



November 16, 2020

Brandon Clinton, Project Manager
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Regulatory Branch
Post Office Box 3755
Seattle, WA 98124-3755

Chehalis River Basin Flood Damage Reduction Project
c/o Anchor QEA
6720 South Macadam Street, Suite 125
Portland, Oregon 97219

RE: Quinault Indian Nation comments, Proposed Chehalis River Basin Flood Damage Reduction Project, Draft Environmental Impact Statement under National Environmental Policy Act; Application for a Department of the Army Permit, NWS-2014-1118

Dear Mr. Clinton and Chehalis River Basin Flood Damage Reduction Project:

On behalf of the Quinault Indian Nation (“Quinault,” “Nation,” or “Quinault Nation”), Earthjustice provides these comments regarding the Draft Environmental Impact Statement (“DEIS”) for the Proposed Chehalis River Basin Flood Damage Reduction Project (“Project” or “dam/levee Project”) prepared for the Corps pursuant to the National Environmental Policy Act (“NEPA”).

The Chehalis River Basin Flood Control Zone District (“Applicant” or “FCZD”) seeks a Clean Water Act Section 404 dredge/fill permit from the United States Army Corps of Engineers (“Corps”) to build a Flood Retention Expandable structure (“FRE”) on the Chehalis River and to raise an existing levee at the Chehalis-Centralia Airport, the preferred alternative. These activities will result in fill of several acres of wetlands, regulated by the Corps as waters of the United States, which trigger the need for a 404 permit under the Clean Water Act (“CWA”). Public Notice No. NWS-2014-1118.

As explained in detail below, the DEIS fails to meet fundamental requirements of NEPA and does not provide the requisite hard look at the Project justifying issuance of a CWA 404 permit because it:

- Relies on an unreasonably narrow purpose and need statement, which inappropriately preordains consideration of only two dams to address flood damage in the target area;

- Includes proposed construction of an expandable dam for which there is no corresponding justification in the purpose or need statement, and there is no evaluation of the impacts from an expanded dam;
- Fails to demonstrate the proposed Project will meet the stated purpose and need, however unreasonably narrow;
- Grossly understates and/or inadequately characterizes adverse environmental impacts, because credible science is not used to support analysis of impacts, especially in the case of the failure to include future climate change impacts in the analysis;
- Fails to identify and/or discuss any mitigation for unavoidable adverse environmental impacts;
- Does not adequately analyze the least-environmentally-damaging approach to accomplish the reduction of flood damage in the Centralia-Chehalis area; and
- Fails to acknowledge, quantify, or discuss the adverse environmental impacts this Project will have that will unlawfully and significantly adversely affect the Nation's reserved Treaty rights and sovereign interests.

The Nation provides the following comments in support of these conclusions. The Nation's comments are further supported by Comment Matrices related to specific environmental disciplines covered in the DEIS, Technical Review Memos, and Addendums to Memos provided to support the Nation's comment letter prepared in response to the Washington State Department of Ecology's State Environmental Policy Act ("SEPA") DEIS including:

1. Critical Review of Proposed Chehalis River Basin Flood Damage Reduction Project NEPA DEIS: Addendum to Cascade of FRE Ecosystems Effects Technical Memo
2. Critical Review of Proposed Chehalis River Basin Flood Damage Reduction Project NEPA DEIS: Climate Change Impacts
3. Critical Review of Proposed Chehalis River Basin Flood Damage Reduction Project NEPA DEIS: Geology Discipline Report Review
4. Technical Report: Salmon Population Modeling and Aquatic Species for the NEPA DEIS Evaluation of Flood Protection in the Chehalis Basin
5. Critical Review of Chehalis River Basin Flood Damage Reduction Project NEPA DEIS: Cultural Resources Issues
6. Forest Practices Technical Analyses Review
7. Socioeconomic Impact Analysis Review

All such Comment Matrices, Technical Memos and Addenda, and their supporting documents are attached and incorporated by reference.

I. QUINAULT INDIAN NATION HAS SUBSTANTIAL INTERESTS IN THE CHEHALIS BASIN.

The Quinault Indian Nation is a federally-recognized Indian tribe and sovereign tribal government. The Quinault people have lived near and depended on Grays Harbor, the Chehalis River Basin, and the Washington Coast since time immemorial. They have been called the Canoe People because of the importance of the ocean, bays, estuaries, and rivers to every aspect of tribal life. *See generally*, Jacqueline M. Storm, *Land of the Quinault* (1990). The Quinault Nation is also part of the Grays Harbor community, and is a leading contributor to the economic and social lifeblood of this region.

A. Federally-Protected Treaty Rights Must Be Considered.

Quinault Nation is a signatory to the Treaty of Olympia (1856) by which it reserved, among other things, the right of “taking fish, at all usual and accustomed fishing grounds and stations” and the privilege of hunting and gathering on open and unclaimed lands, among other rights, in exchange for ceding lands it historically roamed freely.

In a landmark court case known as the “Boldt decision,” a federal court confirmed Quinault’s treaty fishing rights and established the Nation and other plaintiff tribes as co-managers with the State of Washington of off-Reservation fisheries resources entitled to half of the harvestable number of fish returning to Washington waters. *United States v. Washington*, 384 F. Supp. 312 (W.D. Wash. 1974), *aff’d* 520 F.2d 676 (9th Cir. 1975), *cert. denied*, 423 U.S. 1086 (1976). Based on the evidence provided, the court determined the usual and accustomed areas of the Quinault Nation include “the waters adjacent to their territory” and “Grays Harbor and those streams which empty into Grays Harbor.” *Id.* at 374-75; *see also United States v. Washington*, 459 F.Supp. 1020, 1097 (W.D. Wash. 1978), *aff’d* 645 F.2d 749 (9th Cir.1981). In a later compilation of key court findings, the court concluded: “The Quinault Tribe has usual and accustomed fishing places in Grays Harbor and its watershed, including the Humptulips River.” *United States v. Washington*, 459 F.Supp. 1020, 1038 (W.D. Wash. 1978) *aff’d*, 645 F.2d 749 (9th Cir. 1981). Throughout these terrestrial, riverine and marine usual and accustomed fishing areas—including the entire Chehalis River Basin—Quinault is either a full manager or co-manager of Treaty resources and the habitats that support them.

Treaty rights have substantial legal weight. The treaties signed with Washington tribes in the 1850s do not grant rights to Indians, but rather serve as a “grant of right from them—a reservation of those not granted.” *United States v. Winans*, 198 U.S. 371, 381 (1905). Thus, the Nation’s treaty rights are rights reserved by, and not granted to, it. Treaties are the supreme law of the land. *Worcester v. Georgia*, 31 U.S. 515, 531 (1832). Treaties impose the “highest responsibility” on the government and create a special fiduciary duty and trust responsibility upon all agencies of the United States to protect treaty rights, including fishing rights. *Seminole Nation v. United States*, 316 U.S. 286, 297 (1942). These rights cannot be abrogated or diminished except by “plain and unambiguous” explicit congressional authorization. *United States v. Santa Fe Pac. R.R. Co.*, 314 U.S. 339, 346, 354 (1941).

Federal courts, as recently as this year, have consistently required the federal agencies to keep the Treaty promises upon which Indian tribes relied when they ceded huge tracts of land by way of the Treaties. *See, e.g., McGirt v. Oklahoma*, 140 S.Ct. 2452 (2020); *Winans*, 198 U.S. at 371; *Confederated Tribes of Umatilla Indian Reservation v. Alexander*, 440 F. Supp. 553 (D. Or. 1977); *United States v. Oregon*, 718 F.2d 299, 304 (9th Cir. 1983); *Muckleshoot v. Hall*, 698 F. Supp. 1504, 1510 (W.D. Wash. 1988); *Northwest Sea Farms v. U.S. Army Corps of Eng'rs*, 931 F. Supp. 1515 (W.D. Wash. 1996); *United States v. Washington*, 2007 WL 2437166 (W.D. Wash. 2007). Treaties are the supreme law of the land. *Worcester v. Georgia*, 31 U.S. 515, 531 (1832).

In addition, federal courts have confirmed that Treaty rights are property rights protected by the Fifth Amendment to the U.S. Constitution. *Muckleshoot*, 698 F. Supp. at 1510 (citing *Menominee Tribe of Indians v. United States*, 391 U.S. 404, 411 n.12 (1968)). Based on these legal principles, federal courts have interpreted Treaty rights strictly—meaning that no portion of a Treaty fishing right may be taken without specific authorization by Congress. Included in this prohibition are takings of access to fishing grounds: “Apart from allowing States to limit fishing rights for purposes of conservation . . . no court has permitted the actual taking of access or taking of fishing grounds without an act of Congress.” *Muckleshoot*, 698 F. Supp. at 1512. Accordingly, tribes have succeeded in stopping harmful development projects that affected small portions of their usual and accustomed fishing areas. *Id.* at 1515 (granting preliminary injunction halting construction of a new marina which would have occupied one-eighth of one square mile of Puget Sound, including two tribes’ Treaty fishing area); *see also NW Sea Farms v. U.S. Army Corps of Eng'rs*, 931 F. Supp. 1515, 1525 (W.D. Wash. 1996) (upholding decision of the Corps to deny permit to developer proposing to build a fish farm covering one acre of surface area and eleven acres underwater within tribe’s Treaty fishing area).

By way of example, the strength of tribal Treaty rights is evident in the 2016 denial by the Corps of the Clean Water Act § 404 permit to the Gateway Pacific Project proposing a marine-rail coal terminal based on impacts to Treaty fishing rights held by the Lummi Tribe and other tribal nations in Puget Sound. Memorandum for Record, Application: NWS-2008-260 (9 May 2016), attached as Exhibit 1. To make this determination, the Corps relied on the standard articulated by the court in *Lummi v. Cunningham*, (W.D. Wash. 1992): “If the impact to either [Lummi’s U&A treaty right to access as well as their right to take fish] is greater than *de minimis*, in other words the impact is legally significant, the Corps would be required to deny the permit because only Congress can abrogate a treaty right.” *Id.* at p. 20.

B. Quinault Treaty Harvest Is Significant Socially, Economically and Culturally.

The Quinault’s federally-protected treaty fishing right guarantees enrolled Quinault tribal members—now and in perpetuity—the right to harvest any and all fish and shellfish species anywhere within the Quinault Nation’s usual and accustomed fishing areas in perpetuity. The Chehalis River, its tributary rivers, streams, and wetlands, and the Grays Harbor estuary, provide the freshwater and marine habitat that supports Chinook, chum, and coho salmon and steelhead of critical importance to the Quinault Nation’s treaty-protected terminal river fisheries within Grays Harbor. Grays Harbor, and the Chehalis River flowing into it, nourishes other species of

importance to the Nation, such as white sturgeon and Dungeness crab, an economically vital fishery on the Washington coast.

Fish and shellfish are a source of social, economic and cultural values. Salmon have particular historic significance as a vital cultural and economic resource of the Quinault people. Many tribal fishers derive their entire economic livelihood from fishing and shellfishing, including from the Chehalis River system. Salmon represent a means for employment in fishing, guiding and processing jobs. Fish are often used in trade between tribal members for other foods or goods or gifts. Salmon, crab and razor clams are communally served at social and community events such as celebrations, weddings and funerals.

Salmon is a critical food source for the Quinault people. Salmon provide protein, vitamins, and oils that are vital to their dietary health and community well-being. The nutrition from salmon reduces susceptibility to debilitating diseases like diabetes, and provides food for sharing in ceremonial and cultural events. It also protects the community by providing food security during times of scarcity or crisis. Often, salmon and other fish and shellfish are shared with family members, elders and others in the community who do not, or can no longer, fish.

Fishing is also a way to educate younger generations in life lessons, both as a means to pass on traditional knowledge and to perpetuate ceremonial values. Parents bond with and teach these life lessons to their children while catching, gathering, preserving, and preparing foods. There are also spiritual values inherent in fishing, such as thanksgiving for the ability to utilize the resources.

Spring Chinook are highly prized by the Quinault people as it is often the first salmon species to return to the rivers in the springtime. In the Chehalis River, the first salmon ceremony has been traditionally observed for the first of these Chinook salmon. Historically, the fisherman obtaining the first salmon immediately sent messengers to notify all of the villagers of the event. People gathered at the house of the fisherman. It was prepared in such a manner as to ensure future fishing successes. In today's society, a first salmon ceremony is an individual experience; the fisherman will prepare the salmon and disburse it to elders and prominent members of the community. Elders are often unable to fish themselves so they rely on the generosity of the fisherman. The first salmon ceremony has been and continues to be of deep religious significance. *See* Technical Report – Impacts on Fish and Fisheries, describing the cultural importance of salmon to the Quinault people.

Chinook salmon from the Chehalis River system is a delicacy second only to the Blueback sockeye runs in the Quinault River. Traditionally, no edible part of the fish was wasted, including the head, eyes and eggs. Due to its high fat content, Chinook salmon is considered the most flavorful of the salmon species. The head is used for soup; other portions eaten include the eyeballs and cheeks. The belly meat is considered the most succulent and often considered the best part of the fish. Chinook salmon produce many eggs, which Quinault people use to prepare fish egg soup. Baked eggs are considered a delicacy. Nutritionally, the fish, the heads, and eggs are excellent sources of protein and B vitamins.

Correspondingly, enrolled Quinault members have a federally-protected Treaty right to hunt wildlife and gather plants within, at least, the Chehalis Basin on all open and unclaimed lands in perpetuity under Quinault laws and regulations.

The Nation is dependent on avian and other wildlife populations both for subsistence and the ecosystem services they provide, as well as their strong cultural importance to the Quinault people. Records, photographs, and oral histories indicate that a variety of wildlife species have been harvested for centuries for food, clothing, tools, medicines, and spiritual uses—including migratory birds protected under federal law. Today, these animals continue to provide nourishment for the Quinault people, as well as opportunities for intergenerational teaching about cultural history, traditional worldviews, hunting, and food preparation.

The Nation's Treaty-reserved hunting and gathering rights on open and unclaimed lands extend throughout the Chehalis River Basin. Currently, Quinault regulates its members' Treaty hunting through annual regulations pertaining to State Game Management Units within the Basin, including 501 Lincoln, 506 Willapa Hills, 530 Ryderwood, 642 Copalis, 648 Wynoochee, 651 Satsop, 658 North River, 660 Minot Peak, 672 Fall River, 673 Williams Creek, 681 Bear River, 684 Long Beach, and 699 Long Island.

