would it mitigate the risk to those populations to limit when trains were running at those times?

THE WITNESS: It's certainly something, you know, people would want to consider, that we don't want to put these stocks at risk, so don't do that then. That seems almost like common sense.

MR. ROSSMAN: All right. Thank you very much.

JUDGE NOBLE: Could I just ask you about predation. You mentioned that the fish basically can run out of energy and so it would be subject to predation by something like sturgeon, I think. But you didn't mention anything about any other kind of predation. I suppose they're at the top of the food chain in some ways, if they're not being eaten. What about on the smolts coming downstream? Is there any effect from the condition of the water on other life cycle stages?

THE WITNESS: Absolutely. I think predation is worse when they're smaller. Part of the whole evolution of why salmon went out to the ocean to get bigger is that when you come back bigger, there's less things that can actually eat you. And you come --
there's a variety of competitive advantages to being bigger. And sturgeon aren't really predators. Sturgeon are really only eating dead things on the bottom. So generally when a sturgeon eats a salmon, it's because it's already died.

But on the way back down, when they're smolts, there are many things that can eat them. There's native predators, could be northern pikeminnows, but there's a lot of introduced predators, fish predators, that thrive in warm water. I mentioned bass earlier. The Columbia River is a prime smallmouth bass destination now. We have them all over the place. We have walleye, which are a big fish predator in the Columbia Basin. These fish do very well in reservoir situations and those fish have to swim by them. So predation by those fish is a huge -- has a huge impact.

We also have issues with predation with a variety of different birds as well. And I guess I'm more attributing this to the reservoir, but warm water doesn't help with that either.

JUDGE NOBLE: Is it just warm water that encourages that kind of negative predation or is there anything else, like any sort of chemical introduction into the water, that could be a problem with regard to predation?
THE WITNESS: I would guess I could put it in -- again, about the stressors. If there's anything that disorients fish or stresses them out to where they're not able to swim, to see, anything that causes that fish not to operate at its, I guess, maximum level, anything that kind of constrains it, it could make it much more easier for a predator to eat it.

JUDGE NOBLE: And hasn't that always been the case?

THE WITNESS: In the Columbia --

JUDGE NOBLE: Is it any different now than it always has been historically?

THE WITNESS: No. There's brand-new introduced predators. And with the hydro system, a lot of the deprivation of fish actually occurs below dams. So whether it's smolt or fry, it goes through a turbine or goes over the top, that's a long drop, and sometimes they come out disoriented. So fish are subject to a lot more potential predation events when they're disoriented.

JUDGE NOBLE: Thank you, Dr. Penney. Are there any questions related to council questions?

MR. JOHNSON: None, Your Honor.

MR. LOTHROP: I have one, Your Honor, with
regard to Mr. Rossman's questions.

REDIRECT EXAMINATION

BY MR. LOTHROP:

Q. And I can't think of a better way perhaps for the council to help share an understanding with the council about the Hagerman laboratory than to ask how many peer-reviewed scientific publications have they produced in recent years? Can you pick the nearest --

A. It's got to be over a hundred easily. The genetics field is just exploding and I'm very happy that our group is there. There's so many things that we're finding out that we can do with genetics now that can help the fish. So hundreds.

MR. LOTHROP: Thank you. That's all.

JUDGE NOBLE: Thank you, Dr. Penney.

THE WITNESS: Thank you.

JUDGE NOBLE: You are excused as a witness.

Are there any other witnesses?

MR. LOTHROP: Yes, Your Honor. I would like to call Dr. Rice, but I believe he will be our last witness of the day, and if it would be appropriate, this might be a good time to take a break.

JUDGE NOBLE: It is. Thank you. That's a good suggestion. So we will be in recess for 15 minutes. It's about 20 minutes of 3 we'll come back.
MR. LOTHROP: Thank you.  

(Recess taken from 2:23 p.m. to 2:41 p.m.)

JUDGE NOBLE: We're ready to go on the record?

MR. LOTHROP: I am, Your Honor.

JUDGE NOBLE: Mr. Lothrop, would you call your next witness.

MR. LOTHROP: Yes, Your Honor. I would like to call Dr. Stanley Rice to the witness stand.

JUDGE NOBLE: Dr. Rice, would you raise your right hand.

(Witness sworn.)

JUDGE NOBLE: Thank you. Please be seated.

MR. LOTHROP: Thank you, Your Honor.

STANLEY RICE,

having been first duly sworn,

testified as follows:

DIRECT EXAMINATION

BY MR. LOTHROP:

Q. Dr. Rice, did you prepare prefiled direct testimony for this proceeding?

A. Yes, I did.

Q. Do you adopt --

JUDGE NOBLE: He has to identify himself for the record.
MR. LOTHROP: I'm sorry.

BY MR. LOTHROP:

Q. Dr. Rice, can you please identify yourself for the record and spell your first and last name.

A. My name is Stanley Rice, S-t-a-n-l-e-y, Rice, R-i-c-e.

Q. All right. Dr. Rice, did you prepare prefilled direct testimony in this proceeding?

A. Yes, I did.

Q. Do you adopt that testimony as true and accurate?

A. Yes.

Q. Thank you. I'd like to familiarize the council with your qualifications. And, again, I think your qualifications, in my experience, are unique. Can you talk about your career for the council, and I may ask you some questions along the way.

A. Sure. I graduated with a Ph.D. from Kent State University in Ohio in 1971. I did a dissertation on ammonia toxicity in trout embryos, and that caught the eye of my future boss who wanted to initiate an oil effects program, and I was the closest thing he could get to that. I had a lot of toxicology and biochemistry and physiology. I basically graduated in physiology. I had enough chemistry that the biologists think I'm a
chemist and enough -- but the chemists know that I'm a biologist. So a little bit of a hybrid there. But it is a good background for doing oil effects research because it's really about the oil interacting with organisms.

I was hired in Juno, Auke Bay Laboratory in Alaska in 1971. So I worked there for about --

Q. A little slower.

A. Sorry. I worked there for 41-plus years before I retired just a couple of years ago. Part of my duties was to first comment for the agency on the Trans-Alaska Pipeline environmental impact statement. The pipeline, of course, had not been approved yet. Oil had not flowed yet. But yet the Prudhoe Bay reserves were discovered and known to be very large and would be substantial.

But there's concern all over the state for fisheries, and so I was basically hired to be an in-place consultant, so to speak, advising the agency on oil effects and fishery issues, so to speak. I was able to hire both a biologist and chemist through the years.

In 19 -- and we did a lot of bioassays and oil tests with a variety of organisms and crab, shrimp larva --

Q. Dr. Rice, before you go too far, could I ask you what agency hired you?
lothrop / rice

A. Sorry. NOAA. NOAA Fisheries. We did a lot of bioassays at the lab and that -- and produced publications. But that set us up to be in a place, so to speak, with the right experiences and the right analytical capabilities when the Exxon Valdez went aground in 1989. And so we're not quite on site, it's still several hundred miles away, but we were able to get on site and begin studying that spill from the very beginning. We had people collecting samples within five days of the spill.

We did a lot of research on that over the years, and we basically discovered, like in year ten or so, that there's still a lot of oil present. There's still negative effects happening and we continue to study long-term effects, literally right up until last year. The last study looking at oil persistence was sampled last year in 2015, some 26 years after the spill and they still found oil. So I'll talk about it later also.

Q. So if I might ask, in the course of that work regarding the Exxon Valdez accident, did you and your coworkers prepare peer-reviewed publications?

A. Yeah. We published quite a bit. A lot of the researchers associated with the Exxon Valdez did. It was a very well-studied spill, produced a record amount of publications in the spill literature and in our lab...
which, like I say, consisted of both chemists and biologists, produced a number of spills. I've published well over 120, '30 publications including one that came out last year, for example, and I've got more in my computer yet to finish.

Q. And, Dr. Rice, were those peer-reviewed publication?

A. Yes, I only talk about peer-reviewed publications, not abstracts or reports. There's about 500 reports in there, but I don't mention those.

Q. Thank you. So are you still working for NOAA Fisheries?

A. No. I finally retired two years ago, and I was immediately picked up on a contract by the Department of Justice to help them with their --

Q. A little slower. And which Department of Justice?

A. United States Department of Justice. And this had to do with their case prosecuting BP down there, the Deep Horizon Gulf spill. And I became an expert with -- in their trial that ended in January of 2015.

Q. So did you provide live testimony on behalf of the United States in that proceeding?

A. I supplied both written and live testimony, yes. And reviewed hundreds of documents.
Q. How many witnesses in that phase of the trial did the United States put on?
A. Put on 11.
Q. So you were one of 11?
A. I was one of two biologists that talked about effects.
Q. For the Deepwater Horizon spill?
A. Correct.
Q. On behalf of the United States?
A. Yes.
Q. Have you been to many other spills?
A. I haven't been to as many as Mr. Challenger was talking about, but I've been to several. I was the first one to the Ixtoc spill in 1979, which is off of Mexico. But the oil was drifting north onto the Texas beaches, and I was helping the NOAA response team there, consulting, basically, for them about safety -- human safety and other issues as well as effects. Later --
Q. Can you share an experience -- one of those experiences with council?
A. Well, I remember that -- this is an early spill and people were just out collecting tar balls and they're asking about it. You know, they're wading in their shorts and bare feet, and I said, you know, you shouldn't do that and you shouldn't have any pregnant
women out there. There's -- you know, that's sort of -- and children. I said, you need to get those sorts of people off the beach and out of that oil. That's kind of one of my first light bulbs that went off, so to speak, at that time.

Q. Thank you.

A. I came in the '89 Exxon Valdez. I'm also been on the Kuroshima and Selendang Ayu spills. Those were spills in the Aleutian chain near Dutch Harbor and they're extremes --

JUDGE NOBLE: Excuse me. Dr. Rice, we're having a little bit of trouble following you, hearing your words, because you're speaking a bit softly at the end of your sentences and a little fast again.

THE WITNESS: I'm sorry.

JUDGE NOBLE: Sorry.

THE WITNESS: It's a bad habit I have.

A. The Selendang Ayu spill, that's S-e-l-a-n-d-a-n-g [sic].

JUDGE NOBLE: Dr. Rice, the spill names, you need to tell the council the names of the spills that you were on. It wasn't heard.

A. The first spill I'll talk about is the Selendang Ayu. That's S-e-l-a-n-d-a-n-g [sic], second word A-y-u. Another spill in Alaska near Dutch Harbor was the
Kuroshima, K-u-r-o-s-h-i-m-a, about that anyway, close to. Those are the two spills. And then I've been involved with the Deepwater Horizon spill, both as a researcher but also as a reviewer, and we led one very small project. We did some chemistries for them.

JUDGE NOBLE: Thank you.

BY MR. LOTHROP:

Q. So did you read and review Mr. Challenger's testimony?

A. Yes, I did.

Q. And do you agree with his testimony?

A. Mostly not. Mr. Challenger and I come from different viewpoints. He's been a contractor working for spillers who was working on response; for example, in the Deepwater Horizon spill event, he was a SCAT coordinator, shoreline assessment team, looking at what beaches are oiled and which ones are higher priorities than others to clean and maybe even remediate it later.

I, on the other hand, have been a damage assessment researcher for most of my years, so I'm looking at the effects and also over a long term, particularly with the Exxon Valdez. So we come from a different viewpoint. Basically, I'm more pessimistic, I think, about the outcome and effects of the spill than the optimism that I think he projected.
Q. Yeah, can you give us some --

MR. LOTHROP: Ms. Mastro, I would like to call up Exhibit 108, if you could.

BY MR. LOTHROP:

Q. And ask, Dr. Rice, if you could give us some example of your differences that you might have in characterizing outcomes.

A. Well, this is the table that he talked about -- I guess this would be a better way to look. He talked about this table and basically concluded near the end of his oral testimony that it took about one to two years or so for wetlands to recover, and I had a different interpretation of this table than he did.

First, let me orient you to the bottom axis here. This is the time scale, so each vertical line here is five years, so there's -- I think that's five, ten, fifteen here and then these are -- excuse me, 30 and 40 years. And the very highest spill up there is the Gulf spill, which is an anomaly, it's the Gulf War, not Deepwater Horizon. The Gulf War with many, many wells sabotaged, and God knows how much oil is out there and, of course, none of it is treated or cleaned up so that's -- don't want to discuss that one.

But when I look at the next line, and this is in a color that I can't hardly see, it's a little bit more
evident in the book, but it comes out here to pass through the years all the way out there, through 40 years almost. This here is the Florida barge spill --

JUDGE NOBLE: Dr. Rice, we missed what you said when you turned your back to the microphone --

THE WITNESS: I was trying to say that the second line here is the Florida barge spill. And it goes out to about 40 years out in 1979, and that's at Falmouth, in the Massachusetts area. It's about a 30-minute drive, I would guess, from Woods Hole Oceanographic Institution. It was not a large spill by spill standards. It certainly wouldn't crack the top 100 or anything like that, but it has a long-lasting effect, a long-lasting persistence of oil and then long-lasting effects. And because this is a spill of opportunity to research, so to speak, 30 minutes or so from Woods Hole, it's been studied over a period of time by numerous -- well, two generations, so to speak, of scientists there.

They found that the oil persistent in this -- that it's got a chemical composition very similar to the day it was spilled, basically. Crabs that burrow into the sediments will hit that oil layer and then do their devious things. They -- there's an abnormal behavior, their burrows are not as deep, birds,
of course, are more easily preyed upon. So there's a bunch of negative effects that have been persisting over many, many of those years.

I think where I differ from Mr. Challenger, though, is we go down here, there's about ten or so, 11, with question marks that come out here past five years. And so, yeah, there's a group down here that are -- have recovered about one to two years, but there's also -- roughly a third of them, or something like that. That did not and it took longer than that.

Dr. Michel and her cohort Rutherford conclude that spills that are in colder climates, they persist longer, and the spills that are with the lighter fuel oils, they will persist longer because they probably penetrate into the sediment. Spills that are the very heavy crudes, they will last longer, not so much because they penetrate, just because they're so recalcitrant in their lasting and persistence.

When I think about applying this, then, to the Columbia River, the Bakken crude really is pretty close to a fuel oil spill. It's one of the thinnest of the crudes. So it's down there toward fuel oil in terms of viscosity and the thinness in amount of light ends that are there are analogous. The dilbit is kind of analogous to the very heaviest of oils, of course, so
you kind of have -- between those two different oils, you have two different extremes and those happen to be the two different types of oils in this chart here that have the most persistence and the most damage to wetlands and cause the least amount of recovery per unit time. So that's an example of my pessimism, so to speak, compared to his optimism.

BY MR. LOTHROP:

Q. Thank you, Dr. Rice. Exxon Valdez is not on this list. Can you tell us why?

A. Yeah. It would be right up in this range, except for one factor. It doesn't have wetlands. There's virtually no wetlands in the Exxon Valdez. There's only literally about an acre or two, at most, compared to the literally a thousand miles of coastline that was contaminated to one degree or another. However, even, like I said earlier, in 2015, the Auke Bay Lab went back and resampled places they've been sampling periodically for the last 26 years and still is able to find oil.

By "finding oil," I mean that if you dig a pit down and you go below the aerobic part of the surface, about this far, four or five inches or so, and you get to another part, you get to the layer that has oil in it, you dig that oil -- or that hole out and oil will
seep in from the sides and begin to fill that up.
That's a worst-case scenario, so to speak, and there's
still beaches with that worst-case scenario. I think
the square footage of some of those oil pools, so to
speak, beneath the surface have been getting smaller,
but if you're in the middle of that oil pool, you've
still got liquid oil. It's got a weathering status,
it's about the same as, say, 10, 12, 15 days after the
oil spill and that's because it's anaerobic there, no
oxygen. So the microbes can't -- do not have access to
it. They can't degrade it. It's just there until
something disturbs it. And we have found, of course,
that sea otters, for example, will disturb that layer
and become contaminated over time and have had slow
recovery.

Q. So thank you. Let's continue to talk about
Exxon Valdez and the environment in which that spill
occurred. You've been in Southeast Alaska for a long
time.
A. Yes. Over 40 years.

Q. Did you -- were there villages affected by the
Exxon Valdez spill?
A. Yeah, there was. There's one key village.
There are two villages. One was near but not oiled and
the other village was the village of Chenega, and they
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1 were basically in the middle of the oil spill. The
2 oil --
3
4 Q. Remember to speak close to the microphone.
5 A. The oil flowed from the site of impact on the
6 reef southwest and they’re right in the hardest hit
7 area. These people live on a subsistence -- and a lot
8 of those fish are here to some extent, but primarily on
9 salmon and other things. The intertidal zone are --
10 intertidal zones are very significant there in Prince
11 William Sound in the order of 20 or so feet or more, and
12 they use a lower intertidal sound to collect a variety
13 of chitons, for example, and limpets and other things,
14 and they will harvest periodically throughout the year
15 and -- to supplement their diet. This is a badly oiled
16 habitat for them for -- oil visibly, sort of a coated
17 oil, but it had oil for the next couple of summers, each
18 year getting better, but still if you dig these pits,
19 you can still find the oil where they were harvesting.
20 So basically they’ve turned that part of their diet off,
21 or else they have to travel a fair -- excuse me, a fair
22 ways by a skiff to go to a clean area so it has affected
23 them.
24
25 JUDGE NOBLE: Little -- just a little
26 slower, Dr. Rice. And when you use a word like chitons,
27 I think --
THE WITNESS: Chitons.

JUDGE NOBLE: -- you might spell it.

THE WITNESS: That's an invertebrate.

That's kind of like a snail. It has an outer shell.

BY MR. LOTHROP:

Q. And the spelling would be?
A. C-h-i-t-o-n.

Q. And limpet?
A. L-i-m-p-e-t, another snail-like animal. Those both live on rocks and suction cup down and eat algae and that sort of thing. The leather chiton is pretty large. It's kind of -- weighs a pound, roughly, so it's a pretty good-sized animal with a fair amount of meat to it.

Q. So it would be fair to say that the village of Chenega lost a traditional fishery?
A. Yeah, it would be. It's -- you know, there's no commercial fishery on these organisms, but in effect they lost a fishery. They would say they lost their garden table, so to speak.

Q. And, again, you -- how did you get to know the villagers at Chenega?
A. Well, they were affected, and they participated in meetings, but we also did one study, for example, where we contracted to them in part to help flesh out
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the --

Q.  "We" is?
A.  "We" as in NOAA.  Excuse me.

Q.  That's all right.
A.  Our laboratory.  We did a study that dug a hundred holes, a hundred pits per day for a hundred days throughout the summer.  We assessed over a hundred beaches to see how much oil is there, and they were about -- they supplied about four to five people on these crews of eight.

Q.  So you got to know some of the villagers real well?
A.  Yeah, I did.  And they're hard to get to know.  You kind of have to know them for about a month before you can talk to them very easily.  But pretty neat people.

Q.  So this is potentially an example of long-term effects.  Can you give us a little bit more perspective on long-term effects of an oil spill?
A.  Well, there's -- are you talking about the human side --

Q.  Well --
A.  -- in this case?
Q.  -- actually I was thinking of aquatic organisms.
A.  Well, just to finish that human stuff off or
just one sentence. They still to this day -- if you're
my age, for example, you're still not foraging the
beaches. The younger generation probably is. But it
took them literally close to a decade before they
started returning to these beaches, for example.

Getting to long-term effects from -- of the '89
oil spill, we were not surprised by the immediacy of the
kills. There was a lot of birds killed, literally half
a million or more, certainly marine mammals were hit,
seals and sea otter carcasses were collecting all over
the -- those things are kind of expected, so to speak,
because of the massive amount of oil everywhere.

But the thing that did surprise us was the
longer-term effects, so to speak, on several species.
And to give you a couple of examples, this relates to
Mr. Challenger not knowing or remembering of any
population effects, and we have a population effect, for
example, the killer whales, there's two pods of killer
whales that lost 40 percent of their population in about
a year or so. And these two pods had on the order of 25
and 35 animals in them. In one pod, the AT-1 pod,
that's a transient pod that eats marine mammals, it lost
all the reproductive females in that pod. And so now
they continue to have mortalities, of course, with time
as the old guys die, but there are no reproductive
females. So that pod is basically on the route of extinction and in probably another decade or so, that pod will cease to exist at all.

The fish eating pod, AB pod, also lost a similar amount, 40 percent. It is showing signs of recovery. But it's still probably a decade or more away from getting back to the same levels that it had before the spill. And that's because these females are -- kind of have a life history, almost like us humans in a way, not sexually mature for 15 or so years, they're only going to have four or five calves in their total 60, 70, 80-year life span, so their reproductive rate is not high compared to -- well, compared to a pink salmon may carry 2500 eggs or so and reproduce every two years, or at least the cycle is every two years, new generation every two years. So you're going to have to go through quite a few generations of time to restore the killer whales back to their number, at least to the one pod.

With sea otters, there was a group of sea otters in the western part of the sound that were hit pretty hard, hundreds and thousands -- well, a couple thousand carcasses probably. Couple thousand animals died, hundreds of carcasses were collected.

This one group, which is in a heavily oiled area, failed to recover, so its population just bobbed
around literally for about two decades. Might go up one
year and then down, just bobbed along for close to --
well over two decades. And first this is surprising.
So all this sort of came to a head after about year ten,
when our lab rediscovered lots of oil still present.

A different group than USGS was doing otter
studies, and we knew each other but we weren't in --
weren't collaborating yet. They were looking for an
explanation of why those sea otters had not returned to
normal levels. They thought food, but food was more
than adequate where they were at and they found out
about all the pits that we were digging, and the pits in
their area still had a lot of liquid oil. So then
they -- but sea otters are known to dive and dig clams
for their food. They don't come on land to forage.
They will on occasion come out on a rock and sun, but
basically they live and sleep in the water. So they
couldn't figure out how they were getting oil exposed.

So they put diving -- well, put diving chips in
them, actually captured them, anesthetized them, put a
pressure-sensitive chip into their abdomen that could
detect what depth they were diving and also how many
times they were diving, and found out that each animal
is digging hundreds of pits a day and this group of
roughly a hundred or so animals dug, I think, it was
2 million pits in ten years, something of that sort. And they -- by having females and males, they could determine which were digging the deepest -- which were diving the deepest, how often they were diving in the intertidal zone where there is oil. There wasn't any oil below the intertidal zone to speak of. And they found that their exposure was probably often enough, once every two weeks, once a month, something of that sort, for a group of females to become exposed to this liquid oil. Oil is not everywhere, but they were digging enough holes that the odds of them encountering oil every so often was significant and their reproductive rates were just not up to par.

After these 2 million holes are dug over time, the oil, of course, is -- that's a remediation effort that's going on by them, not by us, but by them. So the oil began to dissipate, dissipate, dissipate in the area they're in, and so then after two decades their population started to creep up. And so now they're basically back at -- at this bay, basically back up to the numbers that they were. So that was the population effect. Was it forever? No. The good part about oil is if you only spill it once, you've probably got a pretty good shot at some recovery. It may take time. Depends on your generation type.
For pink salmon, they also were impacted over a number of years. New embryos being laid down in oil streams had elevated mortalities in a sector of the sound for four years past the spill. So contrast this with the killer whales. The killer whales were impacted in year one, probably in the first several months -- two or three months of the spill, and then that impact lasted a long time because their generation rate is so slow. But the pink salmon area was being exposed each new generation for four years and had elevated embryo mortalities. Once that was over, then their populations were returning to normal.

There's a lot of pushback by Exxon on this. One of the things that they say, well, there's just a lot of salmon caught in the -- there was no salmon caught that year by the way, but -- fisheries are closed. But in the succeeding years, the fisheries were good. Alaska was experiencing some very good times in terms of the marine environment survival rates are higher than normal, higher than, say, back in the '70s, and so the returns are very good. But because these embryos did not survive, there's estimated to be 2 million fish that did not return. So that was a long-term impact on them.

Q. So that was 2 million adult pink salmon did not return --
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A. Right.

Q. -- and were presumably lost because of the oil spill?

A. Yes.

Q. And you mentioned that the Deepwater Horizon contested some of these findings. Can you --

A. You mean Exxon contested these.

Q. Exxon. I'm sorry, Exxon contested them. Can you describe the nature of that contest, so to speak.

How long did it go on? What was at stake?

Mr. Johnson: Objection, relevance.

Judge Noble: What is the relevance of that?

Mr. lothrop: So, Your Honor, Mr. Challenger talks about how natural resource damage assessment and the Oil Pollution Act operate to guarantee that resources will be made whole in the event of an oil spill. And in this circumstance, it seems to me that the time frame in which these determinations were made is relevant to the kind of -- the timing of remediation and potentially the success of remediation. So there's a temporal element here that's important to characterize. I used the word "contest," but I think by probing at that concept, we get to that temporal element; that it's not -- I would make an offer of proof that simply because there's an impact doesn't mean that
there's a remediation, that sometimes these impacts are contested. That's what I would like to get at, Your Honor.

JUDGE NOBLE: I think I'm going to sustain the objection. And he can testify to that process, but that specific example, I'm not sure that the relevance is direct enough to allow it. So I think that just in general -- the temporal aspect of recovery, I think that's -- that is a permissible area of inquiry. I'm sustaining the objection.

MR. LOTHROP: I would admit that Tesoro and Exxon are different corporations.

JUDGE NOBLE: Thank you. So noted.

MR. LOTHROP: Thank you.

BY MR. LOTHROP:

Q. So were there -- was the -- in the course of responding to the impacts of the Exxon Valdez spill, can you characterize the scientific endeavor engaged in by your laboratory and whether your results were useful in producing immediate actions?

MR. LOTHROP: Is that fair, Your Honor?

A. I'll try.

JUDGE NOBLE: I don't hear an objection. It isn't quite what I had in mind. I want him to explain the temporal aspects to recovery in a non-specific way,
just describing the process, rather than going over in great detail the previous oil spill experience.

BY MR. LOTHROP:

Q. Well, Dr. Rice, if you could do that and address Judge Noble's question, that would be helpful.

A. Okay. I think that historically the Exxon Valdez is -- I'll say a watershed event in that it changed how we deal with oil spills forever basically.

Prior to that, oil spills were dealt with -- I'm talking toward Canada and other spills, that once the oil spill was cleaned up, the oil spill was kind of over, counted the dead birds maybe, but that was it.

With Exxon Valdez there was a commitment -- it was a pristine area, very valuable fisheries -- what was the long-term effect of that. And so the damage assessment went on for a couple years; there was a settlement in 1991 for the natural resources. There was a civil suit by the fishermen in the '80s that continued on for a number of years, but the damage assessment went on and it continued.

Then the question became how long will it take for the natural system to recover, and we were getting mixed messages by that time. Some things are recovering relatively quickly. Bedrock exposure areas, probably one to two years, in that sort of neighborhood; some of
the cobble beaches that had oil underneath, much longer. We had the long-term effect on a couple of species and there are other species too, but those are the three best ones that have the best data, so to speak, in terms of killer whales, the sea otters two decades, the pink salmon four years, those are the best examples of species recovery.

THE WITNESS: Does that answer your question?

JUDGE NOBLE: I was just waiting for you to get to the point where you would be extrapolating your findings from that other situation to a more general understanding of the process.

THE WITNESS: By "process," I'm not sure what you mean by that.

JUDGE NOBLE: Of recovery from an oil spill.

THE WITNESS: You mean a biological process?

JUDGE NOBLE: Yes.

THE WITNESS: Okay. Well, nature will take care of itself, if it doesn't continue to get more taxed, so to speak, more -- new spills on top of old spills. It will take time. Some of the parts will recover much quicker than others. The bedrock bench, the heavy exposed areas to weather, for example, those will recover faster than I think the more sensitive
environments, such as the wetlands or sandy tidelands, those sorts of places will take longer, especially if they're quiet areas without weather beating on them.

JUDGE NOBLE: Thank you.

BY MR. LOTHROP:

Q. Dr. Rice, I believe Mr. Challenger suggested that mammals will tend to avoid spilled oil. What was your experience?

A. Well, our experience is not that. I think that they are smart animals, and whatnot, and if they have choices, if they're given clear choices, they probably would come to the conclusion that that's a bad idea and I should go over here.

But for a killer whale, for example, it comes up underneath an oil slick and before it hits the surface will exhale. And I can ask each of you to exhale and then how long can you hold your breath? After you exhale, you've only got seconds before you have to breathe. And that's the case with the killer whales. They blow, oops, there's oil there, they have to breathe, those fumes of benzene, toluene, xylene, for example, are there, they inhale them into their lungs and probably presumably got affected that way.

The sea otters, they're there digging holes. They're -- you know, once they get oil on them, maybe
abandon that hole, but they've got oil on their paws and
fur and have to preen and that sort of thing. So
it's -- I think that to assume that the mammals will
avoid the oil is just not the case. Birds are smart
animals too, but they're not going to avoid what they
don't know.

Q. Let's talk a little bit about the pink salmon
studies and if you can describe them and those -- well,
please describe the pink salmon studies and -- that were
done after the Exxon Valdez spill.

A. Well, basically, these studies, there's field
studies that ADF&G did. There's laboratory studies --

Q. Slow down a little bit.

A. Alaska Department of Fish & Game. They did the
field studies to assess how many dead embryos that were
in the oil streams versus un-oiled streams. A very
large study. We did laboratory studies to look at a
sensitivity sort of thing and later we did lab, field,
combo-type experiments. And these studies are precedent
setting, finding dead fish after an oil spill is not
common, to be honest. And the reason is it's easy to
get an acute exposure to a surface animal, like a bird,
can die either from the acute toxicity or from
hyperthermia, but to get a lethal load into a subsurface
animal is more difficult. Oil has to get into the water
and then into the organism and we seldom get that sort of combination, to be honest. And so the animals there are going to be exposed more to a sub lethal dose that may prove harmful over time, but it takes a little longer.

So the fish and game studies that looked at embryo mortalities in the oil streams, those were unprecedented, especially after year one. Year two, three and four, they were basically surprising. So we did studies that confirmed there is oil still in the banks alongside the oil streams, so the oil exposure was potentially there. We did a study that showed you can get oil from the bank down into the salmon reds using well points. Put a dye in here, pick it up there. We could see that happening.

We did the toxicity exposures, which are relatively long term, into a low dose because we knew for the oil to get to those embryos, it had to be a very low dose. Our previous tests prior to the spill showed it took parts per million of PAH, that's polycyclic aromatic hydrocarbons. That's the toxic fraction in oil. It took -- it took like a parts per million to kill them in an acute situation, but this wasn't that. It was more of a chronic situation.

So we lowered the dose down into the parts per
billion, so that's three orders of magnitude lower than a part per million. And basically after a long exposure of several months, which is how long pink salmon, for example, incubate in the ground, they spawn in September, they hatch in about Christmas time, they come out of the gravels in March and April, so they're in those spawning gravels for six to almost nine months, eight months. So we had those sorts of lengthy exposures to really low doses. These are doses that you can't see in the visible oil, doses that don't have any odor to them but they're low.

And we could -- initially we saw some increases in abnormalities, like deformed fins and bent spines, meaning that they're not going to survive. And that was kind of a smaller percentage. It went from, you know, maybe a tenth of a percent up to 1 to 2 percent. So it wasn't an amount that smacked you in the face, so to speak.

Later we took the live animals that came out fry and grew them and we found that the ones that were exposed to parts per billion as an embryo but later in clean water didn't grow as fast. So there was a residual effect that affected their growth compared to the untreated, unexposed controls.

Later we advanced those studies even more by
exposing thousands of embryos in order to get thousands of fry that we then wire tagged with a small coated wire tag in the nose and then released them to the environment. We would have 75,000 control, 75,000 low dose, 75,000 medium dose and 75,000 high dose. Took a couple of weeks to get through the tagging of these different dose groups, each one being tagged equally per day, released. They would go out to the marine environment then for about a year and three months and then return as adults. And then the wire tags had to out of the nose had to be decoded in order to identify which of the dose groups. And basically we found that if we expose them to about 18 parts per billion of PAH that we got a 40 percent -- 40 percent decline in adult returns. If we expose them to 5 parts per billion, we got a 20 percent decline. So that didn't kill all of them. They all looked healthy when they left, but these -- two different dose levels decreased their potential to survive. Were they slower? Were they smaller? Don't really know what the precise mechanism is, but they didn't come back in as good of numbers.

Later John Incardona -- well, let me just say that these studies, then, were unprecedented and they then affected how oil spills, Cosco Busan and then later Deepwater Horizon, were going to be studied and they
were going to be studied much more intensely. You know, persistence was a big effect in the beaches, and these effects on both the sea otters and on the pink salmon were unprecedented. So they then affected how other spills might adapt, so to speak, and how the research on them would be done.

In the Cosco Busan and also in the Deepwater Horizon, John Incardona out of the NOAA Seattle lab advanced our experiment, so to speak, looking at other embryos and looking deeper, drilling down, so to speak, to try to find out what the mechanism is and basically did a great job. We then later also collaborated with him on some studies. I have a publication with him on pink salmon and herring, for example, where the heart is affected, heart rate is affected. So it's a good time to go to that figure?

Q. Sure.

MR. LOTHROP: Ms. Mastro, could you call up Exhibit 5108, please.

A. If you can pause it right there. Pause.

BY MR. LOTHROP:

Q. And please remember to use your microphone.

A. So this is John Incardona's work that he published in 2014 with coauthors. He did this work with three different species of southern bluefin tuna. This
one -- this happens to be amberjack, and later we'll see yellowfin tuna up there, exposing these embryos to low doses part per billion type doses. I'll also talk about another study done by Mager, et al., same year, to a different species.

But what I wanted to show you is how this embryo is functioning, if I can. So here is the eye and head and fin is going on, here's the backbone and here's the cord going back. This is yolk material in here. A large oil droplet here, natural oil. This is energy in their yolk. And this structure there is the heart.

Okay. And this here is the yolk sack and if you could advance to the control one -- excuse me, the exposed one. You can see the heart beating here. One, two, three, four, five, six. Okay. So now this is an exposed one, and we see that this sack here is much enlarged. The biggest deal, though -- this is yellowfin tuna control. Go ahead. One, two, three, four, five, six. We'll get to the yellowfin tuna. It's exposed. One, two, three, four, five. So you see a huge -- I want you to pause. Thank you. You can see this sack here is edema. It's really large, abnormally large, puts pressure on the heart, affects its development and the heart beat is affected.

Now, there's this huge effect downstream of the
heart. This heart is pumping oxygen into internal
tissues especially. It's pumping nutrients coming out
of the yolk material to the rest of the body so it can
grow. So when the heart's affected, as you can well
imagine applying that to yourself or maybe a baby in a
womb, the heart's not functioning properly, you're not
going to expect a lot of good things to happen after
that and that's, in fact, what happens. These animals
don't do as well.

In studies -- other studies by Incardona and
another study by Mager, they actually put these larva on
a treadmill after they've been growing for about
304 days, treadmill meaning just a current of water, to
look at their swimming performance, and the animals that
have been exposed, in Mager's case that was mahi-mahi,
to less than a part per billion for two days, 48 hours,
then hatched, then grown for 30 days, those fish had
poorer swimming performance than the unexposed controls.

So you can see, then, if you affect the heart,
other tissues are likely to be affected. The swimming
performance is going to be affected. Their prey
ability, so to speak, they're going to be prey longer,
less effective at swimming and avoiding prey, less
effective at being a predator themselves acquiring
energy and growing out of that predation stage that
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they're caught up in.

So you can see how there would be this long-term effect. Did oil kill these animals directly? No, it didn't. But did they survive the environment, come back and reproduce? Not likely at all. And that's how oil kills. It doesn't kill by a direct method. It can in the birds, but it doesn't -- it's never going to kill fish directly. It's going to kill them kind of indirectly. It's going to affect them, their swimming performance if they're an embryo; maybe affect their reproductive capability if they're a returning adult, like Dr. Penney was talking about, maybe their behavior is affected, their energy level is going to be increased, they've got to consume more energy which means less energy going to their eggs, less energy available to get to their spawning stream that they're genetically adapted to. So these are all the sublethal affects that can happen to these animals.

Q. Thank you. I would like to shift gears a little bit and talk about relevant oil spills.

A. About which? Relevant oil --

Q. Relevant. Or potentially relevant oil spills to a Columbia River experience. Mr. Challenger covered several of those in his testimony.

A. Yeah.
Q. Let's start with the 1984 Mobil oil spill.
A. Right.

Q. Can you characterize that spill for the council?
A. Well, it's arguably one of the most important oil spills that could have been covered more both in the EIS and also Mr. Challenger's testimony. The big thing I get out of the 1984 oil spill that happened at -- I forget the name of the rock. A few miles downstream from the proposed facility, but basically, what, 50 miles upstream, something like that, from the mouth. And basically, the oil got to the mouth within 72 hours. So that oil -- and it's only about three -- the equivalent of three train cars spilled, maybe four, three or four train cars, so it's not a huge oil spill. But that oil got all the way to the mouth in less than three days. Then it was carried north up the Washington coast to a couple of the bays, killing birds along the way and -- so it kind of told you that -- easy for me to interpret, that the current is a dominating factor here. Current is going to take that oil.

Now, in addition, NOAA determined chemically that the oil was, of course, on the surface. You can see that. Got along the shoreline in various places, including on the outer ocean beaches. They also detected oil in the water column and they detected oil
in the sediments downstream. So here you have a medium oil, roughly not as thin as Bakken oil, not as heavy as dilbit --.

Q. Did you mean -- go ahead. I'm sorry.

A. It's just a medium oil. But it was able to mix down into the water column, down into the sediments. NOAA Fisheries, also out of the Seattle lab, Peggy Krahn to be exact, detected oil chemically in the mouths of sturgeon and in the tissues of sturgeon in that oil fingerprint, not the tissue oil, but the other oils fingerprinted back to the Mobil oil spill. So this is pretty informative when -- if you're going to boom this oil off, you have to be there. You have to be ready. And that -- that is kind of maybe what could happen at the facility itself. But any spill upstream with rail cars, downstream on a vessel coming in or leaving full, are you really going to have booms already there? So it's a problem. Current is going to move that oil.