Furthermore, Quinault people have strong cultural and spiritual ties and interests throughout the Chehalis Basin. Quinault people also identify special areas that are known from the dissemination of family stories and practices for the collection of plants for food, medicine, and weaving. It is known that the Quinault people identify river and floodplain locations in the Chehalis Basin as important for traditional activities that include fishing, trapping and harvesting eels (lamprey).

Eels/ Lamprey were guardian spirits for some Quinault people and could give the holder of this spirit help with hunting and healing.¹ Olsen (1936) tells of Quinault ancestor, Bob Pope who,

was told to carve an elbow pipe out of hard clay with an eel in the angle. (In some way the eel was regarded as the spirit also.) This pipe could travel about, for somehow it partook of the nature of a spirit. The power of this spirit was such that many times Pope was able to kill elk without shooting them!²

and

When an **exceptionally large eel** (leech?) was caught he was not killed. Instead, people said, 'Yes, we caught you. We hear you are a great doctor. I have a friend who is sick and I am going to take you to him. That must be why you came to meet

¹ Ronald L. Olsen, *The Quinault Indians*, vol. 6, University of Washington Publications in Anthropology 1 (Seattle, Washington: University of Washington, 1936), 131. Attached to Critical Review of Chehalis River Basin Flood Damage Reduction Project NEPA DEIS: Cultural Resources Issues.

² *Id.* at 120.

me. I'll pay you with a young woman if you cure him.' **The eel** was then wrapped in soft bark and taken to a person suffering with rheumatism. His mouth was placed over the affected part. When he had sucked his fill of blood he was placed on the floor where he vomited up quantities of slime (not blood).³

An internal Quinault publication from 1981 includes an educational article about the lamprey. The article concludes with, "The large, adult lamprey is considered a delicacy when baked in the oven, cooked on an open fire, or, best of all, dried and smoked."⁴

Rainbow Falls has been identified by the Chehalis and Quinault Tribes as culturally significant, and evidence from the literature review supports this, finding significance beginning in traditional stories, to an important place for the harvest of lamprey and a site essential to maintaining Chehalis Tribal identity and cultural continuity documented as recently as 1969 (Welch 1983).⁵

Additionally, the Quinault Indian Nation described the traditional practice that Elders had for collecting eels (Pacific Lamprey) during the spring. Because the eel population has declined, this collection practice has largely died out, and even the Elders who prepare and consume eels rely primarily on the fish hatchery which collects a few every spring, mainly for the Elders who request them. Justine James (QIN) states: "A lot of the eels in this area, they started going out in about the 60s, some of the elders still follow that old life-way of eating, preparing eels, and it's kind of a dietary change and the logging practices have kind of altered the environment and so you don't get the eels as much."⁶

Although the practice has declined over time, some Quinault members still set traps yearly and process them by smoking and canning for winter storage. While a smaller number of living tribal members recall having eaten eel in the past, many know of this practice from stories from their parents and grandparents.

³ *Id.* at 183.

⁴ "QDNR and ED Newsletter," Taholah, WA IV, no. 5 (July 1981): 1, 5–6. Attached to Critical Review of Chehalis River Basin Flood Damage Reduction Project NEPA DEIS: Cultural Resources Issues.

⁵ Willamette Cultural Resources Associates, Ltd., Chehalis River Basin Strategy Traditional Cultural Property Inventory, June 2019, p. 28. Attached to Critical Review of Chehalis River Basin Flood Damage Reduction Project NEPA DEIS: Cultural Resources Issues.

⁶ Samantha Chisholm Hatfield et al., "Indian Time: Time, Seasonality, and Culture in Traditional Ecological Knowledge of Climate Change," *Ecological Processes* 7, no. 25 (2018), p. 7. Attached to Critical Review of Chehalis River Basin Flood Damage Reduction Project NEPA DEIS: Cultural Resources Issues.

It is also known that Quinault members collect sweetgrass, cattail, and other grasses and forbs, as well as willow from a variety of areas in the Chehalis Basin. These special areas are often kept secret and not in a database. These plants are used by the Quinault as a material in the traditional weaving of baskets and mats and for ceremonial purposes. Weaving is as integral to contemporary Quinault culture as it was in the past. Quinault weavers regard sweetgrass as a special gift and have particular times of year that they prefer to collect it. Sweetgrass requires particular environments and is not common.

C. Corps of Engineers Has a Fiduciary Trust Responsibility to Protect Treaty Rights.

The Nation's status as a federally-recognized Indian tribe, sovereign government, and signatory to the Treaty of Olympia (1856) places a heightened duty and trust responsibility on the Corps to protect those Treaty rights, which includes the obligation to meaningfully consult with the Quinault Nation about the potential impacts to its rights and interests from the proposed regulations. To date, consultation specific to the potential impacts to the Nation's Treaty rights has not occurred.⁷

Executive Order 13175, "Consultation and Coordination with Indian Tribal Governments" (2000), requires all federal agencies to consult with Indian tribes on matters that affect their rights. It further requires those agencies to adhere to the following criteria when formulating and implementing policies that have tribal implications:

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

⁷ The following statements in the DEIS regarding consultation with the Quinault Nation are incorrect: "The QIN requested government-to-government consultation with the Corps on August 15, 2017. The QIN was offered opportunities to participate through a variety of venues, ranging from one-on-one phone calls to technical team meetings to special briefings." DEIS, p. 274. The "opportunities" that included "phone calls," "technical team meetings," and "special briefings" were afforded solely in the context of the Quinault Nation's participation as a Cooperating Agency, not as actual, required tribal consultation. Only two government-to-government consultations occurred regarding the proposed dam/levee Project. The first consultation occurred with Seattle District Colonel Geraldini on November 27, 2017 and focused on the Corps' issuance of a Notice to Expedite a Department of Army permit application for the Chehalis River Basin Flood Control Zone District. The second consultation was with Seattle District Colonel Bullock, who attended a consultation with representatives of the Nation on August 31, 2020, prior to release of the DEIS for public comment. During that consultation, Corps representatives provided a high-level summary of the legal framework of the DEIS, including the Corps' trust responsibility to protect Treaty-reserved rights, outlined summary conclusions included in the DEIS, and answered some technical questions. That consultation did not include a detailed discussion of impacts to Treaty resources from the proposed dam/levee Project. At no time has the Corps requested or offered to have such a discussion with the Nation.

unique legal relationship between the Federal Government and Indian tribal governments.

The Corps echoes these principles in its “U.S. Army Corps of Engineers Tribal Consultation Policy and Related Documents” (2013), attached as Exhibit 2. Among the many Corps’ commitments to tribes included in these policy documents are:

- “Consultation: Open, timely, meaningful, collaborative and effective deliberative communication process that emphasizes trust, respect and shared responsibility. To the extent practicable and permitted by law, consultation works toward mutual consensus and begins at the earliest planning stages, before decisions are made and actions are taken; an active and respectful dialogue concerning actions taken by the USACE that may significantly affect tribal resources, tribal rights (including treaty rights) or Indian lands.”
- “Consultation will be an integral, invaluable process of USACE planning and implementation.”
- “USACE will ensure that it addresses Tribal concerns regarding protected tribal resources, tribal rights (including treaty rights) and Indian lands.”
- Commanders will “Maintain open lines of communication through consultation with Tribes during the decision making process for those matters that have the potential to significantly affect protected tribal resources, tribal rights (including treaty rights) and Indian lands.”
- “TRUST RESPONSIBILITY- 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 Corp, in accordance with the provisions of treaties, laws and Executive Orders as well as principles lodged in the Constitution of the United States.”
- “PRE-DECISIONAL AND HONEST CONSULTATION- The U.S. Army Corps of Engineers will reach out, through designated points of contact, to involve Tribes in collaborative process designed to ensure information exchange, consideration of disparate viewpoints before and during decision making, and utilize fair and impartial dispute resolution mechanisms.”
- “Recognize, respect and take into consideration the significance that Federally-recognized Tribes ascribe to protected tribal resources when undertaking Army mission activities and when managing Army lands.”
- “This policy recognizes the importance of understanding and addressing the concerns of Federally-recognized Tribes prior to reaching decisions on matters that may have the potential to significantly affect tribal rights, tribal lands or protected tribal resources.”

In addition, the United Nations “Declaration on the Rights of Indigenous Peoples” (2007) (“UNDRIP”), endorsed by the United States in 2010, recognizes that indigenous

people must give Free, Prior and Informed Consent for projects affecting their interests: “States shall consult and cooperate in good faith with the Indigenous Peoples concerned through their own representative institutions in order to obtain FREE, PRIOR and INFORMED CONSENT prior to approval of any project affecting their land or territories.” Article 32(2). The Nation expects the Corps to honor this policy in order to ensure no unilateral actions are taken that affect its land, territories or people without its consent.

In short, the Corps is obligated to conduct meaningful government-to-government consultation with the Nation before taking any further action regarding the proposed dam/levee Project to ensure the Nation’s rights and interests are not violated. The Nation repeats its request made from its 2018 EIS Scoping Comments. *The Nation requests ongoing and meaningful consultation with the Corps prior to its decision regarding the 404 permit for the dam/levee Project.*

D. Quinault Indian Nation Submitted Substantial Scoping Comments.

By letter dated October 29, 2018, Earthjustice submitted extensive scoping comments regarding the NEPA and SEPA EISs that included seven attachments, 33 exhibits and 122 cited supporting literature references on behalf of the Nation. Letter and all Exhibits attached thereto are incorporated by reference and Attached as Exhibit 3.

Among other issues, the Nation requested that the EISs address the following:

- The geographic scope of the EIS must include the entire geographic range of Chehalis Basin salmon, extending from “their natal spawning sites that reach to the uppermost reaches of the Chehalis River, extending downstream to the river estuary and Grays Harbor, and then ranging in marine waters from near Northern California to Southeast Alaska.” Scoping comment letter, p. 14.
- The EIS must consider the effects of cumulative stressors on Chehalis salmon populations, which were extensively outlined. *Id.* at 16-18.
- The EIS must analyze impacts of “potential direct, indirect, and cumulative effects associated with the compounding and interactive nature of ecosystem impacts that would modify river geomorphology, sediment regime, hydraulics, and hydrology impacting riparian and wetland vegetation, aquatic habitat and dependent fish and wildlife populations.” *Id.* at 21. The Nation provided extensive detail about the cascade of likely effects. *Id.* at 21-24.
- “The EIS[] should include an alternative comprised of non-structural flood protection measures applied across the entire Chehalis Basin, which include moving willing people and property out of high flood and erosion risk areas (e.g., through acquisition from willing sellers, conservation easements, and relocation/redevelopment), river and floodplain restoration, and local flood protection structures (e.g., floodwalls, levees, raising structures, farm pads, and other floodproofing measures).” *Id.* at 30. The Nation elaborated and provided many references. *Id.* at 30-33.

- “Mitigation that would protect the Chehalis River ecosystem from further degradation and loss of wild salmon would need to be both comprehensive and timed in a way to prevent losses that would be difficult or unlikely to recover from.” *Id.* at 35.
- The EIS needs to address “the full projected lifespan of the Dam and Levee, by alternative, inclusive of economic risk, the likelihood of harm to property, infrastructure, and other assets and economic systems, the full life-cycle of operations, maintenance and repairs and the consequences of the loss of ecosystem services.” (Citations omitted). *Id.* at 43. The Nation elaborated on additional important economic considerations, including the likelihood and import of cost overruns. *Id.* at 43-50

Most importantly, the Nation provided extensive information pertaining to its Treaty-protected rights and interests, including:

The importance of fishing and shellfishing to the diet, health, cultural, and spiritual well-being of Quinault members cannot be overstated.

The Quinault Nation’s Treaty-reserved fishing, hunting and gathering rights must be considered in regard to all of the Alternatives considered in the Dam and Levee Project EIS. The Quinault Nation’s property right in fish must be considered in regard to each Alternative, and in terms of any mitigation for impacts under SEPA or NEPA from each Alternative, that would diminish habitat or otherwise negatively affect salmon or other aquatic species. Likewise, the right of access must be considered in regard to any Alternative that would impair the ability of Quinault Nation fishers to access their usual and accustomed fishing grounds in the Chehalis River Basin. Such impairment would be a violation of the Treaty.

Id. at 6.

E. Quinault Nation Briefly Acted as Cooperating Agency.

The Nation accepted the Corps’ offer to become a Cooperating Agency and executed a Cooperating Agency Agreement with the Corps on May 13, 2019, which the Nation then terminated on September 22, 2019. During the time the Nation was a Cooperating Agency, representatives of the Nation engaged with the Corps and its DEIS consultants primarily regarding fish modeling because of its concerns about the accurate characterization of impacts to Treaty fish and habitat. A statement in the DEIS about the Nation’s involvement is incorrect:

As a cooperating agency under NEPA and consistent with the terms of the Cooperating Agency Memorandum of Agreement, the Corps sought input relative to the QIN’s area of technical expertise on the EIS. To this end, the Corps provided an opportunity for the QIN to comment on the input assumptions and parameters prior to running EDT. **However, the QIN declined to comment.** The Corps continued to work with the QIN throughout July and August to solicit technical input relevant to the salmonid impact modeling effort for Corps consideration. The Corps convened a meeting with QIN and the EDT modelers on August 6, 2019 to

review the EDT model results. The Corps convened another meeting on August 14, 2019 with the QIN and the integrated EDT-LCMs modelers to discuss how EDT results would be integrated into the LCMs. The QIN withdrew as a cooperating agency on September 22, 2019.

(emphasis Added) DEIS, Appendix K, pp. 7-8. In fact, the Nation's representatives provided extensive comments regarding model input assumptions and parameters. Most, if not all, of the issues identified by the Nation's representatives were not corrected by the Corps' DEIS analyses.

F. Quinault Nation Submitted Extensive Comments on SEPA EIS for Dam/Levee Project.

In contravention to NEPA requirements to avoid duplication regarding EISs (40 C.F.R. §1506.2; 33 CFR § 230.20),⁸ the Corps drafted a completely separate Draft EIS than the Draft EIS developed by the State of Washington under SEPA for the same dam/levee Project. The SEPA Draft EIS and all Appendices and Attachments prepared under SEPA are attached as Exhibit 4.