With the system of the Columbia, you can see the swirls and eddies and, of course, the river meanders through the Gorge and areas and has a lot of energy. And so it's easy to see how that oil gets mixed into the water column. Not all of it; some.

To me the current of the river has a range roughly one to five, six knots, depending on where
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1 you're at, what the tidal level is, et cetera, and
2 that's kind of the range. Well, the range of
3 effectiveness on booms is up to about one, one and a
4 half knots. So they just barely overlap in a couple of
5 places. So I guess it's just hard for me to conceive
6 that booms are going to be effective.
7
8 Should you use booms? Yes, you should. The
9 responders should do everything they can to minimize
10 that spill, but to depend on them, to think that they're
11 going to be protective of the river on a large scale
12 basis is, I think, not appropriate thinking there.
13
14 Q. There are -- in your review of the information
15 preparing for this proceeding, did you encounter other
16 spills where booming oil just wasn't, you know, I'll use
17 the word "effective"?
18
19 A. Well, there's another spill on the Mississippi
20 barge and it's -- I don't remember the numbers, didn't
21 have a name on the spill, that he referred to also. And
22 it's spilled on -- not a lot of oil. There was a gash
23 in the barge on the Mississippi River, but the slip was
24 seen 40 miles downstream. Booming wasn't able to get
25 there. The recovery here was .3 percent -- 0.3 percent.
26 That's not very much recovery. It was Bakken oil so it
27 moved easily. Certainly some of that oil evaporated;
28 Bakken has a pretty good evaporation potential to it.
But that also means that whatever didn't evaporate, then, is still in the environment to be -- for the environment to deal with.

Q. How about the Deepwater Horizon? What kind of recovery rates were experienced there?

A. There roughly in the -- less than 10 percent for straight -- for the skimming activities. They had an armada of boats but yet they recovered less than 10 percent. Some of the booming and skimming activities, they lit -- some of the back booms with -- had fire booms, they could light that. That elevated -- that removed another several percent. So it got up into double digits. But basically, certainly there was some evaporation also. So between evaporation and the booming, the collecting, skimming and the burning, it -- more than half of that oil is in the environment for the environment to be dealt with. You know, it's not successful.

Q. So Mr. Challenger also talked about the Enbridge spill.

A. Yeah.

Q. Can you give us -- give the council a little bit more information about the --

A. The Enbridge spill is a pipeline that spilled dilbit into the Kalamazoo River, so that makes it kind
of relevant to the Columbia River. Mr. Challenger reported that about 15 to 18 percent of that sunk. And then one of you asked, well, how much was spilled initially, and he didn't remember.

This is the largest land-based spill in the US. It's close to around a million gallons. The EPA fact sheet -- this is a spill in 2010. The EPA fact sheet reports that the spiller reports about 800 and it was elevated to mid 800,000 barrels were spilled -- gallons, excuse me. 800,000, to later up to about 840,000 gallons were spilled. EPA reports that 1.1 million gallons were recovered. So there's a disconnect there, but that's kind of understandable, I guess.

EPA -- there's dredging activities, recovery activities through 2013. Their testing was not -- proved that there was still too much oil on the bottom because of this 15, 18 percent, which doesn't sound like much until you multiply that times a million gallons, and then that becomes 150,000 to 180,000 gallons on the bottom.

After -- in 2013, they ordered another round of dredging activities to do further cleanup, which ended in mid 2014 or so. The total dredging material removed was 500,000 cubic yards. That's over 30 million
gallons, if I convert yards to gallons. But 500,000 cubic yards were removed over a 40-mile stretch of the river. EPA's tests then confirmed that there's still about 160,000 gallons of oil still there, but doing more dredging may do more harm than good. The point is that dilbit's going to be there for a long, long time. It's very difficult to deal with when it sinks.

When I apply that to the Columbia River situation, that's kind of bothersome. Of course, it would be -- to have that much dredging going on is going to affect the habitat. To have that persistence, persistence is going to be at the order of I would say decades. The only hope is that it would get covered up and sealed off from the rest of the environment.

But to take a species like sturgeon, who inhabit the bottom, who are living literally on top of those sediments, feeding on top of those sediments, the Mobil oil spill found oil and oiled sediments in the mouths of sturgeon, it's kind of frightening. Takes 25 years for that female to get sexually mature and she's going to reproduce maybe every two to five years for who knows how long. Life expectancy may be up to 80, 100 years, something of that sort. That's a lot of long-term exposure potential for that animal. A lot of long-term potential decreases in morbidity and survivability of
the embryos and all those sorts of issues start to come into play to make you wonder if you'll be able to succeed there.

MR. LOTHROP: Thank you, Dr. Rice. That's all my questions for now.

JUDGE NOBLE: Cross-examination of Dr. Rice?

MR. JOHNSON: Thank you.

CROSS-EXAMINATION

BY MR. JOHNSON:

Q. Dr. Rice, I'm Dale Johnson. I'm one of the counsel for the applicant in the case. I think I'll pick up where you were leaving off, or almost leaving off. You referenced the Mobil spill in the Columbia River.

A. Yes.

Q. When did that occur again?


Q. And to your knowledge, have there been any changes in response in spill capabilities in technology since 1984?

A. Certainly there has.

Q. Okay. And would you characterize those as being improved?

A. Well, sure.

Q. Okay.
A. We're better than we used to be.

Q. And, in fact, the crude that was spilled in the Mobil spill was substantially heavier than the API of the Bakken crude that will be processed at the Vancouver Energy terminal; isn't that right?

A. That's correct. It's also less than the dilbit, though. It's in between.

Q. I'm sorry?

A. It's in between.

Q. Okay. But the fate and transport of that oil differs from Bakken crude, correct?

A. Absolutely.

Q. Okay. Would you agree that -- with regard to impacts on wetlands, that the timing of response action and the ability to flush the oil out or potentially to even engage in replanting activities to rehabilitate wetlands is a key factor in their recovery rate?

A. Yes. And we've come a long way since 1984 in that regard also.

Q. Okay. And then -- just a point of clarification. You were talking about the pink salmon runs in Alaska following the Valdez spill. And I thought you said that 2 million pinks did not return because of the spill; is that right?

A. That's the estimated amount, yes.
Q. Okay. But then you also made comments about a very robust fishery in the years following the spill.

A. That's correct.

Q. So is it your testimony that those robust fisheries would've been even more robust had the salmon -- with the additional 2 million not returned?

A. That's correct. That would have been 2 more million robuster.

Q. I see. Okay. All right. So it's fair to say that while there may have been impacts to the pink salmon runs there, the total population of the pink salmon recovered, correct?

A. I didn't get the question.

Q. Well, the total population of the pink salmon in Prince William Sound ultimately recovered from the impacts of the spill.

A. Correct. The total population was basically in good shape in spite of the spill. And that has an awful lot to do with the area it's spilled in. In other words, there was -- I think it's 2,000 streams in Prince William Sound. Only a fraction of those, I would say 20 percent, I don't remember the number, were exposed. So there's -- not everything was exposed.

Q. Okay. And so if not all areas where salmon are present, I suppose in any form, whether they're adult
salmon or embryo or fry, are not exposed, then that enhances the recovery rate for impacted salmon population?

A. I guess -- let me phrase your question this way, if I can. I'm not sure I understand.

Q. I'm not trying to confuse you.

A. I think what you're saying is because there are areas in Prince William Sound, for example, that weren't exposed, that they were there to help with the recovery. And there's some truth to that. One of the strategies of pink salmon is there's a large amount of straying that's natural. And so there's -- that's their strategy. Other species, Sockeye, Chinook, et cetera, have multiple years so that if you knock out one year, you have other years that can come in. Well, pink salmon don't have that strategy at all, but they do have a straying strategy. They don't stray hundreds of miles, but if you have five creeks that come into one bay, for example, they probably might focus on one and have significant straying into the other three or four.

Q. Okay. And just to clarify, because you were discussing this in the context of the pink salmon studies, and I thought you referenced oil stream. So is it correct that there were streams and stream beds that were actually oiled as a result of the Exxon Valdez
spill?

A. Let me clarify that. There is -- because of this intertidal zone that's around 20 feet vertically, that can be two or 300 yards laterally. And so at low tide, that oil comes in -- or high tide, it contaminates -- well, contaminates everything except for the actual stream bed itself, which has water whose oil floats. But right along immediately aside of it -- alongside it, that is contaminated. And the contamination in some bays rose and fell, rose and fell multiple tide cycles. And so the contamination into the sides of those banks was quite significant, but not actually into the spawning reds. The spawning reds require the water hydraulically, basically, as the tide goes out, will flow through the cobble alongside the bank and down into the reds and that's how they get the exposure.

Q. Okay. But they were being exposed to the oil in their spawning grounds; is that right?

A. That's correct.

Q. All right.

A. There's also fry migration, which I didn't talk about. Once they come out, there's growth impacts on fries. They migrate alongside. Two different studies determined that. That would be kind of analogous to the
smolts coming down the river, that they could pick up exposures just by going along the sides of an oiled bank.

Q. Okay. But the river is not analogous to the -- to the sound, where there's this tidal action moving oil into, in effect, the spawning ground, correct?

A. I guess I don't understand your question.

Q. Well, let me just ask what your understanding of the Columbia River -- the spawning grounds in the Columbia River.

A. Okay. Well, I know they're upstream, mostly in tributaries. Sturgeon spawn in the mainstem. There's minimal -- I don't want to say "minimal," I'm not sure, but I know there's some mainstem spawning by Chinook but not -- I would guess not an overwhelming amount in the tributaries.

Q. Okay. And you talked about a one-tenth of a percent to 2 percent, and I'll call it deformation, and I know that's probably not the technical term, but impact on the salmon. Presumably there's some of that that occurs naturally; is that correct?

JUDGE NOBLE: Dr. Rice, before you start to answer, slow down.

THE WITNESS: Okay. Thank you.

JUDGE NOBLE: Thank you.
JOHNSON / RICE

A. I'm sorry, what was the question?

BY MR. JOHNSON:

Q. Well, I was just asking -- you talked about impacts in terms of some deformed fish, and I was asking about whether that occurs naturally.

A. It does at a low rate and that's basically in probably any population that has a small amount of deformity, so it will develop for either environmental, possibly for genetic reasons, I suppose, too. But what we saw with the oil exposures, we saw an increase in that. And that's the first visible sign that we see of an impact, so we know that the dose is causing an effect. Later we could chemically analyze them, we could use a biomarker test, for example, that would stimulate, and visually you could tell that they were being exposed also.

Q. Okay. And then sticking with this -- the pink salmon studies, you talked about exposing thousands of fry and releasing them. So is that exposure in a controlled setting? I don't know if laboratory setting is fair, but in some setting other than a natural setting?

A. Yeah. It was exposed in basically a hatchery situation. And so we had probably a hundred or so. I don't remember the number. But a hundred or so
incubators, which meant that there was a lot of replicate incubators filled with gravel with embryos in them, exposed to oil. That was repeated for a dose. Another group that was at a different dose. Another group that was controls. And their collections were kept separate by dose.

Q. And then when they returned, presumably you were able to trace those back to the specific dose; is that correct?

A. Correct. The reason why we did it, this particular site happens to be in Little Port Walter in Southeast Alaska. We have a hatchery and an experimental hatchery there. And so it has a weir. So every animal that came back that had the adipose fin clipped, boom, it went off to the side, wasn't allowed to go up the stream and spawn. So we collected on all the exposed ones and we had to dissect out the coded wire tag and decode it.

Q. Okay. Earlier today, Dr. Penney testified that there's a difference between what happens in the laboratory and what happens in the field. Do you agree with that statement?

A. Absolutely. The labs do a great job of isolating one factor at a time, one factor. And using that as a single variable trying to figure out what the
potential is of that factor. Unfortunately, the environment is full of tens if not thousands of different factors. And so it makes it difficult.

When we look at oil spills, no two oil spills are ever the same, and yet there's some generalities, so to speak, principles that carry over from one to the other because they are imperfect in terms of an experimental sense.

So in this one project that I talked about extensively, where we did controlled laboratory exposures, where we controlled one variable, the dose, but then we tagged and released the animals out to the environment where they undergo the pressure of predation, they have to acquire food, they have to hurry up and learn how to eat something, a copepod or something like that that's wild out there, they have to go out and migrate, they have to come back. So that has a whole bunch of -- a whole suite of other stressors. Is it a perfect environmental experiment? No. But it's the best we could do.

Q. Are there studies that have assessed -- I know you talked about the exposure -- crude oil exposure studies on other species, like yellowfin tuna, mahi-mahi, et cetera. Are there other studies that have been conducted on other salmonids like Chinook, coho,
chum and/or steelhead?

A. Not of this category. I think I saw maybe one on coho recently. I believe Incardona's lab has done something on coho. I think that was -- had to do with survivability performance, that sort of thing, coming back to urban streams in Puget Sound. But that's -- I think our pink salmon was the only salmonid model out there, so to speak.

Q. Okay. And with regard to the heart rate discussion, I noted you said that the mahi-mahi study was -- involved embryos exposed for 48 hours at parts per billion. What was the dose rate for the yellowfin study?

A. Those are a little bit higher. Those are in the single digit, like 5 or 8 parts per billion. I don't have that on my little fingertips. It's down in the part per billion range, but the mahi-mahi was probably the lowest.

Q. Okay. Are you familiar with how booms are used in currents that are in excess of the current at which the boom is listed to be effective?

A. My understanding, you can put boom after boom after boom. So, yeah, I have some understanding of that. I'm not a response expert, but I have seen booms in action, both working and failing.
Q. Okay. And the Enbridge spill, that was a pipeline spill, correct?
A. Yeah. It was a pipeline spill and because of human error was allowed to flow about 17, 18 hours before they stopped it.

Q. All right. And just, again, back to the Mobil oil spill and--if you've answered this, you can tell me, but you talked about the type of oil that was involved in that spill. Do you know specifically the API gravity of that oil?
A. No, I don't keep that in my mind. I can read it.

Q. All right. Just check my notes here real quick.
One other question. You described the Exxon Valdez spill as a watershed event. Isn't it true that the Oil Pollution Act was enacted shortly thereafter?
A. It was. It's called the Oil Spill Act of 1990, and it had been running around Congress in half a dozen forms for probably six, eight years. And basically a year after, the summer after '89, year and three months or so was passed in the form that it is now.

Q. Okay. Great.
MR. JOHNSON: Thank you. Nothing further, Your Honor.

JUDGE NOBLE: Redirect?
MR. LOTHROP: Nothing, Your Honor.

JUDGE NOBLE: Council questions? I see no council questions.

Thank you, Dr. Rice, for your testimony.

You are excused as a witness.

THE WITNESS: Thank you.

JUDGE NOBLE: Are there further witnesses this afternoon?

MR. LOTHROP: Your Honor, I don't have any further witnesses.

JUDGE NOBLE: All right. Ask your colleagues if they have further witnesses.

MR. LOTHROP: Any further witnesses, colleagues?

MS. BOYLES: No, Your Honor, we have no further witnesses this afternoon.

JUDGE NOBLE: Alas, we are finished early today. Is there anything we need to do other than a rundown of Monday's witnesses today on or off the record?

MR. JOHNSON: I don't think so, Your Honor, not from the applicant.

JUDGE NOBLE: All right.

MS. BOYLES: On to Monday.

JUDGE NOBLE: Monday.
MS. BOYLES: We will now tag team the witnesses for Monday, Your Honor. We have Mr. David Wechner, who will testify about land use planning and facility conflicts. He has prefiled testimony and he is -- will also rebut the testimony of Mr. Carrico.

MR. KERNUTT: Counsel for the Environment will be calling Mr. Holmes -- I'm sorry, this is Matt Kernutt, Counsel for the Environment. I will be calling Mr. James Holmes, who will testify regarding natural resource damage assessments, as well as the ABT report that has been referenced throughout the proceeding.

I will also be calling Dr. Eric English, who will testify regarding recreational and commercial fishing impacts. He was also one of the coauthors of the ABT report.

Mr. Holmes will be addressing some of Mr. Challenger's testimony. Dr. English will be addressing some of Mr. Schatzki's testimony.

JUDGE NOBLE: And I'm trying to remember the prefiled testimony for Holmes and English.

MR. KERNUTT: I apologize. Both filed prefiled testimony.

JUDGE NOBLE: Is that it?

MS. CARTER: I'm the last of the tag team here. The tribes will be calling Chief Mitch Hicks and
Mr. Michael Broncheau. This is a joint testimony. And they will be discussing fishing enforcement, fishing access sites, tribal first response. And they will also be rebutting the testimony of Haugstad, Rhodes and Dr. Taylor.

On deck we have Mr. Paul Lumley, who's the final tribal witness on -- he will be speaking to tribal fisheries and culture and rebutting the testimony of Mr. Challenger.

JUDGE NOBLE: And Hicks, English and -- Hicks and Broncheau had prefilled testimony?

MS. CARTER: Yes. Sorry. All three of these witnesses will have had prefilled testimony.

JUDGE NOBLE: All right. That would be good if we could get through all of that on Monday. And do we have any news on Dr. Barkan -- Mr. Barkan?

MR. JOHNSON: Yes. He will be here Wednesday morning, Your Honor.

JUDGE NOBLE: Thank you. That's good news.

MR. JOHNSON: And we're prepared to begin our rebuttal case first thing Tuesday, if it works out that way, or whenever the last of the opponent witnesses are done.

JUDGE NOBLE: I think it will work out that way. I think it's justified expectation that you can
begin on Tuesday afternoon. Am I right?

MR. KERNUTT: I would agree with that, or
even earlier than that. There is a strong likelihood
that we will be done on Monday.

JUDGE NOBLE: All right. Just for the sake
of the public following this, we will proceed onto the
rebuttal case just as soon as the opponents have
completed their case.

Is there anything further we need to do
today?

MR. JOHNSON: No, Your Honor.

MS. BOYLES: No, Your Honor.

JUDGE NOBLE: All right. We are adjourned
until Monday morning at 9:00. It will be in Vancouver
on Monday morning. Thank you.

(Hearing adjourned at 4:04 p.m.)
CERTIFICATE

STATE OF WASHINGTON )     SS.
COUNTY OF THURSTON )

I, Micheal A. Johnson, Registered Diplomate Reporter and Certified Realtime Reporter, do hereby certify that the foregoing transcript is true and accurate to the best of my knowledge, skill and ability.

IN WITNESS WHEREOF, I have hereunto set my hand and seal this 28th day of July, 2016.

MICHEAL A. JOHNSON, RDR, CRR
BEFORE THE STATE OF WASHINGTON

ENERGY FACILITY SITE EVALUATION COUNCIL

In The Matter Of:
Application No. 2013-01
TESORO SAVAGE, LLC
VANCOUVER ENERGY DISTRIBUTION TERMINAL

HEARING, Volume 18
Pages 4118 to 4364
ADMINISTRATIVE LAW JUDGE CASSANDRA NOBLE

9:08 a.m.
July 25, 2016
Clark College at Columbia Tech Center
18700 SE Mill Plain Boulevard
Vancouver, Washington 98683

REPORTED BY: Micheal A. Johnson, RDR, CRR
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JUDGE NOBLE: Broncheau. Mr. Broncheau, would you raise your right hand.

(Witness sworn.)

JUDGE NOBLE: Thank you. Please be seated.

You may proceed, Mr. Lothrop.

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

MICHAEL BRONCHEAU,

having been first duly sworn,

testified as follows:

DIRECT EXAMINATION

BY MR. LOTHROP:

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

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

Q. Thank you, Mr. Broncheau. Can you describe what job duties you assumed when you started working for the
fish commission, and maybe move your microphone a little
closer to you.

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

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

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

Q. Where are they located?

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

Q. Can you describe the operation requirements of
the in-lieu and treaty fishing access sites for the council.

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

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

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

In the spring of the year, we go through and do
major cleanup of the sites, do pressure washing on
fish-cleaning tables, those types of things on dry
sheds. At the end of the year, we do a major cleanup
and we move any abandoned, personal or titled property
from the site.

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

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

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

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

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

A. Yes, it is. It was initially turned over to the
Bureau of Indian Affairs to invest. They were not able
to invest because of federal laws. So the tribes looked
for an alternative, and what they decided on was the
Columbia River Inter-Tribal Fish Commission would take
over the operation and maintenance of those sites and
also the maintenance dollars. We, as a nonprofit, could invest those dollars where the BIA was not able to invest those. So we have been able to extend the life of those maintenance dollars some, but due to the limitations in our 638 self-determination contract, we were not able to make a lot of dollars or a lot of interest off of those investments. We need to invest in federal documents that only are paying an extremely small amount of interest right now.

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

A. That is correct. We actually started maintaining numbers over the past three years. Last year, in January, we had 78 residents on the sites, almost all on the in-lieu sites only. And during the height of the commercial gillnet season in September, we had 901 residents on the sites. What it does for the operation and maintenance is -- makes us work very hard in order to try and keep those sites maintained with that many tribal users on the sites on a daily basis.
As the fish numbers increase, of course, use and population on sites have also increased.

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

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

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

Since that time, we've worked to get those sites up to a public water system standard. That would be an addition of more equipment on the sites in the well houses, equipment such as water meters and sampling quarts and new wellhead covers. It also meant that we needed to get trained on public water systems. Three of my crew have currently been through training and we are now qualified as public water system operators.
Q. Mr. Broncheau, can you describe what the water supplies are like at the sites and what you've learned about water supply, generally, through this training.

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

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

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

A. Yes, we have. Through our current qualifications, we learned that minimum water mains that would be required to operate a fire hydrant is four-inch, but the preferred is six-inch water mains and none of our sites currently have anything close to that, nor do any of the pumps -- could they provide water for something like that. All of them, to fill a four-inch or six-inch water main would take much more than the
28 gallons per minute that's currently provided on all of the sites.

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

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

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

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

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

Wind is an extremely large factor in any of those fires. Like we learned in the wildland fire training, those fires tend to create their own weather,
but also on the Columbia River, there's almost always a constant west wind and that wind will push those fires extremely quickly and they'll cover an extremely large area. It happened not only on the Washington side but the Oregon side.

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

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

A. Unfortunately, yes, we have. We've had several fires over the years. One of the worst that I remember was at Underwood. Underwood is an in-lieu site about three miles to the west of Bingen and about a quarter mile from the Burlington Northern Santa Fe tracks. The fire actually started on the site in a little camp trailer and quickly spread to the one resident on the site -- residence on the site, as well as several other campers and trailers, boats, both on trailer and off trailer. Also a railroad car that was there being used
as storage for one of the tribal member's fishing gear, that burned completely and all of the gear inside, as well as two dry sheds.

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

Q. Thank you.

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

BY MR. LOTHROP:

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

A. This is a picture at the access to the Cook's Landing in-lieu site. This is looking west along the south side of SR-14 and the Burlington Northern Railroad, both looking in a westerly direction. Off to the left, you see some vehicles and the roof of a house. Those were on the Cook's in-lieu site.
Q. Could you describe your concerns with respect to Cook's in the event of a derailment, or for that matter, many of the other sites?

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

Q. Thank you, Mr. Broncheau.

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

BY MR. LOTHROP:

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

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

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

BY MR. LOTHROP:

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

A. In both the Dalles and the John Day pool, the sites are extremely remote, sometimes miles in between one of the sites, or anything else, to either the Oregon or to the Washington side of the Columbia. If there is a spill or a fire on those sites, it would be very difficult sometimes to learn about it. Although the sites are remote, trying to get word out is also a problem, not only because of the limited access onto or
off of the site, but also because not all of the sites have cell phone coverage. All the tribal fishers do have and use cell phones, but in some places we just don't have coverage at all and it may be hours before we actually know -- before we know, as a maintenance crew, that something has happened at one of the sites.

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

BY MR. LOTHROP:

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

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

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

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

If this is used, this particular one at Cook's Landing, oil, of course, would naturally get into that rock groin and contaminant that area at least for months, probably years to come. That whole groin would
probably have to be removed and then it could be cleaned
down to the base and reconstructed. Something like that
is not going to happen overnight. It's going to affect
the people that live on that site, and on this
particular site, anywhere from 25 to 75 people during
commercial gillnet season will be affected by that.
It's probably not as big an impact as if the oil were on
the surfing beach a few miles further east at Hood
River, but 75 people, their livelihood would be affected
for years to come. They haven't anywhere else to go.

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

A. With --

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

A. This one?

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

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

Q. Maybe just one click. There you go.

A. At that point right there and that point right
there are two platforms that are used by residents on
that particular site and that's used for ceremonial
fishing or subsistence fishing and commercial fishing.
If that particular site was used and oil was collected at that site, of course those platforms would become unusable for years to come. And it's not something that you can rebuild someplace else. This is a specific need, specific reason those platforms are built there. It would affect those families who use that for years to come. These are not families that could, of course, go and get loans on these platforms or replace them some other way or to take out loans on homes or anything else like that to try and replace those. And it wouldn't be an immediate replacement however you look at it. Could take years to rebuild that groin and make it usable again.

Q. Thank you.

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

JUDGE NOBLE: Cross-examination?

CROSS-EXAMINATION

BY MR. JOHNSON:

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

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

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

A. Not that I know of, no.

Q. Okay. All right.

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

MS. MASTRO: Exhibit 53, page 32?

MR. JOHNSON: Correct.

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

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

BY MR. JOHNSON:

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

A. I see it, yes.

Q. Okay. And then --

MR. JOHNSON: Now, if you can go to page 32,
please, the next page and focus on Note 7.

BY MR. JOHNSON:

Q. If you can just take a moment and read Note 7.

(Witness reviews document.)

A. Okay.

BY MR. JOHNSON:

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

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

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

A. I'm sorry?

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

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

MR. JOHNSON: All right. Nothing further.

JUDGE NOBLE: Redirect? Redirect?

MR. LOTHROP: None, Your Honor.
JUDGE NOBLE: Council questions?

Mr. Shafer?

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

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

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

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

THE WITNESS: No.

MR. SHAFER: Okay. Thank you.

JUDGE NOBLE: Other questions?

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

THE WITNESS: That is a commercial gill net, yes. It's attached to the bank on one end and you probably can't see it, but there's a float out on the -- actually you're looking south across the Columbia from the Washington shore. There would be a float holding the other end of that net up. The little thin lines are
floats that you see -- those are floats. And in this particular section of the Columbia River, there is an eddy that tends to want to push the net back upstream.

JUDGE NOBLE: And that's a tribal gillnet?

THE WITNESS: Sorry?

JUDGE NOBLE: Tribal gillnet?

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

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

Any questions based on council questions?

MR. JOHNSON: No, Your Honor.

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

DIRECT EXAMINATION

BY MR. LOTHROP:

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

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

MR. LOTHROP: Your Honor, I think it's
rele vant to the -- I'm sorry, I can't see your name.

MR. SHAFER: Shafer.

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

JUDGE NOBLE: I'll overrule the objection.

If you have another question, Mr. Johnson, you can certainly ask it.

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

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

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

The first of the treaty fishing access sites, construction on them was started in 1995 and I think it concluded in 1996. The last site at Dallesport was
completed two years ago. So from 1937 to two years ago is how long it's taken to get those sites in place. And they haven't been there that long, as we -- as we -- as tribal members consider time and generations. And so there are still concerns that with the number of rail cars coming through the gorge, that something could still happen to our sites, or it doesn't even have to be on site, as we've already seen. They use the sites as a collection point. It could happen miles off the site, above the site and still have a dramatic effect on the sites.

MR. LOTHROP: No further questions, Your Honor.

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

THE WITNESS: When it was --

JUDGE NOBLE: Built.

THE WITNESS: When the construction started?

I'm sorry.

JUDGE NOBLE: When it was done.

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

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

THE WITNESS: I don't know.

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

REDIRECT EXAMINATION

BY MR. LOTHROP:

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

JUDGE NOBLE: No, no, no.

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

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

THE WITNESS: Thank you, Your Honor.

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

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

JUDGE NOBLE: We're back on the record.

Mr. Lothrop, do you have another witness?

MR. LOTHROP: Yes, Your Honor. Your Honor, I would like to call Chief Mitch Hicks to the stand.
JUDGE NOBLE: Chief Hicks, would you raise your right hand. I see it's already raised.

(Witness sworn.)

JUDGE NOBLE: Thank you. Please be seated.

MITCH HICKS,

having been first duly sworn,

testified as follows:

DIRECT EXAMINATION

BY MR. LOTHROP:

Q. Chief Hicks, can you spell your first and last name for the court reporter.

A. Yes. Mitch Hicks, M-i-t-c-h H-i-c-k-s.

Q. Thank you, Chief Hicks. Can you please describe for the council your role with the Columbia River Inter-Tribal Fish Commission?

A. I began my career with the Inter-Tribal Fish Commission in April of 1993. Throughout -- started my career as a patrol officer, then as a sergeant, and three years ago I was appointed as chief. I have spent thousands of hours on the Columbia River, in a patrol capacity and as a supervisor and as an executive. I have worked the Columbia River from Hanford Reach to the ocean and in a wide range of weather conditions and some bluebird days and some not so.

Q. Thank you. And can you describe the nature of
the work that your fisheries enforcement department
does.

A. We have about 700 square miles of patrol area.
We have a staff of approximately 13 sworn officers,
dispatch staff and administrative staff. The primary
patrol area is at Bonneville Dam and extends east to
McNary Dam. And then we also provide mutual aid support
to our tribes, the CRITFC member tribes, so at times we
may work some tributaries.

We have, as was discussed earlier, 31 of the
treaty fishing access sites and in-lieu sites that we
have policing responsibilities for. We also regulate
and enforce the tribal laws and state laws in the treaty
fishery and sport fishery within Zone 6. And we provide
cultural and archaeological resource protection on --
under contract with Army Corps of Engineers.

Q. Chief Hicks, I'm going to ask you a question
that we didn't talk about a lot, but could you explain a
little bit about the jurisdictional setting on the
Columbia River within which you work, the operation of
federal law, state law, tribal law and the commissions
that your officers carry.

A. So I carry a -- an executive certification from
the Oregon Department of Public Safety Standards and
Training. All of our officers and supervisors are
State-certified, including our dispatchers, again, with the State of Oregon. The law enforcement matrix that the patrol officers operate under are three federal judicial districts: so the Eastern District of Washington, the Western District of Washington and the District of Oregon. We’re, again, as I mentioned, state peace officers, certified peace officers, so we have full Oregon police powers. We have two -- excuse me, one federal commission from the Bureau of Indian Affairs for our federal authorities, and then we have a deputization from Klickitat County Sheriff’s Office.

Q. Thank you. Can you describe a little bit more about the nature of the patrols that you and your officers provide on behalf of the tribes.

A. They kind of fall under the primary job description of the officer individually. So some of our staff is dedicated to treaty fisheries enforcement, some of our staff is dedicated to in-lieu and treaty fishing access site enforcement. They do, however, cross over. So those patrols include vehicle and foot patrols, they include boat and marine patrols and at times they can also include aircraft patrols.

Q. How many boats does your department maintain and operate?

A. Five.
Q. And what months of the year and in what types of weather do those boats operate?

A. The fleet that we have is somewhat varied in size and vessel capabilities, but all of them essentially are capable of operating year round. I’ve been out personally in some pretty extreme conditions and have been highly confident in the craft and the vessels that we have. We do operate year round as well. So there are a number of sheriff’s offices and Oregon State Police that have marine enforcement programs. None of the counties or Washington State parks programs are year-round operations. They’re seasonal. Generally run from Memorial Day weekend through the Labor Day weekend. Oregon State Police and ourselves are really the only ones that are operating marine patrols year round. Although Oregon State Police, during their big game seasons, are typically assigned off of the river and not present.

Q. What months of the year are big game seasons typically?

A. Starting around August, mid-August, through the end of November, early December.

Q. Thank you. Does your enforcement department maintain emergency response skills?

A. I mean, as in investigative skills or ICS
Q. Well, you pick. I was going to say emergency response skills, but I understand there's different types of emergency response, everything from fatalities to spills to --

A. Sure. So I guess we'll separate them as in a criminal response versus, say, a search and rescue response or, let's say, a hazardous material spill response. But in pretty much all three types, you're going to operate with an incident command structure of some type. Even if it's -- many people don't realize, but let's say even if it was just an individual contact of a fisherman on the bank and you're doing a license check and so forth, well, the officer that's making that contact at that point in time is an incident commander. That's about as small of a scale as you can get to. But that could be expanded, depending on the event at hand. So whether it's a major crime response or whether it's a natural disaster response or a search and rescue response, those just get expanded to kind of meet -- to try to meet the need of the event that you're dealing with.

Q. Thank you. And can you describe your emergency response capacities in relation to your skills.

A. So capacity-wise on our marine patrols, we
require two officers minimum per patrol. So when you have a staff of approximately 13 sworn and you've got seven days a week to cover, sometimes -- many times we will only be able to schedule one officer on duty at any given time. They do -- we do offer flexibility for officers, though, to make shift adjustments so that those patrols can get done and that we can have emergency coverage during times that we know are critical, which are generally during periods of foul weather, periods of when fishermen need to have fishing gear out of the river for closures, certain ceremonial fishing time periods we want to be available and on hand for emergencies. So there is some preplanning that goes into that capacity.

Q. So one of those emergencies might have included the Mosier train incident?
A. Correct. So --

Q. Go ahead. Describe for the council what your office did, if you wouldn't mind.
A. So we had -- actually we had two -- one officer on duty that day and then a captain -- department captain. Within about 40 minutes of notification to us from Wasco County Sheriff's Office, the one officer that we had responded to the scene and would begin just a search of the riverbank for any sheen or any spill and
if there were recreators along the riverbank that needed to be notified and evacuated or moved out of the way, advised, given notification, those kind of things. The captain, he got with the Wasco County undersheriff and started coordinating the emergency responders that were beginning to arrive.

Q. And did you receive any word from the Wasco County sheriff with regard to follow-up on the incident?

A. Yeah. We happened to be a member of a larger regional law enforcement group, it's called the Mid-Columbia Interlocal Law Enforcement Group. It is comprised of about 13 or 14 law enforcement agencies, from ourselves to the sheriff's offices, state police on both sides of the river, Washington parks, forest service and others.

When this emergency happened, a group message went out to all of the members of the group, similar to if it were, say, an active shooter incident, because we're all small agencies, we need lots of help, nobody -- no one agency within the Mid-Columbia is a stand-alone department to be able to respond to these events. So following that response, some week or so after the things were sort of restored to -- for the local citizens, community members of Mosier, restored to livability, Wasco County Sheriff's Office sent out a
letter thanking everyone for their assistance. And he acknowledged that what was accomplished there in terms of first responders and from law enforcement couldn't have been accomplished without -- you know, without being a group effort.

Q. Thank you. And did you have any subsequent follow-up with law enforcement and other emergency response to evaluate how things went during this operation?

A. Yes. So since then the Wasco County Sheriff's Office sent each agency that had responders a form to have written and returned to them as an afteraction report. And last Friday for approximately three hours, there was a hotwash held at the Columbia Gorge Community College. A hotwash is an emergency management term for basically a multi-agency debriefing of a large-scale event. And there were -- they broke it up into discipline. So there were local and state elected officials, there were law enforcement leaders, there were fire service leaders, public education, community education, public health leaders, every -- I think there was about 36 or 37 in attendance to that and basically had a roundtable discussion and a debriefing of that event.

Q. What did you learn as a result of that
roundtable?

A. From the law enforcement perspective, our group felt like that we could have and should have organized the unified command much quicker. It took us about 36 hours or so to really get that structured. Then we also identified some improvement that we could’ve made in communications. The Wasco County 9-1-1 center was completely overwhelmed and there was no representative from a communications discipline included in the unified command, and so we felt like that we could have done a better job with including communications.

The other thing that we realized, during this discussion from both fire service and from the law enforcement responders, was when the Union Pacific Railroad incident command team arrived, who I understand to be a contracted incident command service for these kinds of events, that the objective of that incident command team was to get the rail cleared and get trains moving again; which was not aligned with the objective of the local unified command in terms of communicating with the community, working with Red Cross and others for sheltering of evacuated residents, input from city council, input from county commissioners, input from I know at least three state senators and one federal congressman that was there and felt like they that had
very little input directly anyway to -- with the
incident command team.

There were a couple of debriefings that were
held for community members and elected officials on two
different days, but we certainly got the sense that the
railroad incident command team and the local unified
command were not aligned in what the objectives in terms
of community health and community livability was --
would look like in -- you know, within a given amount of
time following that event.

Q. So, Chief Hicks, I would like to shift gears a
little bit and talk about your knowledge of the Columbia
River and ask you to share some of that with the
council, and in doing so, talking about wind conditions,
wave -- and wave conditions. Let's start there, and
then we'll move on to boat experiences and vegetation.

A. Okay.

Q. So if you could talk a little bit about your
experience with wind and waves on the Columbia River.

A. There's obviously -- or maybe not obviously, but
if you spent any time in the Columbia River Gorge, it
becomes obvious pretty quickly why the Columbia River
Gorge is the windsurfing capital of the world. Many
claim that. I don't know. I'm not a windsurfer, so I
don't get around the world windsurfing very much. But I
do know that there are people from all over the world that come there to participate in that sport, that recreation. And the winds are consistent. That's why they like it. The winds are strong. That's why they like it. The wave action in the river itself is significant and they like it. So that's all good for recreation.

When it comes to law enforcement, marine enforcement, emergency response in terms of drownings and vessel capsizings and just dealing day to day with the conditions of the river, it's a pretty unique location, very unique.

Q. Have you had to deal with drownings in your official capacity?

A. Yes.

Q. How many?

A. I've personally investigated 19 drownings in the Columbia River.

Q. Can you describe your boat operating skills and those of your staff in these kinds of wind and wave conditions.

A. All of our staff attends a two-week training academy with the Oregon State Marine Board. All of our staff and patrol officers, when they go through their field training program, we have our own five-week field
training section, if you will. So they're -- they're a phase, rather, is what they're called. I kind of lost my thought here. There's a five-week phase just on boat operations, and we -- it's structured -- the training is structured just pretty much completely around what we have learned over the last 30, 40 years of our patrols and dealing with the wind, waves and current is -- you know, rescue operations. We just held a search and rescue training exercise about a month ago. And so all of our officers are trained. They continue to train. And some have been instructors, in fact, for this marine board training that's offered by the state.