On behalf of the Nation, Earthjustice also submitted extensive comments dated May 11, 2020, on the SEPA EIS, which include five Exhibits, four appendices, and nine Technical Review Memos, attached as Exhibit 5. Many of the comments made for the SEPA EIS are relevant to the NEPA EIS and the Nation incorporates those by reference as applicable.

II. NATIONAL ENVIRONMENTAL POLICY ACT REQUIREMENTS

A. NEPA Dictates a Hard Look at Environmental Impacts.

NEPA has two fundamental purposes: (1) to guarantee that agencies take a "hard look" at the consequences of their actions before the actions occur by ensuring that "the agency, in reaching its decision, will have available, and will carefully consider, detailed information concerning significant environmental impact," *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 349 (1989); and (2) to ensure that "the relevant information will be made available to the larger audience that may also play a role in both the decision-making process and the implementation of that decision," *Id.* at 349. NEPA "emphasize[s] the importance of coherent and

⁸ We acknowledge recent revisions to the Council on Environmental Quality ("CEQ") regulations implementing NEPA at 40 C.F.R. 1500 *et seq.*, with a final rule adopted. 85 Fed. Reg. 43304 (July 16, 2020). This final rule became effective September 14, 2020, only four days prior to the issuance of the DEIS for public comment on September 18, 2020. The Corps has not promulgated new rules or revised its NEPA rules in response to the CEQ revision. Further, the new final rules have been challenged by several organizations and states and litigation is pending. It is unclear whether these new regulations apply to the DEIS given that the DEIS was plainly complete before the new rules were finalized. Accordingly, all citations herein are to the CEQ regulations in effect prior to September 14, 2020.

comprehensive up-front environmental analysis to ensure informed decision making to the end that “the agency will not act on incomplete information, only to regret its decision after it is too late to correct.” *Blue Mountains Biodiversity Project v. Blackwood*, 161 F.3d 1208, 1216 (9th Cir. 1998). Moreover, NEPA requires federal agencies “to recognize the worldwide and long-range character of environmental problems.” 42 U.S.C. § 4332(F).

NEPA establishes an “action-forcing” mechanism to ensure “that environmental concerns will be integrated into the very process of agency decision-making.” 42 U.S.C. § 4332(2)(C); *Andrus v. Sierra Club*, 442 U.S. 347, 350 (1979). Pursuant to that statutory provision, “all agencies of the Federal Government shall ... include in every recommendation or report on ... major Federal actions significantly affecting the quality of the human environment, a detailed statement,” an EIS, addressing “the environmental impact of the proposed action, any adverse environmental impacts which cannot be avoided ..., alternatives to the proposed action,” and other environmental issues. 42 U.S.C. § 4332.

When reviewing claims under NEPA, Courts must “ensure that an agency has taken the requisite hard look at the environmental consequences of its proposed action, carefully reviewing the record to ascertain whether the agency decision is founded on a reasoned evaluation of the relevant factors.” *Te-Moak Tribe v. Interior*, 608 F.3d 592, 599 (9th Cir. 2010) (quoting *Greenpeace Action v. Franklin*, 14 F.3d 1324, 1332 (9th Cir. 1992) (internal quotation marks and citations omitted)). This review must be “searching and careful.” *Ocean Advocates v. U.S. Army Corps of Engineers*, 402 F.3d 846, 858 (9th Cir. 2005). It also is guided by a “rule of reason” that asks “whether an EIS contains a reasonably thorough discussion of the significant aspects of the probable environmental consequences.” *Churchill County v. Norton*, 276 F.3d 1060, 1071 (9th Cir. 2001), *amended by*, 282 F.3d 1055 (9th Cir. 2002). NEPA favors “coherent and comprehensive up-front environmental analysis to ensure ... that the agency will not act on incomplete information, only to regret its decision after it is too late to correct.” *Id.* at 1072–73 (quotation marks omitted).

Under NEPA, courts have held that an agency cannot rely on “stale” scientific evidence or “ignore reputable scientific criticism” in EISs. *Seattle Audubon Soc. v. Espy*, 998 F.2d 699 (9th Cir.1993); *Carmel*, 123 F.3d at 1151. In fact, NEPA requires agencies to “ensure the professional integrity, including scientific integrity, of the discussions and analyses in environmental documents.” 40 C.F.R. §1502.23.

NEPA further requires discussion of “[p]ossible conflicts between the proposed action and the objectives of Federal, regional, State, and local (and in the case of a reservation, Indian tribe) land use plans, policies and controls for the area concerned.” (*See* 40 C.F.R. § 1506.2(d)); 40 C.F.R. § 1502.16(c); 42 U.S.C. § 4332(C)(iv).

B. Purpose and Need Must Not Dictate Alternatives.

How an agency defines the purpose and need of its project or action also determines the range of alternatives it considers. On the one hand, an agency may not define the purpose of and need for the action in unreasonably narrow terms. On the other hand, it need not craft a statement so broad that it requires consideration of alternatives that are inconsistent with the overarching

purpose of the proposal. *Northwest Ecosystem Alliance v. Rey*, 380 F. Supp. 2d 1175 (W.D. Wash. 2005). Courts will uphold an agency's discussion of alternatives if they believe the statement of purpose and need is sufficiently broad so that it does not prevent the consideration of reasonable alternatives. *Center for Biological Diversity v. National Highway Traffic Safety Admin.*, 538 F.3d 1172 (9th Cir. 2008) (energy conservation goal required consideration of more stringent corporate average fuel economy standards); *City of Carmel-By-The-Sea v. U.S. Dept. of Transp.*, 123 F.3d 1142 (9th Cir. 1997) (cannot narrow consideration of alternatives by modifying statement of need to eliminate all but one alternative). Courts have cautioned against too narrowly defining a purpose and need statement: [i]t “will fail if it unreasonably narrows the agency's consideration of alternatives so that the outcome is preordained.” *Protect Our Communities Found. v. Jewell*, 825 F.3d 571, 579 (9th Cir. 2016); *Citizens Against Burlington, Inc. v. Busey*, 938 F.2d 190, 194 (D.C. Cir. 1991) (“[T]he rule of reason does not give agencies license to fulfill their own prophecies, whatever the parochial impulses that drive them. . . . [A]n agency may not define the objectives of its actions in terms so unreasonably narrow that only one alternative from among the environmentally benign ones in the agency’s power would accomplish the goals of the agency’s action.”).

Similarly, in order to ensure that environmental review under NEPA is meaningful and fully informs agency decisions, agencies are prohibited from taking any action that limits or forecloses choices or increases the likelihood of that result prior to conclusion of the NEPA EIS process. 40 C.F.R. § 1506.1.

C. Reasonable Range of Alternatives Must Be Analyzed.

NEPA requires a “detailed statement ... on ... alternatives to the proposed action ...” 42 U.S.C. § 4332(2)(C). This includes the mandate to “(s)tudy, develop, and describe appropriate alternatives to recommend courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources.” *Id.* at § 4332(2)(E). EISs must “[r]igorously explore and objectively evaluate *all* reasonable alternatives,” and “[i]nclude reasonable alternatives not within the jurisdiction of the lead agency,” and “[i]dentify the agency's preferred alternative.” *Westlands Water Dist. v. U.S. Dept. of Interior*, 376 F.3d 853, 868 (9th Cir. 2004) (citing 40 C.F.R. § 1502.14(a), (c), (e)) (emphasis added). “The existence of a viable but unexamined alternative renders an environmental impact statement inadequate.” *Id.* (internal quotations and citations omitted). *See also, Natural Resources Def. Council v. U.S. Forest Serv.*, 421 F.3d 797, 813 (9th Cir. 2005) (rigorous and objective evaluation of all reasonable alternatives is “the heart” of an EIS). Reasonable alternatives include those that are practical or feasible from the technical and economic standpoint and using common sense, rather than simply desirable from the standpoint of the applicant. 40 Most Asked Questions, #2a. Further, the environmental impacts of the proposal and the alternatives are to be presented “in comparative form, thus sharply defining the issues and providing a clear basis for choice among options by the decision maker and the public.” 40 C.F.R. § 1502.14

A no-action alternative must also be included in EISs. 40 C.F.R. § 1502.14(c). The no-action alternative may be characterized as continuing with the present course of action until that action is changed. It establishes a baseline against which the proposed action and its alternatives may be measured. *Center for Biological Diversity v. U.S. Dep’t of Interior*, 623 F.3d 633 (9th Cir. 2010).

A court can hold an impact statement inadequate if a baseline is not properly selected. *Center for Biological Diversity v. U.S. Bureau of Land Mgmt.*, 746 F. Supp. 2d 1055 (N.D. Cal. 2009). Courts have held the no-action alternative is not a ‘do nothing alternative,’ but must include a discussion of reasonably foreseeable development that would result from its adoption. *Young v. General Services Admin.*, 99 F. Supp. 2d 59 (D.D.C. 2000), *judgment aff’d*, 11 Fed. Appx. 3 (D.C. Cir. 2000).

Consideration of alternatives is “the heart of the environmental impact statement.” *Westlands Water Dist.*, 376 F.3d at 865. Judicial review of the range of alternatives considered by an agency is governed by a “rule of reason” that requires an agency to set forth only those alternatives necessary to permit a “reasoned choice.” *Save Lake Washington v. Frank*, 641 F.2d 1330, 1334 (9th Cir. 1981); *Life of the Land v. Brinegar*, 485 F.2d 460, 472 (9th Cir. 1973), cert. denied, 416 U.S. 961 (1974). The “touchstone” for courts reviewing challenges to an EIS under NEPA “is whether an EIS’s selection and discussion of alternatives fosters informed decision-making and informed public participation.” *Save Lake Washington*, 641 F.2d at 1334.

D. Scope of Review Requires Direct, Indirect and Cumulative Impacts of Past, Present and Future Projects.

NEPA regulations require that an EIS must consider direct effects, indirect effects, and cumulative effects. 40 C.F.R. §§ 1502.16 and 1508.8. “Effects includes ecological (such as the effects on natural resources and on the components, structures, and functioning of affected ecosystems), aesthetic, historic, cultural, economic, social, or health, whether direct, indirect, or cumulative.” 40 C.F.R. § 1508.8. The direct effects of an action are those effects “which are caused by the action and occur at the same time and place.” 40 C.F.R. § 1508.8(a). Indirect impacts are “caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable.” 40 C.F.R. § 1508.8(b). In addition, § 1502.4(a) states that “[p]roposals or parts of proposals which are related to each other closely enough to be, in effect, a single course of action shall be evaluated in a single impact statement.”

Cumulative impacts include “the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.” 40 C.F.R. § 1508.7. An agency cannot ignore reasonably foreseeable impacts just because they might occur at a later date or at a more distant location. *Department of Transportation v. Public Citizen*, 541 U.S. 752 (2004).

NEPA requires a “useful analysis of the cumulative impacts of past, present and future projects,” which requires “discussion of how [future] projects together with the proposed ... project will affect [the environment].” *Muckleshoot Indian Tribe v. U.S. Forest Service*, 177 F.3d 800, 810 (9th Cir. 1999) (*citing City of Carmel*, 123 F.3d at 1160). The court in *Muckleshoot Indian Tribe* rejected a cumulative impacts analysis in an EIS that contained no evaluation of the impact of timber harvest on lands proposed to be transferred to Weyerhaeuser as part of a land exchange, finding the EIS failed to adequately analyze impacts of another “reasonably foreseeable” land exchange. *Id.* at 811-812. The court ultimately held that the cumulative

impacts statements in the EIS, relying on “broad and general statements devoid of specific, reasoned conclusions,” were “far too general and one-sided to meet NEPA requirements.” *Id.* at 811. The court stated further that the analysis fell far short of a “useful analysis” as required by *Carmel*, 123 F.3d at 1160, and *Blue Mountains Biodiversity Project v. Blackwood*, 161 F.3d 1208, 1214–15 (9th Cir. 1998).

Under NEPA, Congress also directs that agencies must recognize any world-wide and long-range character of environmental problems. 42 U.S.C. § 4332(2)(F). Climate change is plainly world-wide and long-range and the most significant environmental problem the world faces today.

Courts use the “rule of reason” test to decide whether the discussion of cumulative impacts is “reasonably thorough” and would allow an agency's decision-maker to make an informed decision. *Westside Property Owners v. Schlesinger*, 597 F.2d 1214 (9th Cir. 1979).

E. Mitigation Measures Must Be Specific and Analyzed for Effectiveness.

Mitigation measures for identified impacts must be considered and that is the case even for impacts that by themselves would not be considered “significant.” Once the proposal itself is considered as a whole to have significant effects, all of its specific effects on the environment (whether or not “significant”) must be considered, and mitigation measures must be developed where it is feasible to do so. 40 C.F.R. §§ 1502.14(f), 1502.16(h), and 1508.14. All relevant, reasonable mitigation measures that could improve the project are to be identified, even if they are outside the jurisdiction of the lead agency or the cooperating agencies, and thus would not be committed as part of the RODs of these agencies. 40 C.F.R. §§ 1502.16(h) and 1505.2(c). If an impact cannot feasibly be mitigated, the EIS must so state.

For a mitigation measure to be considered valid and the discussion of such measures considered adequate, the measure “shall be reasonable and capable of being accomplished.” *See also, Neighbors of Cuddy Mountain v. U.S. Forest Serv.*, 137 F.3d 1372, 1380-81 (9th Cir. 1998). While a complete mitigation plan capable of being immediately executed is not necessary, a simple list of mitigation measures is not adequate, nor is a perfunctory discussion of what *might* happen with mitigation. *Id.* An essential component of any discussion and analysis of mitigation measures is a full assessment of whether, when, and to what extent, a measure will be effective and what impacts that measure will address. *South Fork Band Council of Western Shoshone of Nevada v. U.S. Dep’t of Interior*, 588 F.3d 718, 727 (9th Cir. 2009). *Cf. Okanogan Highlands Alliance v. Williams*, 236 F.3d 468, 474-75 (9th Cir. 2000) where the court found mitigation discussion adequate where mitigation measures were set forth in detail, each measure received an “effectiveness rating” for how it would address the impact, listed steps for assessing and applying each mitigation measure and discussed how the mitigation measure would address each of the specific impacts. As the court noted, this level of analysis of mitigation is necessitated by the “hard look” requirements of NEPA.