Q. Would you consider these skills to be specialized or unusual skills?

A. I would not characterize them necessarily as specialized, except that I think you're -- the day-to-day street cop, of course, doesn't have these skills, but that's not necessarily their key job function either. But it is a skill, particularly in the Columbia River Gorge. And I would maybe liken it to operating in whitewater, say, if you've been in Hells Canyon at all or, you know, Salmon River in Idaho or someplace where you're operating jet boats in whitewater, it could be somewhat similar. And it's a skill that is learned, it's a skill that has to be
refreshed and -- because it is perishable. It's a perishable skill.

Q. Can you give us a sense of how strong the wind is with respect to the waves? Do the waves whitecap? Does the water spray around?

A. I mentioned earlier that I've spent thousands of hours on the Columbia River in my career. Some have been beautiful bluebird, you know, the river surface is like a mirror, all the way up to conditions where winds are 50 miles an hour plus and you can get standing waves in the river itself to where we have one patrol boat that I've operated, it's a 26-foot boat, it's got a nine-foot beam, and we have submarined the bow of that boat into the standing waves, filling pretty much the open scupper deck in the front, you know, to the point that water's sloshing up onto the windshield. I thought we were going under that day. That was a scary -- that was a scary event.

But the only reason we were out there was because we had a call to rescue a windsurfer, a downed windsurfer. We located the windsurfer and the waves are so tall that they would disappear and -- you couldn't even see them, you're going up and down, up and down, and they're disappearing and you couldn't even see them long enough to throw a ring to them and then not wanting
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to get the vessel so close that you come down on them and injure them that way. So it's very, very difficult. And then you've got wind that's pushing the vessel around.

And other times you can be driving down the freeway, there are a few sections where, say, around east of Stevenson, there's a constriction in the Gorge and it -- for whatever the scientific reasons are, but it compresses the air there and it blows those waves up and you can be driving down the freeway and it's blowing water off of the whitecaps of these waves onto the freeway. The same up east of John Day between John Day River and Philippi Canyon. So it can get very blown -- very hard out there, and these are significant water river conditions to be operating a vessel in and conducting, you know, patrols and emergency responses.

Q. Thanks. Can you give us a sense about vegetation in the Columbia River?

A. The Columbia River, of course, is strewn with shallows and eddies where this vegetation grows up. Typically in the wintertime, we see it -- it dies off or something or it goes dormant and you don't see it much on the surface. But then by early summer when it grows up, it just forms very large mats across the surface of the water. And then for various reasons the wind and
wave action and I suppose other debris, big, large, woody debris coming down the river breaks it loose and it will float down the river and it will collect in eddies and it collects within the tribal -- the fishermen's gear as well, these nets. And it's pretty massive how much of this vegetation is in the river.

Q. Thanks. I would like to shift gears just a little bit back to emergency response. Do you maintain the capability of deploying boom material?

A. We do. We have approximately 800 feet of containment boom stationed at an office we have near Boardman, Oregon. Some of the officers have been trained in deploying boom, some have not. But eventually all will be.

Q. Can you describe your experience with containment boom and whitecaps.

A. So the containment boom is not as fluid, of course, as the water itself or -- you know, it is flexible, but it's not as fluid. So when you get --

MR. JOHNSON: Objection. Excuse me, I'm sorry I cut you off. Your Honor, so far we don't have the foundation that this witness has the expertise or training or experience regarding booms. So if Mr. Lothrop could lay that foundation before continuing, please.
JUDGE NOBLE: All right. I'll reserve ruling on the objection until the foundation is laid.

MR. LOTHROP: Thank you, Your Honor.

BY MR. LOTHROP:

Q. Chief Hicks, do you have any training in deploying booming material?

A. Yes, I do.

Q. Have you deployed booming material on the Columbia River?

A. Yes, I have.

Q. What are your observations with regard to -- have you observed whitecaps on the Columbia River?

A. Yes, I have.

JUDGE NOBLE: At this time I'll overrule the objection.

MR. LOTHROP: Thank you, Your Honor.

BY MR. LOTHROP:

Q. Chief Hicks, can you describe your observations with regard to whitecaps and oil booming?

A. Sure. So as far as capability goes, it is easily done in deploying boom when wind and waves are occurring, even if they are large, as long as it's -- you can get it secured to one end or the other. But as the wave action and the boom material interact, the boom material is somewhat flexible, but, of course, it's not
as fluid as the water is, so you get gaps and spaces as the water and the waves interact with the boom and you get cavitation of the whitecaps of the waves that are move -- that are splashing over and under the boom material.

Q. Thank you. Chief Hicks, Mr. Haugstad, a witness for the proponent, at paragraph 23 of his testimony talked about the Current Buster Technology. Did you review that portion of his testimony?

A. I have.

Q. Do you have any observations you'd like to share with regard to the Current Buster Technology?

A. I did some research into the NOFI Current Buster systems. So this is a -- these are manufactured by a company in Norway, and they're designed for large open water areas and ocean. They are deployed and operated by typically large, deep draft vessels. They are -- the data that is provided by the manufacturer states that these are designed to collect surface oil, and their biggest benefit that they claim is to be able to cover large amounts of area quickly. So they're talking about moving this system through the water at two to three knots. Well, that is already the approximate current flow velocity in the Columbia River. So about 3 miles an hour. In their data they show a -- from a very
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pristine, benign water surface at a speed of two knots and what they call a throughput efficiency, which is basically how much oil is collected through the amount of -- for the amount of water -- amount of water that's passed through this system. So at a very, very calm ideal conditions, they have data that shows approximately 91 percent or so being collected. But in rough water -- what they call choppy waters, which in their data was six- to 12-inch chop, that goes down to about 68 percent. So while they are covering a large amount of area, and while they may be doing it quickly and fast, in my view, 68 percent, even 91 percent collection efficiency is not acceptable, you know, in the Columbia River. And given the wave and the river conditions that generally prevail within the Columbia River, at least from Bonneville Dam to McNary, that efficiency could, you know, be anything less than that. I don't even see how it would operate. They don't even -- the manufacturer doesn't even -- doesn't have -- or I have not been able to find any data where this has been tested or done in the Columbia River with these particular systems.

Q. At the risk of overstating the obvious, six- to 12-inch -- what did they call it, chop? Six- to 12-inch chop, is that a relatively calm day on the Columbia
River?

A. That would be a relatively calm day on the Columbia River. And the other characterization they make of this water condition is a harbor chop. So if you have a harbor in which there are vessels transiting in and out of and you get wake actions and it's sort of a confused sea or a confused surface at that point because you've got this chop and these waves, this little small slight wave action going every direction, that's what they're characterizing as a harbor chop.

Q. Thank you. And finally, Chief Hicks, I'd like you to talk a little bit about your experience with regard to the Cascade Locks marina.

A. A number of years ago, the Cascade Locks fire department purchased a fire boat, a fire suppression vessel. The idea was that they would have this resource to be able to fight fire on large passenger vessels, sternwheelers that we get through the gorge and have had actual on-board fire responses to. However, this piece of equipment didn't get used all that often, so it sat in the marina in Cascade Locks and the presumption was after it was investigated, if you will, is that the batteries had gone dead, the bilge pumps discontinued to work. It was in the early springtime when this happened, so there had been some snow events, there had
been typical, you know, gorge springtime lanes and filled up the bilge with water, the bilge pumps didn't work because the battery is dead and it sank. And there was approximately 200 gallons of diesel fuel in the tanks when it sunk and the Cascade Locks marina is quite small relative to most marinas along the Columbia River. So there was a significant diesel sheen and diesel spill release from that vessel. I never heard an exact amount. All we know is that there was about approximately 200 gallons on board. That marina has one inlet and one outlet, one entrance and one exit. It's probably 50, 60 feet wide, and that was boomed off to contain it within the marina while the cleanup response occurred and that diesel fuel still -- and that was very calm, very slick conditions, as far as water goes, no current in a marina basin, and it still escaped the boom. Some percentage of it still escaped the boom.

MR. LOTHROP: Thank you, Chief Hicks. I have no further questions at this time.

JUDGE NOBLE: Cross-examination for Chief Hicks?

CROSS-EXAMINATION

BY MR. JOHNSON:

Q. Chief Hicks, I'm Dale Johnson. I'm one of the lawyers for the applicant in this case. First of all,
back to your -- well, first of all, in your daily
activities, do you routinely see crude oil unit trains
passing on both the Oregon and Washington sides of the
river?
A. Yes, I do.
Q. And could you -- do you have a copy of your --
you don't have a copy of your prefiled testimony.
A. I don't have it.
Q. Okay. I think maybe your counsel is looking for
a copy. And let me just ask you a question about it,
because it may not be necessary. And I understand that
you and Mr. Broncheau, I guess, prepared this prefiled
testimony together. So I'm just trying to determine if
this is -- if you can turn to page 7, bottom of page 7
where it says, "Many of the concerns expressed by the
City of Vancouver." You see that?
A. Yes, I see it.
Q. Okay. And then if you turn over to the next
page, there's several bullets there that identify, you
know, existing deficiencies in the ability of CRITFC to
respond. Is that your testimony or was that
Mr. Broncheau's?
A. No, this is -- so this testimony was done in two
parts. It was filed in combination with one another,
but this was one of Mr. Broncheau's sections.
JOHNSON / HICKS

Q. Okay. So you can't speak to this section?
A. No.

Q. Okay. With regard to your testimony about the Mosier incidents and your discussion of the unifying command structure, is it your understanding that the unified command structure is different or separate somehow for different responding agencies?
A. I'm not sure I understand your question exactly. But, yes, if you were to consider that we were being asked for mutual aid by the Wasco County Sheriff's Office, then our unified -- internally our unified command structure, being myself or the -- or my captain or perhaps an assigned sergeant in scheduling that -- or providing that mutual aid, could be different, yes.

Q. Okay. I guess what I was driving at was I think you specifically identified that the railroad incident command team and the locally unified command team were working towards different outcomes, and I think you testified that the railroad was focused on getting the trains moving again and the local unified command team was working towards a different outcome. So what I'm trying to understand is whether you view the railroad's unified command as something different from the local unified command.
A. They are, and we recognize that there are
different missions, but there should be communication between the two and there should be liaison between the two. And if, say, Mosier's city mayor or Mosier's city fire chief are expressing concerns, then incident command ought to participate with the unified command, local unified command, as to what either remedies they may be able to offer or suggested solutions or active engagement in that problem solving.

Q. Okay. And is it your understanding that Union Pacific was not communicating well with the Mosier fire chief during that incident?
A. I haven't talked to him specifically about that, but that was a common theme around the hotwash table on Friday, last Friday.

Q. Was Chief Appleton present?
A. Yes, he was.

Q. Okay. And you didn't talk to him about this?
A. Not specifically, no.

Q. Okay. With regard to your testimony about the booms and your experience in deploying booms, where specifically have you deployed booms on the river?
A. So we've had exercise with the Corps of Engineers based on -- at times have oil spills at the dams from hydropower equipment and so forth. So we have done training exercises there. We have had -- we have
had some training provided to us by Washington Department of Ecology and their state parks division. Those are -- come to mind quickly.

Q. Okay. And were those exercises upriver of the Bonneville Dam?
A. Yes.

Q. Okay. And you described conditions on the river in response to a question by Mr. Lothrop in which he asked you about six- to 12-inch chop and you responded that that's a relatively calm day on the river. Does that -- is that with regard to the Columbia Gorge area?
A. The Columbia Gorge area, yes, prevailing. There are other areas that I have worked on in my career experience from, like I said, the Hanford Reach, Tri-Cities to the ocean, where there are significant wind conditions.

Q. Where are the most significant wind conditions along that -- along those areas of the river you just described?
A. Typically they are in the Columbia Gorge itself. So say between Boardman, Oregon, to Troutdale.

Q. Okay. And you also provided some testimony about the Harbour Buster boom system. Have you ever deployed a Harbour Buster boom system?
A. I have not.
Q. Okay. And you said you did some research about the Harbour Buster. Where did you do your research?
A. From the manufacturer's website. They're on productions of YouTube postings.

Q. Okay. So you watched YouTube and did a web search for it, read about it?
A. Uh-huh.

Q. Okay. And are you aware that there's more than one design of the Harbour Buster system?
A. I am.

Q. And which specific design were you discussing when you just provided testimony?
A. It wasn't actually a Harbour Buster. It was a Current Buster 2 and Current Buster 4. And also the NOFI BoomBag.

Q. Which one were you describing? All of them or one of them?
A. Actually as far as the, you know, chop and the throughput efficiency rates and so forth, that was for Current Buster 2 and Current Buster 4.

Q. Okay.

MR. JOHNSON: All right. No further questions. Thank you.

JUDGE NOBLE: Redirect, Mr. Lothrop?

MR. LOTHROP: None, Your Honor.
HICKS

JUDGE NOBLE: Council questions?

Mr. Stephenson has a question.

MR. STEPHENSON: Thank you, Chief Hicks. Do you work with -- you talked about working with fish and wildlife -- excuse me, with state parks to do some boom exercises. Do you work with enforcement from either Washington State Fish and Wildlife or Washington Department of Natural Resources on enforcement issues?


MR. STEPHENSON: Does fish and wildlife have any boom?

THE WITNESS: Not that I'm aware of.

MR. STEPHENSON: So you have 800, you said something like that, down around Portland?

THE WITNESS: That was in Boardman, and that was donated to us last year from Department of Ecology in Olympia.

MR. STEPHENSON: Okay. And has Ecology been involved in responses that you've been at?

THE WITNESS: Yes.

MR. STEPHENSON: And what's their response time typically?

THE WITNESS: Their response time to the
Mosier incident actually -- and they were the one that laid the boom in front of Rock Creek at Mosier, their response time if I -- I'm not positive, but I was told by my captain, somewhere around an hour and a half to two hours.

MR. STEPHENSON: Thank you.
JUDGE NOBLE: Other council questions? Are there questions based upon Mr. Stephenson's question?

MR. JOHNSON: No, Your Honor.
MR. LOTHROP: No.
JUDGE NOBLE: Captain Hicks, thank you for your testimony. You're excused as a witness.
THE WITNESS: Thank you.
MS. CARTER: It appears I'm the bookend for the tribal witnesses. Good afternoon. The last of our witnesses will be Mr. Paul Lumley.

JUDGE NOBLE: Mr. Lumley, could you raise your right hand, please.
(Witness sworn.)

JUDGE NOBLE: Thank you. Please be seated.

PAUL LUMLEY, having been first duly sworn, testified as follows:
DIRECT EXAMINATION

BY MS. CARTER:

Q. So, Mr. Lumley --

A. Yes.

Q. -- please state your full name for the record.

A. My full name is Paul Lumley, P-a-u-l L-u-m-l-e-y.

Q. And please summarize your education and training for the council.

A. Well, I was born and raised on the Yakama Indian Reservation. I lived a big part of my life along the Columbia River, so I have firsthand knowledge of it since I was a child. I went to school at Western Washington University, where I received my bachelor of science degree in mathematics. And then I began working at the Columbia River Inter-Tribal Fish Commission since 1987, except for a few years where I went to Washington, D.C., where I was a senior tribal liaison for the Department of Defense and also the National American Indian Housing Council's executive director, and I am currently the executive director of the Columbia River Inter-Tribal Fish Commission.

THE WITNESS: Am I talking too fast?

JUDGE NOBLE: Yes.

THE WITNESS: I'll slow down. My apologies.
BY MS. CARTER:

Q. So you filed testimony in this case. Do you still stand by your testimony?

A. I do with the exception of one correction. And it's on the table.

MS. CARTER: So, Ms. Mastro, could we have Exhibit 5218.

JUDGE NOBLE: So is Exhibit 5218 a part of the prefilled testimony?

THE WITNESS: It was attached to my testimony.

MS. CARTER: But it was given an exhibit number.

JUDGE NOBLE: That's fine. I just wanted to make sure it had its correct classification.

BY MS. CARTER:

Q. So go ahead, Mr. Lumley, and give your correction.

A. About two-thirds of the way down, you'll see where it says, "Tesoro-Savage Vancouver Energy," there's a mistake there in the middle column where it says "Trains Per Week." It says, "36." That actually should say "28."

And on the column to the right, "Vessels Round trips per week," it says, "20-25." That should say
"14."

Q. So while we have this up, what does this table represent?

A. This table was put together by my office to keep track of existing coal and oil transportation proposals that are going through our tribal fishing area. And once we started assembling this information, we started using this as our management tool to keep track of all of these projects. And one thing that I was particularly alarmed about were the sheer number and volume of all these proposals that are coming through.

You can see on the right-hand side where it says, "Notes," and it says, "Proposed" and "Operating." And so there are several new proposals that we have to keep track of.

I presented this information to the four tribes, the Yakama, Umatilla, Nez Perce and Warm Springs, that the fish commission is made up of, and I heard very resounding alarm bells from the tribes about the sheer number of proposals. But my office keeps track of these proposals as they're being managed and our responses. And I believe this is an important service to this management area. So an important table for us.

Q. Does this table indicate how many crude trains are proposed or currently operating -- currently going
through the Gorge?

A. Yes. If you look, I believe they're in the lower part of the table, you'll see on the right-hand side, there's several that say "Operational." And there are, looks like, three or four that are currently operating, looks like in the range of I want to say 14. Is that correct? I believe so.

Q. So do you have any other observations on this table before we move on?

A. The one proposal for Tesoro Savage would dramatically increase the number of trains going through the Columbia River Gorge by at least twice as much.

Q. And you're referring to crude trains?

A. Correct.

MS. CARTER: So, Ms. Mastro, can we have Exhibit 5023, page 6. Can you zoom in on the map, the big map. Thank you.

BY MS. CARTER:

Q. So would you quickly describe this map. What is this map?

A. This map depicts the Columbia River Basin, a very large basin going into Canada and stretching out through four states: Oregon, Washington, Idaho and Montana. It shows the four tribes that I work for, the Yakama, where I'm a citizen of the nation, Warm Springs,
Umatilla and Nez Perce. The lighter-shaded colored areas depict the ceded lands and the darker areas are the current reservation boundaries.

Now, the ceded lands are important because we ceded those lands to the federal government, but we maintained specific rights to those areas, even though they were ceded to the federal government.

The map doesn't necessarily depict where all of the salmon go, but most of the salmon-bearing streams in the Columbia Basin also happen to be in the area of these four tribes. The -- there are several blockages to salmon that go into Canada as well as into the Snake River Basin in Idaho.

Q. So have you fished on the Columbia River mainstem treaty fishery?

A. Yes. I fished there many times, fished actually throughout the whole Yakama Reservation, but I grew up on the river. My family would move to the Columbia River during the fishing seasons. So I have fished there since I was a child all the way through when I was going to college. That's how I funded my college, at least I tried. I did complete my bachelor of science, but I was not able to complete my master's of science in mathematics because the fishing seasons collapsed and I didn't have enough money to continue.
After I got a job at the Columbia River Inter-Tribal Fish Commission, I still continued to fish with my family until about the time I went to Washington, D.C., for those five years. When I returned in 2009, it was very difficult for me to continue fishing on a regular basis because my job is rather intense and I travel a lot. So I only fish occasionally now with my family.

Q. So please describe the importance -- we've talked and several witnesses have talked about first foods. So if you can, describe the importance of tribal first foods to the council.

A. In order to describe the relationship of first foods, I have to talk about our creation and the relationship we have with the Creator. When the Creator put us on earth, we didn't have an ability to survive, and so the Creator asked us -- asked these first foods as, who can step forward to sacrifice yourselves so these humans can live? And the first to step forward was the salmon. Then after that came the game and then the roots and the berries. And then the Creator gave us these foods -- these first foods and said that with these first foods, you'll always survive, but you have to also take care of these first foods and if you do, they will always take care of you. That is not
something that is just a story that was told long ago.
That is actually how we as an Indian people identify ourselves.

If you go -- if you're lucky enough to go to any of our first salmon ceremonies, for example, you'll see and hear prayers, songs, drumming, a lot of it in honor of the first foods. And when the table is set, it's set in a very specific way. First the water, then the salmon, the game, the roots and the berries, set in that order every time. And so this is not just practice; it's really how we identify as Indian people. I suppose in non-Indian perspective that would be our religion, but it is how we identify as an Indian people.

I would add also that when the non-Indians came over to this land, there were a lot of problems. And the federal government wanted to enter into a treaty with the tribes, and entered into several treaties with the tribes actually. With my tribe, Yakama, as well as Umatilla, Warm Springs and Nez Perce, we all have the same kinds of treaty language. And that's the right to fish in all usual and accustomed areas, as well as hunting and gathering roots and berries.

If you think about those four things, fishing, hunting, gathering roots, gathering berries, those are our first foods. And in reading the minutes of the
treaty negotiations, it is very clear that the tribes
would never have signed these treaties if they didn't
include their reserved rights to these first foods.

Now, when I say "reserved rights," I say that
very carefully because the tribes reserved those rights
to themselves. These were not granted by the federal
government. Tribes always had those rights. They're
reserving those rights in the treaties. So that's how
strongly the tribes felt about our first foods.

MS. CARTER: Ms. Mastro, do we have
Exhibit 5023, page 14? I believe it's the same
document. Right there, the picture. Can you zoom in on
the Celilo Falls picture? Thank you.

BY MS. CARTER:

Q. Can you describe this picture.

A. This is a picture of Celilo Falls. It was
inundated by the construction of the Dalles Dam in 1957,
but prior to that, the falls were a major gathering
place for the tribes in the area. It was our primary
salmon harvesting area. Natives came from all over the
Pacific Northwest to participate in the fishery, to
trade, be with friends and family. It was a wonderful
place to be. It's been described as the original Wall
Street of the northwest because there was so much
activity there. It was a beautiful and wondrous place
to be. Unfortunately, I'm not old enough to have ever witnessed it because I was born in 1963, but that shows how we fish historically. You can see also the platforms and how they have their nets. I believe the testimony last week from Randy Settler described how they did the hoop net fishing off of the platforms, and this is how we did it and it's the way we have fished since time immemorial.

Q. So just expanding on that, describe how important the treaty fishery is to the commission's member tribes and the tribal people of the Columbia River.

A. The history of our treaty fishing right has been a great struggle. We signed our treaty in 1855 and at that time we had somewhere between 16 million and 30 million salmon that would come back. Unfortunately because of dramatic habitat decline, deforestation, agriculture, urbanization, overharvesting in the ocean, we lost a lot of these fish. Dam construction was another big cause for loss of the fish. So now we are actually quite grateful if we even get a couple of million salmon that come back.

Our time of fishing, as soon as the treaties were signed, were met with obstruction. Obstruction by non-Indians out of racism and out of greed for the
salmon for themselves. And so we've had to struggle to
exercise our treaty rights since day one of the
treaties, unfortunately.

In the 1950s and '60s that history was very
difficult for us. As fishermen, we were harassed,
suffered physical violence against us, prevented from
going to the river. There was a series of court cases
where tribal members and the tribal government had
basically had enough. And they started testing the
rights of the states of Oregon and Washington to
intervene in our fisheries, to interfere with our
fisheries. And so we went to court and we started
winning. And two court cases in particular went all the
way to the United States Supreme Court. The United
States versus Oregon, 1967 I believe it was, where the
d judge ruled that the tribes had a right to a fair share
of the fish. And a few years later in 1974, US v
Washington, another judge defined that right to be
50 percent of the harvestable surplus, and also ruled
that the salmon were deserving of the habitat to support
them. And both of those court cases went all the way to
the Supreme Court. And that will tell you, I think, how
much the tribes cared about their treaty reserve right
to these fish, that they would put their treaty out on
the line and go all the way to the Supreme Court and
CARTER / LUMLEY

1 risk that, but the tribes wanted it and it is the law of
2 the land.

Q. You referred to Celilo Falls as Wall Street.
3 Did the tribes engage -- engage in commerce with their
4 first foods and do they still?
5 A. The tribes have always engaged in commerce with
6 the salmon. This particular area, the way my
7 grandfather explained it, was the salmon were so
8 plentiful they would dry the salmon in sides -- the
9 salmon sides would be filleted and they would dry them
10 and store them, and that actually was a monetary value.
11 So if you were trading, they would convert sort of the
12 monetary value into sides of salmon. So something was
13 worth a certain number of sides of fish, sides of
14 salmon. That's how the folks traded. So definitely for
15 salmon, we have a long history of commercial sale. And
16 we've also been involved as tribes in commerce with
17 other first foods, for example, huckleberries. There
18 are -- you'll often see huckleberries sold at our
19 powwows, at gala. Not often, sometimes though, you'll
20 also see some of our roots, our bitter roots, camas
21 roots, Wapato, not often, but you do see them there, but
22 primarily it's berries and fish. Sometimes you'll see
23 deer meat for sale to other tribal members, but you
24 don't see it that often. But those practices still
continue today.

Q. So can you describe some of the current efforts that the tribes have gone to to improve the markets for their salmon.

A. I actually am really quite impressed with the work of the four tribes through the Columbia River Inter-Tribal Fish Commission. We experienced terrible salmon marketing conditions when I was growing up. We didn't expect to have the fish the way we did. We wanted to fish like you see in that photograph, on the platforms. But when the dams came in, the river changed and we had to change the way we fished. We had to buy a boat. We had to buy gillnets. We had to learn a whole new way and invest in resources we never thought we had to before. A lot of the fishermen don't have a lot of money. A lot of our tribal people don't have a lot of money. So they would be struggling to try and find money for a boat, find money for nets. So oftentimes we would go to the commercial wholesale fish buyers and ask for a loan, and they would fund our activities. That's how my father and I fished for many years. We would start out a fishing season by taking a loan out by the commercial wholesale buyer and then we would work fishing to pay back the loan and hopefully have money left over at the end of the season. But we found that
the system on the river with all the fish buyers together were holding down the prices for the tribal fishermen.

I remember one season where our over-the-bank fall Chinook, the most prosperous and best quality fish in the fall season, were only getting a nickel a pound, which is very, very bad. We -- the fish commission saw this problem and started working directly with our fishermen to train them on how to market their fish directly. And we've seen very good success in that regard. We also trained them on how to handle their fish, best quality practices, not just for quality but also for safety. It's HACCP, H-A-C-C-P-S, and started marketing our fish that they're of high quality. And we started a program to help the tribes advertise themselves as business people.

And because of that now, we see prices per pound on the Columbia River that are in the area of 6 to $9 a pound, something I never thought I would ever see in my lifetime. But at certain times of the year, even our tribal catch will be sold over the bank and at a higher price per pound than the non-Indian commercial sales from the lower Columbia River catch. So I'm very proud of our work. Our fishermen are very happy with the progress we've made to increase the value of our
fishermen -- the value of the fish that we catch. And it's not just from fresh salmon that are sold, but that's also for marketing fish that have been processed as well, so smoked, dried, canned.

Q. So we've heard a lot of testimony regarding potential economic losses from an oil spill. We've heard very little about -- testimony about losses to tribal fisheries. Could you characterize in your words how loss of fisheries could impact tribal members in the event of an oil spill.

A. Are you talking about commercial or everything? Everything?

Q. Everything.

A. Thank you. Well, initially we would be asked to stop fishing. So that would have a huge effect on our fish. We wouldn't be able to catch them. We would most likely have a very difficult time marketing the fish that we had already caught. And at some point in the future, after the fisheries reopen, there will be a stigma attached to our fishery for a very long time that our fish are poisoned or contaminated in some way.

We also eat our fish a lot for subsistence. I eat a lot of salmon myself. In fact, we've done studies that show that Native American -- our Native American tribes eat about ten times more salmon than the general
public. So we depend on them for our own sustenance, so there's that as well. There would be also concerns about any of the fish that we eat. We would also question ourselves whether or not the fish that we would be eating would be safe to eat.

I remember I believe it was in 2007 when a couple of Navy fighter jets went in -- crashed over the Columbia River above John Day Dam and there was some contamination there and we had to close the fishery down, and it took quite a while for the fishery to restart. When they did, there were people complaining about whether or not the fish were safe to eat.

I particularly remember that accident because I had just taken a job at the Department of Defense as a senior tribal liaison. I was getting a lot of questions and concerns from the tribes that I worked for. What can I do to help them, because they were getting the runaround from the Department of Defense. And so I looked into it, and it was true, they were getting the runaround to the point where it was too late for the tribes to file claims for the losses of the -- for the fishermen. I believe it was the Yakama Nation who filed a claim. And I was pretty hurt by that because even though I tried really hard on the inside to get that claim filed, my own tribe blamed me because I'm a Yakama
and I was a senior tribal liaison for the Department of Defense, and it was very difficult for me to be the one to have to accept that blame, but I was the only person that they could really talk to about it. They didn't really have great contacts at the Department of Defense and they weren't really returning their phone calls anyways, so it was a very difficult time for them. And I just remember how hard it was for my family that fishes in that area, for them to get back on their feet after that accident and that was a pretty small accident by comparison to what we're talking about here with oil trains crashing into the Columbia or a barge spilling its cargo in the lower Columbia. That would be huge.

Q. So do you believe that the Vancouver Energy proposal is a threat to tribal first foods?

A. I most certainly do. It is a huge threat to our first foods, and not just to the fish. I've listened to some of the discussions these last few days about how the proposal is really just in the Vancouver area, but we're also looking at the transportation throughout the entire stretch along the Columbia River from the upper reaches above even where we fish, above the McNary Dam all the way down to the estuary. So I view the whole proposal as that, because the Vancouver proposal, Tesoro Savage's proposal, would be nothing if it weren't for
the transportation. So you have to include all transportation of oil.

It would affect not only our fish, but it would also affect some of the other first foods that are gathered in the area. There's a deer population in the area, and we also gather some of our roots. We have Wapato that live in the marshes. Wapato is a root that is underwater and you have to go in barefoot with your toes and you pull the roots up. Very delicious, by the way. And then the birds would be affected. Birds are a game. We put those -- those are one of the our first foods on the table too. And it's not just even our first foods, but also the materials we use to practice our culture. We gather our materials out there for weaving, a -- the reeds from the cattails and other grasses in the area that we use for weaving. If those became contaminated, it would cause a stigma for a long time for us to use those materials for weaving.

So I view this proposal as a real threat to our first foods and, in saying so, I would say it's a real threat to us as an Indian people as well.

MS. CARTER: Ms. Mastro, one more exhibit.

Exhibit 185, page 8.

BY MS. CARTER:

Q. Since she's pulling that up, Mr. Lumley, you
CARTER / LUMLEY

were present for Mr. Ellis' testimony last Thursday, correct?

A. Correct.

Q. Okay. This exhibit was presented by opposing counsel. And it's -- I would like you to describe this. What is this?

A. This is a map that shows the mainstem Columbia River from the mouth of the Columbia up to McNary Dam. And it is divided up into two sections. One of them has a label that says Zone 6 Treaty Indian Fishery, and the other one is Zones 1 to 5, Drift Gillnet Fishery.

And one of the -- back up here. All maps have a story. This one has a pretty rich story. The relations we have with the non-Indian community were very difficult for many decades. Soon after Bonneville Dam was built, we were struggling, trying to figure out new ways to fish, and the non-Indian commercial fishery, and sport fishery too, were harassing us, as well as the state game wardens.

And so there was a decision made that -- the states especially agreed that the tribes did have a right to go fishing, and they said up in this area above Bonneville Dam, we won't go fish up there; we will not have our non-Indian commercial fishery up there. That would be an area of exclusivity to the tribes. And you
won't find that as a contract anywhere. It's just a handshake agreement.

And the reason why is because the tribes were very nervous about declaring that that would be the only place that they could fish. That's not -- that map does not show the only place where we can fish. In fact, I fished down on the lower Bonneville Dam. I fished for smelt with my father. And I've also -- well, actually at Sandy River, I believe, the Cowlitz -- Cowlitz or I want to say Burkett, down in that area, I remember it was on the Washington side, also at Willamette Falls. So we've had both commercial and noncommercial activity outside of that area.

It was not something the tribes would ever want to put down on paper, that they were giving up their rights to fish commercially outside of Zone 6. In fact, earlier this year, there's a coalition of tribal fishermen who have banded together or lobbied the tribes to extend a much more commercial season for the tribal fishery down below the Bonneville Dam, down to what's called zones -- about Zone 3, as I recall. And so I've been asked to conduct an analysis of what it would take to organize a structured commercial fishery all the way down to about Zone 3, which would entail questions of funding, because I'll have to extend my enforcement
program down there; we'll have to have a management crew that would keep track of sales and probably deal with legal issues and also social issues in the area. And so I've been asked to give that a more serious consideration.

So the area in particular, Vancouver is not an area that we have ever given up on, don't necessarily have a commercial season there right now because of social pressures, but the tribes are serious about fishing there again someday in the future.

Q. So just keeping it to Zone 6, based on your knowledge, do unit trains full of crude transit the rail through Zone 6?

A. I'm sorry, I couldn't hear your question. One more time.

Q. Yeah, sorry. I was too fast. Keeping it to Zone 6, based on your knowledge, do unit trains full of crude transit the rail along Zone 6?

A. Oh, yes. I see trains there -- I go up and down the Columbia River on a fairly regular basis. So I see oil trains definitely on both sides of the river.

Q. So switching a little bit. Mr. Carrico's testimony asserted that there were no tribal usual and accustomed fishing places at the Vancouver Energy terminal and downstream. This is at the Port of
CARTER / LUMLEY

Vancouver. How would you respond to Mr. Carrico's testimony?

A. Well, we certainly have usual and accustomed fishing rights in that area. There's no question about it. We have rights to all of our first foods in that area, in fact, not just for fish. I mentioned before some of the other game and roots and berries in that area. We've never given up our rights in that area ever. Never given that up. Might also add that we're not the only tribes in this area. We have the Cowlitz Indian tribe there in the area, and if you also go downriver, non-federally-recognized tribes, the Chinook, and I've also heard the Grand Ronde tried to lay claims to this area as well. So we're not the only tribes that have an interest. We are, however, the only tribe that has tribes in this area that have our rights guaranteed to first foods in treaties with the United States in 1855.

Q. Is it also fair to say that the fish that tribal people eat swim past the proposed facility in the Port of Vancouver?

A. Yes, they do. They swim in both directions. As salmon smolts, they swim out of the Columbia River past that facility. When they go out to the ocean and come back as adults to spawn, they also swim past that
Q. Do some of these fish that the tribal people eat also live or rear in the estuary below the Port of Vancouver?

A. Almost all of our androgynous fish that we catch have been reared in an estuary. The only exception would be sturgeon who are landlocked from Bonneville Dam, but all of our salmon, all of our lamprey that we catch, they've all been reared in the estuary, there's no question about it.

Q. So switching gears a little bit. Why are the tribes concerned about chemical contamination of their first foods?

A. The work we've done at the Columbia River Inter-Tribal Fish Commission has been focused on salmon, and we leave it up to the tribes to deal with the other first foods, although we do have some discussions with them about potential contamination and some of their other first foods, especially the roots and the berries and the deer. But -- so in our work with the salmon, we heard complaints about the water, that it's getting dirtier. And some of our fishermen were getting sores on their body from the water, especially at -- even at Willamette Falls.

And so they asked us to do a study on what's in
the fish, because we eat a lot of fish. And so the first step was in the early 1990s, maybe late 1980s, we completed a study that showed that we eat ten times more fish than the general public. That was a study that was done as a cooperative with the US Environmental Protection Agency. And after that, we completed another study that showed that there were a large number of contaminates that were in the fish and that had to raised two levels of concern for the tribes. The first was that we eat ten times more fish than the general public, so are we poisoning ourself with the fish. And the other question was on fish health, because we choose to eat fish or not, but the salmon, they don't have a choice. They have to swim and move. So we had concerns about fish health as well.

So after that we started working directly with the federal government to see what we can do to clean up the water. You know, we used to drink right out of the Columbia River. That map -- excuse me, that photograph showed the platforms at Celilo Falls. A lot of those old photographs, you're going to see a bucket right there on a rope, and they would lower the bucket down into the Columbia, drink. Well, nobody in their right mind would do that now, but historically that's where we drank from.
And we started hearing from the elders, started hearing from the tribal government officials, what can we do to clean up the river so that we can have healthy fish and have healthy fish to eat ourselves. And it took a couple of decades, but we finally got the State of Oregon to change their water quality standards. This is just not too long ago, maybe four or five years ago. Water quality standard is used for their own permitting processes for anybody that needs a permit to pollute the rivers. And they changed their water quality standard to be on the basis of the tribe's fish consumption rate. So instead of allowing pollution in the river up to a level of six and a half grams of consumption of fish a day, which is pretty small, about the size of a sugar packet, they moved it up to a full salmon steak, which is 175 grams per day, which is about what many Indian people, actually many people eat much more than that.

But what Oregon did was they strengthened their water quality standards to be the strongest in the United States; the strongest of any other state. That's based on a tribal fish consumption rate, and they increased it by tenfold. So we are working very hard right now to get Washington and Idaho to do the same thing. We have a very good partnership with the Environmental Protection Agency and we think we are on
the right track to improve the water conditions for the fish, for the Indian people, and for everybody in this room.

Q. So switching to another topic, Mr. Lumley, you read Mr. Challenger's testimony. Do you have any observations of his testimony?

A. I do. I started reading his testimony on Saturday and I didn't finish it so I went back and I started reading it again today. And I have it in front of me, and I have to say that I'm quite disappointed in several sections that attempt to downplay the effects of what might happen if there was a spill. And I can go through these -- maybe I should go through these.

Q. Can you indicate which --

A. Which paragraph?

Q. -- provision. Yes.

A. I see on paragraph 49 where he says, "Recovery of less than five years is typical for wetlands and marshes in most instances when good response decisions are undertaken."

And five years is a lifetime for a lot of people, and more than a lifetime. It's an eternity if you can't fish and the fish are dying. Five years is more than the life cycle of fish. And he also qualifies it as, "if good response decisions are undertaken."
CARTER / LUMLEY

Well, I don't know that, and I will be honest with you that we have many instances that the tribes are working with to repair habitat that's been degraded without good response decisions, and I don't know what kind of guarantees that this -- the proponents of this proposal can offer, but it probably would never be enough to make me comfortable.