F. Environmental Justice Requirements Dictate Evaluation of Impacts to Affected Populations.

NEPA assigns continuing responsibility to federal agencies to preserve important historic, cultural, and natural aspects of our nation heritage and to maintain, wherever possible, an environment which supports diversity. 42 U.S.C. § 4331(b)(4). To that end, by Executive Order, federal agencies are required to consider environmental justice in their NEPA analysis in order to evaluate the potential that a proposed action would have disproportionate impacts affecting minority or low-income groups (Executive Order 12898, 59 Fed. Reg. 7629 (1994)). The Environmental Justice process requires that no minority or low-income population group should bear a disproportionate share of potential adverse environmental and socioeconomic impacts resulting from major projects, such as the Dam and Levee proposed for the Chehalis Basin. The analysis of potential impacts must identify alternative proposals that may mitigate environmental justice, as well as environmental, impacts. In addition, special efforts should be made to reach out to such communities to ensure that they understand the proposed project and its potential impacts on them.

The fundamental policy of NEPA is to “encourage productive and enjoyable harmony between man and his environment.” In service, in part, to that policy, Executive Order 12898 directed each federal agency to, among other things:

- make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations;
- identify differential patterns of consumption of natural resources among minority populations and low-income populations;
- evaluate differential consumption patterns by identifying populations with differential patterns of subsistence consumption of fish and wildlife; and
- collect, maintain, and analyze information on the consumption patterns of populations who principally rely on fish and/or wildlife for subsistence.⁹

In considering how to evaluate whether federal agencies were complying with this direction, the CEQ has defined effects or impacts to include “ecological...aesthetic, historic, cultural, economic, social or health impacts, whether direct, indirect or cumulative.”¹⁰ CEQ’s Guidance for Environmental Justice under NEPA calls for agencies to consider specific elements when considering environmental justice issues:

⁹ “Federal actions to address environmental justice in minority populations and low-income populations,” 59 Fed. Reg. 7629 (Executive Order 12898; February 11, 1994).

¹⁰ CEQ, Environmental Justice: Guidance Under the National Environmental Policy Act, December 10, 1997, available at <http://ceq.hss.doe.gov/nepa/regs/ej/justice.pdf> (“CEQ Guidance”).

- agencies should consider the composition of the affected area, to determine whether minority populations, low-income populations, or Indian tribes are present in the area affected by the proposed action, and if so whether there may be disproportionately high and adverse human health or environmental effects on minority populations, low-income populations, or Indian tribes.
 - agencies should consider the potential for multiple or cumulative exposure to human health or environmental hazards in the affected population and historical patterns of exposure to environmental hazards.
 - agencies should consider these multiple, or cumulative effects, even if certain effects are not within the control or subject to the discretion of the agency proposing the action.
 - agencies should recognize the interrelated cultural, social, occupational, historical, or economic factors that may amplify the natural and physical environmental effects of the proposed agency action.
 - these factors should include the physical sensitivity of the community or population to particular impacts; the effect of any disruption on the community structure associated with the proposed action; and the nature and degree of impact on the physical and social structure of the community.
 - agencies should be aware of the diverse constituencies within any particular community.
 - agencies should seek tribal representation in the process in a manner that is consistent with the government-to-government relationship between the United States and tribal governments, the federal government's trust responsibility to federally-recognized tribes, and any treaty rights.

*See also, EPA Policy on Environmental Justice for Working With Federally-Recognized Tribes and Indigenous Peoples, (July 24, 2014) ("EPA Tribal Policy").*¹¹ These principles have been enforced as to NEPA review, most recently by the decision in *Standing Rock Sioux Tribe v. U.S. Army Corps of Engineers*, 255 F.Supp.3d 101 (D.D.C. 2017) (citing *Allen v. Nat'l Institutes of Health*, 974 F. Supp. 2d 18, 47 (D. Mass. 2013) "The purpose of an environmental justice analysis is to determine whether a project will have a disproportionately adverse effect on minority and low income populations" (quoting *Mid-States Coal. for Progress v. Surface Transp. Bd.*, 345 F.3d 520, 541 (8th Cir. 2003)).

The EIS must include demographic information for all communities affected. The Guidance provides that agencies "should recognize that the impacts within...Indian tribes may be different from impacts on the general population due to a community's distinct cultural practices." CEQ Guidance at 14. "Where environments of Indian tribes may be affected...agencies must consider pertinent treaty, statutory, or executive order rights and consult with tribal governments in a manner consistent with the government-to-government relationship." *Id.* *See also, EPA Tribal Policy.*

¹¹ <https://www.epa.gov/sites/production/files/2017-10/documents/ej-indigenous-policy.pdf>.

Relevant to this dam/levee Project, the “unit of geographic analysis” for the environmental-justice assessment should “be chosen so as not to artificially dilute or inflate the affected minority population.” CEQ Guidance at 26. *See Standing Rock Sioux Tribe v. U.S. Army Corps of Engineers*, 255 F.Supp.3d 101 (D.D.C. 2017) (citing *Allen v. Nat’l Institutes of Health*, 974 F. Supp. 2d 18, 47 (D. Mass. 2013)).

Finally, the CEQ guidance requires that, in the environmental review process (not some later process), tribal input must be sought at a level “consistent with government to government consultation.” It does not say wait until consultation (assuming consultation properly happens at all) to seek tribal input. Rather, the input is supposed to be part of the environmental review itself in order to inform government decision making, inform the public, and allow a comprehensive environmental justice analysis within the context of the information gathering and analysis that is part of an EIS. Consultation with tribes and environmental review under NEPA are two separate and distinct obligations. While they may overlap or have similarities, they are not substitutes for each other.

G. Socioeconomic Effects Must Be Considered and Analyzed.

NEPA requires agencies to “identify and develop methods and procedures, which will ensure that presently unquantified environmental amenities and values may be given appropriate consideration in decision making along with economic and technical considerations.” 42 U.S.C. § 4332(B). Effects that must be considered in an EIS include economic effects. 40 C.F.R. § 1508.8(b). *See also, id.* § 1508.14 (adequate discussion of impacts on the natural and human environment will necessarily include economic and social impacts) and CEQ Guidance at 4, 5, 8, and 26 (each EIS must consider the economic and social impacts on tribes). Plainly, adequate analysis of socioeconomic impacts is an integral part of adequate assessment of environmental justice impacts.

It is further critical that the agency take pains to ensure that the economic information it considers and includes in the DEIS is accurate and complete. If it is not, the DEIS is misleading and inadequate and the public’s ability to understand and comment on the project subverted. *See, Natural Resources Defense Council v. U.S. Forest Serv.*, 421 F.3d 797, 811-12 (9th Cir. 2005).

III. ADDITIONAL FEDERAL LEGAL REQUIREMENTS

A. Clean Water Act Dictates Least Environmentally Damaging Alternative.

The Clean Water Act (“CWA”) (33 U.S.C. §§ 1251 *et seq.*) is the federal legal framework for regulating discharges of pollutants into the waters of the United States and regulating water quality. The CWA is the federal law authorizing the Corps’ to develop the permit program for dredge and fill permits such as the one here. The Corps has determined that Project construction will result in the filling of several acres of wetlands under CWA jurisdiction. Under section 404, the Corps regulates discharges of “dredged or fill material” into “navigable waters.” (33 U.S.C. § 1344.) “Navigable waters” is defined as “waters of the United States.” (33 U.S.C. § 1362(7)). To issue a 404 permit, the Corps must ensure, among other things, that the proposed activity

complies with the U.S. Environmental Protection Agency's ("EPA") 404(b)(1) Guidelines, set out in 40 C.F.R. Part 230.

The 404(b)(1) Guidelines, adopted as binding federal regulations, provide strong overarching policy directives to the Corps that guide their implementation:

(a) The purpose of these Guidelines is to restore and maintain the chemical, physical, and biological integrity of waters of the United States through the control of discharges of dredged or fill material.

(b) Congress has expressed a number of policies in the Clean Water Act. These Guidelines are intended to be consistent with and to implement those policies.

(c) Fundamental to these Guidelines is the precept that dredged or fill material should not be discharged into the aquatic ecosystem, unless it can be demonstrated that such a discharge will not have an unacceptable adverse impact either individually or in combination with known and/or probable impacts of other activities affecting the ecosystems of concern.

(d) From a national perspective, the degradation or destruction of special aquatic sites, such as filling operations in wetlands, is considered to be among the most severe environmental impacts covered by these Guidelines. The guiding principle should be that degradation or destruction of special sites may represent an irreversible loss of valuable aquatic resources.

40 C.F.R. § 230.1.

"The fundamental precept of the Guidelines is that discharges of dredged or fill material into waters of the United States, including wetlands, should not occur unless it can be demonstrated that such discharges, either individually or cumulatively, will not result in unacceptable adverse effects on the aquatic ecosystem." Memorandum: Appropriate Level of Analysis Required for Evaluating Compliance with the CWA Section 404(b)(1) Guidelines Alternatives Requirements, Robert H. Wayland, III, U.S. Environmental Protection Agency and Michael L. Davis, Department of the Army. Attached as Exhibit 6. "The burden of proof to demonstrate compliance with the Guidelines rests with the applicant; where insufficient information is provided to determine compliance, the Guidelines require that no permit be issued. 40 CFR 230.12(a)(3)(iv)." *Id.*

Accordingly, the Guidelines impose stringent criteria for the Corps' determination of whether it can issue a 404 permit, including the following four prerequisites for approval:

(a) "[N]o discharge of dredged or fill material shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences." 40 C.F.R. § 230.10(a) (emphasis added).

(b) "No discharge of dredged or fill material shall be permitted if it . . . [c]auses or contributes, . . . to violations of any applicable State water quality standard . . . [or]

[j]eopardizes the continued existence of species listed as endangered or threatened under the Endangered Species Act . . . or results in likelihood of the destruction or adverse modification of . . . a critical habitat” 40 C.F.R. § 230.10(b).

(c) “[N]o discharge of dredged or fill material shall be permitted which will cause or contribute to significant degradation of the waters of the United States.” This includes adverse effects “on life stages of aquatic life and other wildlife dependent on aquatic ecosystems” Such effects “are not limited to, loss of fish and wildlife habitat or loss of the capacity of a wetland to assimilate nutrients, purify water, or reduce wave energy[.]” 40 C.F.R. § 230.10(c).

(d) [N]o discharge of dredged or fill material shall be permitted *unless appropriate and practicable steps have been taken which will minimize potential adverse impacts of the discharge on the aquatic ecosystem.* 40 C.F.R. § 230.10(a) (emphasis added).

In determining whether these criteria are met, 40 CFR § 230.11 requires the Corps make written factual determinations regarding the “potential short-term or long term effects of a proposed . . . fill . . . on the physical, chemical, and biological components of the aquatic environment. . . .” Per 40 CFR § 230.11, each determination includes considerations of effects on:

(a) “[T]he nature and degree of effect that the proposed discharge will have, individually and cumulatively, on the characteristics of the substrate at the proposed disposal site.”

(b) “[T]he nature and degree of effect that the proposed discharge will have individually and cumulatively on water, current patterns, circulation including downstream flows, and normal water fluctuation.”

(c) “[T]he nature and degree of effect that the proposed discharge will have, individually and cumulatively, in terms of potential changes in the kinds and concentrations of suspended particulate/turbidity in the vicinity of the disposal site.”

(d) “[T]he degree to which the material proposed for discharge will introduce, relocate, or increase contaminants.”

(e) “[T]he nature and degree of effect that the proposed discharge will have, both individually and cumulatively, on the structure and function of the aquatic ecosystem and organisms.”

(f) Determinations regarding disposal and mixing zones.

(g) “Cumulative effects attributable to the . . . fill material in waters of the United States should be predicted to the extent reasonable and practical.”

(h) “[S]econdary effects on aquatic ecosystems shall be considered prior to the time final section 404 action is taken by permitting authorities.” An example of a secondary effect is “fluctuating water levels in an impoundment and downstream associated with the operation of a dam[.]”

The Guidelines include additional requirements and evaluation and testing procedures at subparts C through J to Part 230, including extensive requirements for compensatory mitigation to “offset environmental losses resulting from unavoidable impacts to waters of the United States.” 40 § 230.93(a)(1). In addition to these requirements of the Section 404(b)(1) Guidelines, the Corps also conducts a review of at least 19 different public interest factors. 33 C.F.R. § 320.4. Even if a proposal passes the Guidelines tests, if it is found to be contrary to the public interest, the permit should be denied.

B. Federal Laws Protecting to Animal Species and Cultural Resources Apply.

The Corps must comply with the **Endangered Species Act** (“ESA”) (16 U.S.C. §§ 1531 *et seq.*), which prohibits the unauthorized “take” of listed species. 16 U.S.C. § 1538(a)(1)(B). The ESA broadly defines “take” to include “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect.” 16 U.S.C. § 1532(19). “Harm” may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering. 50 C.F.R. § 17.3.

Under the ESA, federal agencies must “insure that any action authorized, funded, or carried out by such agency ... is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat” of endangered or threatened species. 16 U.S.C. § 1536(a)(2); *Friends of Santa Clara River v. United States Army Corps of Engineers*, 887 F.3d 906, 913 (9th Cir. 2018). Accordingly, the Corps must review this Section 404 permit application “for the potential impact on threatened or endangered species pursuant to section 7 of the Endangered Species Act.” 33 C.F.R. § 325.2(b)(5). If the Corps determines that “the proposed activity may affect an endangered or threatened species or their critical habitat,” it must “initiate formal consultation procedures with the U.S. Fish and Wildlife Service [(“USFWS”)] or National Marine Fisheries Service [(“NMFS”)].” *Id.*

Such consultation requires consideration of the “best scientific and commercial data available or which can be obtained during the consultation for an adequate review of the effects that an action may have upon listed species or critical habitat.” 50 CFR § 402.14(d).

The **Bald and Golden Eagle Protection Act** (“BGEPA”) (16 U.S.C. §§ 668-668d), prohibits the take, possession, sale, purchase, barter, offer to sell, purchase or barter, transport, export or import, of bald or golden eagles, including any part, nest, or egg, unless permitted under the authority of USFWS. “Take” includes acts to “pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb.” 6 U.S.C. § 668c.