I see here on page -- on paragraph 55 where he says -- he's talking about the Kalamazoo River, which I believe is in Michigan, and I believe that was a pretty good-sized oil spill and he said, "Very few dead fish (approximately 45) were found during intensive searches during the response to the Enbridge spill over 25,000 bbls" -- is that barrels? -- "of diluted bitumen in the Kalamazoo River."

Well, just because you can't see the dead fish doesn't mean they weren't killed. And last year we had unprecedented heightened water temperatures in the Columbia River. We had a very large Sockeye return that came back. And somewhere between 200 and 400,000 Sockeye died between Bonneville Dam and the uppermost dam up there by Wenatchee, several dams from us, they just disappeared; died because of the temperature. They can't be accounted for by harvest or tributary turnover and compared to recent data, a lot of fish died. And we
1 looked, we asked, where are all the fish? And nobody
could report that they were seeing large pools of dead
fish anywhere. And you would think that with 200,000
dead Sockeye, they would show up. But they didn't. So
just because you can't see dead fish didn't mean they
didn't die. So I see this is an example, maybe an
exaggeration, of we can't see the dead fish, so they
didn't die.

I note here on paragraph 67 where there's a
list -- there's a list of the salmonid species in the
river and also sturgeon. But I don't see chum. Chum is
here. Excuse me. Chum is here. I don't hear a lot of
discussion about -- chum are the -- I don't see any
discussion here about chum being the last remaining
spawning population on the mainstem Columbia below the
Bonneville Dam. They're actually not too far from where
we're sitting today. But they do spawn out there.
There are eggs out there. And I believe it was
Mr. Holmes -- is that his name? -- who talked this
morning about a tabletop exercise, if I'm getting his
characterization correctly, where he said that they did
an analysis of a spill just above Bonneville Dam and he
listed a fish species, but unfortunately he didn't list
the chum. And the chum are important because if there
was a spill and there were eggs in the gravel, it would
be a much worse outcome for those fish than any other fish in another part of their life cycle. And the chum are listed under the Endangered Species Act.

I didn't participate in Mr. Holmes' tabletop exercise, but just above Bonneville Dam on the Washington side is a fairly good-sized tribal community living at Fort Rains. That's one of the treaty fishing access sites. We have probably 70 families that live there, a lot of them year round, because they fish year round. And that would be right where a train disaster could be. And so I'm very worried about whether or not tabletop exercise was complete in that regard if it didn't include the tribal community that could be affected by that kind of an exercise.

I also see in here, Mr. Holmes -- in Mr. Challenger's written testimony, I think it's towards the end here, where he talks about an explosion would reduce the amount of oil that goes into the Columbia River, if I can find that right now. But he did talk about it in here, and a portion would burn off the oil, there's no doubt about it. But if that train accident occurred at our fishing village, then it would have been much worse than we even saw at Mosier because that train was almost to the middle of our tribal community, right next to it. So I know the Mosier accident had some
distance between the train tracks and some of the other buildings in the area, but this is right through our community, much like many of the other tribal fishing villages, but I would -- I am very curious now and would like to see more about that tabletop exercise to make sure it was thorough.

I see here on paragraph 83 where he says, "While it is always preferable to avoid an adverse impact, there are many positive results of early restoration, emergency restoration, and longer term habitat improvement projects that shorten the duration and severity of predicted spill impacts and bring about a return of services more quickly."

Paragraph 84 provides an example of that, at Fifteenmile Creek. But I can assure you that we are not better off with a disastrous spill. There is nothing that can be done to --

MR. JOHNSON: Objection. He's mischaracterizing the testimony. And with all due respect, I've been very patient here. This witness is not a biologist, and they've had a number of opportunities to present biologists who can explain the natural resources damages process and impacts on fish and other species. So I'm going to object that this witness, A, is mischaracterizing the testimony and, B,
it is beyond his area of stated expertise.

JUDGE NOBLE: In what way are you saying he's mischaracterizing the testimony? He's just saying if they were going --

MR. JOHNSON: Well, the statement he just read doesn't suggest that anyone is better off. What it suggests is there are ways to address impacts of a spill. So he read the statement, and then he said, we are not better off. And that's not what the statement says.

JUDGE NOBLE: Do you want to respond?

MS. CARTER: Your Honor, I think Mr. Lumley is well-qualified. He has a science background and he's been living on this river for his entire life. I think he's very well-qualified to comment on testimony that is written. And maybe this goes to weight, because maybe his interpretation may be different from another interpretation, but I think it's a reasonable interpretation.

JUDGE NOBLE: I'm overruling the objection. He's qualified to say that the tribes -- the tribe will not be better off.

So you may continue with your answer, unless you already finished it.

BY MS. CARTER:
Q. Mr. Lumley, can you -- which paragraph number was that you were talking about?

A. Paragraph 83, and then paragraph 84 immediately following refers to the Fifteenmile Creek, a spill that occurred there. And there's a statement here that says, "During the response, barriers to mitigation [sic] were removed immediately upstream to the spill site to improve future habitat use. Many miles of stream were made available to steelhead spawning with demonstration of fish passage and year one, helping to avoid potentially significant impacts."

THE REPORTER: I need you to slow down.

THE WITNESS: I'm very sorry. Do you want me to read it again?

THE REPORTER: Yes.

A. "During the response, barriers to mitigation were removed immediately upstream of the spill site to improve future habitat use. Many miles of stream were made available to steelhead spawning with demonstration on fish passage in year one, helping to avoid potentially significant impacts to steelhead with possible net gains."

JUDGE NOBLE: Excuse me, Mr. Lumley. I think that people who have been following your reading are saying that you said "mitigation" in the first
sentence. You may have misread that.

THE WITNESS: During the response barriers
to mitigation.

JUDGE NOBLE: It's "migration," I think.

THE WITNESS: I'm sorry. Migration. My
apologies. I read it wrong three times. So the word is
"barriers to migration."

MR. JOHNSON: Your Honor, I'm going to
object again. Does counsel have questions for the
witness, or is this just going to be a narrative of a
page-to-page readthrough of Mr. Challenger's testimony?

JUDGE NOBLE: I think the question
originally was how he differed with the testimony. And
so I guess that's what he's doing, is going through,
pinpointing places he disagrees with.

But I would ask whether the witness is
almost done with this phase of his testimony. We do
have that testimony that the council can read, and if
he -- instead of reading from the testimony he would
direct his comments and tell us where he's commenting
about and then just proceed with his own testimony,
might be better.

And I also note that the court reporter is
needing a very brief break. So I'm looking for a place
that would be convenient.
MS. CARTER: I've got one more question after this and maybe, Mr. Lumley, you can answer --

THE WITNESS: Can I finish? I only have one more.

JUDGE NOBLE: Sure. And then we'll have one more question from counsel and then we'll have a brief break.

THE WITNESS: The reason why I was asked about testimony, Your Honor, was because I had concerns about its potential bias, and so I was going through the concerns that I have. The final one I have is on page -- is paragraph 87. And the last sentence reads, "As a result, impacts are expected to be largely temporary and more significant impacts will be localized." But that's rather subjective unless you're living there and living the life. I don't -- I can't express enough how different it is when you're -- when you're experiencing it, and it would be not just an area where the accident or spill occurred, it would cover a wide area. So this is another example of it being minimized.

And, finally, at the end of -- at paragraph 101 he states, "Given the analysis that predict a very low likelihood of spills" -- and then he goes on. And I realize that he signed his testimony
in -- May 12th of this year. That was before the accident in Mosier. And so I realize he might have thought that when he signed it, but now we've had an accident, and I don't -- I can't agree with it now, that it is very low likelihood because it's a hundred percent likelihood, because it did occur. So that concludes my review of Challenger's testimony in the areas that I found very concerning.

JUDGE NOBLE: Thank you. And did you have one more question?

MS. CARTER: That will be all before the break. I have a few more.

JUDGE NOBLE: All right. I would like this brief to be -- I would like this break to be brief, and so we can just break for five minutes. And we'll be back on the record -- well, eight minutes, at 4:35.

(Recess taken from 4:29 p.m. to 4:39 p.m.)

JUDGE NOBLE: We're back on the record. You may continue.

MS. CARTER: Okay. Just for the time, we're probably three-quarters of the way done and if we hit 5:00, are we going -- can we extend it a little bit to finish or --

JUDGE NOBLE: Off with your head.

MS. CARTER: Is that on the record?
JUDGE NOBLE: I'm sure it is.
MS. CARTER: I deserve that.
JUDGE NOBLE: I think we should just finish up with the witness if it's not going to be hours.
MS. CARTER: No.

BY MS. CARTER:

Q. Okay. Mr. Lumley, again, changing. Describe some of the other impacts to first foods that the commission and its member tribes are addressing in partnership with federal, state and local governments.

A. Is the question about other impacts?

Q. Yes.

A. We are -- in addition to all the work we're doing with the salmon, we are also assisting the tribes with global climate change issues, because it's affecting all of our first foods. The salmon are coming back at different times of the year than they should, the deer are not where they're supposed to be and they're dealing with disease and pests that they didn't normally have to deal with. The berries are ripening much earlier than expected, and the roots in some cases are all but disappearing from their normal locations. So the commission's member tribes have asked us to help find funding for them so that they can develop their own climate adaptation plans.
We also have some fairly new issues with our berry fields, our huckleberry fields, with non-Indians coming through with these metal cones that strip all the berries off the bush. Even those that are not ripe, takes all the leaves off as well and it sometimes kills the bushes. So we're trying to fend that off as well.

But all the tribes are dealing with their first foods as priorities in their programs, and they've asked the fish commission, where I work, to focus primarily on salmon. But I will be honest with you, it's very difficult to separate out one first food from the other because they are all connected in some way through this broad ecosystem. So in order for us to assist the tribes in an ecosystem, it covers all of the first foods that come into play at some point or the other.

Q. So what are the commission tribes doing -- let me rephrase that again.

A. Actually we did put together our own salmon restoration plan in the mid 1990s. It's called Wy-Kan-Ush-Mi Wa-Kish-Wit, which I will spell for you. W-y dash K-a-n dash U-s-h dash M-i, second word is W-a dash K-i-s-h dash W-i-t. And that means spirit of the
The tribes got very frustrated in the mid 1990s after several salmon species began to be listed under the Endangered Species Act, and the frustration was because the -- all of the impacts through all of the salmon's life cycle were not being addressed, yet there was this unhealthy focus on shutting down the tribal fishery. And so we developed our own salmon restoration plan that looked at the salmon's entire life cycle, all life stages and developed policy and technical recommendations for -- not just ESA listing but for full recovery. When we signed our treaties in 1855 -- our understanding is these salmon runs would continue unto perpetuity, and when we signed those treaties there were somewhere between 16 and 30 million fish coming back. We're not going to settle for a lesser goal of just ESA listing when we are entitled to full productivity of the salmon runs as when the tribes signed their treaties in 1855. And so this salmon restoration plan was intended to strike much better balance in favor of the salmon and also for the interests of the tribes as protected in the treaties of 1855.
BY MS. CARTER:

Q. I'll wait till this comes up. So I'll go ahead and ask a question and then as it comes up, we'll refer to the chart. Can you describe the magnitude of investments that the Bonneville Power Administration is making in restoring the Columbia River salmon, sturgeon and lamprey?

A. The entire northwest region contributes to this amazing effort to restore salmon in the Pacific Northwest, the Columbia River Basin. And that didn't just come about by accident. It came about by extreme pressure from the tribes and many others which resulted in the northwest power conservation act, if I got the act name right. Some people refer to that as the Northwest Power Act. And that set up a system whereby ratepayer dollars -- so when you -- ratepayer dollars are when you pay your electric bill, a portion of that funding goes to the Bonneville Power Administration to restore fish and wildlife that have been impacted by the development and operation of the federal hydropower system. It's not taxpayer funding. This is ratepayer funding, and the Bonneville Power Administration is the federal agency in charge of that program.

As a part of that Northwest Power Act, the four states' governor's offices identify members from the
Northwest Power and Conservation Council, that's Oregon, Washington, Idaho and Montana, and they established a fish and wildlife program of priorities. And there are several sovereigns and non-sovereigns that participate in this fish and wildlife program, funding over $300 million a year for fish and wildlife restoration and protection activities. This is one of the largest programs like it in the world.

I was at a national -- international conference not too long ago and heard the Columbia River described as once producing more salmon than any other place in the world, now produces more hydropower than any other place in the world and has the dubious honor of also having the largest single-species recovery program than any other place in the world. So it's a very large program for just salmon. And the tribes are a big part of this program and the reason why it is the way it is. That is in large part by the tribes' treaties reserved fishing right and our Supreme Court victories and all of the other lawsuits that we've been involved in to achieve full mitigation.

I will tell you that from a tribal perspective, I've heard this many times in tribal governments, that this is not anywhere close to full mitigation even. And the reason is because the hydropower system has so
degraded the ecosystem that the salmon depend upon, that
even this amount of funding isn't anywhere close to full
mitigation.

MS. CARTER: So, Ms. Mastro, can you zoom in
on the numbers, I guess, on that page, zoom in a little
bit and maybe you can speak to this.

MS. MASTRO: More?

MS. CARTER: No, I think that's good.

BY MS. CARTER:

Q. Can you see that, Mr. Lumley?

A. I can see it now. I couldn't see it before.

MR. JOHNSON: Objection to relevance, Your
Honor.

MS. CARTER: Your Honor, this is what he was
speaking to. This is costs on salmon restoration.

JUDGE NOBLE: What is your problem with the
relevance of this?

MR. JOHNSON: What do the costs of salmon --
salmon restoration as it relates to the Bonneville Power
Administration have to do with the Vancouver Energy
terminal?

JUDGE NOBLE: I think I can tell what the
relevance of that is, but perhaps you would like to
express what your idea is.

MS. CARTER: Your Honor, perhaps my expert
can speak to that, unless you want me to answer that.

JUDGE NOBLE: It was a relevance objection, so --

MS. CARTER: Well, as Mr. Lumley testified, the tribes had exerted a great deal of energy and investment into this Wy-Kan-Ush-Mi Wa-Kish-Wit -- sorry, Wy-Kan-Ush-Mi Wa-Kish-Wit restoration, spirit of the salmon plan.

Likewise, and similarly, the federal agents at Bonneville has invested a great deal of funding for salmon restoration. It's very important to look at the -- holistically this system. There's a lot of energy and effort to restoring a very important resource. And we're talking today about something that may cause impact and detrimental harm to that resource and how much money this could -- this could impact, I guess.

JUDGE NOBLE: The objection is overruled. The witness may answer.

THE WITNESS: Thank you, Your Honor.

A. I was about to be asked a question about a number on a chart up there on the table.

BY MS. CARTER:

Q. No, as I said, you've seen this document before, haven't you?
JOHNSON / LUMLEY

A. Yes, I have. And another big part of this hydropower system and the fish and wildlife program is the fish that are listed under the Endangered Species Act, there is quite a bit of legal activity with the federal Columbia River hydropower system. In fact, there was a recent ruling from a judge calling into question the legality of the current ESA biological opinion. And I note that the baseline of information used for the analysis does not include the Tesoro Savage proposal. That is a significant potential impact that could cause great harm to endangered species and it is not included, and if this proposal moves forward, it could call into question the entire biological opinion and its validity and potentially could even undo several fish and wildlife programs that have taken great success of late in bringing back some of these endangered fish.

MS. CARTER: I have no further questions.

JUDGE NOBLE: Cross-examination?

CROSS-EXAMINATION

BY MR. JOHNSON:

Q. Thank you, Mr. Lumley. I'm Dale Johnson representing the applicant this afternoon. The exhibit -- that table that you said was an important table for you, I think it was 5218.

MR. JOHNSON: Can you pull that up,
Ms. Mastro, please.

BY MR. JOHNSON:

Q. And to move things along, I'm going to ask you a couple of other questions and when we get it up there, we'll go back to that. You talked about the Navy -- couple -- midair collision situation. Was that a claim under the Federal Tort Claims Act; do you know?

A. I don't know the answer to that.

Q. Okay. And then you also talked about tribes having claims to usual and accustomed places below the Bonneville Dam. Are you familiar with the term "adjudicated"?

A. Can you define that for me, please.

Q. Well, I'm asking you if you're familiar with the term, because I --

A. It's a legal term.

Q. Okay.

A. I believe it means a court has ruled on it. Is that correct?

Q. Well, I'm not going to answer -- I'm not going to tell you. But if that's -- if that's your understanding. Do you know if the tribes have any adjudicated usual and accustomed rights below the Bonneville Dam?

A. I'm not quite sure I understand the word
JOHNSON / LUMLEY

adjudicated, so I'm not quite sure if I can answer the question. I can tell you that the tribes have not gone to court to assert a right for usual and accustomed places in that area. We have not challenged it. We have not challenged it in court. Did that answer your question?

Q. I think so. Another way to put it would be if you're aware if any court has established that there is a usual and accustomed place below the Bonneville Dam, right? I think you've answered that.

A. I'm not quite sure if there's any place in the Columbia River that has had that status, to be honest with you.

Q. Okay. Now we have the chart up, so we can see that. Draw your attention to -- boy, it's tough to see on the --

MR. JOHNSON: Can you blow that up at all?

Okay. Right there. There you go.

BY MR. JOHNSON:

Q. About halfway down the page, you see where it says the "Grays Harbor Rail Terminal"?

A. Uh-huh.

Q. Do you know the status of that project?

A. It's proposed.

Q. Are you sure -- are you sure about that?
A. No, I'm not, because the chart says it's proposed and I take it on its face value that it's proposed.

Q. All right. When was this chart updated last?
A. May 12th, 2016.

Q. Okay. And is it your understanding that the Imperium Renewables project involves crude oil?
A. That's my understanding, yes.

Q. Okay. Did you ask anybody to go back and verify that?
A. The comment here says, "Company announced it will not accept crude."

Q. Okay. So is that your understanding, then?
A. That's my understanding, yes.

Q. Okay.
A. So that's an update. Right-hand column, "Notes," is meant to include updates on proposals. I believe if you go up even above, for example, you can see, "Coal, Gateway Pacific," where it says, "Proposed, permit denied."

Q. Okay.
A. At least the right-hand column is meant to be an update.

Q. Okay. So have you subtracted out the number of train trips associated with those projects that are no
longer in existence?

A. The chart is still there in the way it is. I haven't necessarily done any math on the chart. I was surmising a little while ago that about 14 trains per week, oil trains per week.

Q. For the Vancouver Energy project; is that right?
A. For the non-Vancouver Energy project.

Q. I see. Okay. And do you -- have you accounted for the change in status of certain projects reflected on this chart?
A. I believe so.

MR. JOHNSON: Okay. Nothing further.
JUDGE NOBLE: Any redirect?
REDIRECT EXAMINATION

BY MS. CARTER:

Q. Mr. Lumley, that chart is just used for management of development policy and trying to understand all the different potential impacts and current impacts of these projects, correct?
A. That's correct.

MS. CARTER: That's all. Thank you.
JUDGE NOBLE: Council questions?

Mr. Shafer?
MR. SHAFER: Mr. Lumley, one question. And thank you for your testimony today.
Early in your testimony, you made reference to Supreme Court rulings which, if I understand correctly from you, that that sustained or protected the tribal interest and needs and concerns. Specific to the Vancouver Energy terminal, are you of the opinion that this project could be prevented solely on the basis of threats to tribal first foods?

THE WITNESS: The question is, am I of the opinion that the treaty rights and the Supreme Court rulings could stop this project? Is that what your question is?

MR. SHAFER: Well, that was just as a general background. But based on your experience, my question is relative to this project, do you think it can be prevented solely on the basis of threats to tribal first foods?

THE WITNESS: That is -- this will be my own opinion and not the opinion of tribal governments, and I'll explain why, but my opinion is yes. The reason why I'm clarifying this as not a tribal opinion is because the risk of putting the tribes' treaty rights on the table are very serious. It could be a ruling that would be negative and would have lasting impacts that would go for untold generations. And so the tribes will not put their treaty rights out there unless they are very
positive of an outcome. But in my opinion, the proposal
does create great risk to our first foods that are
protected in those treaties.

MR. SHAFER: Thank you very much.

JUDGE NOBLE: Other council questions?
Any questions based upon Mr. Shafer's
question?

MR. JOHNSON: No, Your Honor.

MS. CARTER: Wow, 5:00. No.

JUDGE NOBLE: All right. Well, Mr. Lumley,
you are excused as a witness and thank you very much for
your testimony today. Thank you.

We have come to the close of the day. Is
there anything else we need to do on the record before
we go over the testimony plan for tomorrow?

MS. BOYLES: Yes, Your Honor. The opponents
rest.

JUDGE NOBLE: Thank you.

MS. BOYLES: The court reporter will rest
soon.

MR. JOHNSON: That's what you think.

JUDGE NOBLE: The plan was for the rebuttal
testimony to start Tuesday afternoon, but now it can
start in the morning. I assume you're prepared to do
that, Mr. Johnson?
MR. JOHNSON: We are, Your Honor, and I'm looking for my list of witnesses here, so if you can bear with me. One other thing while I'm doing that, Your Honor, we do have one witness tomorrow, and that is Ms. Jo Reese. She'll be testifying about cultural resources in rebuttal to some testimony from Mr. Huber, and we would request -- I've conferred with opposing counsel. We would request that she be allowed to appear by telephone. I know that's been a bit unwieldy.

Y, however, I think it's worked better here than it did in Olympia and it will be relatively brief testimony. So that's a request of you, Your Honor.

JUDGE NOBLE: And there's -- what would be the reason for that?

MR. JOHNSON: She has a number of conflicting scheduling issues, and to get her in -- to get her in and out, it's just -- we're able to make her available by phone and not as easily to make her available by -- in person.

JUDGE NOBLE: Well, I don't want to be unreasonable. So I think as long as we're able to make it work, that will be fine.

MR. JOHNSON: All right. And then do you want me to run through the list of rebuttal witnesses or --
JUDGE NOBLE: For tomorrow. The public needs to know what witnesses are expected and what the subject of their testimony is so that they can --

MR. JOHNSON: Okay. And then I promised Ms. Boyles a copy of this and haven't had time to get it to her, but I'll go ahead and walk through it. So it will be Dr. Elliott Taylor who has testified both prefiled and live. Again, he'll be talking about spill response, fate and transport of spilled oil, and he has rebuttal to Rice, Ellis, Brigham and Holmes.

Then Greg Challenger, who also has testified both prefiled and live, talking about impacts of spills on species, rebutting testimony of Niemi, Rice, Ellis, Penney, Holmes, English, Slockish, Parker and Mr. Lumley.

And then again, Jo -- Ms. Jo Reese by telephone.

We have Dr. Kelly Thomas, who filed prefiled testimony. He'll be testifying about risk incident to facility incidents and insurance matters, rebutting testimony of Dr. Sahu, Garcia and Blackburn.

Then we have Captain Marc Bayer, who has already appeared, to discuss vessel operational practices and issues related to air-related -- vapor tightness and other things, addressing the testimony of
Dr. Sahu.

And then we have Mr. Brad Roach, who will discuss oil markets, economic need for the project and responding to testimony from Mr. Goodman. That's it for tomorrow.

And then we anticipate -- we expect on Wednesday just -- because we've been promising this, Dr. Chris Barkan, who is not a rebuttal witness -- well, although he'll provide some rebuttal testimony, we'll call -- we'll reserve to call him on direct. That will be Wednesday morning.

JUDGE NOBLE: And Wednesday, that will be in the morning?

MR. JOHNSON: Yes, Dr. Barkan will be in the morning on Wednesday.

JUDGE NOBLE: And Dr. Barkan will also be by phone?

MR. JOHNSON: No, no, he's here. He's able to travel and he's here.

JUDGE NOBLE: All right. Is there anything else we need to do before adjourning for today?

MR. JOHNSON: The only other thing I would say about tomorrow, Your Honor, is if you could bear with us on the order. I mean, that's the order we'd like to present. However, we have some witnesses flying
in as late as tomorrow or early tomorrow morning, so we might need to adjust something.

JUDGE NOBLE: That's not a problem. Are we -- thank you very much, Mr. Johnson.

We are adjourned for the day until tomorrow morning at 9:00.

(Hearing adjourned at 5:05 p.m.)
CERTIFICATE

STATE OF WASHINGTON )
COUNTY OF CLARK ) SS.

I, Micheal A. Johnson, Registered Diplomate
Reporter and Certified Realtime Reporter, do hereby
certify that the foregoing transcript is true and
accurate to the best of my knowledge, skill and ability.

IN WITNESS WHEREOF, I have hereunto set my hand
and seal this 30th day of July, 2016.

MICHEAL A. JOHNSON, RDR, CRR
BEFORE THE STATE OF WASHINGTON

ENERGY FACILITY SITE EVALUATION COUNCIL

In The Matter Of: 
Application No. 2013-01 
TESORO SAVAGE, LLC 
VANCOUVER ENERGY DISTRIBUTION TERMINAL

HEARING, Volume 15
Pages 3439 to 3726
ADMINISTRATIVE LAW JUDGE CASSANDRA NOBLE

9:04 a.m.
July 20, 2016
Red Lion Olympia
2300 Evergreen Park Drive Southwest
Olympia, Washington 98502

REPORTED BY: Micheal A. Johnson, RDR, CRR

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(Witness sworn.)

JUDGE NOBLE: Thank you. Please be seated.

THE WITNESS: Thank you.

ERNIE NIEMI,

having been first duly sworn,

tested as follows:

DIRECT EXAMINATION

BY MS. BOYLES:

Q. Mr. Niemi, could you please state your name and spell your name for the record.

A. My name is Ernie, E-r-n-i-e, Niemi, N, as in Nancy, i-e-m, as in Mary, i.

MR. JOHNSON: Your Honor, before Ms. Boyles continues with her questioning, I would like to put an objection on the record. I guess it's best characterized as a motion in limine with regard to this witness and hopefully that way we can -- if, in fact, you allow the witness to testify, I won't have to continuously interrupt with objections.

The primary basis for the objection is that we've been notified that this witness, who was not previously identified, is a rebuttal witness who will be providing rebuttal testimony to Mr. Casey, Mr. Schatzki and Ms. Hollingsed's testimony. This witness has been identified as an expert in economics, specifically
natural resources economics and an expert in natural resource damages issues. We would object to any testimony from this witness regarding natural resource damages because neither Casey, Schatzki or Hollingsed refer to natural resource damages, the extent of those damages or damages calculations. And there may have been some issues about providing financial assurances for those, but not the subject of natural resource damages themselves. So we would object to any testimony relating to those -- to that issue.

Moreover, as you know, we have consistently taken the position that the calculation of potential natural resource damages is one that's left to the Department of Ecology in the future and so we have confined our evidence to the ability to provide assurances based on whatever that number should be in the future.

And then with regard to any testimony about economics issues, our objection is that this witness could have been identified prior to the hearing, prior to the witness identification deadlines and that, for instance, if the witness intends to comment on components of the economics benefits analysis, like Mr. Johnson this morning, the opponents have had an ample opportunity to provide that testimony and prepare
it for the hearing. So it's a case of, you know, late notice.

MR. BARTZ: Excuse me, Your Honor, and the Port of Vancouver -- Dave Bartz with the Port of Vancouver, we would join in that objection. Thank you, Your Honor.

JUDGE NOBLE. Ms. Boyles?

MS. BOYLES: Yes, Your Honor. We have called Mr. Niemi as a joint witness sponsored by Columbia Riverkeeper, the Counsel for the Environment and the Columbia Waterfront LLC because of the live testimony given by Mr. Schatzki, Ms. Hollingsed and in certain circumstances echoed by Mr. Casey, who was also a late fact witness, about some of the economic issues, valuation of economic issues with respect to natural resources damages and how you look at the full picture of costs and benefits.

That was information that was not clearly going to be part of this proceeding until we heard that live testimony. Mr. Niemi has reviewed the testimony of those witnesses via the recordings. The questions I intend to ask him are limited to those particular areas and call on the areas of Mr. Schatzki's discussion of what the magnitude of an oil spill harm would be, what the economic benefits of an oil spill would be and how
you actually value economic damages when you're talking about things like insurance and financial assurances as discussed by Ms. Hollingsed.

We provided this information to opposing counsel on Saturday, July 16th. It is true that is late and after the witness list, but it was as fast as we could move to get Mr. Niemi here.

JUDGE NOBLE: Thank you. And I'm hoping that if there are more motions in limine, we can deal with them before we get started.

I am -- normally the remedy for -- or alleged late disclosure is to allow access to the witness. And in this case, access to this witness, I assume, was provided along with a notice that he would be planned when it was given on Saturday, July 16.

MS. BOYLES: Your Honor, we disclosed his name. I provided his CV. The short exhibit that we will introduce perhaps through his testimony and discussed, in fact, on Monday, the extent of his testimony, with Mr. Johnson.

JUDGE NOBLE: Did you provide an opportunity for Mr. Johnson to query this witness?

MS. BOYLES: I did not invite Mr. Johnson to query this witness, but I'm sure Mr. Johnson knows how to ask to do so.
JUDGE NOBLE: I'm sure he does.

Mr. Johnson, did you ask if you could contact this witness to --

MR. JOHNSON: Your Honor, my objection isn't about our ability to question the witness. What I -- my primary focus is that this doesn't turn into inappropriate surrebuttal and that it is confined narrowly to the testimony -- responding to the testimony of the witnesses that this witness has been called to rebut quite specifically.

And in Ms. Boyles' description of what Mr. Schatzki discussed in his testimony just now, for instance the scope of impacts from an oil spill, I mean, that's not an area that Mr. Schatzki was testifying about.

So I'm most concerned that we tread carefully here and, you know, we're prepared, we reviewed the transcripts. So to the extent Ms. Boyles will be asking specific questions about specific answers from those witnesses and that testimony is properly characterized and Mr. Niemi's testimony is confined to those specific issues, we -- you know, we're prepared to proceed. But I don't want it to turn into open season for testimony that isn't something that -- is new that was presented in our case.
MS. BOYLES: Your Honor, I just want to -- may I just add, I have -- we have -- we're intent on saying what -- where these issues were raised during the live testimony. Some of the issues are things that were not raised. And so there are issues where Mr. Schatzki talked about or Ms. Hollingsed talked about an issue but then did not provide a full picture. So there is also an absence of information that we're talking about here as well.

JUDGE NOBLE: I understand. All right.

Mr. Johnson, you did say that one of your issues was that you were not notified, and from what you're just saying, you're not really concerned about that; you're more concerned about the nature of the testimony.

MR. JOHNSON: Yes, Your Honor. And I think the late notification goes to if this becomes testimony about much broader issues, then it is problematic because then we're going to have to bring back witnesses later and it makes it more problematic.

JUDGE NOBLE: Yeah, you do have rebuttal testimony made available to you, and I know that you are intending to present rebuttal testimony so you will have that opportunity.

With regard to natural resource damages, I
do not agree that only DNR can decide what natural resource damages are in a formal way. There is a process regarding natural resource damages that the State engages in. I understand that. But I cannot agree that a witness should not be able to testify about natural resource damages, what they are and what they might be projected to be.

MR. JOHNSON: Well, Your Honor --

JUDGE NOBLE: This is an expert witness.

MR. JOHNSON: But this is rebuttal testimony. So to the extent --

JUDGE NOBLE: Wait a minute. This is the case, the opposition case. Rebuttal testimony truly comes at the end of when both sides have presented their case and there is a kind of surprise, they're not expected testimony, and rebuttal testimony will come at that point, after both sides have presented their cases in chief.

Maybe it's just a difference in terms, but this witness is testifying in response to the testimony of the proponents. And I think Ms. Boyles' point is reasonable that this witness should be able to perhaps expand and present additional information that was not covered by your witness, as long as it's the same subject matter. And so that seems reasonable.
MR. JOHNSON: I understand, Your Honor. And I don't want to hold things up. I guess I would say this, however. And I don't want to go round and round about what's rebuttal and what isn't. But if, in fact, based on your ruling right now, that the other side was to try to present testimony outside of the scope that Ms. Boyles provided, and it was quite specifically what she characterized as rebuttal based on these three witnesses, then that would be problematic for us because we have prepared, assuming he would be allowed to testify, to cross-examine him on those specific issues related to those specific witnesses. We're certainly not prepared to cross-examine him on other things. Maybe we should see how it goes.

JUDGE NOBLE: Right. And trials being rather a fluid process, I understand it might stray into an area that you hadn't prepared for and so that would be remedied with either the opportunity to do that and bring the witness back or the opportunity to present rebuttal testimony, which you've already reserved. And so I am going to allow Mr. Niemi to testify. I'm not going to overly restrict his testimony, and you have the opportunity to raise objections in the course of it and then I'll rule on those as we go along. But there are other remedies that
BOYLES / NIEMI

we can utilize if in the event that they are needed.

MR. JOHNSON: Thank you.

JUDGE NOBLE: I will allow Mr. Niemi to testify.

MS. BOYLES: Thank you, Your Honor.

JUDGE NOBLE: Overrule the objection.

BY MS. BOYLES:

Q. Hello. Could you please give the council a summary of your background.

A. I am currently president of a consulting firm called Natural Resource Economics in Eugene. I started that firm four years ago. Prior to that, for about 35 years, I was a senior economist with another consulting firm, ECONorthwest -- that's ECONorthwest, all one word -- which has offices in Eugene, Portland and Seattle.

My educational background is I have a bachelor's degree in chemistry from the University of Oregon and I have a master's degree in city regional planning from Harvard University. And I'm sorry, I'm speaking a little slow [sic], so I'll slow down. My areas of expertise are natural resource economics and cost-benefit analysis. I have taught courses on those topics at the University of Oregon.

My research, particularly as it relates to the
issues before this council, involve doing research on the economic consequences of the Exxon Valdez oil spill, a spill from a shipwreck, the Kyowa Violet, that's K-y-o-w-a, Violet, on the Island of Yap in the Pacific; a train derailment in Northern California that spilled a hazardous chemical into the Sacramento River; the shipwreck of the New Carissa on the Oregon coast.

Over the last couple of years I have been working with communities on the coast of Kenya to help them understand the potential economic consequences of an oil export facility that the government is planning for that area. I have conducted dozens of studies on the economies of the Pacific Northwest, Washington, the Pacific Vancouver area and Oregon, and I also conducted a lot of research on the relationship between natural resources and, in particular, the fisheries resources of this region and the economy.

From 2009 to 2012, I was the project manager for what is, to my knowledge, the most current and most detailed assessment of the economic import in salmon and steelhead resources in the Columbia River.

MS. BOYLES: We have provided -- or submitted what is Exhibit 5633, which is Mr. Niemi's CV, and at this time I would move its admission.

MR. JOHNSON: No objection.
JUDGE NOBLE: Exhibit 5633 will be admitted.

BY MS. BOYLES:

Q. Could you please summarize what you have reviewed to prepare for your testimony here today?

A. I have reviewed by video the testimony of Mr. Schatzki, Ms. Hollingsed, Mr. Casey, and I've reviewed my own research and the research that I drew upon on the topics that I considered relevant to the testimony of those three individuals.

Q. Thank you. During the testimony that you reviewed of Mr. Schatzki, Mr. Schatzki elaborated on how he believed and factored into his analysis the economic benefits to a community or region from an oil spill. Do you recall that testimony?

A. Yes.

Q. Did you hear him say that he did not look at economic risks from an oil spill?

A. Yes.

Q. Did he miss something?

A. Yes, he did. He actually extended that statement when he responded to a question, I believe it was from a council member, when he said he did not look at risks. He then, however, pointed toward the ABT report, which is spelled A-B-T. The ABT report does quantify some of the economic risks associated with an
oil spill. And he observed that that report quantified the potential economic costs from a vessel spill to be $200 million, and he concluded that that was a small amount relative to his calculation of the expected benefits from this project which was, he estimated to be $1.2 billion.

Now, the ABT report focuses on only a small slice of the value -- or the cost that would result from the spill that they analyzed. That small slice focuses on what economists call the direct costs of a spill, the direct costs in this case being the impacts on recreational and commercial fishing. So it's an impact on people who directly interact with the fish and the river.

Far more important are what economists call the passive-use costs from an oil spill like that. Passive use refers to people placing a value on salmon. Because of the existence of the salmon, they want the salmon to continue to exist, not only in this generation but for future generations.

The analysis that we conducted in 2009-2012, which we conducted for the Department of Ecology and for Bureau of Reclamation and which was subject to very stringent peer review by the Department of Interior and which is now the basis for the expenditure of funds to
support the implementation of a water resource management plan in the Yakima River basin, our findings in that analysis are that the direct-use costs -- or the direct-use value of fish in the Columbia River represent about 10 percent of the total value that Washingtonians as a whole place on the salmon and steelhead in the river. So the ABT report, then, represents about 10 percent of the total cost that would result from the spill that they outlined.

We extended our analysis to look at the potential benefit to Washingtonians, taking into account both the direct benefits and the passive-use benefits from an increase in population of about 180,000 adult fish per year in the Columbia River basin. That analysis found that for Washingtonians as a whole, that value would be about $3.1 billion for 180,000 fish. If you include Oregonians in that, it becomes about $5 billion. Well, if an increase of 180,000 fish creates a benefit of that amount -- or those amounts, then the loss of 180,000 fish, all else equal, would create a cost to Washingtonians and Oregonians of roughly those amounts.

Now, in reality the costs would actually be greater because people perceive the value of a loss to be more important than the benefit of a gain. But if we
set that aside, then the loss of 180,000 fish per year
would impose a cost on all Washingtonians of about
$3.1 billion and for all Oregonians and Washingtonians
of about 5 billion.

If you scale that down to 130,000 fish, which is
a number that the ABT report estimated would be the
potential loss in fish, then the reduction of 130,000
fish, all else equal, would result in a cost to all
Washingtonians of about $2.2 billion, and for
Washingtonians and Oregonians of about $3.6 billion.

So where Mr. Schatzki compared $2 million from
the ABT report to his estimate of the benefits to
$1.2 billion, if you take into account the full total
value of the -- just the fish alone, so not taking into
account any other natural resource damages, then the
potential damage -- the potential cost from a spill
would exceed those benefits for Washingtonians alone by
about $1 billion, and if you throw Oregonians into that,
it's about $2.4 billion. And I want to make very clear
that this analysis does not include tribal values.
Tribal values, indigenous values, are distinct from
this.

Q. And just to be clear for the council, the ABT
report that you're talking about is the report that's
been -- that will be discussed by a later witness for
the Counsel for the Environment; is that correct? You understand that?

A. That's my understanding.

Q. Moving on to a slightly different question. Could you summarize your understanding of what Mr. Schatzki testified to with respect to the economic benefits of an oil spill?

A. Yes. Again, from my review of the video recording of his testimony, his discussion began by and I don't recall whether it was in his direct or his cross. He talked about his expectation that if there were a spill and that spill resulted in a ban on fishing, that the recreational fishers would go fish some place else or that the commercial fishers would go fish some place else or they would find some other job, so that the net impact on employment and on value-added would be smaller than it would be if you just considered the initial direct effect.

He was then asked if the reciprocal of that argument also applied to the creation of jobs from an oil spill, from the cleanup. And he replied, no, that's not the case; that with a cleanup the expenditures on the cleanup, the expenditures on an accident or a spill would be, quote, new money to -- new money, quote, to this economy. And as new money it would have no effect
on the rest of the economy.

That conclusion just does not correspond to economic reality in any situation, let alone the situation applies with an oil spill or an accident, especially a severe spill or severe accident.

From my experience and from my review of spills and accidents that have occurred elsewhere, especially if they are severe, they're crises. And at that moment, you start to pull workers from other places. So, for example, one of the first things that happens is that the police stop doing whatever else they would do and they come to the accident site or the spill site and they manage all of the chaos that is taking place right there.

Another thing we see is that the local government administration gets totally distracted by the spill. So you see mayors and city council members, you see city administrators spending almost all of their time or, in many cases, more than full-time dealing with the spill, with the cleanup and then later dealing with the litigation that follows one of these events. As a result, that city administration doesn't do what it otherwise would have done and so you lose that productivity.

For example, in Cordova, in Alaska, following
the Exxon Valdez, the city government was unable to apply for grants, they were unable to invest in infrastructure maintenance and upkeep, and those things just fell to the wayside because these people were spending more than full-time dealing with the spill, the cleanup and the litigation.

We also see that some workers get pulled immediately into these -- into these events from other jobs. So one of the things that we saw in the Exxon Valdez and you see associated with other spills, for example, is that -- one example is that people working in daycare go and work on the cleanup because it pays more. Okay. That's a very reasonable thing for them to do. But when they do that, the work in the daycare doesn't get done, so the economy loses that.

And you might say, well, that's fairly small. But then what happens is that the parents who are relying on that daycare so that they can go to their jobs, they're stuck. And so you start to see these ripple effects. You start to see some businesses that actually go out of business because of one of these events, because they suspend operations, they suspend normal things that otherwise would've taken place.

Now, the model that Mr. Schatzki used simply doesn't recognize all of that. His analysis didn't
recognize all of that and he alluded to that when he said that, you know, this kind of offsetting behavior would apply to the fishermen who are out of a job, but it wouldn't apply in a situation where you are spending new money on the spill and the cleanup.

The concerns about having displacement of jobs and hence the value-added associated with those jobs is especially severe in this particular metropolitan economy which generally operates at or pretty near full employment. "Full employment" means, by definition, that everybody's working, everybody who wants to work is working. So if you have a spill and suddenly you have a demand for a thousand new workers, those thousand workers have to come from some place else and there is going to be a displacement in the economy when that occurs.

Eventually the economy might be able to adjust to some of that by finding workers from outside and pulling them in, but that's, at best, a process that takes a while, employers and employees incur costs to do that and in some cases we see that the economy just sort of breaks and it never gets fixed.

Q. Thank you. I would like to turn now to some of the testimony from Ms. Hollingsed that was echoed by Mr. Casey regarding financial assurances and liabilities
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as they relate to potential damages and the economic impacts to the citizens of Washington and to the tribes.

You have done some assessment and publication regarding this particular subject with respect to an oil spill; is that correct?

A. I certainly have worked on oil spills that have affected indigenous cultures in -- with respect to the Exxon Valdez and with respect to the Kyowa Violet spill on the Island of Yap.

Q. And in your expert work and writing, do you -- what do you consider to be the full consideration of damages?

A. Well, the full consideration is that you have to take account of everything. You don't just look at what is financial. Financial generally -- the history of that term is that it involved the exchange of cash. And an awful lot of the impacts that occur, some of them are called natural resource damages, but as I just tried to explain, a lot of them operate within the structure of the -- what we normally call the economy itself. A lot of those don't get picked up by financial concerns why this notion of financial transaction is.

So first of all, you want to take account for everything. And another way of saying that -- that economists use is you want to account for the monetary,
the market, you know, those effects that occur and
materialize through markets, as well as those effects
that don't materialize through markets. You don't have
monetary evidence of those effects.

Q. Ms. Hollingsed testified, for example, that
cultural damages would only be covered by insurance if
they could be monetized, if you could put a dollar
amount on that and prove it. Do you have an opinion and
response to that testimony?

A. Yes, from my -- again, my review of the video of
her testimony, she used the term "financial." The
insurance company would pay up only if a claimant could
demonstrate the financial cost.

I understood her to mean from being in these
situations before, that that means, one, the claimant
would have to actually provide the evidence that they
spent some money because of the spill.

In some cases over the last 20 years, 30 years
or so, you've seen the evolution of insurance covering
some costs where you don't have this exchange of money,
but economists have been able to demonstrate through a
credible economic analysis that, yes, there was a harm
and, yes, through these analytical approaches, we have
come up with a credible, reasonable estimate of the
economic value of that harm.
What we often see, however, especially when you have a spill or an accident that involves an indigenous culture or a subsistence culture is that some of these harms fall through the cracks. They just do not overlay with the sort of western economic view of what an economy is.

In these settings, the natural resource, so the river or the fish or whatever in this instance, it does several things. One is it provides sustenance. People depend upon that. What it also does, is that it helps define for the group what the group is. Are they a fish people? Are they a seal people? Are they a shell fish people? Are they a river people?

Within the group, these subsistence activities help define who the individual is. So if somebody is an especially good -- especially good at catching fish, catching very big fish, they bring those fish back, they distribute them within the entire community, that defines who that individual is and that sharing binds all of the families within the community together. That's how these communities avoid stress and conflict.

In addition, the very process of going out and fishing is the process that these communities use, these cultures use to sustain themselves. It is within -- you know, the adults taking the children out to fish, that's
how they say, here's where the fishing -- fish used to be, but now they've moved over here. If the weather looks like this, this is how you catch the fish. And that's not something that you can just sit in the room in the back of the house and explain that. You have to be out there actually doing that.

What we found on -- for example, with the Exxon Valdez and it -- something very similar happens with other spills, is that native communities were no longer able to fish, they were no longer able to hunt seals, they're no longer able to harvest shell fish or seaweeds or other products.

Well, the insurance company was able to say, okay, you don't have food, don't have, you know, X kilograms of fish per person per day, so they shipped in container -- containers of food. Well, that takes care of that. In some sense that's -- you know, that's a transactional notion of a financial cost.

They were unable, however, to deal with these other aspects of the value of the relationship between the community and the resource. And so what we started to see over time, a tribal elder explained to one of my colleagues, the young men no longer want to go out and fish. This was after the fishing ban was lifted. No longer want to go out and fish because they like going
to the container and getting steak from Texas, which is what Exxon had shipped in.

Well, at that point the elders were saying, what do we do? Because if the young people don't learn how to fish, then who we are as a people, we will expire; we will be gone.

What we also have seen is that you've started to see the breakdown of the amity or what economists call the social capital within these communities. Social capital is a fancy word that we use for trust. And the trust is the lubricant that allows different people to conduct their business and agree that, well, they're probably going to do the right thing and so we can conduct business with a handshake rather than with a lot of attorneys and contracts.

When that breaks down, the people that have done the research, the follow-up research on the Exxon Valdez, what we've seen in these communities is they've become, quote, corrosive communities. People are no longer helping. They are fighting. You find out that the people who otherwise would have volunteered to be the mayors and the city council members no longer want to do that because there's just too much abuse. And so, again, you start to see changes in the structure of what's happening there.
There is no way that I'm aware of for an insurance company to turn to the economist and say, can you put a value on these things? We just don't know how to do that. And so there is real harm. We can all agree that there is harm.

Ms. Hollingsed actually in her statement said that she acknowledged that there are these effects and she anticipated that it would be very difficult to put a value on that. And what I'm saying is it's difficult for a lot of them. It's impossible for some of the others. Just cannot be done.

Q. What's been marked as Exhibit 5632, it's right in front of you, sir, is a short memo entitled "Secondary Economic Impacts of Coastal Spills." Are you familiar with this memorandum?

A. Yes. I was the lead author of this memo.

Q. Without describing the contents of the memo, could you just describe when and why this memo was written.

A. Yes. Based on my experience at the Exxon Valdez and the spills in the Pacific, somehow I started the conversation with a man named Doug Helton. And at the time, Mr. Helton was the point person from within the National Oceanic and Atmospheric Administration, NOAA, N-O-A-A, on oil spills or on shipwrecks. Previously
he'd been heavily involved in some of these spills in the Pacific region. Later, as we -- as I knew him, my understanding was he was the first person, for example, who was on site with the BP spill in the Gulf.

And part of our discussion was just to exchange information, but over time we started to both say that you have the spill response events and processes that do what they do. They focus on trying to clean up the oil. But they leave unattended many of the legacy effects of the oil and of the cleanup activities themselves, and then the legacy of that in terms of what happens in the communities and what happens with litigation.

And so over time, as we talked, he asked me if I would put together this memo, which I did, with two of my colleagues, and sent it to him. He was going to use it with his -- you know, the people he worked with. I remember that we submitted it for -- to be presented at a conference on coastal spills. I didn't attend that conference. I don't remember if one of my colleagues attended it and presented it or not.

Q. Does this memorandum basically summarize the secondary impacts that you've been -- of oil spills that you've been discussing today?

A. It uses the term "secondary economic impacts." Another way of talking about that is the -- when it's
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talking about the changes in the structure of the economy that occurs.

Q. Let me stop you right there. I want to move admission of this --

MS. BOYLES: Your Honor, I want to move admission of Exhibit 5632.

JUDGE NOBLE: Objection?

MR. JOHNSON: No objection.

BY MS. BOYLES:

Q. Okay. Now you can continue.

JUDGE NOBLE: I was all ready to --

A. Sorry for jumping the gun.

MR. JOHNSON: I'm sorry?

JUDGE NOBLE: I said I was all ready to rule on an objection. You're not objecting?

MR. JOHNSON: I'm not objecting, Your Honor.

A. Some of the changes in the structure of the economy resulting from a severe event like this occur very quickly. You can have, for example, an explosion that destroys the business right on site. A lot of what happens occurs over time.

I talked about how the community structure can change so that you no longer have mayors. You no longer have people on the city council; they just don't want to do it anymore. You no longer have people who want to
work as the heads of city agencies.

You also can, over time, see that -- especially with what's happening with the Internet and video and all of that, that you can -- you can see -- imagine if you have a situation where you have more than one event, even if they are small events, that can go viral on the Internet now.

You also have this disruption, especially in indigenous cultures, of the relationship between the culture and the resources and it's very hard to piece that back together, especially if that community, the families within that community are no longer helping one another because they have this hiatus in the ability of people to bring food and share it with their neighbors.

An awful lot of the follow-up research on the Exxon Valdez and on other spills has focused on what happens to the particular individuals. And in summary, what you see is that these are very traumatic events for many people within indigenous cultures, as well as people outside of those indigenous cultures, that somehow people feel they are violated, they become very obsessed with these things, they have a very difficult time responding to them; and the psychologists conclude that you have in fact post-traumatic stress.

In the event of the Exxon Valdez oil spill, the
follow-up research has documented that a very high percentage, far higher than you would expect, of the people affected in the communities near Prince William Sound and Kodiak Island still exhibit characteristics of post-traumatic stress nearly 20 years later. So those are -- these changes, these secondary economic impacts that we described, my colleagues and I describe in this paper.

JUDGE NOBLE: Just a minute. I'm not sure that I actually said that Exhibit 5632 is admitted. I want to make sure that it's on the record in the court case. Thank you. Please proceed.

MS. BOYLES: Thank you, Your Honor. And I have nothing further for Mr. Niemi.

JUDGE NOBLE: Cross-examination of Mr. Niemi?

CROSS-EXAMINATION

BY MR. JOHNSON:

Q. Mr. Niemi, I'm Dale Johnson, one of the attorneys for the applicant. I just wanted to reflect on your testimony about these values that are noncompensable. Is that a fair way to characterize them?

A. There are some damages -- or there is some harm that economists have a very difficult time and in some
instances are unable to quantify.

Q. And are some of those that can be quantified accounted for, for instance, in the natural resource damages assessment context through approaches like habitat equivalency analysis?

A. Habitat equivalency analysis, or HEA, is what ABT and its partner did in what's called the ABT report. And that approach evolved out of this very difficulty that everybody has in quantifying natural resource damages.

So, for example, if somebody runs into your car, we have a process and it works pretty well in figuring out what is the value of that car. If you have a ship that runs into the coast, we have a very hard time figuring out how to place the damage on that directly on that point.

Habitat equivalency analysis said, well, we can't do that, so let's look elsewhere within the ecosystem and see if we can't buy land or buy water or, in this instance, buy marshland or wetlands and see if we can't restore it in some cases, if it's already been degraded, or actually create new wetlands if it was dry land and we're going to now convert it into a wetland. With the logic that if we do that, we somehow have compensated for the injury to the habitat and the loss
of resources.

Now, there's some very powerful assumptions to get from A to Z in all of that and there's an awful lot of talk, there's an awful lot of debate on how that might work and the empirical issues of whether it actually does work in a particular setting.

Q. Thank you. And tribes are natural resource damages trustees, are they not?

A. That's my understanding, but I'm not an attorney. So it's my understanding.

Q. Okay. Fair enough. Isn't it true that tribes have and can recover for services associated with natural resources as distinct from damages that are determined through the HEA process?

A. Again, that's my understanding. But if you're referring to a statute or a regulation, I'm not an expert on that.

Q. Okay. And back to this issue of non--at least monetarily noncompensable damages, how can a tribe or a tribal entity be compensated for those damages? If not financially, how?

A. Well, first of all, let me observe that in my experience quite often the answer is it doesn't. So you sort of begin from that as a reference point.

Q. Well--okay. Let me stop you there. Let me
stop you there. It doesn't. What's the answer? What's the answer for this project, then? Assuming there's a risk of one of these damages, what is your answer to address that concern?

A. The answer is complicated. So if you bear with me.

Q. Okay.

A. Okay. Indigenous people look at these resources in a different way than our western culture does. And so if you go and ask, for example, how much compensation do you need for the loss of fish, that's not even a question in many instances that they will acknowledge is a valid question. They just -- it doesn't make any sense to them. So you have to recognize that and you have to respect it.

So, again, as part of the process -- and that's a difficult thing, is to respect that. You then have to realize that it's not just coming up with a number and a number of dollars, you know, cash; it also has to involve a process.

So part of the validation of compensation in some of these situations -- and I'm not saying that it would apply necessarily to a particular situation on the Columbia River because it is incident-specific, but part of what has to happen in many of these situations is
that the person or the individual that is viewed as responsible for the -- for this damage, for this injury to them, has to acknowledge that, has to somehow go through -- and this isn't quite the right term -- but some sort of purification process to atone for that damage.

Within the Exxon Valdez, one of the -- one of the statements that I heard several times from indigenous people is that the day of the spill was the day that the water died, because it no longer -- I mean, it killed fish, it killed otters, it killed all sorts of things, but it also killed their relationship to the water.

So somehow you have to have a process -- for example, if there were a spill in the Columbia River and a claimant -- tribal claimant came up, picked up the form and filled it out, what is the harm, the water died, that person isn't going to be able -- and even won't recognize the validity of the question, can they -- that person fill in the blank, what is the dollar amount. It has to be a process. It has to be, you know, fixing it as best as we can. It maybe has to be doing more than fixing it so that -- so that if you kill 130,000 fish a year, maybe you have to boost that up by 200,000 fish. And what sort of safeguards are you
going to put into place, both technological and economic
and maybe even spiritual, to see that it doesn't happen
again.

MR. JOHNSON: Nothing further.
JUDGE NOBLE: Redirect?
MS. BOYLES: No, Your Honor.
JUDGE NOBLE: Council questions?
Mr. Snodgrass?
MR. SNODGRASS: You had mentioned in your
testimony in terms of the -- moving away from the tribal
context, but in terms of costs to local public agencies
beyond the cleanup and the litigation. You know, it's
obviously going to be very case-specific, but do you
have any kind of examples or is there any rules of thumb
of -- I would assume there would be litigation. I have
no idea how much that would be. It would be case
specific. What can you tell us about that?
THE WITNESS: That's a really excellent
question. The advice that I used to give when I used to
make presentations on this was write everything down.
And most communities don't. They're not prepared to
write everything down. And let me give you an
example -- several examples.

In Cordova, which is a community that I
spent quite some time in, the police officers -- while
the cleanup was going on, the police officers would tell us, we interviewed them, that they had spent most of their time dealing with fights among the cleanup workers or between the cleanup workers and the people who lived in the community where that happened.

You say, okay, how much time did you spend on that? You know, do you have any records? No, we don't have any records. Well, why don't you have any records on how much time you spent? Well, we know that the city has a budget for the police. And if I file overtime, there's no money to pay me, so why would I fill out the form? I'm not going to fill out the form.

We have a -- there was sort of a community hall and a school that became the place where people met; it became a place for the meeting. Well, the community didn't have records of how -- the times having hundreds of people in this place, the wear and tear on all of that. You know, I could talk to the building manager. Well, the building manager had left to go work on the spill, so that person had some insight but not total insight. How do you quantify this? There are no records. And so when they submitted a claim, no records, no money, no compensation.

So, again -- and I understand, because every time I present it, it isn't very satisfactory, but it is
try to find some person who is the recorder in chief and
tell that person or that group, record everything you
possibly can record because, again, in my experience,
when you turn to the insurance company and submit a
claim, if you don’t have that documentation, you’re
simply out of luck.

MR. SNODGRASS: Switching gears, a question
on the ABT report and it seemed like the dollars, once
you moved beyond -- in your estimation beyond -- or
maybe it’s the report, beyond the 200 million I think
that you had indicated was direct costs and moved to a
sort of overall valuation for Washingtonians and
Oregonians potentially getting into the billions, take
us through that a little bit. What were the next
biggest -- after you get -- after you look at those --
and I think you used the example of perhaps fishery job
losses would be part of the direct. What were the big
chunks of the indirect that got that number to where
you -- what you had mentioned?

THE WITNESS: Okay. Let me illustrate if I
can this notion of passive use versus direct use, if I
may. I suspect that a lot of you attended the
University of Washington. When you directly used that,
you paid money; you paid tuition and fees. Well, I
suspect again that most of you continued to place a
value, you see that the University of Washington is an important part of Washington, what Washington is. And so you are willing to spend money to sustain that university, even though you don't use it. You are willing to have it be there, you are willing to have it so that your neighbor's children can go there, you hope that it will be there for your children and your grandchildren. That's the notion of passive use. So it's not something that is unique to natural resources at all. It's a very common concept.

Within the Columbia River basin, we're already paying an awful lot of money for salmon. We're doing that through our utility bills. So Bonneville Power Administration collects -- I don't know how much money it is, it's a lot, to me it's a lot -- money to help restore and restore habitat with the expectation that they can prevent salmon populations from going down. That's becoming more difficult with the forecast of climate change saying there's going to be pressure on them. So we already have in place where people are paying on their utility bills for -- for salmon.

Now, the research that deals with passive use, because you don't have any cash being exchanged, you can't go out and find market information the way that you can with how much did you pay for your fish at
the fish market or how much did you pay to go fishing as a recreational fisher. And so economists have developed very sophisticated survey techniques to go out and ask people, in this particular case relevant to this, and say, we have a plan -- imagine that there is a plan to increase fish populations by 180,000. How much would you be willing to pay on your utility bill month by month over the next 20 years to bring that about? It's a lot more sophisticated than that, but that's basically what happens. And people respond and they tell us. Now, some people say nothing, some people say an awful lot, most people call -- come in in the middle.

And so when you add all of that up, on average, for all Washingtonians over the next 20 years, which is what we did, and you then convert that stream over 20 years to a single number that's equivalent, it's a process called discounting, then that comes up to the numbers that I described.

MR. SNODGRASS: Thank you.

JUDGE NOBLE: Mr. Shafer?

MR. SHAFER: Mr. Niemi, thank you for your testimony today. One question.

You spoke earlier in your testimony, if I heard you right, that associated quantity of fish on the order of 180,000 fish to about a $5 billion value, but I
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1 think you quickly followed that, that said that -- you
2 said that that did not include tribal values. So that
3 struck me. Cannot tribal values be quantified in that
4 regard relative to fish in the Columbia River? And if
5 it can, do you know approximately what that value would
6 be?

7 THE WITNESS: No, that relates to the
8 discussion that we just had here with Mr. Johnson, is
9 that there are some parts of the tribal values,
10 indigenous values, subsistence values, that we can't --
11 we, economists, can't come up with dollar values. We
12 can cover some things. You know, tribes fish
13 commercially and sell the fish. We can come up with
14 that. We can do that. We can -- you know, if you're
15 fish -- excuse me, if your boat is oiled, we can come up
16 with the value of your boat, your equipment, those sorts
17 of things.

18 But when it comes down to the ceremonial
19 values of these fish, I don't know an economist that's
20 going to go there and say, this is the value of that
21 ceremony, that cultural value. And one of the reasons
22 is, you know, the discussion of this is, as soon as you
23 start to do this, to say the value -- the cultural value
24 of this fish is -- of these fish is a billion dollars,
25 at that point you -- you're setting the stage for
somebody to say, well, here is $1.1 billion, we're going
to destroy your culture and you're better off, and
that's simply not the case. From an ethical
perspective, that's not acceptable.

MR. SHAFER: Thank you.

JUDGE NOBLE: Mr. Lynch? Are you done,
Mr. Shafer?

MR. SHAFER: Yes.

JUDGE NOBLE: Mr. Lynch?

MR. LYNCH: Morning.

THE WITNESS: Morning.

MR. LYNCH: I'm just wondering about, is
there's any difference between -- again, focusing on the
cultural values and you had mentioned like a particular
event, an incident that can affect a particular tribal
community, but what about the situation of continued
degradation of the particular value they have, and I'm
thinking the difference between an oil spill, for
example, versus train traffic that increases through
their lands, along areas that they frequent; at some
point you have a number of trains getting to a point
presumably where they say this -- my experience in this
place here is changed. So is there any different ways
of -- do economists view those differently at all or is
it just -- it's a cultural value and it's viewed in the
same way?

THE WITNESS: In the end result, I think economists view them the same. If you have -- whatever the source, it could be -- for example, you know, given the history that we have, it could be the degradation of the resource through a spill, an incident. It could be a gradual degradation of that resource. It could be barriers to access. We've had some of those over time. And one interpretation that I have of what you just said, is that rail traffic may in effect be a barrier to -- if not physical access, to some sort of spiritual access to these resources. If at the end of the day, you have a disruption of this relationship between the people in this culture and that resource and its multiple dimensions, then, yes, you have this harm, this injury, some of which you may be able to compensate for and some of which you may not be able to. Did I respond to your --

MR. LYNCH: Thank you.
THE WITNESS: Thank you.
JUDGE NOBLE: Questions to my left? Mr. Siemann?

MR. SIEMANN: Good morning.
THE WITNESS: Good morning.
MR. SIEMANN: In previous testimony, I think
by Greg Challenger -- did you review his testimony?

THE WITNESS: I have not.

MR. SIEMANN: Okay. If I recall correctly, he discussed how oil would -- so what I'm interested in as a question here is around the temporal aspects of a spill and the effects on fish and how that might affect the analysis that you're providing here. And his testimony suggested that a spill would be -- most of the oil would go downstream and out into the sea, a little bit would be recovered. The effects on fish would be -- would occur in sort of an initial plume that would not affect the overall population of the fish, and that if you had then a -- so you'd lose some set of population of the fish. And that if -- you know, following a spill you'd probably have a closure of fisheries in which you might actually have a population rebound that exceeded the loss and that the overall loss of fish might last three years in terms of the population and then you'd have this rebound.

And so if that's true, and I'm not saying it is or not, but what I'm asking is, if you think about it in that context of a one- to three-year effect, does that change how we should think about these impacts -- these secondary impacts that you've described?

THE WITNESS: That also is a very good
question. Let me extend that to the hypothetical extreme. If you have a spill as a switch goes on and then you immediately switch that off, well, you blink and it's gone. And so it might be reasonable to say, well, you didn't have any impact, you know, because people didn't even notice it.

If it's a spill that persists for a very long time with the -- with the harmful material in the environment, people can see it, they can touch it, they can smell it and it's there for decades, we know that that continues to have a very persistent effect.

If, in fact, in three years it is totally gone and people believe it is totally gone, then they are more likely to not incur some of these lasting effects, but there likely will be some of them.

Now, I very carefully said "if people perceive." If they perceive several different things. If there's a fishing ban, the ban is -- let's presume it's because the fish is poisonous; it's not good for your health. And then after a certain period of time the appropriate officials say, it's now okay; it satisfies standards.

What we know occurs is that many people say, I don't believe that because I can go out and I can find a place where it's worse than that. So when you relax
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standards, basically what you're saying is, we did some samples out there and what we found is that either all of these samples are okay or some percentage of the samples are okay.

There's some uncertainty in that and some people can go out and find some places where it's not okay, or they believe that it's not okay. They continue to be harmed because of that perception of risk. If they feed that fish to their children, they perceive that they are poisoning their children.

Now, they may also continue to perceive that the water was killed, you know, the water died, but it was somehow resurrected after three years. They may still perceive that the water died for three years, and that has some spiritual, real, intangible but important effect on them that persists.

You may also have seen that, you know, during that three-year period, and this is a very -- this is very important to people in these societies, is that during that three-year period, you may have had a disruption of these activities that sustain the culture, so that if you do not have the adults teaching the -- you know, a cohort of young people how to fish, where to fish, how to survive, what to do -- what is the proper thing to do with fish when you catch it or what is the...
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proper thing to do with a fish of these characteristics when you catch it, then that cohort may be lost. You may not be able to easily restore those characteristics, those beliefs, those patterns, those cultural components to that cohort.

MR. SIEMANN: I'm wondering if you know of any examples where the temporal aspect was in this sort of range of one to three years in terms of effects, rather than the Exxon Valdez which has certainly been more persistent?

THE WITNESS: Well, in every one of these cases, there is some period of time where a governmental agency will say that it's over, you know, the ban is lifted. In the Yap it was 18 months. In Exxon Valdez, I don't recall, but it's on the order of one to two years. On the Cantara Loop spill in the Sacramento River in Northern California, it was shorter than that.

In my experience and in my study, in every instance, there are these legacy effects. You know, people are shocked. People are traumatized. They don't get over that. The community is shocked. It doesn't get over that very easily.

MR. SIEMANN: Thank you.

JUDGE NOBLE: Further questions, to my left?

I have a question, Mr. Niemi. I think I'm
NIEMI

hearing you saying that cultural values cannot be monetized, but I would ask you if you believe that money can reduce the effect -- effects on cultural values at all?

THE WITNESS: First of all, some cultural values. I was pretty clear to say that there are -- there's some aspects, if you have a soiling of the boat, then you can probably compensate that, but some can't.

And then I'll say -- I'm sort of the economist. So it depends. What we see, for example, is this example that I had with Exxon shipped in a container full of steaks from Texas. Well, you could continue to ship in food -- or you could continue to provide people with money so that they can buy steaks from Texas, but if that's what people do with the money, then the money in effect compounds the erosion of their cultural values.

So in some instances I can conceive where, yes, money -- a community could use those funds wisely and you could have some improvement of the outcome. I can also identify some very real situations where, if handled badly, you can compound the bad parts of the outcome.

JUDGE NOBLE: Thank you.

Questions based upon council questions?
RECROSS-EXAMINATION

BY MR. JOHNSON:

Q. Mr. Niemi, have you ever been involved in any capacity in a natural resource damages assessment that involves valuation of intrinsic, passive or nonuse values, the kinds you've been discussing today?

A. Excuse me, that involved what?

Q. Intrinsic or passive or nonuse values, the kinds of things you've been discussing today.

A. Yes, I've -- what I discussed -- again, on the salmon in the Columbia River, I've certainly estimated the values -- the passive-use values of that.

Q. No, I understand. But my specific question was have you been involved in any capacity in a natural resources damages assessment. And I'm using that as a term of art, that is, under any applicable statute such as the Oil Pollution Act or CERCLA or something that includes --

A. If recollection serves me correctly, no, I've not actually conducted an NRDA.

MR. JOHNSON: Okay. Thank you.

JUDGE NOBLE: Ms. Boyles?

MS. BOYLES: Nothing further.

JUDGE NOBLE: Mr. Niemi, thank you very much for your testimony. You are excused as a witness.
March 28, 2014

Col. Bruce A. Estok, District Engineer
US Army Engineer District, Seattle
4735 East Marginal Way South
Seattle, WA 98134-2385

Subject: CTUIR Comments on NWS-2013-0962, Proposed Tesoro-Savage Vancouver Energy Distribution Terminal

Dear Colonel Estok:

The Confederated Tribes of the Umatilla Indian Reservation (CTUIR) has significant concerns regarding NWS-2013-0962, Proposed Tesoro-Savage Vancouver Energy Distribution Terminal. The facility will be a major undertaking that could have serious, profound, far-reaching and long-lasting effects on the rights and interests of the CTUIR and its members in the Columbia River Basin. The CTUIR objects to the issuance of a Nationwide Permit under the “maintenance” category because the proposed use would be a significant change from the currently permitted use. This change warrants reopening the permit to evaluate the impacts in a thorough and comprehensive manner. Specifically, the evaluation should include adequate information to make an informed judgment as to the impacts to tribal Treaty Rights, traditional use areas and the near- and long-term health and sustainability of tribal First Foods. The CTUIR formally requests government-to-government consultation on this project to answer the questions posed in this letter and to collaboratively address the potential impacts to Treaty Rights.

The Tesoro-Savage Vancouver Energy Distribution Terminal is being considered under the Corps’ Nationwide Permits 3 and 12. Under Nationwide Permit General Condition 17, “[n]o activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.” The CTUIR believes that this project may substantially risk impairing rights and resources of the CTUIR protected under the Treaty of 1855, 12 Stat. 945. The terminal will be located on the Columbia River, the migration corridor for the downstream and upstream passage of salmon, lamprey and other fish species in which we and other tribes have rights reserved in treaties with the United States. Rail traffic transporting highly volatile oil will also increase in the Columbia River Basin, passing along Zone 6 (the principal mainstem tribal fishing zone) and various Columbia River tributaries where tribal members continue to actively fish pursuant to the treaties and federal court orders interpreting them.

A Nationwide Permit for this activity is also inappropriate because this work is far beyond routine maintenance and is essentially restoration and reconfiguration of the existing structure to accommodate a greatly-expanded use. The significant redevelopment of the facility and use for an oil terminal to transfer 360,000 barrels of oil a day to ocean-going vessels is a sufficient departure from the existing permit and of sufficient public concern that the permit should be reopened under Corps authority contained in 33 CFR § 325.7 (Modification, suspension, or revocation of permits).
Because this project has the potential to impact Treaty Rights, it must not go forward until, at a minimum, government-to-government consultation requested by the CTUIR is completed. We welcome discussions with the Corps pursuant to your responsibilities as the trustee of natural resources the CTUIR reserved in the Treaty of 1855. In furtherance of this process, we have developed a technical analysis of the proposed work as the CTUIR currently understands it, which is attached. The document contains concerns and questions that will need to be reviewed and answered during consultation process. The CTUIR requests that an Environmental Impact Statement (EIS) be done regarding this project that addresses all direct, indirect and cumulative effects. The EIS should include and incorporate all the necessary information to enable the Corps and the region to make an informed decision regarding the merits and drawbacks of this project and other projects that will have similar and related effects.

The CTUIR appreciates your attention to our comments and concerns. Please have your staff contact Audie Huber, Inter-Governmental Affairs Manager, at audiehuber@ctuir.org or (541) 429-7228 if you have any questions or to schedule the government-to-government consultation.

Sincerely,

Gary Burke  
Chairman, Board of Trustees

GB: ah

Attachment: Initial Technical Comments on NWS-2013-0962,

Cc: Steve Manlow, Project Manager, U.S. Army Corps of Engineers, Seattle District  
The Honorable Senator Ron Wyden  
The Honorable Senator Jeff Merkley  
The Honorable Senator Maria Cantwell  
The Honorable Senator Patty Murray
Introduction

On March 3, 2014, the CTUIR Department of Natural Resources (DNR) received a notice from the Corps of Engineers (Corps) regarding a proposed Nationwide Permit for maintenance work at the Port of Vancouver, in Vancouver, Washington. The CTUIR was given 10 days to comment on this proposal and DNR requested an additional 15 days. NWS-2013-0962, the Tesoro-Savage Vancouver Energy Distribution Terminal, is being considered under the Corps’ Nationwide Permits 3 and 12.

Nationwide Permits are inappropriate and would be insufficient to meet the Corps’ public interest review obligations in this instance. First, under Nationwide Permit General Condition 17, “[n]o activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.” This project will impact reserved rights and resources of the CTUIR protected under the Treaty of 1855, 12 Stat. 945. Second, Nationwide Permits are inappropriate because the proposed work is far beyond the scope covered by either of the suggested Nationwide Permits. The work is not routine maintenance, but rather a restoration and reconfiguration of the existing dock structure to accommodate greatly-expanded uses. For these and the other reasons discussed below, the CTUIR DNR requests that the Corps conduct a full public interest review and not use the Nationwide Permits and their abbreviated review processes.

Discussion

The Northwest is currently under siege by a series of proposals to rapidly expand the transport of various fossil fuel products (oil, coal and natural gas) through enlarged or entirely new means and mechanisms of transportation. Based on the limited information available so far on this and the other proposals, many serious questions and concerns regarding resulting impacts remain unanswered.

The Tesoro-Savage terminal will be located on the Columbia River, the migration corridor for the downstream and upstream passage of salmon, lamprey and other fish species which the CTUIR and other tribes have rights to harvest that were reserved in treaties with the United States. Rail traffic will also increase along the Columbia River corridor, passing through Zone 6, the principal mainstem fishing area where large numbers of tribal members make their living exercising the Treaty-reserved rights. The Tesoro-Savage facility will detrimentally impact tribal First Foods and the exercise of our Treaty Rights based on them, as well as other natural

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1 The proposed restoration and modification of the dock will enable the operation of a complex that will transfer 360,000 gallons of crude oil per day to ocean-going ships. The oil will be shipped to Vancouver by rail. Approximately 262 tankers of crude oil (assuming 500,000 bbls/vessel and 360,000 barrels per day) will traverse the estuary per year, and 8 to 10 trains per day will cross the Columbia River Basin in addition to current rail traffic. This increase is significant, particularly when there appears to be no upper limit on the number of trains that can transport fossil fuels or upper limit on the amount of fossil fuels transported.
and cultural resources. The Corps’ review of this project raises issues of tribal sovereignty, co-management authority, and trust obligations.

The CTUIR’s Treaty-secured “right of taking fish” extends to all “usual and accustomed stations” along the Columbia River and its tributaries. In order for this right to have any meaning, there must be fish to take, they must be healthy and sustainable, and access must be available. The project may negatively impact tribal fishing sites and the fish that migrate past them. Additional trains may also adversely affect the ability of tribal members to access tribal fishing sites due to increased obstruction of foot and vehicle traffic at crossings. More train traffic may also result in derailments and spills of oil and other pollutants into the rivers. Furthermore, the Corps cannot and should not make any dispositive decisions regarding permitting of the project until all necessary coordination and consultation with NOAA Fisheries and the U.S. Fish and Wildlife Service have been completed.

The Lower Columbia River Estuary is particularly important to salmon life history and development. The tribes and many federal and state agencies have spent enormous time and resources over many decades in efforts to protect and restore salmon in the Pacific Northwest. A healthy estuary has been identified as key to successful recovery. The Tesoro-Savage project and others like it could undermine much of the progress and improvements that have been made. The river, its water and its fish would be subject to significant risks from construction and operation of the facility and the entire range of activities associated with it. They are likely to degrade the immediate environment (for example, from increased emissions) and will exacerbate broader climate change effects, which are already occurring, and to which our people and our culture are particularly vulnerable.

In addition, rail transit and operations associated with the project will affect traditional cultural properties governed by the National Historic Preservation Act (NHPA). The transit corridor will pass through or otherwise affect tribal trust lands and traditional use areas. Information pertaining to changes in rail usage is needed to assess the effects the proposed undertaking will have on those properties. The dock itself and the upland area are within an Archaeological District that has been determined eligible for the National Register of Historic Places under the National Historic Preservation Act (NHPA). This action has the potential to adversely impact the Archaeological District and must therefore involve consultation with tribes and the Washington Department of Archaeology and Historic Preservation. It is unclear whether a traditional use study has been done to determine whether it is a historic property of religious and cultural significance to an Indian tribe. Such an analysis is necessary to determine tribal use of the area. Finally, the National Park Service has commented specifically on the potential impacts to adjacent and nearby historic properties, which the CTUIR incorporates herein by reference.²

Instead of the circumscribed analysis accompanying Nationwide Permits, the Corps should conduct an Environmental Impact Statement for the proposed project, which is linked to other proposed projects subject to permit actions in the Columbia River corridor. The EIS should not

² See http://www.efsec.wa.gov/Tesoro%20Savage/Agency%20scoping%20comments/Agency%20SEPA%20Scoping%20Comment%20004.pdf
analyze Tesoro-Savage in isolation, but in conjunction with those other regional fossil fuel transport proposals. Both individually and collectively, the projects raise issues related to the environment, economics, aesthetics, air quality, wetlands, historic and cultural properties, fish, wildlife, plants, water quality, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, energy needs and production, public safety, food production, and property use and ownership, for both Indian and non-Indian communities.