The **Migratory Bird Treaty Act of 1918**, as amended (“MBTA”) (16 U.S.C. §§ 703 *et seq.*) prohibits the take of protected migratory birds, their eggs, parts, or nests unless authorized by a permit under the authority of USFWS. “Take” includes acts to “pursue, hunt, shoot, capture, collect, kill, or attempt to pursue, hunt, shoot, capture, collect, or kill.” 6 U.S. Code § 715n.

Congress declared through the **Marine Mammal Protection Act** (“MMPA”) (16 U.S.C. §§ 1361 *et seq.*) that:

[M]arine mammals have proven themselves to be resources of great international significance, esthetic and recreational as well as economic, and it is the sense of the Congress that they should be protected and encouraged to develop to the greatest extent feasible commensurate with sound policies of resource management and that the primary objective of their management should be to maintain the health and stability of the marine ecosystem. Whenever consistent with this primary objective, it should be the goal to obtain an optimum sustainable population keeping in mind the carrying capacity of the habitat.

16 U.S.C. § 1361(6). Accordingly, it prohibits, with certain exceptions, the "take" of marine mammals in U.S. waters, including harassment, hunting, capture, collection, or killing, or "any other negligent or intentional act which results in disturbing or molesting a marine mammal." 50 CFR § 216.3.

The **Magnuson-Stevens Fishery Conservation and Management Act** ("MSA") (6 U.S.C. §§ 1801 *et seq.*) creates a national program "to conserve and manage the fishery resources found off the coasts of the United States, and the anadromous species and Continental Shelf fishery resources of the United States." 16 U.S.C. § 1801(b)(1). Among Congress' goals in adopting this Act are to "promote the protection of essential fish habitat in the review of projects conducted under Federal permits, licenses, or other authorities that affect or have the potential to affect such habitat." 16 U.S.C. § 1801(b)(7). Essential fish habitat ("EFH") includes "waters and substrate necessary to fish for spawning, breeding, feeding or growth to maturity." 16 U.S.C. § 1802(10). Congress requires that this program "utilizes, and is based upon, the best scientific information available." 16 U.S.C. § 1801(c)(3). The Corps must consult with NMFS regarding impacts to EFH and seek recommendations regarding measures that can be taken to conserve it. See 16 U.S.C. § 1855(b), 50 CFR Subpart K.

Similarly, the **Fish and Wildlife Coordination Act** ("FWCA"), 16 U.S.C. §§ 661 *et seq.* (as amended), requires consultation with the U.S. Fish and Wildlife Service when there are plans to conduct, license, or permit an activity involving the impoundment, diversion, deepening, control, or modification of a stream or body of water. *And see* 33 CFR § 320.3(e), 33 CFR § 320.4. The FWCA also requires consultation with the head of the state agency that administers wildlife resources in the affected state. The purpose of this process is to promote conservation of wildlife resources by preventing loss of and damage to such resources and to provide for the development and improvement of wildlife resources in connection with the action. This is not consultation for consultation's sake. Rather, the EISs should contain an explicit record of wildlife resource loss and damage prevention consistent with FWCA compliance.

The **National Historic Preservation Act** ("NHPA") (16 U.S.C. §§ 470 *et seq.*) requires the Corps to consult with tribes when considering the effects of federal undertakings on historic properties that have tribal religious and cultural significance. Section 106 imposes several obligations that should occur in conjunction with EIS development, including to make a "reasonable and good faith effort" to identify historic properties within the "area of potential effects, including any data concerning possible historic properties not yet identified." 36 C.F.R. § 800.4.

IV. SIGNIFICANT LEGAL SHORTCOMINGS OF THE DEIS

The choosing and analysis of alternatives is the heart of an EIS and fundamental to credible compliance with NEPA. The purpose and need statement dictates the alternatives analyzed in an EIS. Federal law requires a purpose and need statement not be so narrow as to limit or undermine analysis of all “reasonable alternatives.” This DEIS, however, only considers two dams after applying overly-narrow, inexplicable and unsupported screening criteria to address the stated purpose and need.

To start, the Nations reminds the Corps of the process by which this entire Project began. The Chehalis Basin Strategy (“Strategy”) is a collaborative process the responsibility for which the Washington Legislature delegated to the Office of the Chehalis Basin and its oversight Board “to aggressively pursue implementation of an integrated strategy and administer funding for long-term flood damage reduction and aquatic species restoration in the Chehalis river basin.” RCW 43.21A.730(1). The Chehalis Basin Strategy Final Programmatic Environmental Impact Statement (“PEIS”) (June 2, 2017) evaluated a suite of actions to equally address both challenges. Among those actions were two types of dams: 1) A dam designed to temporarily hold back water during major floods, referred to as a Flood Retention Only facility (“FRO”), and 2) a larger dam with a permanent reservoir designed to retain water all year (instead of only during major floods), referred to as a Flood Retention Flow Augmentation facility (“FRFA”).

The proposed dam/levee Project is antithetical to objective of the Chehalis Basin Strategy of an **integrated** strategy for flood damage reduction and aquatic species restoration throughout the Basin. The proposed Project addresses flood damage reduction through a facility that will have catastrophic impacts on the core riverine processes and ecological systems needed to sustain, let alone restore, aquatic species in the Chehalis Basin and offers a limited geographic extent and scale of flood damage reduction, leaving most of the Chehalis River Basin and its residents unprotected. This Project does not address other important components of the overall Chehalis Basin Strategy that have been under consideration for more than two decades, such as flood damage reduction **throughout the entire** Chehalis River Basin.

A. The Corps Did Not Adequately Consider All Reasonable Alternatives.

1. *Stated purpose and need inexplicably differ from Applicant’s.*

There are several fundamental flaws with and between the purpose and need statement, alternative screening metrics, and selection of alternatives for analysis in the DEIS. These flaws, described below, demonstrate an invalid process that does not support the proposed Project as the only solution to the stated problem.

a. Project description.

Although lacking detail provided in the Draft EIS under the State Environmental Policy Act

(“SEPA”),¹² the preferred Alternative, the proposed dam/levee Project includes an expandable dam—the FRE (equivalent size and function to the FRO considered in the PEIS). It is proposed to be 1,550 feet long and 270 feet high. DEIS, p. 26. It includes an overflow spillway and five gated outlets about 310 feet long, through which the river would flow under “normal conditions.” *Id.* A fish “Collection, Handling, Transport, and Release” (“CHTR”) facility would be located on the east side of the River immediately downstream of the FRE facility. *Id.* A reservoir with a storage capacity of 65,000 acre-feet would hold floodwaters, covering approximately 856 acres. *Id.* at 28. Vegetation would be removed from 485 acres of the FRE site and reservoir footprint. *Id.* at 31. A road bypass route consisting of existing roads would be improved by adding gravel and compacting it. *Id.* at 28.

Concrete aggregate material would come from one or more quarries, three potential sites for which are identified in the DEIS, (p. 28), and a concrete production facility would be built “near the FRE facility.” *Id.* at 30. A new power line will be installed. *Id.* at 26.

The reservoir would begin to fill approximately 48 hours before the predicted flow rate reached 38,800 cubic feet per second (cfs) at the Grand Mound gage (USGS 12027500). *Id.* at 31.

The following substantive elements of the FRE were included in a Department of Army Section 404 Permit Application (“DAPA”) submitted by the Applicant for the proposed Project September 4, 2020, but not discussed or analyzed in the DEIS:

- The CHTR would include an adult and a juvenile fish ladder, lamprey ramp, fish lift, sorting stations, holding tanks, and a mechanical/electrical building. DAPA, p. 11
- Access road improvements would include crossing several delineated streams and seven streams that have not been field verified. *Id.* at 6.
- Although the size of the quarry has not yet been defined, for the purposes of this application it was assumed that the selected quarry site would be cleared of vegetation to support up to a 15-acre quarry for aggregate production. Material processing equipment would be used to produce aggregates suitable for RCC and conventional concrete from materials

¹² Anchor QEA prepared the DEIS on behalf of the Corps under a contract with the State of Washington, and under which it also prepared a Draft EIS pursuant to the State Environmental Policy Act. Anchor QEA also authored or contributed to several technical reports analyzing various aspects of the proposed dam/levee Project that underlie the analysis in the DEIS, including the wetland delineation reports, hydrologic monitoring, hydrology, water quality reports, and fish passage design. Anchor QEA developed the dam/levee Project Operations Plan. It is a conflict of interest for Anchor QEA to be analyzing and discussing the impacts of the proposed Project in the Draft EIS based on its own underlying technical reports—essentially reviewing its own work. This situation fails to meet the objectivity required by 40 C.F.R. § 1502.14.

excavated from the quarry and concrete mixing plants. This would include rock crushers and processing plants, stockpiles, conveyors, and potential washing equipment to produce different size sand, gravel, and rock required for construction. Imported materials such as Portland cement, pozzolans (flyash), and concrete add mixtures would be stored at the concrete production facility location near the Chehalis River. *Id.* at 14.

- To the extent possible, the FCZD would minimize disturbance and creation of new impervious surfaces by using existing roads to provide access to and around the construction site. However, some permanent road improvements would be necessary to provide sufficient load-bearing for construction equipment. Improvements would likely include amendment with quarry spalls and subsequent maintenance activities. *Id.*
- Debris management, storage, and staging areas would support the deployment of boats and barges from existing access roads. Debris would be stockpiled in a log sorting yard located between RM 109.6 and 109.9. *Id.* at 15.
- Incorporation of permanent new water pipeline crossing of the Chehalis River into the FRE structure or a permanent new crossings of the Chehalis River at another location [to replace the water supply system for the town of Pe Ell, which will be affected by the Project]. *Id.* at 15-16.

No description of or justification for the expanded FRE is provided in the DEIS. Likewise, the impacts associated with the expanded FRE are not considered.

The proposed Chehalis-Centralia Airport levee portion of the Project would include:

- Adding 4 to 7 feet of height along the existing 9,511-foot levee with earthen materials or floodwalls¹³
- Raising up to 810 linear feet of NW Louisiana Avenue
- Widening the parts of the levee base
- Replacing utility infrastructure

DEIS, p. 33.

Aside from the requisite No Action Alternative, the DEIS includes only a second version of the dam/levee—a non-expandable flood-retention only dam (FRO) combined with the airport levee. The impacts of this non-expandable dam are largely deemed the same as the FRE.

¹³ In contrast, Public Notice No. NWS-2014-1118 and DAPA indicate the levee work involves “Raising the existing levee by between 1.3 feet and 5.3 feet along 9,511 linear feet.”

The Applicant for the dam/levee Project is the Chehalis River Basin Flood Control Zone District (“FCZD”), a quasi-governmental agency that has never designed, built, or operated a flood control dam. To date, the development of the Project and the SEPA and NEPA analysis have been funded by the State of Washington. However, there is currently no identified funding source to construct or operate this proposed Project.

b. Purpose and need statement.

The Applicant determined that this Project is needed:

because flooding has caused major damage in the recent past. In the Chehalis Basin, flooding has damaged homes, businesses, and agricultural areas. It has also damaged and blocked access to critical public facilities. Some transportation facilities, like I-5 and the Chehalis-Centralia Airport, have been required to temporarily shut down. These past damages and delays have resulted in high economic costs.

DEIS, p. 11.

The stated purpose of the proposed Project, therefore, is “to reduce the risk of flood damage in the Chehalis/Centralia area from catastrophic flooding.” *Id.* A “catastrophic flood” is defined as a 100-year flood, which has a 1% chance of happening each year. *Id.* The geographic scope of the Project’s purpose is then very specifically defined as the 100-year floodplain of the Chehalis River from Adna to Grand Mound. DEIS p. 11, 23. There is no justification provided in the DEIS for an expandable dam being needed to address any particular future condition. Appendix D merely notes the FRE is expandable “if the Applicant decided to increase the storage capacity in the future. This future expansion could increase temporary reservoir storage from 65,000 acre-feet to 130,000 acre-feet, but is not proposed at this time.” p. D-25.

To meet the stated purpose in the target area, the Corps applied “screening criteria based on information provided by the Applicant.” *Id.* at 23. The Corps neither cited nor provided such “information.” The Nation notes, however, the SEPA DEIS included an Attachment comprising “Applicant’s Project Description and Clarifications” (Attachment A to Appendix 1) that included a series of Memoranda from the Applicant dating between November 30, 2018 and May 7, 2019 regarding “Chehalis River Basin Water Retention Facility - Project Purpose and Need Clarification.” The May 7, 2019 Memorandum¹⁴ included the following description of the Project purpose:

The proposed project would reduce flooding originating in the Willapa Hills and improve levee integrity at the Chehalis-Centralia Airport to reduce flood damage in the

¹⁴ This May 7, 2019 Memorandum is provided on the Chehalis River Basin Flood Control District website as the “Project Purpose Need and Description” <https://www.chehalisriverbasinfczd.com/flood-retention-facility-options> (accessed October 26, 2020).

Chehalis-Centralia area Reduced flood damage would be measured by the following metrics:

1. Removing about 635 structures of value from flooding risk during a 100-year flood
2. Reducing the disruption of access via main transportation routes, specifically ensuring access along State Route (SR) 6 and Interstate 5 (I-5) is open within 24 hours of a 100-year flood
3. Minimizing flood-related impacts (e.g., closure) at the Chehalis-Centralia Airport

To achieve the proposed project purpose, the Applicant is proposing the following objectives:

1. Locate the proposed project within a geographic scope extending from the Pe Ell area to the Chehalis-Centralia area. More specifically, the Applicant is proposing to locate a flood retention facility near Pe Ell and implement levee improvements at the Chehalis-Centralia Airport.
2. Reduce flood elevations during a 100-year flood at the following locations:
 - A. 10 feet at the Doty gage (U.S. Geological Survey [USGS] 12020000)
 - B. 1 foot at the Mellen Street gage (USGS 12025500)
3. Do not extend the boundaries of the existing 100-year floodplain.
4. Provide future leaders in the Chehalis Basin the flexibility to address additional increases in peak flood levels through an adaptable design approach.

In stark contrast to the SEPA framework outlined above, the Corps imposed an entirely different framework to evaluate whether the purpose and need would be met. The Corps required that the alternatives meet all the following Phase 1 screening criteria for achieving the Project purpose:

- **Geographic Area of Flood Damage Reduction:** An alternative must reduce flood damage from a 100-year flood from USGS river gage 12021800 near Adna to USGS river gage 12027500 near Grand Mound.
- **Flood Damage Reduction Metrics:** An alternative must reduce 100-year flood elevations at each of the following locations:
 - Reduction of 1 foot at the Mellen Street gage (USGS 12025500)
 - Reduction of 4 feet at the Adna gage (USGS 12021800)
 - Reduction of 0.9 foot at the Chehalis Wastewater Treatment Plant gage (USGS 12025100)
 - Reduction of 0.8 foot at the Grand Mound gage (USGS 12027500)

- No Substantial Increase in Redirected Negative Impacts: An alternative cannot cause substantial changes to the 100-year floodplain that would increase flood damages in other segments of the Chehalis Basin. *Id.*

Applying these metrics, only four out of 61 potential alternatives were deemed viable after Phase 1 screening. *Id.* at 24. All four of these alternatives included a flood control dam and levee improvements.

As part of its Phase 2 screening criteria, the Corps considered “whether alternatives carried from Phase 1 were reasonably available to the Applicant” and “whether any alternatives would cause substantially greater impacts to the aquatic environment relative to each other.” *Id.* at 23. The remaining viable alternatives were the FRE and a Flood Retention Only (FRO) dam, which would essentially be the same as the preferred FRE but “built on a smaller foundation” and “would not be designed to allow for future expansion of flood storage capacity.” *Id.* at 34.

These criteria and metrics differ substantially from those presented in the SEPA DEIS, which included the metrics identified by the Applicant in its May 9, 2019 Memorandum regarding the “Project Purpose and Need Clarification”:

The stated purpose and objective for the FRE dam/levee Project are:

The Applicant’s **purpose** for the Proposed Project is to reduce flood damage in the Chehalis-Centralia area by constructing a flood retention facility and temporary reservoir near Pe Ell and making changes to the Chehalis-Centralia Airport levee.

The Applicant’s **objective** for the Proposed Project is to reduce flooding coming from the Willapa Hills and improve the levee protection level at the Chehalis-Centralia Airport.

SEPA DEIS, p. 6 (emphasis added). The DEIS identifies these specific metrics to measure flood damage reduction:

1. Protect approximately 635 structures of value from flooding risk during a catastrophic flood.
2. Reduce disruption of access via main transportation routes, specifically ensuring access along SR 6 and Interstate 5 (I-5) is open within 24 hours of a catastrophic flood.
3. Minimize flood-related impacts (e.g., closure) at the Chehalis-Centralia Airport.

SEPA DEIS, p. 8.

The NEPA DEIS does not provide an explanation or justification for not incorporating the Applicant’s stated purpose and need. Nor does the NEPA DEIS provide any explanation or rationale for changing the metrics used to measure the purpose of flood damage reduction from

those provided by the Applicant and utilized in the SEPA DEIS, to use a more narrowly focused purpose and need statement.

2. *Stated purpose and need are unreasonably narrow and improperly dictate alternatives.*

The purpose of the proposed Project is described (p. 11) “to reduce the risk of flood damage in the Chehalis/Centralia area from catastrophic flooding. The target area is the 100-year floodplain of the Chehalis River from Adna to Grand Mound” (Figure 2.2-1). Flood damage reduction is not the same as flood level reduction; there are many proven measures to reduce flood damage without reducing flood levels. However, the DEIS ties its screening for potential alternatives to reductions in 100-year flood elevations without justifying why flood damage can only be reduced through reduction in flood levels specifically at the Mellen Street, Adna, Chehalis Wastewater Treatment Plant, and Grand Mound river gauges. The delineation of the target area is not supported by the need statement in Section 2.2 and appears to reverse-engineer the screening metrics to the preferred alternative, effectively ruling out any other potential solution than a dam at the proposed location.

The flood damage reduction metrics used in the screening process to support the purpose for the Project differ substantially, and without explanation or justification, from the metrics presented in the SEPA DEIS to achieve the stated purpose. Inclusion of the Adna gauge in the flood level reduction metrics defines the agricultural area along the mainstem Chehalis River in that reach as being part of the target area. The need description (Section 2.2) describes the consequences of catastrophic flooding in this target area, including damage to “vast areas of agricultural land.” However, there is no rationale provided for why this particular area of agricultural land warrants flood protection while other, higher value areas such as in the South Fork Chehalis do not. In fact, the unexplained inequity of providing protection against flooding for one agricultural area over another introduces a new problem rather than solving one. If the true target area is actually the urban Centralia/Chehalis/I-5 corridor as stated (p. 11), the DEIS should be transparent about that and focus on screening for alternatives that solve the flood consequences in that smaller target area.

Further, the types of damage to agricultural land described in the DEIS need statement in Section 2.2 can be solved through measures other than the dam/levee Project, such as riparian corridors to screen out sand and other flood debris before it reaches agricultural fields, elevated farm pads (many of which have been built in the Chehalis Basin) to provide safe refuge for animals and farm equipment, and elevation or floodproofing for valuable structures (including barns). In addition, restoration of upper Chehalis headwater areas and of flood-storing riparian wetlands could reduce flood flow velocities (and possibly even levels) in the future. Additionally, actual inundation of crop land from slow-moving floodwater is widely recognized as a net benefit to crop productivity because of the soil replenishment that these floodwaters bring, as long as the farmer is able to achieve field drainage during the growing season. It is this exact process that created the fertile farmland that farmers seek in floodplain areas. Therefore, periodic flooding of agricultural land is not inherently a problem to be solved, but rather a benefit to increase agriculture viability. Limiting periodic agricultural flooding is not properly included as a “need” for the dam/levee project.

The DEIS alternative selection process describes a two-phase screening process, with Phase 1 relying on the criteria described in Section 3.2.2 – target geographic area, flood level reduction metrics, and a criterion for no substantial increase in redirected negative impacts—and Phase 2 evaluating whether alternatives were “reasonably available to the Applicant” and “whether any of the alternatives would cause substantially greater impacts to the aquatic environment relative to each other.” The DEIS is not transparent about its evaluation of other alternatives; Appendix D contains a short synopsis description of each alternative evaluated along with its qualitative ratings against the Phase 1 screening criteria. No information is provided as to the basis of the ratings assigned. The Nation notes, however, that the four projects (all variations on dams) that advanced to Phase 2 were the only ones to meet the metrics of reduction in flood levels at the specific gages defined in the DEIS purpose and need statement. Given this lack of transparency, there is inadequate basis to determine why the ratings are supported, and, accordingly, the Nation does not accept the screening results. Further, the screening process does not consider combinations of the 61 potential screened alternatives except combinations similar to the proposed project (flood retention plus airport levee improvements), resulting in a myopic evaluation process that did not truly examine the possibilities of other ways to meet the purpose and need as stated in the DEIS.

By considering the airport levee only in conjunction with the FRE/FRO facility, rather than as a stand-alone alternative or one combined with other non-dam flood reduction measures, the DEIS inflates the benefits of the FRE facility and fails to comparatively determine the efficacy of the airport levee. *See*, Appendices Comment Matrix, comment 8. Understanding impacts from the airport levee separately would be beneficial to understanding each action's unique effects and whether the airport levee options could provide important flood damage reduction benefits as part of a non-dam alternative. Furthermore, the DEIS in no way justifies the need for the airport levee in light of the stated purpose and need.

The Phase 2 screening evaluation is invalid because of the flaws in the Phase 1 screening process described above, which steered the conclusion toward a flood retention facility as the only viable alternative. In fact all of the types of measures included in the many alternatives screened out – levees, flood walls, flood proofing, farm pads, buyouts, structure elevations, and watershed restoration – are currently actively being implemented in the Chehalis Basin through the Chehalis Basin Flood Authority actions and the Community Flood Assistance and Resilience (“CFAR”) program implementation, making the argument that these measures are not reasonably available to the Applicant absurd. Nearly all of these measures would have relatively smaller impacts to aquatic systems than the proposed Project, making them viable and even superior against that Phase 2 criterion.

In summary, this DEIS is a clear example of the Corps preordaining the preferred alternative by providing an unreasonably narrow purpose and need statement. The flawed method by which the DEIS alternatives were chosen based on this unreasonably narrow purpose and need statement violates NEPA requirements to consider all reasonable alternatives and fails to appropriately foster informed decision-making.

3. *Purpose and need does not justify expandable dam/levee Project.*

In addition to the unreasonably narrow purpose, need and objectives for the proposed Project, the DEIS wholly fails to comply with NEPA requirements to consider reasonable alternatives because the purpose and need do not support that a future expanded dam with a larger reservoir is actually needed. In fact, the DEIS provides zero justification for an expandable FRE dam. Notably, because the DEIS eliminates the Applicant's previously stated objective from the SEPA DEIS to "Provide future leaders in the Chehalis Basin the flexibility to address additional increases in peak flood levels through an adaptable design approach," it eliminates the only objective that would have provided support for needing an expanded dam.¹⁵ This objective, in addition to other clarifications by the Applicant found in appendices to the SEPA DEIS, provided insight about why the FRE was designed to allow for a future expanded dam addition and larger reservoir. For further elaboration, see Quinault Nation SEPA comment letter, Section V.A.2, and referenced Exhibits and attachments, including SEPA DEIS, Appendix 1, Attachment A. Additionally, the NEPA DEIS specifically excludes consideration of future climate conditions and states that "it is not possible to predict the timing or extent of future flooding." DEIS at 40. **The DEIS, thus, on its face, fails to justify an expandable FRE dam as an alternative that meets the purpose and need stated in the DEIS.**

4. *DEIS fails to provide comprehensive flood risk evaluation for target area, compounding the lack of justification for choosing the FRE as the proposed Project.*

Flood damage reduction and flood risk mitigation standards of practice dictate that flood risks to a target area be comprehensively evaluated in order to provide reasonable assurance that the best techniques are applied to the right areas. As stated in FEMA Guidance for Flood Risk Analysis and Mapping (2019):

[D]ata and information obtained during the Discovery process should demonstrate a holistic picture of flooding issues, flood risk, and flood mitigation needs and capabilities within a watershed. The data and information gathered should also provide an understanding of the geography, demographics, and willingness to address risks, infrastructure presence, underlying building codes, and other critical elements that will provide a full understanding of the watershed.

Attached as Exhibit 7.

¹⁵ See discussion in Quinault Nation SEPA DEIS comment letter, Section V.A.2, demonstrating that even given the Applicant's stated purpose, need and objectives, the Applicant's own record demonstrates an expanded dam is not warranted because it rejected the Flood Retention Flow Augmentation dam (effectively the equivalent of an expanded FRE) as "not necessary to meet the purpose and need" and because of its "unnecessary environmental impacts."

As stated above, major floods do not equate to flood damage. Flood damage only occurs in areas where development is exposed to flooding and not designed to accommodate flood waters. Flood-resilient communities accommodate major flooding with little or no damage. The DEIS fails to provide a comprehensive assessment of how effective the FRE will be at reducing flood damage in the Chehalis-Centralia area because it ignores the regular flood damage the area experiences from several local creeks, and that “storms centered over the Black Hills and Cascade Range foothills can cause flooding in the Skookumchuck, Newaukum, and Chehalis Rivers in the Centralia/Chehalis area.” (SEPA DEIS App. N, p. N-15)¹⁶

The Chehalis-Centralia area experiences regular flood damage from several local creeks that flow through the two cities, most notably China Creek, Salzer Creek, Coal Creek and Dillenbaugh Creek, but aside from generalized statements about flood risk related to the No Action Alternative, the DEIS does not acknowledge or discuss the flood risks posed by local creeks. Through its preferred alternative, the DEIS has inappropriately narrowly focused on flooding from a single source within the Chehalis Basin – the upper Basin above the Town of Pe Ell – when it is well known that damaging floods originate from numerous sources within the Chehalis Basin, including the South Fork Chehalis, Newaukum, Skookumchuck, Satsop and other watersheds.

Although the NEPA DEIS states that the proposed FRE facility would have the volumetric capacity to impound more water than is technically needed to achieve the purpose and need during a current 100-year flood, there is no analysis of how increases in peak flows from the South Fork Chehalis River, the Newaukum River, and the Skookumchuck River will affect downstream flood stage, regardless of the impoundment and storage of flood flows upstream of Doty. Without this analysis, it becomes impossible to characterize whether the FRE facility will meet the stated purpose and need during the analysis period of 2030 to 2080. *See*, Critical Review of Proposed Chehalis River Basin Flood Damage Reduction Project NEPA DEIS: Climate Change Impacts.

The failure to evaluate different geographic sources of flooding and a range of storm events compounds the DEIS’s failure to actually meet its stated purpose and objectives. This failure contradicts sound standards of flood risk management practices to comprehensively assess flood risks to an area, and then develop solution options to address those risks.

Likewise, because of the application of unreasonably narrow purpose and need statements, a non-dam alternative was not considered. In fact, a non-dam alternative such as the Local Action Program as explored by the Nation in its comment letter for the SEPA DEIS would be best suited to provide the comprehensive plan needed to address the range of flood problems, inundation pathways and geographic flooding scenarios not considered in the DEIS and more in keeping

¹⁶ In addition to the FRE/levee Project, the DEIS briefly discusses the non-expanded FRO combined with the levee. However, because the DEIS largely concludes the impacts between the two dams are similar and does not analyze the impacts of each comparatively, the comments herein regarding the preferred FRE dam/levee Project also apply to the FRO dam/levee Project.

with the original legislative direction for the Basin. *See*, Ex. 8, Local Actions Alternative Technical Analyses Review.

5. *Stated metrics for meeting purpose and need not all met.*

Oddly, the DEIS buries its conclusions about whether the metrics tied to the dam/levee Project meeting the purpose and need will be met. *See*, Note at the end of Table 4.1-5 at 57. It confirms that of the four flood elevation reduction metrics, one is not met, and one would “most likely be met”:

1. This is the closest location to the Adna gage (USGS 12021800) and shows **the metric of -4 feet during a catastrophic flood would not be met.**
2. This is the closest location to the Chehalis Wastewater Treatment Plant gage (USGS 12025100) and shows the **target metric of -0.9 feet during a catastrophic flood would most likely be met.**
3. This is the Mellen Street Bridge (USGS 12025500) and shows the target metric of -1 foot during a catastrophic flood would be met.
4. This is the Grand Mound gage (USGS 12027500) and shows the target metric of -0.8 foot during a catastrophic flood would be met.