Specific questions to be answered in an Environmental Impact Statement review of this project include, but are not limited to, the following:

- How many trains, and of what length, will convey the oil to the facility per day, week, and month?
- Is there a maximum or upper limit on the amount of oil and/or the number of trains and/or ships that will be used?
- What route(s) will the trains take?
- What type of auxiliary in-water services will be required (e.g., tugboats)?
- Will any dredging, or increased/altered maintenance dredging, be required? If so, how often?
- What are the capabilities of the U.S. Coast Guard in the event of an oil spill at the facility? In the estuary? Along the Columbia River upstream, in the event of an accident or spill or that reaches the River?
- What is the source and ultimate destination of the oil? Is it Bakken shale crude oil which has recently been the subject of a United States Department of Transportation emergency restriction?¹
- Have the potential characteristics and impacts of spills been examined for the fuel proposed to be shipped through the Port of Vancouver?
- For what purpose was the dock originally constructed?
- What are the potential impacts to threatened and endangered species from operation of the oil terminal and dock?
- What are the oil spill risks and impacts along the rail route, at the terminal, in the Columbia River, and in the Pacific Ocean?
- How much will rail and ship traffic increase?
- What will be the impacts to streams, wetlands, fish and fishing areas?
- What will be the air quality and respiratory impacts?
- Rail tank car safety
- Impacts of the terminal on local businesses (including tribal)
- Types of oil shipped (including their health risks), spill clean-up plans and contingencies
- Climate change impacts
- Impacts on historic and cultural resources and properties
- Effects on the Columbia River Gorge National Scenic Area

Finally, the Corps has the authority to reopen permit NWS-93-25 issued to the Port of Vancouver. The regulations for processing Department of the Army permits provide for authority to reopen a permit in order to modify, suspend or terminate permits when the public interest necessitates it under 33 CFR § 325.7(a).\(^4\) Due to the nature of the potential impacts of the proposed dock operations, the CTUIR believes it is in the public interest to reopen the permit and conduct an EIS to evaluate the impacts of these operations. Impacts have the potential to be significant, particularly when there appears to be no upper limit on the numbers of trains or ships to transport fossil fuels to or from the dock. Recently in scoping by Washington State regarding the location of the Tesoro Savage facility, over 30,000 comments were received as well as a 1100 page scoping report.\(^5\)

**Conclusion**

The CTUIR DNR requests that the Corps not use Nationwide Permits for this project, and instead develop an Environmental Impact Statement. The potential direct, indirect and cumulative impacts are significant and more substantial than those contemplated under the Nationwide Permit review.

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\(^4\) 33 CFR § 325.7 Modification, suspension, or revocation of permits.
(a) General. The district engineer may reevaluate the circumstances and conditions of any permit, including regional permits, either on his own motion, at the request of the permittee, or a third party, or as the result of periodic progress inspections, and initiate action to modify, suspend, or revoke a permit as may be made necessary by considerations of the public interest. In the case of regional permits, this reevaluation may cover individual activities, categories of activities, or geographic areas. Among the factors to be considered are the extent of the permittee’s compliance with the terms and conditions of the permit; whether or not circumstances relating to the authorized activity have changed since the permit was issued or extended, and the continuing adequacy of or need for the permit conditions; any significant objections to the authorized activity which were not earlier considered; revisions to applicable statutory and/or regulatory authorities; and the extent to which modification, suspension, or other action would adversely affect plans, investments and actions the permittee has reasonably made or taken in reliance on the permit. Significant increases in scope of a permitted activity will be processed as new applications for permits in accordance with § 325.2 of this part, and not as modifications under this section.

Via Electronic Delivery

Michael LaDouceur
Project Manager, Regulatory Branch
U.S. Army Corps of Engineers – Portland District
333 S.W. First Avenue
P.O. Box 2946
Portland, OR 97208-2946

Michael Turaski
Chief, Regulatory Permits
U.S. Army Corps of Engineers – Portland District
333 S.W. First Avenue
P.O. Box 2946
Portland, OR 97208-2946

January 26, 2015

Re: Permit Applications for Project Nos. NWP 2013-427, 2007-998-1

Dear Mssrs. LaDouceur and Turaski:

Since 2013 the Confederated Tribes of the Umatilla Indian Reservation (CTUIR) and the US Army Corps of Engineers (Corps) have been engaged in government-to-government consultations at the staff level regarding the above referenced permit applications. In December, 2014, the Corps staff asked for further comments from the CTUIR. We submit those comments below. We also request a policy level meeting with the Corps as part of the ongoing government-to-government consultation process.

The CTUIR restates the questions and comments posed in the August 13, 2013 and February 28, 2014 letters.

As an initial matter, we restate the questions posed in the CTUIR’s August 13, 2013 letter to Steve Gagnon with the Corps. While Columbia Pacific Bio Refinery (Refinery) copied the CTUIR on a September 5, 2013 response letter to the Corps, the questions remain largely unanswered. Refinery’s letter takes the position that there would be no future increase in quantities of oil shipped from the dock if the proposed project is completed. This seems misleading at best, given the regional proposals to increase or begin both oil-by-rail and coal-barge shipments. The oil proposals are still active, and oil by rail quantities continue to increase. In addition, the Corps has not denied the Coyote Island permit application. That project if approved will result in the transloading of approximately 8 million tons of coal annually at the dock.
The unanswered questions from our August 13, 2013 letter are below. We encourage you to review the entire letter as you prepare a response.

- How many trains, and of what length, will convey the oil to the facility, per day? Week? Month?
- Is there a maximum or upper limit on the amount of oil and/or the number of trains and/or ships?
- What route will the trains take?
- Will the ships need to turn around?
- What will be the impacts from Panamax-class vessels on other navigation at or near River Mile 53? Throughout the Columbia River estuary downstream from the facility to the Pacific Ocean?
- How many auxiliary in-water services will be required (e.g., tugboats)?
- Will any dredging (including increased/altered maintenance dredging) be required?
- What are the capabilities of the U.S. Coast Guard in the event of an oil spill at the facility? In the estuary? Along the Columbia River upstream, in the event of a rail spill that reaches the River?
- Are there any other spill contingencies?

We are still awaiting responses to these questions from the Corps. The questions remain unanswered.

Similarly, we restate the concerns we raised in our February 28, 2014 letter addressing the permit application for Project No. NWP 2013-427, submitted by the Port of St. Helens. For the reasons stated in that letter, as well as the reasons stated at pp. 5-6 of the April 25, 2014 letter from Miles Johnson, Columbia Riverkeeper, to Michael Turaski, Misty Latcu, Michael LaDouceur and Steve Gagnon, the work proposed in Project Nos. NWP 2013-47 and NWP 2007-998 cannot be viewed in isolation and subject to segmented review. That work is integral to and enables the increased shipment of fossil fuels throughout the Columbia River Basin, including but not limited to the Morrow Pacific/Coyote Island project mentioned above (NWP 2012-056). Accordingly, the comments of CTUIR, the Yakama Nation, the Nez Perce Tribe and the Confederated Tribes of the Warm Springs Reservation of Oregon on that Coyote Island project all apply to the NWP 2013-47 and 2007-998 permit reviews. We attach the following documents discussing potential and certain impacts from the proposed project (these impacts would not occur but for the Port of St. Helens or Refinery projects):

- June 27, 2014 letter from Gary Burke, CTUIR Chairman, to Col. Aguilar, Corps;
- Declaration of Robert Brigham;
- Declaration of Julius Patrick;
- Declaration of Brandon Treloar;
- June 26, 2014 letter from JoDe Goudy, Yakama Nation Chairman, to Col. Aguilar, Corps;
- Declaration of Jeffrey Goudy;
- Declaration of Patrick Luke;
• Declaration of Thomas Mosqueda;
• Declaration of Steven Parker;
• June 26, 2014 letter from E. Austin Greene, Confederated Tribes and Bands of the Warms Springs Reservation of Oregon, to Col. Aguilar, Corps;
• Declaration of Bruce Jim;
• June 30, 2014 letter from Silas Whitman, NPTEC Chairman, to Col. Aguilar, Corps;
• Declaration of Jack McCormack;

• Declaration of Gary Greene
• Declaration of Scherri Greene
• Declaration of Daniel Kane
• June 27, 2014 letter from Babtist P. Lumley, CRITFC, to Col. Aguilar, Corps;
• Declaration of Babtist P. Lumley;
• Declaration of Blaine L. Parker;
• Declaration of Stuart Ellis;
• Declaration of Julie Carter;
• March 28, 2012 letter from Eric Quaempts, CTUIR DNR Director, to Steve Gagnon, Corps;
• March 28, 2014 letter from Brent Hall, CTUIR, to Charles Redon, Oregon DSL.

Potential impacts in the lower Columbia River and Estuary must be analyzed.

Along with the impacts to the CTUIR’s Treaty reserved resources, exercise of the Treaty fishing right, and the fishing-based culture and traditions of the CTUIR (as identified in the documents listed above), the CTUIR is also concerned about the potential impacts to the lower Columbia River and estuary ecosystem, including its fishery resources, from the this project, and the extensive activities and operations it will enable. The proposed uses of the dock (reinforcement of the existing dock for POSH and extension of the dock for Columbia Pacific) will dramatically increase the potential shipping from the dock from what was originally contemplated or ever experienced at the dock in its 70 year history. Increased shipments of coal and oil have the potential to directly and indirectly impact treaty reserved salmon populations that migrate past the Port of St. Helens. Every anadromous fish tribal treaty fishers catch passes by Clatskanie on the way to and from the ocean and any accident at the site or towards the mouth of the Columbia has the potential to impact these fish populations. This is the narrowest part of the Columbia River, directing the entire flow of the basin (with the exception of four extremely minor tributaries) through a 2000 foot wide river. Any accident here would travel deep and fast in the Columbia to the estuary and be catastrophic.

Further, the Corps has not analyzed, nor have they sought NOAA/USFWS input on what limitations should be placed on permitted actions in the estuary to avoid potential cumulative impacts on salmon populations in the estuary. Without this analysis there exists no metric of
how much development is too much or if the Corps can deny a permit due to cumulative impacts. The estuary is a highly complex and productive habitat system that provides a transitional environment for rearing anadromous fishes moving between freshwater and saltwater during their life cycles. It is of critical importance to the salmonid life cycle, and its protection is an important element of the biological opinions for the Federal Columbia River Power System. CTUIR tribal members fish below Bonneville Dam. We expect there are tribal members living in the Portland metro area that fish in the area of the Port of St. Helens.

The direct, indirect and cumulative impacts from the project include, but are not limited to, the following:

- Public health and safety risks concerns from explosions or fires resulting from the transloading and/or shipment of fossil fuels;
- Potential toxic water pollution from operations that could harm fish resources, and human health and safety though consumption of contaminated fish;
- Vessel traffic and/or potential spills that may destroy, degrade or otherwise adversely affect significant scientific, cultural, or historical resources in the Columbia River estuary;
- Adverse effects to endangered or threatened species, including but not limited to anadromous salmonids, and their designated habitat.¹
- Adverse effects to Pacific lamprey, sturgeon and their habitat, trust resources of the tribes;
- Impacts of wake stranding on juvenile salmonids and other fish resources;
- Impacts of wake action on low-lying wetlands and other ecologically critical areas in the Columbia River estuary;
- Impacts of fish entrainment into ship cooling and ballast systems;
- Impacts of cooling water discharges (thermal pollution) from Panamax and other vessels, and from on-shore operations related to fossil fuels shipping and processing at Port Westward;
- Increased transport and dispersal of invasive species into the Columbia River estuary in ballast water and attached to ships;
- Impacts on air quality from diesel and other air emissions from vessels, trains, and on-shore operations related to fossil fuels shipping and processing at Port Westward;
- Increased danger of crude oil fire and explosion due to increased volume of crude oil proposed to be shipped;
- Increased risk of spill in the Columbia River and estuary due to the hazardous conditions of the Columbia Bar, which is widely known for the extreme danger to ships.

• Impacts of global warming and ocean acidification on the Columbia River Estuary due to burning and extraction of fossil fuels.

All of these potential impacts must be identified, analyzed and assessed. The proper vehicle for this process is an Environmental Impact Statement. See, Native Ecosystems Council v. U.S. Forest Service, 428 F.3d 1233, 1239 (9th Cir. 2005) (An agency must prepare an EIS when substantial questions exist about whether the proposed project “may” significantly degrade the environment.) See also, Klamath Siskiyou Wildlands Ctr. v. Boody, 468 F.3d 549, 562 (9th Cir. 2006)(“This is a low standard.”)

It is the duty of the Corps to ensure that Indian Treaty Rights are given full effect.

As an agency of the federal government, the Corps is a trustee of the Tribe’s Treaty rights. That obligation imposes a fiduciary duty owed in conducting "any Federal government action" which relates to Indian Tribes. In carrying out its fiduciary duty, it is the government's, and consequently the Corps', responsibility to ensure that Indian treaty rights are given full effect. Indeed, it is well established that only Congress has the authority to modify or abrogate the terms of Indian treaties. NW Seafarms v. US Army Corps, 931 F.Supp. 1515 (W.D. Wash. 1996), citing Seminole Nation v. United States, 316 U.S. 286. 296-297 (1942) (finding that the United States owes the highest fiduciary duty to protect Indian contract rights as embodied by treaties); United States v. Eberhardt, 789 F.2d 1354 (9th Cir. 1986).

The ability to exercise the treaty fishing right requires more than the ability to dip a net into an empty river. Rather, “a fundamental prerequisite to exercising the right to take fish is the existence of fish to be taken.” United States v. Washington, 506 F.Supp. 187, 203 (W.D. Wash. 1980). The fishery is a trust asset, and protection of that asset is part and parcel of the fiduciary obligation the Corps owes the CTUIR. In reviewing the permit applications it is the Corps’ fiduciary duty to ensure that the CTUIR’s Treaty rights, especially the fishing right, are given full effect. NW Seafarms, 931 F.Supp. 1515.

Please contact Audie Huber, Intergovernmental Affairs Manager, at (541) 429-7228, to schedule a policy-level meeting as part of the government-to-government process.

Sincerely,

[Signature]

Brent H. Hall

Encl.
November 29, 2016

Millennium Bulk Terminals—Longview, LLC,
Coal Export Project (NWS-2010-1225) NEPA EIS
C/o ICF International
710 Second Avenue, Suite 550
Seattle, WA 98104

Washington Department of Ecology
Attn: Federal Permit Coordinator
PO Box 47600
Olympia, WA 98504-7600
millennium.wqc@ecy.wa.gov
http://www.millenniumbulkeiswa.gov/submit-comments.html

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Sally Toteff
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RE: Proposed Millennium Bulk Coal Terminal

Dear Director Bellon, Ms. Toteff, and others:

The Confederated Tribes of the Umatilla Indian Reservation (CTUIR) Department of Natural Resources (DNR) provides the following comments on the proposed Millennium Bulk Terminal. These comments are in regard to:

1) The U.S. Army Corps of Engineers’ Draft Environmental Impact Statement (DEIS) under the National Environmental Policy Act (NEPA);
2) The Corps’ draft Clean Water Act §404 Dredge/Fill/Rivers and Harbors Act §10 permit; and
The CTUIR is a federally recognized tribal government with rights and interests in the Columbia River Basin secured under the Treaty of 1855. That Treaty, between the Cayuse, Umatilla and Walla Walla peoples, reserved the preexisting rights of the Tribes to fish, hunt, gather, and graze in our ancestral territory in exchange for ceding millions of acres of land in what are now the states of Oregon and Washington.

Tribal Treaty Rights are potentially threatened by the development of Millenium Bulk Terminal as well as other proposed fossil fuel projects proposed across the Northwest. Increased rail traffic has the potential to increase air pollution from dust and train exhaust, cause greater risk of derailments and spills, and magnify dangers to tribal members accessing fishing site along the river. Increased vessel traffic along the Columbia River have the potential to increase spills to the river, endangering aquatic wildlife as well as impair air quality from ships.

The CTUIR has previously commented on the Millennium Bulk Coal Terminal, as well as many other projects that have been proposed throughout the State and region in recent years. As noted earlier in our previous comments, the Corps, in association with the other federal and state agencies with shared jurisdiction over these projects, must comprehensively evaluate in a programmatic manner the impacts of the dramatic, region-wide increase in fossil fuel (coal, crude oil, natural gas and others) development and transport. Absent any comprehensive analysis of their effects on the region’s citizens, environment and economy, each discrete individual proposal will continue to evade cumulative impacts review and the potential impacts to tribal Treaty Rights will remain unaddressed.

Attached you will find three letters that bear on the concerns regarding potential impacts to Treaty Rights of the CTUIR. The first letter is from November 18, 2013 from the CTUIR DNR to ICT International regarding scoping comments for Millennium Bulk Terminal. In those comments DNR recommended consideration of impacts of additional train and vessel traffic, impacts that were not analyzed in the DEIS. The second letter is from March 28, 2014 regarding a similar project, the Tesoro-Savage Vancouver Energy Distribution Terminal. In that letter, the CTUIR Board of Trustees raised concerns regarding potential threats to treaty rights, including increased rail traffic impacts on tribal fishers and the increased risk of train accidents along the Columbia River. Finally, the third letter is from May 11, 2016 regarding the proposal of Union Pacific Railroad to develop 5 miles of second mainline in Mosier, Oregon. In that letter, the CTUIR Fish and Wildlife Commission raised concerns regarding the threats posed by the increase in rail traffic along the Columbia River and the potential impacts to the exercise of tribal Treaty Rights, among other concerns. Each of these letters contains relevant information that should be reviewed for regarding the potential impacts of the Millennium Bulk Terminal.

_Draft Environmental Impact Statement; Clean Water Act §404/Rivers and Harbors Act §10 Permit(s)_

The scope of the DEIS is too narrow to fully examine the potential effects that will result from permitting this facility. This narrow scope eliminates consideration of the impacts of train and vessel traffic from the coal mine to the ocean and fails to assess the impact of burning 44 million
tons of coal on global climate change. Without the appropriate analytical scope, the DEIS is incapable of adequately evaluating the potential impacts of this project on the rights of the CTUIR pursuant to the Treaty of 1855.

On the sixth page of the DEIS, a central failure of the document is apparent:

When considered in accordance with applicable laws and regulations, many of the activities of concern to the public, such as rail traffic, coal mining, shipping coal overseas, and burning exported coal in other countries, are outside the Corps’ control and responsibility.

This statement disclaims any and all responsibility for the results of authorizing the project based on a lack of authority by the Corps to regulate many of the associated—and inescapable—project activities. This misses the point of the National Environmental Policy Act—to consider the direct, indirect and cumulative effects of the action and likely potential consequences. The Corps improperly maintains that its regulations allow review of project impacts only to the extent of its regulatory authority over the activities producing those impacts, notwithstanding the outcome—as here—that the project would undergo limited, deficient, and unduly circumscribed analysis as a consequence.

The Millennium Bulk Coal Terminal will result in up to 16 more trains per day (8 full trains arriving, and 8 empty trains departing) and up to 70 ships loaded a month. Those ships will generate 1,680 transits (840 empty ships and 840 fully loaded ships) of the Columbia River and estuary. Approximately 44 million tons of coal will be burned, contributing approximately 80 million metric tons of carbon dioxide into the atmosphere. None of these effects are considered. Failure to evaluate these impacts along the train and vessel routes as well as the climate impacts of the burning of coal renders the analysis contained in the DEIS critically defective— inadequate in determining effects on the Treaty Rights of the CTUIR and other tribes, and inadequate to fully and fairly examine effects on resources in the Columbia Basin and the wider environment.

Increased rail traffic along the Columbia River will pose additional dangers to tribal members who fish in and along the Columbia River, yet this is not addressed. The conclusion that the coal intended for Millennium will reach the market whether or not this project is built carries no weight; if that was a reasonable argument then no project would ever be denied no matter how disastrous or adverse to environmental harms.

Clean Water Act §401 Certification

The Washington Department of Ecology (WDOE) should deny the Clean Water Act §401 Certification for the Millennium Bulk Coal Terminal unless the project can demonstrate that the project will meet water quality standards. The State has the authority—and the responsibility—to issue such a denial where conditions exist such as those here—where a project clearly cannot provide the necessary assurance that state water quality standards will be met. Water quality degradation is likely to occur, contrary to the State’s policy. WDOE is not bound by any federal
agency determination of water quality issues or their choice to narrowly focus the scope of review for a project. It should rigorously take steps to protect the quality of State waters, and not issue permits where reliable assurance that standards will be achieved is lacking, and designated uses will be impaired.

Other commenters on this project have noted the potential for the project to create substantial water quality problems, such as the U.S. Fish and Wildlife Service’s conclusion that it would “measurably increase toxic pollutant concentrations” in water. The Washington Department of Natural Resources stated that the DEIS’s estimated coal dust deposition rate in the Columbia River was “unrealistic,” said that “local acidification can result from coal dust entering water along the Columbia River,” and questioned the failure to consider long-term effects of coal dust deposition such as bioaccumulation.

A §401 Certification for this project is not appropriate absent assurances of meeting those water quality standards. The project would not protect designated and existing uses, like salmon, aesthetics, and navigation. It would not comply with Washington’s narrative and numeric water quality standards for toxic pollutants, turbidity, aesthetics, and other parameters. It would not satisfy the state’s Antidegradation Policy.

There is little assurance that water quality will be protected, or that standards will be met; risks inordinately outweigh benefits; and tribal Treaty Rights will be unjustifiably subject to higher threats of damage, infringement, erosion, and curtailment.

Mitigation

No adequate mitigation plan or proposal has been developed to make up for the numerous harms and shortcomings identified above—to tribal rights and resources, to water quality, and to other resources—that the project is likely to cause. Limited mitigation ideas have been suggested, but as yet there is no certain or complete package, or reliable assurance that there exists long-term financial backing and support for it from the various entities that have come and gone over the history of this proposal. As we stated previously, “[i]n our experience, much harm to natural resources has been authorized in the past based on unduly optimistic, excessively rosy scenarios and proposals for mitigation that turned out to be woefully insufficient.”

DNR understands that unavoidable significant impacts include increasing certain rail line segments beyond their capacity, potentially diminishing rail safety and increasing demand for more rail construction, increased noise along the rail line, additional delays at crossings and backups, increased greenhouse gas emissions, and increased risks of train and vessel spills in the Columbia River and the estuary. Again, these have been identified as “unavoidable,” and—one would assume—thus “un-mitigate-able.” Resource agencies have noted that mitigation “may” reduce impacts to tribal resources “but would not eliminate them.”
Conclusion

Millennium Bulk Terminal should not proceed unless and until a full and complete review of the environmental impacts of the project is conducted including a complete assessment of the potential impacts to the rights and resources of the CTUIR reserved under the Treaty of 1855. The information and materials that have been produced as part of the Millennium Bulk Terminal applications and permitting processes are flawed, inadequate, and insufficient to accurately depict the project and the full range of its potential impacts, particularly as they concern tribal rights, interests, and resources. Until a comprehensive analysis has been conducted, no permits for the facility should be issued.

This project, as well as many other fossil fuel projects for the transport, storage, processing, and/or further distribution of fossil fuels (coal, oil, and natural gas) create significant risks to the resources of the region while generating little or no benefits to this region.

The CTUIR DNR appreciates the opportunity to provide these comments and for your consideration. If you have any questions, please contact Audie Huber, Inter-Governmental Affairs Manager, at (541) 429-7228.

Sincerely,

Eric Quaempts
Director, Department of Natural Resources

Cc: Columbia River Inter-Tribal Fish Commission

Attachments:
    CTUIR DNR November 18, 2013 letter to ICT International re: Millennium Bulk Terminal.
    CTUIR Board of Trustees March 28, 2014 letter to Col. Estok re: Tesoro Savage Terminal.
November 18, 2013

Millennium Bulk Terminals-Longview EIS
c/o ICF International
710 Second Avenue, Suite 550
Seattle, WA 98104

Subject: Scoping Comments on Proposed Millennium Bulk Terminals Longview Shipping Facility

Delivered Electronically to: comments@millenniumbulkeiswa.gov

To Whom It May Concern:

The Confederated Tribes of the Umatilla Indian Reservation (CTUIR) Department of Natural Resources (DNR) appreciates the opportunity to comment on the proposed Millennium Bulk Terminals Longview Shipping Facility Project (Project). The CTUIR DNR is concerned that the Project may impact tribal treaty fisheries, traditional use areas, and the habitats and cultural resources necessary to support and sustain them. We have additional concerns regarding the cumulative impacts of the Project and others proposed in the region.

The Environmental Impact Statement (EIS) should include adequate information to make an informed judgment as to the impacts to tribal Treaty Rights, traditional use areas and the near- and long-term health and sustainability of tribal First Foods. The EIS should also address how the federal government would be fulfilling it Trust Responsibility to the CTUIR and other Indian Tribes if a federal agency was to ultimately authorize this Project.

The U.S. Army Corps of Engineers (Corps), the Washington Department of Ecology (WDOE) and Whatcom County have begun an environmental review for a similar coal export terminal (Gateway Pacific) in Whatcom County. WDOE and the County have indicated their intent to examine all of the impacts of that project, including indirect effects such as increased rail traffic, vessel traffic, additional mining, and greenhouse gas emissions of coal combustion. This comprehensive approach should be followed in the case of the Millennium facility as well.

Impacts from the Project will be felt far and wide. Rail impacts (traffic, emissions, and derailment risks) will extend from the Powder River Basin to the Project site. Ocean transport will cause increased emissions, collision risks, and near-shore effects from Longview, through the Columbia River estuary, and across the sea. Greenhouse gas emissions will rise from the eventual combustion of the mined and transported coal, resulting in increasing temperatures, ocean acidification and mercury deposition in the Northwest. The Millennium facility will add to environmental burdens that will result if the many other coal and oil transport projects in the region come to fruition. It should not be analyzed in isolation, but in conjunction with the other proposed projects.
Fish and Fishing Site Impacts

The CTUIR has a treaty-secured “right of taking fish . . . at all . . . usual and accustomed stations” along the Columbia River and its tributaries. In order for this right to have any meaning, there must be fish to take, they must be healthy and sustainable, and access must be available. The Project will potentially negatively impact these sites and the fish that migrate past them. The additional trains may also adversely affect the ability of tribal members to access treaty reserved fishing sites along the Columbia River and other tributaries due to the increased danger at crossings. The EIS should assess these potential impacts. Fish are but one of the many tribal First Foods, and they all should be considered when weighing the effects of the Project.

Cultural Resources

Rail transit and operations associated with the Project will affect traditional cultural properties governed by the National Historic Preservation Act. The transit corridor will pass through or otherwise affect tribal trust lands and traditional use areas. Information pertaining to changes in rail usage is necessary to assess the effects the proposed undertaking will have on those properties.

Air Quality

Air quality may deteriorate as a result of the Project, from additional diesel emissions, coal dust, and the burning of the coal itself. Mercury deposition should be specifically examined; the CTUIR is particularly concerned about the alarming evidence of toxic contaminants in fish, water and across the landscape where we commonly obtain our First Foods.

Government-to-Government Consultation

These are just a few of the CTUIR’s many concerns; there are many more that cannot be fully detailed here. We request consultation on a government-to-government basis with the Corps on this Project. The EIS should include and incorporate adequate information for us and the region to make an informed decision regarding the merits and drawbacks of this and all the other projects that will have similar significant effects. Please contact Audie Huber, our Inter-Governmental Affairs Manager, at audiehuber@ctuir.org or (541) 429-7228.

Sincerely,

Eric Quaempts
Director, Department of Natural Resources
January 17, 2012

U.S. Army Corps of Engineers,  
ATTN: CECW–CO–R, Ms. Amy S. Klein  
441 G Street NW., Washington,  
DC 20314–1000.

Submitted via e-mail to: regulatory.review@usace.army.mil

RE: COE–2011–0028

This letter represents the comments of the Confederated Tribes of the Umatilla Indian Reservation (CTUIR) Department of Natural Resources (DNR) Cultural Resources Protection Program (CRPP) regarding the Plan for Retrospective review of Corps regulations under Executive Order 13563. Specifically, this letter pertains to comments regarding 33 CFR 325 Appendix C. The CTUIR DNR has consistently told the Corps over the last 10 years that the Appendix C regulations need to be revised to comply with the National Historic Preservation Act (NHPA). To paraphrase our November 27, 2006 letter regarding these regulations, Appendix C is now 20 years, at least 5 legislative amendments and numerous regulatory revisions out of date. Over the last decade the Corps has initiated regulatory review and sought comments to review Appendix C yet those regulations remain unchanged since they were issued in 1990. I have attached our six comment letters addressing Appendix C since 2002.

This history of Appendix C is convoluted. The regulations were first proposed April 3, 1980 in a Federal Register notice entitled “proposed counterpart regulations.” 45 Fed. Reg. 22112. Four years later the regulations were issued as a proposed rule on May 4, 1984. 49 Fed. Reg. 19036. The rule was not issued as final for another 6 years on June 29, 1990. 55 Fed. Reg. 27000. The 1990 Federal Register announcement indicated that the Corps had been operating under these regulations since the initial proposal April 3, 1980. While the 1990 Federal Register notice indicate the ACHP approved of the 1980 regulations on an interim basis, that notice does not indicate that the ACHP concurred in the 1990 draft of the regulations. The regulations adopted in 1990 differ dramatically from those released in 1980.

Our first comments on Appendix C, May 7, 2002, were prompted by a Federal Register notice from March 8, 2002. 67 Fed. Reg. 10822. That notice stated:

Since the principle law and the ACHP implementing regulations have been changed, the Corps of Engineers has determined that it is necessary to address these changes. ¶ The Corps of Engineers is initiating a process to address the ACHP regulations for the Regulatory Program. The first step in this process is to solicit public views on 36 CFR part 800 regulation as it relates to the Corps Regulatory Program and Appendix C.
Our May 2, 2002 comments to that request for tribal input included acknowledgment that “Appendix C: Procedures for the Protection of Historic Properties as it currently exists is remarkable for its lack of involvement of Indian tribes. We anticipate that the revised version will mandate consultation with tribes…”


This ANPRM and subsequent related rulemaking actions will have tribal implications. These rulemaking actions will have direct effects on tribal governments, on the relationship between the Federal government and the Indian tribes, or on the distribution of power and responsibilities between the Federal government and Indian tribes. The 1992 amendments to the NHPA and the ACHP’s revised regulations at 36 CFR part 800 require consultation with Indian tribes when Federal undertakings, such as activities that require DA permits, may affect historic properties on tribal lands or historic properties of religious and cultural significance to Indian tribes located off tribal lands. Therefore, revising our permit processing procedures for the protection of historic properties will have tribal implications.

On November 4, 2004 the CTUIR DNR stated “the only realistic option is for the Corps to revoke Appendix C and use the 36 CFR § 800 regulations . . . [because] the existing Appendix C is so far out of date, fixing it would require more work than starting over with the regulatory requirements as currently adopted by the ACHP.”

Again, on November 14, 2006 the Corps sent a letter to the CTUIR initiating formal consultation on efforts to revise Appendix C. In that letter it stated:

The ACHP has never concurred in our counterpart regulations due to disagreements primarily on jurisdictional issues. The ACHP revised 36CFR800 in 1999 and 2004 to incorporate the 1992 amendments to the National Historic Preservation Act. These changes reflected, among other things, increased involvement of Tribes and the public, Appendix C has not been updated since 1990. Appendix C lacks updated effect definitions, updated public involvement guidelines and does not address any tribal involvement.

Let me repeat that statement from the Corps: “Appendix C . . . does not address any tribal involvement.” This lack of tribal involvement has prompted the Corps to issue “interim” guidance and “revised interim” guidance such as the June 24, 2002 and April 25, 2005 memorandums for major subordinate commands and districts. These guidance documents are an exceedingly poor substitute for legislative rules mandating tribal consultation for Corps actions which may implicate historic properties of significance to Indian tribes or tribal rights. In the CTUIR DNR comments to the November 14, 2006 Corps letter, dated February 28, 2007, we stated:

• Appendix C is not authorized by the NHPA or any other law.
If the COE wants alternative procedures for Section 106 of the NHPA, they must have the concurrence of the ACHP.

Unless and until the COE has valid alternative procedures, they are bound by the 36 CFR 800 regulations.

Finally, on July 12, 2007 the Corps sent another letter to the CTUIR requesting tribal assistance to reevaluate and revise Appendix C. The result of this process was a “Concept Paper for Alternative Procedures” drafted and revised with input from the tribes and the Advisory Council on Historic Preservation (ACHP). The CTUIR provided comments on this draft which are attached. This process culminated in a letter exchange between the Corps and the ACHP whereby on November 7, 2008 the Assistant Secretary of the Army (Civil Works) “instructed the Army Corps of Engineers to stand down its efforts to revise Appendix C…” (Letters attached.) We are unaware of any further actions to revise Appendix C.

It has been almost 10 years from the request for comments to revise Appendix C yet the Corps has not issued any amended regulations. In that 10 year period however the Corps has continued to publically advance a rulemaking without publishing a rule.

The CTUIR DNR requests that the Corps of Engineers revise Appendix C to:
• integrate the 1992 amendments of the NHPA,
• clearly integrate tribal consultation and
• adopt a process addressing both direct and indirect effects of Corps undertakings that more closely approximates the existing 36 CFR § 800 regulations including the “area of potential effect” rather than the narrow “permit area.”

Until the Corps adopts valid alternative procedures concurred by the ACHP, the Corps should comply with 36 CFR § 800.

As an aside, I’d like to point out that our relationship with the Portland District Army Corps of Engineers Regulatory Program has improved due to efforts of the Corps to work with the CTUIR on cultural resource issues. The Portland District Regulatory Program has greatly improved consultation with tribes including participating in trainings at the CTUIR and hiring an archaeologist for their regulatory program to review applications. Having an archaeologist solely devoted to regulatory permits is an important step other districts should emulate. Archaeological staff, while not tasked with the function, can often identify instances in which historical cultural uses and current cultural uses may require closer consultation with tribes on permit actions. While the ultimate goal is that Corps Regulatory staff understand tribal treaty, statutory and other rights in the permitting process, in the interim it is helpful to have as many capable Corps staff looking for tribal issues as is possible.

Finally, it is important to note that while these comments are on the cultural resource implications of Appendix C, the CTUIR DNR recommends that the Corps pay special attention
to treaty rights and the trust responsibility in revising their regulatory program and be aware that permit actions can have implications on treaty rights as noted in our comments to the Nationwide Permits from November 26, 2006 and January 31, 2007 (attached.) For instances, Nationwide Permits forbid actions that impair treaty rights, but no information provided to applicants what treaty rights are.

If you have any questions, please contact Audie Huber, Intergovernmental Affairs Manager of the CTUIR DNR at 541-429-7228. We look forward to consulting with the Corps on these regulatory revisions. Thank you.

Sincerely,

Teara Farrow, Program Manager
Cultural Resources Protection Program

Enclosures:
   CTUIR Cultural Resources Committee letter to the Corps, May 7, 2002
   CTUIR DNR letter to the Corps, November 24, 2004
   CTUIR DNR letter to the Corps, November 26, 2006
   CTUIR DNR letter to the Corps, January 31, 2007
   CTUIR DNR letter to the Corps, February 28, 2007
   CTUIR DNR letter to the Corps, February 5, 2008
   Corps letter to the ACHP, September 23, 2008
   ACHP letter to the Corps, October 9, 2008
   Corps letter to the ACHP, November 27, 2008.

cc:  Georgeie Reynolds, Senior Tribal Liaison, Corps of Engineers
     Dennis Griffin, Oregon State Historic Preservation Office Archaeologist
     Robert Whitlam, Washington State Archaeologist
     Paul Cloutier, Army Corps Northwestern Division, Tribal Liaison.
     Valerie Hauser, Advisory Council on Historic Preservation, Native American Program coordinator
February 5, 2007 [(sic) should have been February 5, 2008]

Georgeie Reynolds, Ph.D.
Tribal Liaison
Leader, Tribal Nations Community of Practice
US Army Corps of Engineers

Delivered Electronically.

Dear Georgeie:

This letter represents the preliminary comments of the Confederated Tribes of the Umatilla Indian Reservation, Department of Natural Resources on the January 23rd, 2008 draft of the Army Corps of Engineers Concept Paper For Alternative Procedures for the consideration of historic properties. As we have only had the document a week or so, the comments are not complete, but do represent work up to section 5.0.

[Throughout the document I suggest deletions with strike-through and new language in bold.]

First, the document needs a consistent name. It is alternatively called a “concept paper” in the title, “Alternative Procedures” in section 1.0(a), a “supplement” to the 36 CFR 800 regulations in Section 2.1, and “Regulatory Program’s implementation of section 106” in section 2.3(f).

There remain a variety of structural problems. For instance, section 1.0(s) defines “District Implementation Protocols” in almost the identical way that section 9.0(c). Section 5.0(e) defines “special conditions” in the identical way that section 9.0(d) does.

Remove the reference to “Traditional Cultural Properties” on page 5 and replace with “historic properties of religious and cultural significance to Indian tribes and Native Hawaiian organizations.”

Throughout the document it should consistently refer to SHPOs/THPOs, tribes and Native Hawaiian Organizations when comments are sought on actions or determinations. Many references only reference the SHPOs or THPOs but not the tribes. I lost count at how many times the draft alternative mentioned SHPOs and THPOs but not tribes. I recommend a search and replace to include tribes in the list of those consulted or communicated with regarding actions or determinations. Also, many sections reference consulting with the SHPO/THPO and
other consulting parties. This is not sufficiently explicit to indicate that the Corps should also be consulting with tribes. Add Indian tribes or NHOs to these sections.

Remove section 5.0(c)(1) because there a “no adverse effect determination through data recovery” is a logical impossibility under the law.