Id.

Because the DEIS does not comprehensively evaluate all potential sources of flooding for this area, it cannot definitively conclude that the two areas deemed to meet the target metric would actually be removed from flood risk with the proposed Project.

By the same token, whether the metric of reducing flood damage from catastrophic flooding between Adna and Grand Mound is met is only superficially addressed in the DEIS. *Id.* at 180-181. First, it states that the number of flooded acres in the study area (the FRE site to Porter) would be reduced by 2,800 acres during a major (10-year) flood, and by 4,100 acres during a catastrophic (100-year) flood. *Id.* However, it is unclear which of those acres lie between Adna and Grand Mound, specifically. Nor does the DEIS clarify whether flood *damage* on that acreage would be reduced. As pointed out previously, flooding does not necessarily equate to flood damage. Second, the DEIS states that a reduced number of structures would be flooded as a result of the dam/levee Project (55 fewer structures during a major/10-year flood and 692 fewer structures during a catastrophic/100-year flood). However, it is unclear whether this means flood levels would be reduced or these structures would see zero flooding. The DEIS states generally that critical infrastructure, including I-5, would be “protected from flooding” without providing detail about what that means. *Id.* at 180. Likewise, the statement that “[e]ssential public facilities “would experience reduced flooding.” *Id.* Again, it is unclear if this means those facilities would experience lower flood levels or reduced damage.

Because the analysis in the SEPA DEIS included future climate predictions, its conclusions showed less protection of structures from flooding and less flood damage reduction than stated in the NEPA DEIS. The NEPA DEIS, then, almost certainly over-reports the protection of structures from flooding. The failure of the NEPA DEIS to consider future climate impacts, combined with the failure to evaluate all potential sources of flooding, means the NEPA DEIS

does not validly demonstrate its metrics for achieving the stated purpose and need would be met. Accordingly, **the DEIS does not satisfy NEPA requirements to rigorously and objectively evaluate all reasonable alternatives or “to recognize the worldwide and long-range character of environmental problems,” which clearly include climate change.**

B. DEIS Fails to Take Requisite Hard Look at Impacts and Is Not Based on Credible Science.

The DEIS considers environmental impacts from the proposed Project between 2030 and 2080 and describes them as “low, medium, or high.” *Id.* at 38. These determinations were “based on best professional judgment” without further qualification or explanation of whose judgment, or what process was followed to derive them. “Low impacts may or may not be readily noticeable while medium impacts would be. High impacts would be very noticeable and cause substantial problems for the environmental resource.” *Id.* Although the DEIS indicates that the thresholds used to assess impact levels for each environmental resource are provided in Appendix E, in fact, no explanation is provided to quantitatively interpret the thresholds identified and so they cannot be validated and are not scientifically justified. *See*, TECHNICAL REPORT: Salmon Population Modeling and Aquatic Species for the NEPA DEIS Evaluation of Flood Protection in the Chehalis Basin, p. 34.

In summary, with regard to impacts to aquatic species, “Construction and operations would also adversely affect aquatic species, including fish, plants, freshwater mussels, and marine mammals.” App. K at E-2.

Key DEIS findings for impacts from FRE construction include:

- High direct impacts to anadromous salmonids and lamprey in the FRE project area and study area
- High direct impact to spring-run Chinook at the Chehalis Basin scale from loss of habitat diversity in the study area
- High permanent impairment of habitat function in the study area because of increased water temperatures and decreased dissolved oxygen below the proposed flood retention facility to RM 100 from pre-construction vegetation removal and reduced shading from riparian vegetation

DEIS at 111, 126, 132, App. K at ES-2- ES-10.

Key DEIS findings for FRE operational impacts include:

- High indirect impacts to anadromous salmonids and lamprey in the FRE project area and study area
- High indirect impacts to spring-run Chinook salmon from loss of habitat diversity in the study area

- High permanent impairment in the study area of habitat function because of increases in water temperatures (RM 108 to RM 100 near the Elk Creek confluence) from ongoing vegetation management
- High long-term modeled decrease in habitat potential in study area for spring- and fall-run Chinook salmon, coho salmon, and steelhead because of changes in habitat function, reduced supply of prey resources, and reduced fish passage
- High decrease in habitat potential in study area for other salmonids, lamprey, and other native fish species because of impacts to habitat function that are similar to impacts to modeled salmonids

Id. Although statements of these qualitative findings of impacts are spread throughout the DEIS and Appendix K, they are somewhat inconsistently described. The Nation explains below why the impacts to aquatic species and their habitats are incorrectly analyzed and underestimated in the DEIS.

To analyze impacts to natural resources, the DEIS relies on three key modeling efforts: hydrology models using data from the past 30 years, a sediment transport model, and salmon models. Because there are significant errors, omissions, flawed assumptions, and inappropriate calibration with each model, and because model inputs rely on each other, the DEIS severely underreports impacts to aquatic species and their habitats.

Furthermore, the DEIS acknowledges “precipitation patterns and air temperatures in the Chehalis Basin will differ in the future compared to the data used in modeling” (*Id.* at 40), and the DEIS concedes “it is possible that the operational impacts of the flood retention facility would also differ.” *Id.* However, future climate conditions were not modeled for the DEIS. *Id.*

These multiple severe shortcomings are discussed in more depth below.

1. *Ecosystems effects are not addressed in DEIS.*

A flood control dam alters the natural flow, sediment, and wood regimes, creating what is referred to as a first-order impact that sets in motion a cascade of effects to the fundamental physical processes that form and sustain river ecosystems. *See*, Exh. 8, Cascade of FRE Facility Ecosystems Effects Technical Memo. By disrupting the natural flow of water, sediment, and wood, the proposed FRE facility will subsequently impact all river processes related to geomorphology, aquatic habitat, wetlands, and water quality. *Id.*

Alteration of the natural flow, sediment and wood regimes directly affects both downstream sediment transport and channel hydraulics, resulting in channel incision, alteration of channel and floodplain morphology over time, referred to as a second-order impact. These impacts affect instream flows and groundwater levels that directly and indirectly set up a third-order impact to existing plant, fish and wildlife habitat and how this habitat changes over time. This, in-turn, adversely affects the plant and animal populations and their habitats. Changes in plant communities, such as vegetation encroachment into a side channel that now has a reduced flow regime, may subsequently cause changes in channel hydraulics, causing channel incision and

decoupling channel and floodplain lateral connectivity, causing feedback that further alters plant communities, habitats, and fish and wildlife populations. This leads to higher order impacts. *Id.* These impacts are thoroughly described in the Nation's SEPA DEIS comment letter (pp. 33-38) and Exh. 8 Cascade of FRE Facility Ecosystems Effects Technical Memo. As explained in the attached Addendum to Cascade of FRE Ecosystems Effects Technical Memo, the NEPA DEIS also fails to consider or address these pervasive and significant ecosystem impacts and their effects on waters, wetlands, and aquatic species and habitats.

The DEIS provides no meaningful analysis that accurately quantifies the interaction of the processes affected by the proposed Project in an ecosystem framework. Given the well-established interactions between geomorphic, hydrologic, and ecological processes that form and maintain high quality aquatic habitat, the impairment of several of these individual processes will set in motion a much larger "cascade" of impacts that will amplify over time. The synchronous alteration to multiple, connected natural processes that sustain aquatic habitat sets up a positive feedback loop in which the overall impact to ecosystems is amplified relative to the alteration of any one process. However, neither the cascade of effects, nor the amplification of effects are adequately or appropriately analyzed in the DEIS and its associated discipline reports. The result is a DEIS that presents only cursory analysis and grossly underestimates the potential for impacts to waters and wetlands, fish and wildlife species and habitats, and to the very processes that create and sustain functional rivers and floodplains through time. *Id.* at 2. If approved, the proposed Project would have impacts to aquatic species and habitats that cannot be mitigated. *Id.*

2. *Frequency and duration of impacts to flow regime are underestimated.*

The incorporation of reasonable estimates for both the current and future frequency and duration of peak flow events is critical to a credible analysis of impacts from the proposed FRE facility because its operation is directly tied to these events. The analysis of all local and downstream effects due to operation of the FRE facility depends on the hydrology of the system, and particularly on the frequency and magnitude of flooding events that would trigger operation of the FRE facility.

Although the DEIS references "...established, peer-reviewed and state-of-the-art climate projections" (DEIS, Appendix G, p. 54) related to future trends in temperature, precipitation, and flooding, the analysis of impacts tied to frequency and duration of operating the FRE facility ignores future trends. Rather, the NEPA DEIS relies on the assumption that current conditions are representative of future conditions and the assertion that future uncertainty justifies ignoring robust projections, both of which stand in contrast to a large body of scientific literature. *See*, Critical Review of Proposed Chehalis River Basin Flood Damage Reduction Project NEPA DEIS: Climate Change Impacts; Technical Report: Salmon Population Modeling and Aquatic Species for the NEPA DEIS Evaluation of Flood Protection in the Chehalis Basin.

Climate change projections are readily available for the Chehalis River Basin due to previous modeling efforts by the University of Washington Climate Impacts Group. Incorporation of these, or similar, projections is critical for a robust analysis of impacts. By excluding quantitative analysis of projected increases in the frequency and magnitude of flood events, the DEIS underestimates the frequency of operation of the FRE facility. Critical Review

of Proposed Chehalis River Basin Flood Damage Reduction Project NEPA DEIS: Climate Change Impacts, pp. 4-6, 8-9. The DEIS states that “For the purposes of the impact analysis, the EIS generally assumes that the flood retention facility would operate on average once every 7 years, which is the average predicted frequency of a major flood.” DEIS, p. 39. However, the Nation’s previous analysis of the SEPA DEIS estimates that the frequency would actually be once in every 1.8 and 1.4 years under the mid- and late-century climate change scenarios as presented in the SEPA DEIS. Critical Review of Proposed Chehalis River Basin Flood Damage Reduction Project NEPA DEIS: Climate Change Impacts, p. 6. Furthermore, the DEIS’s assumption is based on analysis of the historic record of annual peaks and does not incorporate historical observations of the occurrence of multiple peak flows that would trigger operation of the FRE facility multiple times in a single year. Critical Review of Proposed Chehalis River Basin Flood Damage Reduction Project NEPA DEIS: Climate Change Impacts, p. 4.

By not incorporating climate change in any quantitative analysis, all impacts associated with the frequency and duration of dam operation and reservoir impoundment are underestimated in the DEIS. Additionally, the frequency and magnitude of peak flows is projected to increase across the Chehalis River basin, but there is no analysis in the DEIS of how increases in peak flows in other contributing drainages will affect the ability of the FRE facility to meet the stated purpose of reducing flood stage within the 100-year floodplain of the Chehalis River from Adna to Grand Mound, which is downstream of several unregulated tributaries. By not incorporating climate change projections, the DEIS cannot adequately provide decision makers the information necessary to determine whether the future achievement of the flood damage reduction metrics can meet the stated purpose and need. *Id.* at 8-9.

3. *Impacts to sediment regime are based on flawed analyses and are underestimated.*

The sediment transport model is the primary analysis tool used to assess impacts to geomorphic processes as a result of the proposed FRE facility and serves as the quantitative basis for assessing how changes to those processes impact the ecosystem, including but not limited to aquatic habitat and fish populations (Appendix K) and wetlands (Appendix J). The sediment transport model presented in Appendix I of the NEPA DEIS is fundamentally flawed and contains many errors, omissions, flawed assumptions, inappropriate calibration, and a sensitivity analysis that does not reflect the variability and uncertainty in sediment transport predictions. *See*, Addendum to Cascade of FRE Ecosystems Effects Technical Memo.

The modeling approach significantly underestimates the sediment load from the 2007 storm event by omitting ~90% of the estimated sediment load. *Id.* at 7. The model also fails to account for increases in the frequency and magnitude of landslides due to reservoir operations. *See*, Addendum to Cascade of FRE Ecosystems Effects Technical Memo. Landslides and landslide potential are underrepresented in the supporting technical analyses and thereby underestimate sediment delivered by landslides and the resulting impact analyses; actual sediment volumes will be much higher (potentially as high as 16 million cubic yards). Critical Review of Proposed Chehalis River Basin Flood Damage Reduction Project NEPA DEIS: Geology Discipline Report Review, p. 3, 8. Observations of actual conditions in the Chehalis River confirm the sediment transport results are flawed. *Id.* Further, because the model was not properly calibrated with

bedload measurements, the accuracy of the results are questionable. *Id.* The sediment mobility analysis has multiple additional flaws, which are discussed in the Addendum to Cascade of FRE Ecosystems Effects Technical Memo.

For these reasons, the model significantly underestimates the amount of coarse sediment that would be stored behind the proposed FRE facility and the amount of fine sediment that would be transported downstream as a result of its operation. There is likely to be greater amounts of fine sediment transported downstream of the proposed FRE facility than what is disclosed in the NEPA DEIS. The implications of these underestimated impacts include likely greater impacts to geomorphic processes, aquatic habitat, and wetlands than are disclosed in the NEPA DEIS. These include, but are not limited to, greater degrees of downstream channel incision (which disconnects the river from its floodplain, results in decreases in floodplain habitat and the loss of associated wetland area and function), loss of salmonid spawning habitat through increases in siltation from fine sediment and increases in bed scour, and increased simplification of in-channel habitats. Fine sediment inputs will increase the frequency and duration of river turbidity, adversely affecting water quality, suffocating salmonid eggs, freshwater mussels, and amphibian larvae, and altering the nature and functions of floodplain wetlands – all of which would result in greater impacts to water quality, aquatic species, instream habitats, and floodplain wetlands than what is presented. Siltation from fine sediments has been identified as a contributing factor to freshwater mussel declines in many watersheds across the country. Amphibian species (including Tailed frogs, Western toads and some species of salamanders, among others) have been shown to be similarly susceptible to increases in fine sediment. *Id.*

Because the sediment transport model is fundamentally flawed, so too are all of the impact assessments that rely upon it, particularly the NEPA DEIS interpretation of the magnitude and intensity of impacts to the physical processes that create and sustain riverine, floodplain, and associated wetland habitats and their associated fish and wildlife species. *Id.*

4. *Impacts to fish and habitat based on flawed analysis and underreported.*

The DEIS relies on the same methods and models used in the SEPA DEIS (the Ecosystem Diagnosis & Treatment Model (“EDT”) and the integrated EDT-Life Cycle Model (“LCM”) Hybrid (hereafter referred to as “Hybrid”)), to evaluate impacts of the FRE on four salmonid species (spring and fall Chinook, coho, and winter steelhead) (collectively referred to as “salmon”). These salmon models utilized the same population structures, geographic area, and time periods for reporting impacts (during FRE construction, and at mid and late century), and assumptions regarding early action habitat restoration, culvert removal, and future degradation resulting from development as were used to inform the SEPA DEIS.