I commend the Corps for acceding to the NHPA definition of “undertaking” and adopting the term “area of potential effect (APE).” However, the term “scope of analysis” still seeks to limit the APE unless it is “determined that sufficient federal control and responsibility exist” over the lands. The definition of “scope of analysis” in section 1.0(j)(ii) of this draft attempts to incorporate the existing definition of “scope of analysis” contained in 33 CFR 325, Appendix B, subsection (7)(b). This is clearly inconsistent with the “area of potential effect” as identified in the 36 CFR 800 regulations. Previously it was recommended that this definition be removed, but this draft has only removed it from this document and incorporated it by reference. To summarize, the Corps continues to limit the scope of the APE based upon their statutory jurisdiction under the Clean Water Act and other authorities they enforce. The NHPA is far more simple than that. If the applicant wants a permit, they must demonstrate to the Corps that they have made a good faith effort to identify historic properties which may be affected by the activities resulting from the permit, irrespective of land ownership or regulatory jurisdiction. If the Corps has the authority to issue the permit, they have the authority to require the applicant to do whatever is necessary to meet the obligation of a good faith effort to identify historic properties.

The NHPA does not require the entire scope of the undertaking be under the authority of the permitting agency, only that the effects to historic properties which are reasonably foreseeable be considered. Therefore the ownership of the lands where the effects occur is irrelevant. Indeed, if this were not the case, the requirement of consideration of indirect effects would be meaningless, because the analysis would stop at the waters edge, where the permit is required.

Further, under section 1.0(j), the draft alternative only proposes seeking SHPO/THPO input for impacts to “significant historic resources, such as [National Historic Landmarks].” First of all, the Corps should seek tribal input as well, but also the Corps should seek input on the APE for all undertakings, not just those resources deemed “significant” by Corps staff.

The definition should be rewritten to read:

(j) **Scope of Analysis. Area of Potential Effects:** The DE is responsible for making final determinations regarding the boundaries of the Area of Potential Effects (APE); however, in cases of Standard Individual Permits or for General Permits that involve impacts to significant historic resources, such as NHLs, the DE shall seek the views of the SHPO/THPO and tribes or their staff before establishing the APE.  

(i) Within the context of the Corps Regulatory Program, the APE is the geographic area within which the proposed undertaking has the potential to affect historic properties. Effects may be direct or indirect. The APE is influenced by the scope, scale and nature of the undertaking and may be different for different kinds of effects. In light of the Corps Regulatory Program’s mission requirements, the APE includes jurisdictional waters of the United States and associated

**TREATY JUNE 9, 1855 + CAYUSE, UMATILLA AND WALLA WALLA TRIBES**
Section 1.0(k) should be amended to address the qualifications of the Corps staff making the recommendations to the District Engineer (DE). I would recommend that the language from section 2.4(a)(1) be added to section 1.0(k), stating “The DE shall ensure that professional qualification standards, in accordance with the Secretary of the Interior’s Standards and Guidelines for Archaeology and Historic Preservation are met in the conduct of identification, evaluation, assessment of effects, and treatment of historic properties. Further, the DE shall ensure that Corps cultural resources staff making findings and recommendations to the DE meet these standards.”

The concept enumerated in section 1.0(s), District Implementation Protocols is a novel concept. However, they resemble programmatic agreements which are addressed in the 36 CFR 800 regulations. Notably the DIPs don’t require ACHP Council approval. I would suggest that the ACHP be an invited signatory of the DIPs, and their failure to sign is not fatal to the agreement. It is not clear from the alternate procedures if the “local agreements” spoken of in section 3.2(f). They sound very similar.

I’d recommend deleting section 2.3(c), “federal trust responsibility.” First of all, the alternative procedures never use the term “federal trust responsibility” except for the definition thereby negating the need for a definition. Second, this definition is not very good. Finally, the regulations do use the term “trust resources” and do not define that term. It should be noted that the DOD has adopted the American Indian and Alaska Native Policy as well as DOD Instruction Number 4710.02, which might inform this definition.

Section 2.4(d)(3) indicates that the THPO is the official representative of the Indian tribe for the purposes of Section 106 of the NHPA. This may or may not be true. A tribe may assume THPO functions, yet retain in their governing council the authority to address consultation on projects with Section 106 work. In the past, we’ve recommended the following language to address this issue:

Tribal Historic Preservation Offices have been delegated the authority of the Secretary of the Interior to serve as the historic preservation officer for tribal lands, however they may not have been delegated by their tribal governments to function as the sole point of contact for all undertakings on and off reservation. Therefore, agencies must contact the THPO’s and the tribal government leaders regarding Section 106 consultation to determine the appropriate point(s) of contact.

In section 2.4(f)(2), the applicants should be encouraged to coordinate investigations with SHPO/THPO, the tribes and NHOs as well as the Corps. The tribes and SHPO have experience which would be helpful in this process.
Section 3.2(c) restricts the responsibility of the DE to seek input on the APE from SHPO/THPO to projects “that involve impacts to unique resources, such as” National Historic Landmarks. This is a problem for the same reason the restrictive language was objectionable in section 1.0(j) above. The DE should seek input from the SHPO/THPO, Indian tribes and NHOs for the APE of all undertakings, not just those impacting National Historic Landmarks.

Section 3.2(d)(1) provides for the determination of “no potential to cause effects.” This section unilaterally excludes lands that have been “extensively modified” and therefore presupposes that historic properties are lost when in a heavily disturbed context. It should be pointed out that this would only apply to historic properties important for he information and not include “historic properties of religious and cultural significance to Indian tribes and Native Hawaiian organizations.” These type of sites may not possess an archaeological component.

In section 3.3(a), investigations, please remove “the magnitude of the undertaking and the degree of federal involvement.” The magnitude of the undertaking and degree of federal involvement is irrelevant in determining the presence or absence of historic properties after the APE has been identified, which was established in 3.2(c).

Section 3.3(g), it is unclear what “phased identification efforts” are. Presumably, the project is considered as an entire project, and not broken up into discrete elements. Otherwise, projects could simply be phased with each step involving more commitment of resources resulting in the latter steps being a virtual certainty. Further, if there are impacts on properties where access is restricted, and neither the Corps nor the permitee can gain access, the permit should be denied outright. We have worked with the Corps on projects in the past where dredged spoils were to be placed on private land that the landowner would not allow to be surveyed. Because he refused access, the dredged spoils could not be placed there.

Section 5.1(a) provides that the DE will only “consider the Secretary of the Interior’s Standards and Guidelines for Archaeology and Historic Preservation.” This language should be consistent with section 2.4(a)(1) that “The DE shall ensure that qualification standards, in accordance with the Secretary of the Interior’s Standards and Guidelines for Archaeology and Historic Preservation are met in the conduct of identification, evaluation, assessment of effects, and treatment of historic properties.”

As noted, these comments are only preliminary. We look forward to reviewing the alternative procedures in greater detail when another draft is released. If you have any questions, please feel free to contact me at 541-966-2334.

Sincerely,

[Signature]

Audi Huber, Intergovernmental Affairs Manager
Department of Natural Resources
February 28, 2007

U.S. Army Corps of Engineers
Attn: Dr. Mark Sudol, Chief of HQ Regulatory
441 G Street, NW.
Washington, DC 20314

Dear Dr. Sudol,

The Confederated Tribes of the Umatilla Indian Reservation (CTUIR) Department of Natural Resources (DNR) appreciates the opportunity to comment on the invitation for formal consultation regarding Appendix C of 33 CFR § 325 (Appendix C) for the Army Corps of Engineers (COE). I would like to note that this is the fifth time the CTUIR has written to the COE regarding requested comments on either Appendix C or the application of Appendix C to Nationwide Permits (NWP). Our recommendation remains the same, abandon Appendix C and comply with 36 CFR 800. I have attached our four previous correspondences.

Our most direct analysis of Appendix C as it relates to the National Historic Preservation Act (NHPA) is contained in our November 26, 2006 letter, which states:

Appendix C is 16 years, at least 5 legislative revisions and numerous regulatory changes out of date. Appendix C is devoid of tribal consultation, fails to take into account the numerous, significant changes to the NHPA in the 1992 amendments, and utilizes definitions which are directly in conflict with the letter and the spirit of the law. To be perfectly clear: The Corps of Engineers should immediately abandon Appendix C and comply with 36 CFR § 800. This should be done rather than embarking on an open-ended “consultation” on an unambiguously flawed Appendix C. During the time allocated to revise Appendix C, the Corps should comply with the law as it is written and developing an alternative process as defined in the NHPA.

Some commenters have argued that the cost of complying with 36 CFR 800 by COE Regulatory would severely impact the COE’s regulatory function and radically increase their budgetary needs. The fact that the COE has not budgeted for compliance with the NHPA regulations is an irrelevancy. As established in TVA v. Hill, when Congress directs an agency to act, the agency can not avoid compliance merely because compliance would be onerous.
Further, as enumerated in *Chevron v. US*, and the numerous other cases, the only agency entitled
dereference in implementing their regulations is the agency delegated the authority by congress to
enact the regulations. In the case of the NHPA, the Advisory Council on Historic Preservation
(ACHP) is delegated the authority and responsibility to write the regulations implementing the
NHPA. 16 USC 470s. The COE writing legislative rules to implement the NHPA is contrary to
the law. The fact that Appendix C was written pursuant to the Administrative Procedures Act
(APA) process does not render it lawful when there is no legislative delegation to COE to write
the regulations at the outset. Further, the assertion in the request for consultation that
compliance with the APA would be required to revise Appendix C is patently false. Illegal
regulations do not become legal simply because they were adopted in an APA process nor must
you comply with the APA to declare them void.

To quote the comments from the ACHP from the November 27, 2006 letter on the NWP
reissuance regarding Appendix C, “As you know, Appendix C has not been approved by the ACHP
as a program alternative, as required by 36 CFR Part 800.14. The ACHP considers the Corps’
Appendix C as an unauthorized process that does not fulfill the requirements of Section 106 of the
NHPA.” The COE has issued at least two “interim guidance” on Appendix C to COE staff and still
has not come to agreement with the ACHP on the proper scope of the COE’s responsibilities under
the NHPA. The steadfast refusal of the COE to comply with 36 CFR Part 800 is at best obtuse,
and at worst, patently illegal.

Rather than going into each and every reason why Appendix C is unlawful, all our previous
 correspondence on point are attached. But, for the sake of completeness, here is a summary:

- Appendix C is not authorized by the NHPA or any other law.
- If the COE wants an alternative procedures for Section 106 of the NHPA, they must have the
  concurrence of the ACHP.
- Unless and until the COE has valid alternative procedures, they are bound by the 36 CFR 800
  regulations.

If you have any further questions, please feel free to contact Audie Huber, Intergovernmental
Affairs Manager, at 541-966-2334 or Catherine Dickson, Cultural Resources Protection Program
Principle Investigator, at 541-966-2338. However, I request that the COE implement and discuss
the comments you have received to date prior to requesting additional comments on the existing
Appendix C.

Sincerely,

Eric Quaempts, Director
Department of Natural Resources

Cc: NATHPO, D. Bambi Kraus
    ACHP, Valerie Hauser, Tribal Liaison
    Georgeie Reynolds, Tribal Liaison COE
    Barbara Creel, Portland COE
    Lawrence Evans, Portland COE
    Skipper Scott, Ft. Worth COE
    Michelle Walker, Seattle COE
January 31, 2006  [(sic) This should be January 31, 2007.]

U.S. Army Corps of Engineers
Attn: CECW–OR/MVD (David B. Olson)
441 G Street NW.
Washington, DC 20314-1000

Re: CTUIR DNR Comments on Nationwide Permits

DELECTERED ELECTRONICALLY

Dear Mr. Olson:

The Confederated Tribes of the Umatilla Indian Reservation (CTUIR) Department of Natural Resources (DNR) appreciates the opportunity to review the Corps of Engineers’ (Corps) solicitation of comments on the proposal to reissue and modify Nationwide Permits (NWPs), general conditions and definitions. On November 27th, the CTUIR requested a 60-day extension to address individual details regarding the NWPs. After review of DNR’s original concerns from our November 27th letter, it is apparent that our concerns were justified and we reiterate our comments on General Conditions 16 and 18.

General Condition 16, Tribal Rights, states that “No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.” Further research of Corps records and conversations with Corps staff indicate that there exists no guidance within the Nationwide Permit process which tells potential permitees what is meant by “tribal rights,” nor what standard is used to determine their impairment. Unless and until the Corps develops some form of guidance to potential permitees regarding General Condition 16, there is essentially no Corps oversight of impacts to tribal rights. The Corps of Engineers has a Trust Responsibility to manage resources entrusted to their care so that resources secured by treaty for Indian tribes are protected from destruction or degradation. Under the Nationwide Permitting scheme, the Corps is exercising no oversight of tribal treaty-reserved rights or resources and is therefore breaching that Trust Responsibility. Worse still, Condition 16 suggests that the Corps is ensuring protection of tribal rights, when in fact the Corps appears to have no intention of doing so. To remedy this failure, the Corps has an obligation to consult with tribes to determine what tribal rights are and what actions the Corps must take to protect them. This could be done on a division or district level.
General Condition 18, regarding Historic Properties, should reference the 36 CFR § 800 regulations for compliance with the National Historic Preservation Act (NHPA). The draft conditions cite the Corps’ compliance with “the current procedures for addressing the requirements of Section 106 and the” NHPA. As of this date, the only lawful “current procedures” for the Corps to comply with the NHPA are in 36 CFR § 800. We would direct the Corps’ attention to a letter sent to the CTUIR on November 14th from Don T. Riley, Major General, U.S. Army, Director of Civil Works. The letter, in the attached Appendix C Fact Sheet, states that “The ACHP has never concurred in our counterpart regulations due to disagreements primarily on jurisdictional issues.” Further, the Fact Sheet states that “Appendix C lacks updated effect definitions, updated public involvement guidelines and does not address any tribal involvement.” Until the ACHP concurs in the Appendix C regulations, they are a nullity, enacted without legal force or effect. To quote our November 27th letter:

The Corps of Engineers should immediately abandon Appendix C and comply with 36 CFR § 800. This should be done rather than embarking on an open-ended “consultation” on an unambiguously flawed Appendix C. During the time allocated to revise Appendix C, the Corps should comply with the law as it is written. . .

If you have any questions, please feel free to contact Audie Huber, Intergovernmental Affairs Manager, at (541) 966-2334.

Sincerely,

[Signature]

Eric Quamme, Director
Department of Natural Resources

Cc: NATHPO, D. Bambi Kraus
    ACHP, Valerie Hauser, Tribal Liaison
    Georcie Reynolds, Tribal Liaison COE
    Deborah Knaub, Seattle COE
    Diane Lake, Seattle COE
    Corrie Veenstra, Portland COE
    Barbara Creel, Portland COE
November 27, 2006

U.S. Army Corps of Engineers,
Attn: CECW–OR/MVD (David B. Olson),
441 G Street NW,
Washington, DC 20314–1000

Dear Mr. Olson:

The Confederated Tribes of the Umatilla Indian Reservation (CTUIR) Department of Natural Resources (DNR) appreciates the opportunity to review the Corps of Engineers (Corps) solicitation of comments on the proposal to reissue and modify Nationwide Permits (NWP), general conditions and definitions. Due to the short time frame, the CTUIR DNR was unable to undertake an exhaustive review of the proposal. In the future, if consultation were initiated earlier in the process it would facilitate tribal involvement. For instance, the notice in the Federal Register occurred on September 26th, the letter to the CTUIR Chairman was dated October 3rd, received on October 18th and filtered down to staff in late October. Thirty days were lost in the 60-day review period due to poor communications. The CTUIR requests an extension of the comment period until January 31st in order to consult with the Corps on the nature of the Nationwide Permit process. During that time, we can further work with Corps staff to answer questions regarding how the program takes into account tribal interests, rights and resources. The following represent the preliminary comments of the CTUIR DNR on the NWP.

GC 16. Tribal Rights.

The current General Condition 16 states “No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.” The DNR would like to discuss with the Corps what threshold is used to determine whether tribal rights are implicated. Further, what metric is utilized to determine whether a right is impaired? If there is any guidance provided to applicants to determine whether tribal rights are impaired by a given activity, please provide it to us for review. The Federal Register notice does not provide any additional information.
GC 18. Historic Properties

The CTUIR DNR appreciates the fact that the Corps is considering revising the 33 CFR § 325, Appendix C guidance for Corps Regulatory Branch under the National Historic Preservation Act (NHPA). However, because this is at least the Corps’ third attempt to revise Appendix C since 2002, with absolutely no changes to Appendix C itself since 1990 we are hesitant to dedicate staff time to providing comments yet again. The CTUIR commented on the Corps request for input on Appendix C in 2002, published in the Federal Register, 67 Fed. Reg. 10821-22, and again in 2004, 69 Fed. Reg. 57662-64. To date there have been two “interim guidance” documents, one in 2002 and another in 2005 clarifying the shortcomings of Appendix C. To echo the comments of the CTUIR in 2002 and 2004, Appendix C is 16 years, at least 5 legislative revisions and numerous regulatory changes out of date. Appendix C is devoid of tribal consultation, fails to take into account the numerous, significant changes to the NHPA in the 1992 amendments, and utilizes definitions which are directly in conflict with the letter and the spirit of the law. To be perfectly clear: The Corps of Engineers should immediately abandon Appendix C and comply with 36 CFR § 800. This should be done rather than embarking on an open-ended “consultation” on an unambiguously flawed Appendix C. During the time allocated to revise Appendix C, the Corps should comply with the law as it is written and developing an alternative process as defined in the NHPA.

For the record, I have attached the comments of the CTUIR to the 2002 Federal Register notice to revise Appendix C, and the CTUIR comments to the 2004 Federal Register notice.

The Corps seems perpetually consumed by an artificial distinction between NHPA Section 106 obligations on Corps owned lands and their obligations as a regulatory body effecting private lands. Another agency with similar responsibilities, the Federal Communication Commission has addressed this issue in a nationwide Programmatic Agreement, as have many other agencies under 36 CFR § 800.14, Subpart C. This is the appropriate avenue for the Corps to address an alternative process rather than relying on prophylactic “interim guidance” band-aids to address critically deficient regulations.

The proposed General Condition language to omit reference to Appendix C is appropriate. However, the reference to “current procedures for addressing the requirements of Section 106” of the NHPA is not appropriate. The General Condition should reference 36 CFR § 800, as it is the only current process authorized by the ACHP for the Corps to comply with their Section 106 responsibilities. Unless and until the ACHP concurs in the Appendix C regulations, they are a nullity. The Corps, if it desires an alternative Section 106 process, can develop alternate procedures in the 36 CFR § 800.14 process. Until this process is followed, the Corps is mandated by law to follow the currently existing ACHP regulations.
The CTUIR DNR looks forward to hearing from you regarding our request for an extension of the comment period through January 31st, 2007. We hope to work directly with Corps staff in the next two months to address the issues identified in this letter and further discussions on Nationwide Permits. If you have any questions, please feel free to contact Audie Huber, Intergovernmental Affairs Manager at 541-966-2334.

Sincerely,

[Signature]

Eric Quaempts, Director
Department of Natural Resources

Cc: NATHPO, D. Bambi Kraus
    ACHP, Valerie Hauser, Tribal Liaison
    DOD, Paul Lumley, Senior Tribal Liaison
    Corps, Georgeie Reynolds, Tribal Liaison
U.S. Army Corps of Engineers  
Attn: CECW-MVD (David B. Olson)  
441 "G" Street, NW,  
Washington, DC 20314-1000  

Dear Mr. Olson,

The Confederated Tribes of the Umatilla Indian Reservation (CTUIR) Department of Natural Resources (DNR) appreciates the opportunity to comment on the advance notice of proposed rulemaking (ANPRM) regarding disposition of Appendix C of 33 CFR § 325 (Appendix C) for the Army Corps of Engineers (Corps). 69 Fed. Reg. 57662-64, September 27, 2004. I have attached our earlier comments to the March 8, 2002 Federal Register solicitation of comments addressing the 1992 National Historic Preservation Act (NHPA) amendments and the subsequent revisions of the Advisory Council on Historic Preservation (ACHP) regulations. I believe these earlier comments are useful in identifying some of the major flaws within Appendix C. However, after reviewing these comments again, Appendix C, as well as the most recent permutation of the NHPA § 106 regulations, 69 Fed. Reg. 40544-555, I believe the only realistic option is for the Corps to revoke Appendix C and use the 36 CFR § 800 regulations. The reasons for this are manifold, but most importantly, the existing Appendix C is so far out of date, fixing it would require more work than starting over with the regulatory requirements as currently adopted by the ACHP.

As noted in the ANPRM, the NHPA has been amended since Appendix C was adopted in 1990, as have the regulations. To be specific, § 101 of the NHPA was amended in 1992 (P.L. 102-575), 1994 (P.L. 103-437), 1996 (P.L. 104-333), 1999 (P.L. 106-113), and 2000 (P.L. 106-208). In short, Appendix C is some 14 years, 5 legislative enactments and numerous regulatory revisions out of date. This and the fact that the process within Appendix C is so different from the existing § 106 process makes the third alternative proposed, “Revoke Appendix C and use 36 CFR part 800, subpart B for all individual permits and general permits” the preferred option. However, the ANPRM does not explain why only subpart B would be applicable. It is our understanding that subpart A, the purposes and participants of the § 106 process, is just as relevant to the Corps as is subpart B. It is our recommendation that the Corps comply with both subparts A and B.
Without rehashing the CTUIR letter from 2002, these are a few of the obvious problems of Appendix C:

- The terms “Historic Property,” “Local Governments” and “Undertaking,” have definitions under the law. The definitions should be taken from the legislative language. For example, regulations contained at 36 CFR § 61.2 state “(a) All terms that the National Historic Preservation Act of 1966, as amended, defines have the same meaning in the regulations in this part that the statute provides[.]”

- The definition of “Permit Area” loosely mirrors the definition of “Area of Potential Effect” contained at 36 CFR § 800.16(d). We would recommend abandoning new terms and stick to the language of the law and ACHP regulations in order to avoid ambiguity and litigation.

- The general policy references consideration of effects of undertakings on historic properties under § 110(f) of the NHPA but does not, at any time in Appendix C, reference § 106 of the NHPA. This should be corrected.

The ANPRM cites EO 13175 and the DoD American Indian and Alaskan Native Policy. I believe the CTUIR letter of 2002 addresses the consultation obligation above and beyond statutory mandates including the trust responsibility and will not repeat those points here. However, the ANPRM, rather cryptically, requests comments on the applicability of the American Indian and Alaskan Native Policy to the Corps Regulatory Program itself. To be clear and leave no doubt, the Corps American Indian Policy and the trust responsibility mandating fiduciary obligations on the part of the Corps managing treaty reserved resources, does apply to the activities of the Corps Regulatory Program. This requires consultation early and often in the decision making process. To assist this understanding, I have attached the CTUIR definition of consultation at a Government to Government level.

Finally, it is disturbing that the Corps is issuing essentially the same request in an ANPRM in 2004 as they did in a request for comments in 2002, 67 Fed. Reg. 10821-22, without any change in the interim. The 1992 amendments to the NHPA were significant revisions to the structure of the law and how tribes are addressed under it. While we appreciate the move to change the regulations, we feel that twelve years is an excessively long time to wait for internal structural changes in how the Corps Regulatory Program handles permits under the NHPA. We would hope that the time-frame for implementation of training within the existing Corps Regulatory Program for compliance with 36 CFR § 800 is expedited.

If you have any further questions, please feel free to contact myself or Teara Farrow, Manager of the Cultural Resources Protection Program within DNR, at 541-276-3629.

Sincerely,

[Signature]

Audre Huber, Acting Director,
Department of Natural Resources
Confederated Tribes of the Umatilla Indian Reservation

CC: NATHPO, D. Bambi Kraus
ACHP, Marjorie Nowick

CTUIR Comments on Corps of Engineers 33 CFR § 325, Appendix C
Page 2 of 2
May 7, 2002

U.S. Army Corps of Engineers
Institute for Water Resources
CEIWR-PD
7701 Telegraph Road
Casey Building
Alexandria, Virginia 22315-3868

Dear Corps of Engineers:

Thank you for the opportunity to comment on the Corps Regulatory Program and the New Advisory Council on Historic Preservation (ACHP) 36 C.F.R. Part 800 Regulations. This letter constitutes the Confederated Tribes of the Umatilla Indian Reservation (CTUIR) Cultural Resources Committee comments regarding this matter. The Cultural Resources Committee looks forward to consulting with you on a policy level.

We would like to remind the Corps that as a federal agency you have a trust responsibility toward Indian tribes and must consult with us on activities which may affect treaty and trust resources. Policy Guidance Letter No. 57, Indian Sovereignty and Government-to-Government Relations with Indian Tribes, CECW PLG 57, 18 February 1988, states:

The U.S. Army Corps of Engineers will work to meet trust obligations, protect trust resources, and obtain Tribal views of trust and treaty responsibilities or actions related to the Corps, in accordance with provisions of treaties, laws and Executive Orders as well as principles lodged in the Constitution of the United States.

This legal obligation to consult is also contained in the various laws addressing cultural resources, including, but not limited to, the National Historic Preservation Act (NHPA), the Native American Graves Protection and Repatriation Act and the Archaeological Resources Protection Act. Additionally, the regulations rely on Executive Orders for guidance. Executive Order 13175, Consultation and Coordination With Indian Tribal Governments, November 6, 2000, states that federal agencies “shall respect Indian tribal self-government and sovereignty, honor tribal treaty and other rights, and strive to meet the responsibilities that arise from the unique legal relationship between the Federal Government and Indian tribal governments.”
Appendix C: Procedures for the Protection of Historic Properties as it currently exists is remarkable for its lack of involvement of Indian tribes. We anticipate that the revised version will mandate consultation with tribes when proposed projects will take place within their ceded lands as required in Section 101 of the NHPA. 16 U.S.C. 470a(d)(3). We recommend that the Corps make it clear that tribes are not simply interested parties and outline the Corps’ trust responsibilities regarding cultural resources. Specifically, tribes must be included at least in sections 2(d), 2(f), 3(b), 4(b), and 12. There is no mention of traditional cultural properties in Appendix C. Please include them in your definition of historic properties. To determine if tribal traditional cultural properties are within a proposed project area, consultation with tribes is essential.

The definitions section should be changed to be consistent with the NHPA and the ACHP implementing regulations, 36 C.F.R. 800. First, the definitions of “designated historic property” and “historic property” should be removed and replaced with the definition of “historic property” contained in 36 C.F.R. 800.16(l), which states:

(1) (1) Historic property means any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization and that meet the National Register criteria.

(2) The term eligible for inclusion in the National Register includes both properties formally determined as such in accordance with regulations of the Secretary of the Interior and all other properties that meet the National Register criteria.

The definition of “an effect” erroneously implies that a historic property must be designated a historic property prior to the effect triggering application of the NHPA. The appendix should define an “adverse effect” consistent with the ACHP regulations, 36 C.F.R. 800.5(a)(1), which state:

An adverse effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property’s location, design, setting, materials, workmanship, feeling, or association. Consideration shall be given to all qualifying characteristics of a historic property, including those that may have been identified subsequent to the original evaluation of the property’s eligibility for the National Register. Adverse effects may include reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance or be cumulative.

Section 2(f) of Appendix C states, “The Corps will make every effort to provide information on historic properties and the effects of proposed undertakings on them to the public by public notice within the time constraints required by the Clean Water Act.” We believe that the Corps needs to also ensure compliance with the NHPA. If the permit the Corps is issuing will allow
ground-disturbing activity, then the proposed project is an undertaking and requires compliance with the NHPA, which has its own time constraints.

Additionally, we are troubled by the notion that the Corps may be sharing sensitive information about historic properties with the public. Section 4(a) also indicates the Corps will be sending information about historic properties to interested citizens. The NHPA specifically notes that certain data regarding historic properties, most notably their location, are exempt from the Freedom of Information Act. Section 4(c) acknowledges this fact, but states that sensitive information will be withheld if the district engineer or Secretary of the Interior determines that such information will “create a substantial risk of harm, theft, or destruction to such resources.” If the Corps is redrafting the regulations in order to make them more readily implemented by staff, we would strongly recommend that information regarding historic properties be withheld unless it is determined that releasing it will not risk harm to the historic resource. If, on the other hand, the Corps lacks the authority to deviate from the language of the NHPA, then the standard applied in 4(c) is inappropriate and should comport with the statutory language. The section should be amended to read:

c. Locational and sensitive information related to archeological sites is excluded from the Freedom of Information Act (Section 304 of the NHPA and Section 9 of ARPA). If the district engineer or the Secretary of the Interior determine that the disclosure of information to the public relating to the location, character or ownership of a historic resource may cause a significant invasion of privacy, risk harm to the historic resource, or impede the use of a traditional religious site by practitioners then the district engineer will not include such information in the public notice nor otherwise make it available to the public. Therefore, the district engineer will furnish such information to the ACHP, the SHPO, and the relevant Tribal Historic Preservation Offices by separate notice.

The language as drafted gave the impression that a “substantial” risk of harm, theft or destruction was necessary before information is withheld. This is not accurate. There need only be a risk of harm to a historic resource to necessitate withholding information. In the statutory language, the word “significant” modifies the word “invasion” only, as is plainly apparent from a reading of the NHPA in its statutory form.

We believe that section 3(a) needs to be clear that often it will be necessary to conduct cultural resource surveys and possibly testing to determine whether or not historic properties are within the proposed project area. Merely reviewing the properties listed in the National Register is not sufficient as the vast majority of properties which are considered eligible for inclusion in the National Register are not included in it. It is our understanding that, at least in the Portland District right now, the Corps simply sends a notice of the proposed project to the State Historic Preservation Office (SHPO) and if they do not hear from that office, they consider there will be no historic properties effected by the proposed project. The Oregon SHPO is understaffed and underfunded and we are dubious that it is able to review all proposed projects.

Section 3(b) indicates that some undertakings have little likelihood of affecting historic properties. We do not believe the district engineer is qualified to make that determination. The
Corps must have SHPO concurrence on whether or not historic properties will be affected. If the Corps wishes to categorically exempt certain projects, we recommend you develop a programatic agreement with the appropriate SHPO.

It is not clear from Appendix C who is making decisions about eligibility and the effects a project may have on a historic property. There is no mention of the Corps cultural resource staff anywhere in Appendix C. The district engineer is making all decisions. Presumably his or her cultural resource staff would advise him or her, but in our experience, those decisions are made at the regulatory level. We do not believe the regulatory staff is qualified to make such decisions. We believe that if revising these regulations takes place with the goal of ensuring compliance with the National Historic Preservation Act, most of our comments will be properly addressed.

We look forward to consulting with you further regarding this matter. We feel we will be able to provide even more substantial comments when you provide us with a draft of your new regulations to review. We would appreciate a response to this letter including the anticipated date for distribution of the new draft regulations. You may contact me at 541-276-3165 or Jeff Van Pelt, Program Manager, Cultural Resources Protection Program at (541) 276-3629.

Respectfully,

Armand Minthorn, Chair
Cultural Resources Committee
Member, Board of Trustees

AM/ced:abf

cc: Leland Gilsen, Oregon State Historic Preservation Office Archaeologist
    Robert Whittam, Washington State Archaeologist
    Lynda L. Walker, Army Corps North Pacific Region, Tribal Liaison, Portland District
    Jeff Van Pelt, Program Manager, Cultural Resources Protection Program
    Valerie Hauser, Advisory Council on Historic Preservation, Native American program coordinator
The Confederated Tribes of the Umatilla Indian Reservation

Consultation: Government to Government (or otherwise)

WHAT IS CONSULTATION?


Consultation is the formal process of negotiation, cooperation and policy-level decision-making between the Confederated Tribes of the Umatilla Indian Reservation (CTUIR) and the United States federal government. As such, consultation is the bilateral decision-making process of two sovereigns: the Confederated Tribes of the Umatilla Indian Reservation and the United States Government.

It is critical to understand that consultation is not just a process or a means to an end. Rather, consultation is the process that ultimately leads up to and includes a decision. The most important component of consultation is the ultimate decision. Consultation then is the formal effort between two sovereigns of making policy level decisions.

It is equally important to understand what consultation is not. Consultation is not notifying a Tribal government that an action will occur, requesting written comments on that prospective action, and then proceeding with the action. In this scenario the decision is not affected. This is not consultation.

WHAT ARE THE OBJECTIVES OF CONSULTATION?

a. Assure that CTUIR Board of Trustees understands the technical and legal issues necessary to make an informed policy decision.

b. Improved policy-level decision making of both CTUIR and federal government.
c. Bi-lateral decision making among sovereigns (co-management).

d. Protection of CTUIR lifestyle, culture, religion, economy.

e. Compliance with Tribal laws.

f. Compliance with federal Indian law; federal statutes; federal policy.

g. Develop and achieve mutual decisions.

h. Improve the integrity and longevity of decisions.

HOW DOES CONSULTATION WORK?

Consultation works through the same procedures and steps that are common-place for most federal agencies: technical meetings and policy meetings. From a practical standpoint, consultation requires an ability to differentiate between technical and policy issues; this allows for proper technical level staff consultation and then policy-level consultation for those issues that remain unresolved or for those issues that are clearly only resolvable at the policy level. Consultation is the process of coming to common understanding of the technical and legal issues that affect or are affected by a decision. Consultation is using this common understanding to make a decision.

Consultation does not portend to mandate a certain decision; most Tribal governments are much more willing to address cooperatively a decision that on the surface is distasteful than if they had not been thoroughly consulted with prior to facing that distasteful decision.

Meaningful consultation requires that federal agencies and Tribes understand respective roles and have a basic understanding of the legal underpinnings of the government-to-government relationship, including the responsibility of the federal government under the Trust doctrine. In addition, federal agencies will benefit from some understanding of tribal culture, perspectives, world view, and aboriginal rights. Tribal governments must understand the policy decision-making authority of the federal agency. Tribal governments must understand the non-tribal politics of the federal agency decision that consultation will affect.

Tribal governments must also understand the federal and state laws within which the agency must operate. In these examples, it is critical to note that a Tribal government cannot understand the politics of the federal agency decision without personal communications. Similarly, the federal agency cannot understand the Tribe’s world view unless agency staff meet with the Tribe to discuss that world view. The lesson here is that consultation has a foundation of communication. Without communication, consultation is thwarted and a mutual decision is impossible.

Thus in a hypothetical example, consultation works like this:
1. Federal agency contacts Tribal government to advise of an impending project proposal or to conduct an activity that may or may not impact a tribal resource or issue.\(^1\)

2. CTUIR responds back that this issue is important and that it would like to initiate consultation. CTUIR requests federal agency technical experts meet with CTUIR technical representatives (or CTUIR requests a policy level meeting).

3. Consultation has been initiated. Technical staff meets. Technical and legal issues are discussed; the result is that CTUIR staff understand the proposal and federal agency staff understand at technical level why this proposed activity is of concern. This allows respective technical staff to brief respective policy entities and to provide informed opinions and recommendations.

4. CTUIR staff brief the proper Tribal policy entity. Consultation steps are defined, written down and then transmitted to federal agency.\(^2\) Agreement is reached upon this consultation process.

5. Additional meetings are held, if necessary, leading up to the decision.

6. Federal agency and CTUIR formulate a decision. Ultimately and optimistically this decision is consistent with federal laws and tribal laws and policies. This means the decision is consistent with applicable natural and cultural resource laws and policies, with the Doctrine of Trust Responsibility and with federal Indian law. For the CTUIR specifically, it means the decision protects the resources to which the CTUIR has specific aboriginal and treaty reserved rights, protects the unique culture and world view and enables continued practice of the Tribal religion.

Most important is that leading up to the decision, the Tribal Government and the federal government have communicated. Mutual understanding and trust have been developed. Without mutual understanding and mutual trust a mutual decision is nearly unthinkable. History is replete with examples of such failures. In any event, the CTUIR perspective regarding the decision to formally consult or not to consult is that these entities required by law or policy to consult with Tribes is obviously to consult, or at the minimum, ask the CTUIR. The consequences of consulting when not required is preferred to these consequences of misjudging and not consulting when required.

\(^1\) It is crucial to note here that the federal agency contacted the CTUIR because of an impending decision that the federal agency will have to make in the near future. Remember, it is that decision that consultation is focused upon. Also note that, depending upon the issue, the CTUIR could have contacted the federal agency to initiate consultation.

\(^2\) These steps are usually no more complicated than additional technical level meetings, later policy level meetings, potential mutual measures to obtain additional information, and finally a policy level meeting to make the ultimate decision.
Mr. John Nau  
Chairman  
Advisory Council on Historic Preservation  
1100 Pennsylvania Avenue, Suite 803  
Washington, DC 20004  

Dear Mr. Nau:

Enclosed is my most recent concept proposal for replacing 33 CFR 325, Appendix C, with an updated Rule or Alternate Procedure that I believe complies fully with the National Historic Preservation Act, as amended. This proposal establishes processes for the regulated community, consultants, preservation officers, and your agency to achieve historic preservation objectives collaboratively while enabling important development activities to move forward as intended by Congress. I appreciate your support over the past few years as our respective staff have discussed issues and attempted to come up with solutions.

Several months ago, the Office of Management and Budget (OMB) offered to lead an interagency coordination process in an attempt to resolve remaining issues and produce a draft Rule and/or Alternative Procedure that could be published in the Federal Register for public and agency review and comment. I believe that we have reached the point where the best approach is to move my proposal forward into the public forum, and see if information and comments received can assist us as we work to resolve the last few remaining issues, such as the definition of undertaking, determining the proper regulatory scope of analysis and area of potential effect, and establishing parameters for coordination, research, and study activities. After the expenditure of significant Army resources and staff time, I believe that we should allow the public we serve to assist us with their views and recommendations, and then figure out how best to integrate NHPA requirements with the Corps' authorities and its specifically-defined Federal regulatory scope of jurisdiction under the Clean Water and Rivers and Harbors Acts.

This office and the Corps volunteered to work with the ACHP to revise and improve, or replace, Appendix C several years ago. As this Administration comes to a close, I urge you to join with me to see that both the development and historic preservation communities have a clear regulatory way forward in 2009, a way forward that achieves the objectives of both communities, and that finds ways to identify and achieve shared objectives. I believe that it is both administratively efficient and consistent with the intent of Congress to consider the same factors in establishing the
scope of analysis for NEPA purposes and the area of potential effect for NHPA section 106 purposes. In fact, 36 CFR Part 800 encourages Federal agencies to use existing procedures and guidance (e.g., App. B), and acknowledges that any Alternate Procedures that are developed should be tailored to meet the needs of Federal agencies consistent with their missions and authorities. The Army’s regulatory program affects over $220 billion in economic development annually, and does a fantastic job, overall, protecting both natural (aquatic) and cultural resources. Very few of the 110,000 annual written authorizations processed by the Corps for tribes, local governments, private entities and other agencies have required my specific attention, or resulted in disputes that cannot be resolved at the field level.

If you believe we can reach a mutually acceptable agreement predicated on the enclosed proposal please let me know along with any ideas you may have on how to complete a Rule and/or Alternate Procedure this year or very early in 2009. If we cannot reach agreement on a way forward the Corps will continue to rely on Appendix C for its section 106 activities for the Regulatory Program, but it is my hope and belief that the concept proposal can serve as the basis for a revised approach that will better protect historic and cultural resources while allowing the Regulatory Program to continue fulfilling its core missions. Your Executive Director may contact Chip Smith of my staff at 703-693-3655, or by email at Chip.Smith@hqda.army.mil.

Very truly yours,

[Signature]
John Paul Woodley, Jr.
Assistant Secretary of the Army
(Civil Works)

Encl
Corps of Engineers Regulatory Program
Rule/Alternate Procedure (AP) Key Concepts - Section 106, National Historic Preservation Act (NHPA)

Introduction. The Corps is updating Appendix C (Historic Properties) to 33 CFR 325 (ca. 1990) in order to more efficiently comply with the 1992 amendments to the NHPA and its implementing regulations at 36 CFR 800 (2000, 2001). The new rule/AP will greatly improve and enhance the Corps ability to more consistently consider effects to historic properties, consult with American Indian and Alaska Native governments (Tribes), and evaluate proposed development activities requiring Department of the Army permits to be evaluated quickly and effectively.

Purpose. The rule/AP will enable the Corps to take into account the effects of activities proposed by Tribes, other agencies, non-governmental organizations, and private citizens affecting waters of the United States, including wetlands, on historic properties as defined by the NHPA. The rule/AP addresses consultation and coordination requirements, public involvement, integration with NEPA, time frames, and documentation requirements.

Applicability. The rule/AP will only apply to “undertakings” (defined below) under section 404 of the Clean Water Act (CWA), sections 9 and 10 of the Rivers and Harbors Act (RHA), and section 103 of the Marine Protection, Research, and Sanctuaries Act (MPRSA) of 1972, as amended. The rule/AP will not apply to water resources projects of the Corps Civil Works Program.

Regulatory Program Mission. By law and regulation, the Regulatory Program protects the Nation's aquatic resources and environments, while allowing reasonable development through fair, flexible and balanced permit decisions. The Corps regulatory authority and responsibility is limited to the placement of dredged and fill material, and structures, into waters of the United States, including navigable waters and wetlands. The Corps balances the reasonably foreseeable benefits and detriments of proposed projects, and makes permit decisions that recognize the essential values of the Nation's aquatic ecosystems to the general public, as well as the property rights of private citizens who wish to develop their land. The Corps strives to make its permit decisions in a timely manner, minimizing impacts to the regulated public. Section 404(a) of the Clean Water Act states that the Corps must regulate discharges of dredged or fill material into specific areas (navigable waters):

“The Secretary may issue permits, after notice and opportunity for public hearings for the discharge of dredged or fill material into the navigable waters at specified disposal sites. Not later than the fifteenth day after the date an applicant submits all the information required to complete an application for a permit under this subsection, the Secretary shall publish the notice required by this subsection.”
Undertaking. 36 CFR 800.16 defines "undertaking" as "a project, activity, or program funded in whole or in part under the direct or indirect jurisdiction of a Federal agency, including those carried out by or on behalf of a Federal agency; those carried out with Federal financial assistance; and those requiring a Federal permit, license or approval." Further, 36 CFR 800.3 states "The agency official shall determine whether the proposed Federal action is an undertaking as defined in § 800.16(y) and, if so, whether it is a type of activity that has the potential to cause effects on historic properties." A DA permit is required for three types of activities: discharges of dredge or fill material into waters of the US (CWA Section 404); placement of structures into navigable waters of the US (RHA Secs 9 and 10); and [the transportation of dredged material for the purpose of dumping it into ocean waters (MPRSA Sec 103)]. Hence, in accordance with the Advisory Council on Historic Preservation's (ACHP) regulations, any of these three types of activities are Federal undertakings to the extent they require a DA permit. Note that the Corps does not permit "projects" that involve these types of activities, only the specific activities required by statute to obtain DA permits. However, the Corps will consider the scope of the wider project when it determines the "area of potential effects" (APE) of an undertaking (see below). Also in accordance with ACHP regulations, District Engineers are solely responsible for determining whether a proposed activity constitutes an undertaking, and for defining the APE of any undertaking.

Types of Authorizations. The Regulatory Program provides two kinds of authorizations, Standard (SP) Permits and General Permits (GP). SPs are preferred after project-specific evaluations, application of the CWA Section 404(b)(1) Guidelines, completion of a public interest review, and completion of NEPA compliance (usually an EA or EIS and public notice). SPs can be completed in several months, but most often take a year or more. The second type of authorization is by GP. GP evaluations are not project-specific — rather GPs authorize "similar activities" resulting in minimal adverse effects to the aquatic environment with mitigation, are authorized in accordance with thresholds and permit conditions that are reissued every 5 years. Examples are the 49 Nationwide Permits issued by Corps Headquarters and numerous Regional Permits issued by Corps districts and divisions. Approximately 85% of DA authorizations are provided by GPs and in accordance with performance standards set by OMB and as set forth in Corps regulations, these authorizations are to be provided in 45 days or less.

Consultation with American Indian Alaksa Native Governments, and Native Hawaiian Organizations. If an undertaking has the potential to affect historic properties to which Federally-recognized Indian tribes or NHOs attach religious and cultural significance, the DE will initiate consultation, as appropriate. As a general rule, Public Notices alone are insufficient means to initiate and accomplish consultation. Districts are encouraged to consult with Indian tribes and NHOs to establish appropriate notification procedures. Such notification procedures should acknowledge that an effective consultation process requires active communication with Indian tribes and
NHOS, considering their interests during the decision-making process, in recognition of their sovereign status. Most work is usually accomplished at the staff level; however, in cases where policy agreements such as local consultation procedures are being developed, consultation must be carried out at the government-to-government (DE-Tribal government head) level.

**Views of Others.** During the permit process, the Corps considers the views of other Federal, state and local agencies, Federally-recognized Tribes, NHOS, interest groups, and the general public. Careful public interest review, public notices, and public meetings, all help the Corps achieve fair and equitable decisions that allow reasonable use of private property, infrastructure development, and growth of the economy, while offsetting any unavoidable impacts to the waters of the United States through compensatory mitigation.

**Area of Potential Effects (APE).** 36 CFR 800.16 defines APE as “the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist. The area of potential effects is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking.” DEs are responsible for making final determinations regarding the boundaries of the APE; however, DEs may seek the views of SHPOs/THPOs or their staff before establishing the APE in cases of complex or controversial projects, or projects having disproportionate impacts to historic properties.

- Within the context of the Corps Regulatory Program, the APE is the geographic area within which the proposed undertaking has the potential to directly or indirectly affect historic properties. The APE is influenced by the scope, scale and nature of the undertaking and may be different for different kinds of effects. In light of the Corps Regulatory Program’s mission requirements, the APE includes jurisdictional waters of the United States and associated upland areas or buffers as determined by the DE. Other areas may be incorporated into the APE if it is determined that sufficient federal control and responsibility exists.

- Generally, the establishment of the APE will follow the scope of analysis as defined in 33 CFR Part 325, *Appendix B-NEPA Implementation Procedures for the Regulatory Program*. The Corps believes it is both administratively efficient and consistent with the intent of Congress to consider the same factors in establishing the scope of analysis for NEPA purposes and the APE for NHPA Section 106 purposes.

**Subject Matter Experts.** DEs will, as appropriate, consult with qualified agency cultural resources staff, Tribal liaisons, and other points of contact, when implementing these procedures. The DE should identify staff in districts, divisions, labs, centers of expertise, and headquarters offices, and use them as needed.
Avoidance and Minimization. By regulation and policy, permit applicants must first consider avoidance and minimization of impacts to aquatic resources, including wetlands, before compensating for unavoidable impacts. This same philosophy, as a goal not a requirement, will be applied when considering effects to historic properties. Corps staff will work with applicants and consulting parties to avoid and minimize effects to historic properties, before authorizing activities requiring mitigation (e.g., data recovery, recording). At any time during permit processing, the DE may consult with applicants, SHPO/THPOs, Tribes, NHOs, and other parties to discuss and consider possible alternatives or measures to avoid or minimize the potential adverse effects of a proposed undertaking on historic properties.

District-Specific Procedures. DEs are encouraged to develop District-specific operating procedures with their SHPOs/THPOs and/or Tribal officials to streamline implementation of these procedures and provide for expedited reviews and/or additional exempt activities. District-specific operating procedures may be used for the similar types of undertakings within or across district boundaries. These procedures can be tailored to applicable SHPO/THPO processes, geographic-hydrogeomorphic considerations, and regional cultural (historic property) characteristics. DEs may develop and execute procedures and agreements without formal ACHP participation. A copy of final District-specific procedures shall be forwarded to the ACHP for information. No district-specific program or procedure may supersede or nullify the procedures found at 36 CFR 800 or this rule/AP.

Permit Evaluation Process. Under its regulations (33 CFR 320-331), the Corps regulates activities affecting WOUS on private property, trust lands, land under the management and jurisdiction of other governmental entities, and NGOs. Both the RHA and CWA envision that economic development activities will be proposed, hence these statutes and their implementing regulations circumscribe processes for evaluating project proposals, and authorizing those proposals where impacts to aquatic resources are not contrary to the overall public interest. In addition to the requirements of the NHPA and other environmental laws (Endangered Species and Magnuson-Stevens Acts), effects to historic properties as defined by the NHPA are also considered under the NEPA per 33 CFR part 325, Appendix B) and in accordance with the Corps’ public interest review requirements (33 CFR 320.4). As a general rule, prospective applicants are encouraged to engage early and often with the Corps, during the planning phase of a proposed undertaking; however, pre-application meetings with the Corps are not required to obtain a permit. During pre-application meetings with prospective permit applicants DEs will encourage the consideration of possible effects to historic properties at the earliest practical time in their planning process. In addition, DEs will disclose information regarding any known historic properties that may be affected by a proposed undertaking. Permits are preferred when it has been determined that an activity is not contrary to the public interest.

No Potential to Cause Effects and Minimal Effects. If it is determined by the Corps that a proposed activity meets the definition of an undertaking, DEs must establish whether it is a type of activity that has the potential to cause effects on historic
properties. In certain instances, the nature, scope, location, and magnitude of the work and/or structures to be permitted may be such that it is reasonable to presume that there is no potential to cause effects on historic properties. Three such situations are:

- Undertakings in areas/contexts that have been extensively modified. In such areas, historic properties that may have at one time existed within the APE may be presumed to have been lost unless specific information indicates the presence of such a property.

- Undertakings in areas which have been created in modern times. Some recently created areas, such as dredged material placement areas, have had no human habitation. In such cases, it may be presumed that there is no potential for the existence of historic properties unless specific information indicates the presence of such properties.

- Certain types of work or structures (e.g., minor maintenance, cleaning, repair, painting, re-installing, rejuvenation) that are of such limited nature and scope that there is little likelihood of impinging upon a historic property even if such properties were to be present within the APE.

In addition, certain categories of activities typically have minimal effects or no adverse effects on historic properties based on the nature and overall scope of the activity (see attached list) and upon programmatic review at least every 5 years are exempt from additional case-by-case section 106 review. While these activities are generally not expected to result in adverse effects on historic properties, districts are encouraged to initially coordinate with the SHPO/THPO, Tribes and NHOs to identify areas within their district's boundaries that are likely to yield a high concentration of historic properties. Activities proposed in these areas would not necessarily be exempt from further section 106 review. Following review and documentation, if there is a determination of "no potential to cause effects," the Corps has no further obligations under section 106 or these procedures, except in the case of an inadvertent discovery.

**Historic Properties Discovered During Construction.** After permit issuance, if the applicant discovers a previously unknown historic property may be affected by accomplishing the activity authorized by the permit, he shall immediately contact the DE with information on the discovery. The Corps shall initiate Federal and state coordination required under Section 106 of the National Historic Preservation Act to determine the eligibility of the site under the NRHP and the need for additional recovery or preservation efforts. The DE shall seek voluntary avoidance of the discovery during the review process. Depending on the circumstances of the discovery and the potential effects, the DE shall also consider modification, suspension, or revocation of the permit under 33 CFR 325.7 until review is complete.

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Identification and Evaluation of Historic Properties within the APE. Except to determine the presence of historic properties of religious and cultural significance to Tribes and NHOs, the DE shall identify historic properties within the APE by reviewing the following formal records:

(1) Properties listed on the National Register of Historic Properties or National Landmark Properties;

(2) Properties formally determined eligible for listing by the Keeper of the National Register;

(3) Properties that the SHPO/THPO certifies are in the process of being nominated to the National Register;

(4) Properties previously determined eligible as part of a consensus determination of eligibility between the SHPO/THPO and a Federal agency; and,

DEs shall make reasonable and good faith efforts to carry out appropriate identification efforts within the APE by reviewing such records to the extent they are available. Where review of such records indicates that an undertaking may have an effect on a historic property within the APE, DEs will take into account past planning, research and studies, the magnitude of the undertaking and the degree of federal involvement, the nature and extent of potential effects on historic properties, and the likely nature and location of historic properties within the APE. DEs will also take into account any confidentiality concerns raised by SHPOs/THPOs, Tribes, NHOs, or property owners during the identification process.

If, in consultation with qualified in-house personnel and/or in consultation with SHPOs/THPOs, DEs determine that adequate evidence exists to justify additional investigations to determine whether historic properties are present within the APE, the applicant may be required to conduct an investigation. Any additional requests for information must be documented in the administrative record, along with an explicit justification to the applicant if additional information is requested. Requests for surveys may not be made for the purpose of initiating consultation. Information of an anecdotal nature is not sufficient to warrant surveys or other investigations. Traditional cultural knowledge pertaining to historic properties of religious and cultural significance to Indian tribes and NHOs may be considered.

DEs cannot require investigations of historic properties on land located outside of the established APE. However, indirect effects to known historic properties located outside the APE may be considered during the evaluation process.

Emergency Procedures. Division engineers are authorized to approve special processing procedures in emergency situations. An "emergency" is a situation which would result in an unacceptable hazard to life, a significant loss of property, or an immediate, unforeseen, and significant economic hardship if corrective action requiring

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a permit is not undertaken within a time period less than the normal time needed to process an application under standard procedures.

- When an emergency undertaking is essential and requires immediate response, or for a disaster or emergency declared by the President, a Tribal government, or the Governor of a State, or if there is an imminent threat to life, property, human health, or human safety, the DE will explain the circumstances and recommend special procedures to the division engineer who will instruct the DE as to further processing of the application.

- Even in an emergency situation, reasonable efforts will be made to receive comments from interested Federal, Tribal, NHO, State, and local agencies and the affected public. Also, notice of any special procedures authorized and their rationale is to be appropriately published as soon as practicable. These procedures apply to undertakings that are implemented either 45 days in advance of an imminent emergency or disaster situation or within 45 days after the emergency or disaster has been declared. DEs are encouraged to develop specific local procedures with THPOs and SHPOs.
CF:
SACW (Sign, File)
OSD- ATL (Beehler)
OSD-OGC (Van Ness)
OGC (Schmauder)
CECW-ZB (Stockton)
CECW-O (Hannon)
CECW-OR (McLaughlin)
CECW-IF (Reynolds)

Dr. John D. Fowler
Executive Director
Advisory Council on Historic Preservation
1100 Pennsylvania Avenue, Suite 803
Washington, DC 20004

Mr. Mark A. Sadd
Chairman, Federal Agency Programs Committee
Advisory Council on Historic Preservation
1100 Pennsylvania Avenue NW, Suite 809
Washington, DC 20004

The Honorable Alex Beehler
Acting Principal Deputy Under Secretary of Defense (I&E)
3015 Defense Pentagon, Room 3C553A
Washington, DC 20301-3015

Mr. James Laity
The Office of Management and Budget
Office of Information and Regulatory Affairs (OIRA)
725 17th Street, NW
Washington, DC 20503

Dr. John Eddins
Advisory Council on Historic Preservation
1100 Pennsylvania Avenue, NW, Suite 803
Washington, D.C. 20004

J:SHAREDSMITH CHIP APPENDIX C REVISIONNAU 10SEP08 V3 LETTERHEAD
October 9, 2008

Honorable John Paul Woodley, Jr.
Assistant Secretary of the Army for Civil Works
Department of the Army
108 Army Pentagon
Washington DC 20310-0108

Dear Secretary Woodley:

Thank you for your letter dated September 23, 2008, transmitting the Corps’ summary concept proposal for how it would propose to revise or replace Appendix C and develop an approved alternative to the procedures set forth in subpart B of 36 CFR 800. Your letter suggests that the ACHP and the Corps are in fundamental agreement and there are only a “few remaining issues” to work through. Unfortunately, I cannot agree with your characterization. Although the ACHP has continued to stress the need for the procedures in the concept proposal to be consistent with the 36 CFR Part 800, I do not believe that the Corps has chosen to address this fundamental issue. Thus our respective agencies remain at odds over the appropriateness of your current proposal.

Let me also state at the outset that Mr. Chip Smith’s follow up to the transmittal of your proposal conveyed a note of impatience with the ACHP that I do not appreciate. Apparently he was not fully aware of the disruption caused by Hurricane Ike in Texas, which had significant impacts on my operations and responsibilities.

We see three major problems with the Corps’ concept proposal:

- The definition of undertaking;
- The definition of Area of Potential Effects (APE); and
- The nature of consultation required in the Section 106 process.

These are fundamental issues that define the Corps’ obligations with regard to historic properties and the rights of stakeholders to participate in the Corps implementation of Section 106.

In its concept proposal, the Corps continues to avoid consideration of the larger project that encompasses and is dependent on the permitted activity. The Corps would redefine the APE to mean only the area directly affected by the permitted activity and any “directly associated” upland area. Thus, in the case of a large residential development requiring a Corps permit to be placed within the bounds of a Civil War battlefield, the undertaking, following the Corps’ definition, would only include the area directly impacted by the fill and possibly any area of “directly related” uplands that influences the specific location of the fill. Though the Corps suggests that it may consider indirect effects from the permitted actions to significant properties outside its restricted APE, it apparently will not consider the direct or indirect effects of the housing development as a whole on the landscape of the battlefield. The definition of APE in the ACHP’s regulations clearly...
specifies that the APE includes the geographic area or areas within which an undertaking requiring a Federal permit may directly or indirectly affect historic properties. Therefore, in the above illustration, the Corps must consider the effects that the proposed housing development will have on the battlefield.

Over the years, a major ACHP concern with Appendix C has been its failure to properly reflect the Corps’ responsibility to recognize the true extent of an undertaking’s effects. The latest concept to use the NEPA-based Appendix B approach does not in any way resolve that issue. Rather, it reinforces the problem by making the Corps’ scope of review less clear and subject to arbitrary interpretation by District Engineers.

Finally, the current Corps procedures in Appendix C and those proposed in the concept proposal fail to adequately provide for consultation with Section 106 stakeholders. Section 106 requires that the Federal agency take steps to inform the public and elicit and consider their concerns while also identifying appropriate stakeholders to be invited into the consultation process as consulting parties. Consultation, “the process of seeking, discussing, and considering the views of other participants, and, where feasible, seeking agreement with them regarding matters arising in the section 106 process,” is at the heart of the Section 106 process. The Corps’ current procedures for dealing with General Permits, and those proposed in the concept proposal, do not acknowledge this obligation and do not meet this central standard of the Section 106 process.

In embarking on our collaborative effort to modify Appendix C, I understood our mutual goal was to achieve a reasonable, workable compromise that balanced an efficient permit process with an appropriate level of consideration for the effects on historic properties. Toward that end, the ACHP proposed an alternative that acknowledged the Corps’ “small Federal handle” on these permitted activities. Modeled on the successful approach set forth in the national programmatic agreement with the Federal Communications Commission for the build out of cellular towers, the alternate approach ACHP recommended would offer significant streamlining while ensuring that effects on important historic resources were addressed in the permit approval process. I continue to believe that this approach holds out great promise for striking a reasonable balance and ultimately solving differences between the Corps and the ACHP that have divided us for many years. I regret that the Corps chose to reject this approach without first subjecting it to more careful analysis and consideration.

You suggest in your letter that the ACHP agree to the Corps publishing its concept proposal for public comment. Given the fundamental discrepancies noted above, I feel that I cannot take such a step. It is certainly the Corps’ prerogative to publish its proposal and the ACHP will not stand in the way of that. However, we cannot imply by our concurrence that the ACHP believes that the proposal meets either the legal standards of Section 106 or the policies that underlie the government-wide Section 106 procedures.

Despite this impasse, I want to reaffirm the ACHP’s willingness to work with the Corps to develop procedures to streamline the Section 106 process for the regulatory program. I also want to thank the Corps staff that have labored diligently in an attempt to find a better way forward.

Sincerely,

John L. Nau, III
Chairman
Mr. John Nau  
Chairman  
Advisory Council on Historic Preservation  
1100 Pennsylvania Avenue, Suite 803  
Washington, D.C. 20004

Dear Mr. Nau:

In view of your letter of October 9, 2008, I have instructed the Army Corps of Engineers to stand down its efforts to revise Appendix C, Historic Properties, the regulation currently in force for complying with section 106 of the National Historic Preservation Act under the Army’s Regulatory Program. It is unfortunate that we continue to disagree on the law and policy regarding the definitions of “undertaking” and “area of potential effect.” I regret that our legal and policy staff could not agree on how to address direct and indirect effects in a way that acknowledges that the Corps has limited jurisdiction over waters of the United States, including wetlands, involving private property or land under the jurisdiction of American Indian tribes or other agencies.

We evaluated most carefully the Federal Communications Commission (FCC) programmatic agreement on several occasions and repeatedly reported to your staff that for a number of reasons, this model would not work for the Army’s Regulatory Program. At several points in interagency discussions your staff acknowledged that they understood why the FCC approach would not work. I continue to believe that the most logical and legally defensible approach, as well as the approach with the most flexibility, is to use the Corps’ long-standing National Environmental Policy Act (NEPA) regulation (App. B) to help frame a reasonable, workable, balanced, and efficient regulatory scope of analysis. The Corps will therefore continue to use both Appendices B (NEPA) and C (Historic Properties), as these are the regulations that currently carry the force of law.

This office and the Corps teach a 3-day training course, Partnering with Indian Nations, that thoroughly addresses tribal consultation and Section 106 matters. Thus far, we have taught the course at six Corps district offices and trained about 350 staff. Corps Headquarters Regulatory Branch staff routinely assess the adequacy of the tribal and Section 106 aspects of their Regulatory Program training courses and adjust them, if necessary. This office will continue to work with the Corps to evaluate and update, as necessary, two interim guidance documents that were developed to address the amendments to the National Historic Preservation Act and the new 36 FR 800 regulations.
These actions will provide the protection of historic properties intended by Congress, while enabling critical economic development activities to continue moving forward consistent with the Corps regulatory programs. Although it would have been more desirable to update Appendix C, I am optimistic that the Corps will continue to fulfill its historic preservation requirements. The record shows that despite concerns about Appendix C expressed by your staff, since 1996 in cases involving nearly a million written authorizations, there has been only one case where consultation was terminated by the Corps, and less than 6 cases where this office received copies of letters asserting that a Corps District had foreclosed the ACHP’s opportunity to comment. I have confidence that the Corps Tribal and State Historic Preservation Officer staff will continue to find ways to resolve nearly all future cases at the local level.

Please do not hesitate to contact me if you wish to discuss this matter further.

Very truly yours,

John Paul Woodley, Jr.
Assistant Secretary of the Army
(Civil Works)
November 27, 2006

U.S. Army Corps of Engineers,
Attn: CECW–OR/MVD (David B. Olson),
441 G Street NW.,
Washington, DC 20314–1000

Dear Mr. Olson:

The Confederated Tribes of the Umatilla Indian Reservation (CTUIR) Department of Natural Resources (DNR) appreciates the opportunity to review the Corps of Engineers (Corps) solicitation of comments on the proposal to reissue and modify Nationwide Permits (NWP), general conditions and definitions. Due to the short time frame, the CTUIR DNR was unable to undertake an exhaustive review of the proposal. In the future, if consultation were initiated earlier in the process it would facilitate tribal involvement. For instance, the notice in the Federal Register occurred on September 26th, the letter to the CTUIR Chairman was dated October 3rd, received on October 18th and filtered down to staff in late October. Thirty days were lost in the 60-day review period due to poor communications. The CTUIR requests an extension of the comment period until January 31st in order to consult with the Corps on the nature of the Nationwide Permit process. During that time, we can further work with Corps staff to answer questions regarding how the program takes into account tribal interests, rights and resources. The following represent the preliminary comments of the CTUIR DNR on the NWP.

GC 16. Tribal Rights.

The current General Condition 16 states “No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.” The DNR would like to discuss with the Corps what threshold is used to determine whether tribal rights are implicated. Further, what metric is utilized to determine whether a right is impaired? If there is any guidance provided to applicants to determine whether tribal rights are impaired by a given activity, please provide it to us for review. The Federal Register notice does not provide any additional information.
GC 18. Historic Properties

The CTUIR DNR appreciates the fact that the Corps is considering revising the 33 CFR § 325, Appendix C guidance for Corps Regulatory Branch under the National Historic Preservation Act (NHPA). However, because this is at least the Corps’ third attempt to revise Appendix C since 2002, with absolutely no changes to Appendix C itself since 1990 we are hesitant to dedicate staff time to providing comments yet again. The CTUIR commented on the Corps request for input on Appendix C in 2002, published in the Federal Register, 67 Fed. Reg. 10821-22, and again in 2004, 69 Fed. Reg. 57662-64. To date there have been two “interim guidance” documents, one in 2002 and another in 2005 clarifying the shortcomings of Appendix C. To echo the comments of the CTUIR in 2002 and 2004, Appendix C is 16 years, at least 5 legislative revisions and numerous regulatory changes out of date. Appendix C is devoid of tribal consultation, fails to take into account the numerous, significant changes to the NHPA in the 1992 amendments, and utilizes definitions which are directly in conflict with the letter and the spirit of the law. To be perfectly clear: The Corps of Engineers should immediately abandon Appendix C and comply with 36 CFR § 800. This should be done rather than embarking on an open-ended “consultation” on an unambiguously flawed Appendix C. During the time allocated to revise Appendix C, the Corps should comply with the law as it is written and developing an alternative process as defined in the NHPA.

For the record, I have attached the comments of the CTUIR to the 2002 Federal Register notice to revise Appendix C, and the CTUIR comments to the 2004 Federal Register notice.

The Corps seems perpetually consumed by an artificial distinction between NHPA Section 106 obligations on Corps owned lands and their obligations as a regulatory body effecting private lands. Another agency with similar responsibilities, the Federal Communication Commission has addressed this issue in a nationwide Programmatic Agreement, as have many other agencies under 36 CFR § 800.14, Subpart C. This is the appropriate avenue for the Corps to address an alternative process rather than relying on prophylactic “interim guidance” band-aids to address critically deficient regulations.

The proposed General Condition language to omit reference to Appendix C is appropriate. However, the reference to “current procedures for addressing the requirements of Section 106” of the NHPA is not appropriate. The General Condition should reference 36 CFR § 800, as it is the only current process authorized by the ACHP for the Corps to comply with their Section 106 responsibilities. Unless and until the ACHP concurs in the Appendix C regulations, they are a nullity. The Corps, if it desires an alternative Section 106 process, can develop alternate procedures in the 36 CFR § 800.14 process. Until this process is followed, the Corps is mandated by law to follow the currently existing ACHP regulations.
The CTUIR DNR looks forward to hearing from you regarding our request for an extension of the comment period through January 31st, 2007. We hope to work directly with Corps staff in the next two months to address the issues identified in this letter and further discussions on Nationwide Permits. If you have any questions, please feel free to contact Audie Huber, Intergovernmental Affairs Manager at 541-966-2334.

Sincerely,

Eric Quaempts, Director
Department of Natural Resources

Cc: NATHPO, D. Bambi Kraus
    ACHP, Valerie Hauser, Tribal Liaison
    DOD, Paul Lumley, Senior Tribal Liaison
    Corps, Georgeie Reynolds, Tribal Liaison
January 31, 2007 (ERROR IN ORIGINAL, DATED 2006)

U.S. Army Corps of Engineers
Attn: CECW–OR/MVD (David B. Olson)
441 G Street NW.
Washington, DC 20314-1000

Re: CTUIR DNR Comments on Nationwide Permits

DELIVERED ELECTRONICALLY

Dear Mr. Olson:

The Confederated Tribes of the Umatilla Indian Reservation (CTUIR) Department of Natural Resources (DNR) appreciates the opportunity to review the Corps of Engineers’ (Corps) solicitation of comments on the proposal to reissue and modify Nationwide Permits (NWPs), general conditions and definitions. On November 27th, the CTUIR requested a 60-day extension to address individual details regarding the NWPs. After review of DNR’s original concerns from our November 27th letter, it is apparent that our concerns were justified and we reiterate our comments on General Conditions 16 and 18.

General Condition 16, Tribal Rights, states that “No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.” Further research of Corps records and conversations with Corps staff indicate that there exists no guidance within the Nationwide Permit process which tells potential permittees what is meant by “tribal rights,” nor what standard is used to determine their impairment. Unless and until the Corps develops some form of guidance to potential permittees regarding General Condition 16, there is essentially no Corps oversight of impacts to tribal rights. The Corps of Engineers has a Trust Responsibility to manage resources entrusted to their care so that resources secured by treaty for Indian tribes are protected from destruction or degradation. Under the Nationwide Permitting scheme, the Corps is exercising no oversight of tribal treaty-reserved rights or resources and is therefore breaching that Trust Responsibility. Worse still, Condition 16 suggests that the Corps is ensuring protection of tribal rights, when in fact the Corps appears to have no intention of doing so. To remedy this failure, the Corps has an obligation to consult with tribes to determine what tribal rights are and what actions the Corps must take to protect them. This could be done on a division or district level.
General Condition 18, regarding Historic Properties, should reference the 36 CFR § 800 regulations for compliance with the National Historic Preservation Act (NHPA). The draft conditions cite the Corps’ compliance with “the current procedures for addressing the requirements of Section 106 and the” NHPA. As of this date, the only lawful “current procedures” for the Corps to comply with the NHPA are in 36 CFR § 800. We would direct the Corps’ attention to a letter sent to the CTUIR on November 14th from Don T. Riley, Major General, U.S. Army, Director of Civil Works. The letter, in the attached Appendix C Fact Sheet, states that “The ACHP has never concurred in our counterpart regulations due to disagreements primarily on jurisdictional issues.” Further, the Fact Sheet states that “Appendix C lacks updated effect definitions, updated public involvement guidelines and does not address any tribal involvement.” Until the ACHP concurs in the Appendix C regulations, they are a nullity, enacted without legal force or effect. To quote our November 27th letter:

The Corps of Engineers should immediately abandon Appendix C and comply with 36 CFR § 800. This should be done rather than embarking on an open-ended “consultation” on an unambiguously flawed Appendix C. During the time allocated to revise Appendix C, the Corps should comply with the law as it is written. . .

If you have any questions, please feel free to contact Audie Huber, Intergovernmental Affairs Manager, at (541) 966-2334.

Sincerely,

[Signature]
Eric Quampts, Director
Department of Natural Resources

Cc: NATHPO, D. Bambi Kraus
    ACHP, Valerie Hauser, Tribal Liaison
    Georige Reynolds, Tribal Liaison COE
    Deborah Knaub, Seattle COE
    Diane Lake, Seattle COE
    Corrie Veenstra, Portland COE
    Barbara Creel, Portland COE
August 1, 2016

U.S. Army Corps of Engineers
Attr: CECW-CO-R
441 G Street NW
Washington, DC 20314-1000

Submitted Electronically to: NWP2017@usace.army.mil

Re: Reissuance of Nationwide Permits, Docket Numbers COE-2015-0017 and RIN 0710-AA73

To Whom It May Concern:

The Confederated Tribes of the Umatilla Indian Reservation (CTUIR) Department of Natural Resources (DNR) offers these comments regarding the reissuance of Nationwide Permits (NWPs). The CTUIR DNR is in communication with the Corps’ Portland District to consult on the reissuance of NWPs with plans to meet in the near future, but this letter is intended to describe our general concerns over NWPs. Our primary concern is that NWPs are not appropriate when Indian Treaty Rights are implicated by the proposed action. Two examples of problems caused by issuing NWP for projects affecting Treaty Rights are attached. In each instance the CTUIR objected to the use of generic NWPs because Treaty Rights were unaddressed. This is the fundamental flaw with this approach—NWPs do not look at indirect or cumulative effects on a case-by-case basis, and simply assume that indirect and cumulative effects are minimal. In our experience dealing with indirect and cumulative effects of construction in and along the Columbia River in the Pacific Northwest, development can have significant impacts, including impacts to the legal exercise of tribal Treaty Rights guaranteed by the U.S. Constitution.

The NWP process streamlines review of proposed activities in order to reduce the workload on regulatory staff by permitting routine activities assumed to have minimal individual and cumulative adverse effects. These activities often tend to be non-controversial, with limited complexity—but not always. The CTUIR DNR has found that many such projects, on closer examination, do in fact implicate Treaty Rights, often adding greater controversy and complexity. Two examples of this situation that the CTUIR has faced are illustrated in the attached letters. They involve two proposed NWPs: the Tesoro Savage Vancouver Energy Distribution Terminal, NWS-2013-0962, and the proposed Union Pacific Railroad Second Mainline in Mosier, Oregon, NWP-2014-364. Each of these projects has substantial potential impacts to Treaty Rights directly, indirectly and cumulatively, rendering them inappropriate for the simple, relatively cursory NWP process.
Tesoro Savage Vancouver Energy Distribution Terminal, NWS-2013-0962

Tesoro Savage is proposing to store and then transfer 360,000 barrels of oil per day from trains to ocean-going oil tanker vessels, which would make it the largest crude-by-rail transfer facility in the United States. The project was initially proposed under NWPs #3 and #12. The CTUIR engaged in government-to-government consultation with the Corps’ Seattle District Con and expressed our opposition to the use of NWPs for this project, one which would result in four additional trains of crude oil traveling daily through the Columbia River Gorge National Scenic Area and multiple tribal treaty fishing sites along the River. The Seattle District ultimately determined that an NWP was inappropriate, but only did so after a year of consultation with the CTUIR and other tribes. Considerable time and resources were spent that could have been better utilized by tribal and Corps staff on more beneficial matters than having to convince the Corps that impacts to Treaty Rights require careful analysis and review and cannot be addressed in a perfunctory analysis under the NWP process.

Union Pacific Railroad (UPRR) Second Mainline, Mosier, Oregon, NWP-2014-364

The UPRR Second Mainline track proposed for Mosier, along the Columbia River, is currently proposed for authorization under NWP #14, Linear Transportation Projects, and entails construction of four miles of track to create a 5-mile second mainline. The asserted project purpose is to improve efficiency. Information provided by UPRR staff indicates that this could increase rail traffic in the area by 25%. Such an increase in traffic poses a significant threat to treaty fishing from both increased risk to tribal members crossing the railroad tracks and from potential spills, such as the oil train derailment, spill and fire that occurred on June 3, 2016, in Mosier (which was within the footprint of this proposed project). The Portland District still intends to proceed under a NWP for this project, though we are still in consultation. In our meetings with the Portland District it was clear that a NWP would not look at indirect or cumulative effects on this or other similar/related projects, and that indirect and cumulative effects to Treaty Rights would not be considered. When asked whether an NWP could be rejected in the event its indirect impacts would have more than a *de minimus* impact on Treaty Rights, the answer we received was, “we don’t know.” Individual permits can be denied if they have more than a *de minimus* effect on Treaty Rights, whether directly or indirectly. Clearly NWPs should be treated the same, but if there is no case-by-case analysis of indirect effects of a NWP-authorized project, indirect effects to Treaty Rights will never be considered. The CTUIR is awaiting a response to our comments on NWP-2014-364.

NWPs do not examine cumulative or indirect impacts on Treaty Rights because they don’t analyze indirect or cumulative effects. This is a problem in the Northwest where proposed actions may affect Treaty Rights. Use of NWPs when Treaty Rights are implicated is therefore inappropriate. The CTUIR has commented similarly on other projects under NWPs including other linear transportation projects and dock upgrades, but the two examples above give the starkest instances in which NWPs are inappropriate and Individual Permits are necessary to ensure that tribal Treaty Rights are addressed in the review process.
The CTUIR DNR understands that NWP General Condition 17 prohibits NWP activities from impacting Treaty Rights; however, using NWPs that fail to examine indirect and/or cumulative effects virtually assures that Treaty Rights will not be adequately considered. We have consistently faced uphill battles trying to convince the Districts of this dilemma. We assert that clear Corps directives from headquarters that NWPs are not generally appropriate when tribal Treaty Rights are implicated would be helpful.

If you have any questions, please contact Audie Huber, CTUIR DNR Intergovernmental Affairs Manager, at 541-429-7228.

Respectfully,

Eric Quaemps, Director
Department of Natural Resources

Attachments:

Cc: Shawn Zinszer, Chief Regulatory Branch, Portland District
    Michelle Walker, Chief Regulatory Branch, Seattle District