The major difference in methods used in the NEPA and SEPA model-based assessments is that the NEPA assessment does not evaluate impacts of future climate change, despite a clear recognition that climate change patterns are projected to worsen certain environmental conditions for salmon. Technical Report: Salmon Population Modeling and Aquatic Species for the NEPA DEIS Evaluation of Flood Protection in the Chehalis Basin, p. 3. The SEPA DEIS, on the other hand, included at least a superficial evaluation of changes in future precipitation, temperature, flood peak flows, and streamflow for mid- and late-century. Accordingly, the

analysis provided in the Nation's SEPA DEIS comment letter related to impacts to fisheries resources from the proposed Project (pp. 38-44) and associated "Review of Impacts on Fish and Fisheries as Presented in the SEPA DEIS Evaluation of Flood Protection in the Chehalis Basin" are applicable to the impacts characterized in the NEPA DEIS but not re-stated herein. Additional concerns are outlined in the Technical Report: Salmon Population Modeling and Aquatic Species for the NEPA DEIS Evaluation of Flood Protection in the Chehalis Basin and summarized below.

A primary concern is the reliance on the use of the Hybrid to examine potential effects of variability in inter-annual stream flows as reflected by United States Geological Survey ("USGS") water years. The Hybrid does not simulate effects of flow on salmon habitats directly, but rather attempts to mathematically stitch together population performance measures for life stages produced by EDT under steady state conditions for the entire life cycles of different species. Life cycles for different species encompass several years while individual life stages occur during a few months. The Hybrid, therefore, is a fundamental and irreconcilable mismatch between the population performance measures produced by EDT and an attempt to incorporate USGS water years.

The Hybrid attempts to evaluate effects of variability in water years by a random selection over a 100-year period used in modeling of three specific USGS water years chosen to represent 2-, 10-, and 100-year flood flow frequencies. The Hybrid employs "water flow conditions" that correspond to EDT's life stages for individual species. However, the months encompassed by Hybrid's selected EDT life stages do not align with October to September USGS water years. For example, Hybrid's spawner to smolt life stage for coho covers an 18-month period that includes portions of two USGS water years. An error in coordinating the modeling components between EDT and Hybrid resulted in only applying a single water year over the entire 18-month period—this mistake was never corrected even though the modelers became aware of it prior to publishing the DEIS. *See*, Technical Report, at 22. A more confusing situation occurred in modeling winter steelhead. Hybrid's representation of winter steelhead utilizes an April to March water year, which is mid-way during an actual USGS water year. In addition to the physical and biological disconnects between water flow conditions, USGS water years, and EDT life stages, persistent environmental carry-over effects are ignored by Hybrid's assumption that environmental conditions change instantaneously with water flow conditions. Hybrid's coupling of EDT life stage performance measures in an attempt to estimate cumulative impacts of variations in USGS water years over salmon life cycles is clearly fundamentally flawed.

The effects of the different water year types that serve as the inputs to Hybrid are derived using EDT by adjusting that model's habitat attribute parameters in a way intended to reflect how the attributes would change under different water year scenarios. Any errors in parameterization of EDT would be incorporated directly into results produced by Hybrid. EDT modeling suffers from a variety of deficiencies, errors, and lack of interpretation and explanation, as detailed in the Technical Report. *Id.* at 15-25, 29-33. Significant errors were found in EDT parameterization associated with the 10- and 100-year flood scenarios, which would underestimate adverse effects of those flood events on salmon populations. Hybrid suffers from structural defects in attempting to extract the EDT steady state results in a manner for which the EDT Model was not designed. This results in propagating those errors in the EDT

attribute parameterization. *Id.* at 9. Hybrid attempts to mathematically couple steady state population performance measures of productivity and capacity produced by EDT for life stages of different species to generate productivity and capacities over the entire life cycle. NEPA does not describe the mathematical methods employed to merge EDT steady state life stage results into the Hybrid. Attempting to force fit incompatible modeling frameworks is not scientifically credible or defensible. *Id.* at 25-33. As a result, the Nation does not have confidence in the validity or utility of the results produced by either model, but the Hybrid model in particular. The negative effects to salmon are significantly underestimated by the modeling. *Id.* at 4, 14, 15, 16, 18, 19, 36.

Further, the failure to include future climate impact considerations in the modeling analysis of impacts to salmon is a significant omission. From a biological standpoint, salmon populations are particularly sensitive to broadly accepted scientific projections of climate change impacts on temperatures, water flows, estuarine and ocean environments. When coupled with environmental degradation initiated by construction and operation of the proposed Project and foreclosures of opportunities to restore habitat upstream of the facility or improve resiliency, climate change will heighten risks to the viability of the salmon populations. The DEIS ignores these considerations and thereby fails to provide a sound basis for its conclusions regarding the scale and intensity of impacts to aquatic species.

In light of the omissions and errors in modeling inputs, configuration and parameterization, and omission of climate change from the analysis, the impacts on salmon and other aquatic species from the proposed Project were not sufficiently analyzed in the DEIS and are likely underestimated. As a result, the DEIS does not provide a sound scientific foundation on which to base a decision regarding issuance of a 404 permit. *Id.* at 36.

5. *DEIS fails to consider all impacts from all project components.*

There are myriad additional shortcomings and failures in the DEIS discussion of impacts from the proposed Project, which are pointed out in the various Technical Memos and Comment Matrices attached and incorporated by reference. These include inaccuracies and omissions in analyses, as well as failures to include or analyze all Project components. A few are highlighted below. Additionally, comments provided in the Nation's SEPA DEIS comment letter at B.3. *Analysis of Other Fisheries Impacts is Inadequate* and referenced Technical Report – Impacts on Fish and Fisheries, remain relevant failures in this NEPA DEIS and are incorporated by reference herein.

Three sites are proposed for development of a quarry to provide rock and aggregate for dam construction as a component of the proposed Project. However, the DEIS fails to provide site plans, volume estimates, proposed footprints, or supporting technical analyses (e.g. vibration, slope stability, stormwater management, etc.) or meaningful analysis for any of the three quarries proposed on steep slopes and adjacent to Type-S waters. The impacts of developing any or all of these proposed quarries were not analyzed in the DEIS or supporting documents. Critical Review of Proposed Chehalis River Basin Flood Damage Reduction Project NEPA DEIS: Geology Discipline Report Review, pp. 3, 9. Nor were the impacts of the associated concrete production

facility, including “rock crushers and processing plants, stockpiles, conveyors, and potential washing equipment” considered or analyzed. NEPA EIS Comment Matrix, comment 29.

A water line relocation for Pe Ell is included as a component of the proposed Project in the Applicant’s DAPA, but is not specifically identified in the NEPA DEIS, nor are the impacts of this component analyzed. No proposed plans nor detailed descriptions for the water line relocation were presented in the NEPA DEIS or supporting documents. Supporting graphics submitted with the Project’s public notice (Sheet 20 of 22 dated 7/30/2020) identify the water line relocation. It crosses many geologically hazardous areas, including landslides, steep slopes, and channel migration zones. The excavation, installation, and operation of a municipal water line in these hazardous areas has probable impacts to wetlands and waters, and aquatic species and their associated habitats and compensatory mitigation would be anticipated. Critical Review of Proposed Chehalis River Basin Flood Damage Reduction Project NEPA DEIS: Geology Discipline Report Review, pp. 3, 9; NEPA EIS Comment Matrix, comment 17.

The potential impact of large waves and dam-break floods resulting from large landslides were not fully evaluated in the DEIS. Critical Review of Proposed Chehalis River Basin Flood Damage Reduction Project NEPA DEIS: Geology Discipline Report Review, p. 1, 8-9; Geology Comment Matrix, comments 59, 66.

Impacts from new road development and the development and use of a debris management storage and staging area that would support the deployment of boats and barges from existing access roads are not analyzed. See, Forest Practices Technical Analyses Review– Proposed Chehalis River Basin Flood Damage Reduction Project, NEPA DEIS, pp. 3-8.

Impacts to wetlands are severely underreported, resulting in incorrect calculations of wetland impacts that would require compensatory mitigation. *See generally*, Wetlands and Other Waters Comment Matrix and Addendum to Cascade of FRE Ecosystems Effects Technical Memo. First, the DEIS inappropriately represents changes to the flood inundation area as being the sole factor indicative of impacts to the complex network of riverine processes within the 100-year floodplain that sustain existing wetlands and waters and continuously form new wetlands and waters over time. Addendum to Cascade of FRE Ecosystems Effects Technical Memo, p. 16. Second, the DEIS underestimates the downstream impact on groundwater recharge, and therefore the formation and maintenance of floodplain wetlands, by using inappropriate groundwater recharge rates and a rudimentary groundwater-surface water analysis. Critical Review of Proposed Chehalis River Basin Flood Damage Reduction Project NEPA DEIS: Climate Change Impacts, pp. 2, 4-7. Third, the DEIS fails to recognize the pervasive cascade of impacts to wetlands and waters downstream of the proposed FRE facility as a consequence of the operation of the FRE and fails to characterize the impacts that are acknowledged as operational impacts even though they are the direct result of the operation of the FRE facility. The DEIS also fails to accurately represent the scale and intensity of these impacts to wetlands as a result of the interaction of the riverine processes affected by the proposed Project. Further, because these downstream impacts to the area and function of the 100-year floodplain, its wetlands and waters, and associated habitats should have been characterized as permanent, direct impacts attributable to the proposed Project, they should be subject to requirements for compensatory mitigation of area and function. Addendum to Cascade of FRE Ecosystems Effects Technical Memo, pp. 16-

19; Wetlands and Other Waters Comment Matrix. The DEIS fails to accurately or consistently state the cause and type of impact (i.e. direct, indirect, compounded over time) to waters and wetlands. Gross internal DEIS inconsistencies render the decision maker incapable of understanding the true scope and scale of impacts to area and function. Mitigation cannot be appropriately proposed, or its potential efficacy considered, unless the scope, scale, and mechanism of impact is accurately represented. *Id.*

The DEIS fails to provide sufficient evidence for its conclusion that water quality impacts from mercury would not occur from operation of the FRE facility, including ignoring the documented role that decomposing vegetation plays in enhancing mercury methylation that may make the FRE facility an actual source of methylated mercury. *See*, Water Quantity and Quality Comment Matrix, comments 26-34. On the contrary, there is evidence that methylmercury uptake and concentration elevation happens rapidly in aquatic organisms and could occur within the expected inundation period for the proposed reservoir—up to one month according to the DEIS (Appendix G, p. 69; Appendix D, Table 2.2-1, p. D-39), although further evaluation of issues with the DEIS hydraulic and geomorphic models suggests the temporary reservoir would be inundated for much longer periods. Therefore, the potential exists for methylmercury accumulation in fish—fish the Nation relies on for subsistence--due to the proposed FRE facility, which must be more thoroughly analyzed. *See also*, Terrestrial Species and Habitats Comment Matrix, comment 28.

Impacts to macroinvertebrates, amphibian and wildlife species are not fully disclosed or analyzed in the DEIS. *See generally*, Terrestrial Species and Habitats Comment Matrix. Similarly, impacts to native plant species and their communities that provide habitat for native aquatic and terrestrial wildlife species are not considered. *Id.* at comments 9, 12, 27, 29.

For the foregoing reasons, numerous direct and indirect impacts have been omitted, underestimated, or insufficiently analyzed in the DEIS. The erroneous critical assumptions, omissions, and errors present in the DEIS and associated discipline reports and modeling efforts result in a gross underestimation of the potential for impacts to waters and wetlands, fish and wildlife species and habitats, and of the very processes that create and sustain functional rivers and floodplains through time. **These failures represent an overall failure to comply with NEPA requirements to take a reasonably thorough and hard look at the environmental consequences of the proposed Project in order that the decision of whether to issue a 404 permit is founded on a reasoned evaluation of the relevant factors.**

C. Cumulative and Indirect Impacts Were Not Fully Considered As Required by NEPA.

The DEIS fails to disclose, quantify or characterize the permanent, temporary, indirect, and cumulative impacts from construction and operation of the proposed Project consistently or accurately. *See*, NEPA DEIS Chapters Comment Matrix, comments 60-88. This failure prevents regulatory decision makers from having an accurate accounting of the impacts to acres, processes, and functions that would occur to natural resources and species as a consequence of the proposed Project.

Most egregious, although the FRE includes a footprint that allows for an expandable, larger dam to be constructed at the site in the future, the impacts of an expanded dam are not addressed. According to documents included in the SEPA DEIS, the proposed Project would add \$60 million to \$100 million to the price tag of the dam in order to build “a foundation and hydraulic structures capable of supporting future construction of a larger dam with up to 130,000 acre feet of storage.” *See*, Exh. 7, App. 1, Att. A-2, pp. ES-1, 6. The dam designer, HDR, went to the extent of providing design configurations, construction details and cost opinions for the expanded dam, evident throughout the Report at App.1, Att. A-2. *See*, Exh. 7. Despite the DEIS’s glaring omission to consider future climate change impacts, the building of an expanded dam is a likely indirect consequence of the building of an expandable dam, and therefore, reasonably foreseeable. Accordingly, the impacts of an expanded dam should have been analyzed as an indirect and cumulative impact. NEPA DEIS Chapters Comment Matrix, comments 64, 65.

The DEIS evaluated impacts over a time scale of 50-years. Given the fact that large dams are intended to last far longer than 50-years and there is no commitment to remove the project in 50-years, the evaluation period of 50-years is arbitrary and misleading because it minimizes impacts that occur over a longer time period. Cumulative environmental impacts will increase with time, maintenance costs will rise considerably with the age of the project, dam failure risks will increase as the facility ages, and flood reduction benefits will diminish significantly after 50 years based on climate predictions. Critical Review of Proposed Chehalis River Basin Flood Damage Reduction Project NEPA DEIS: Geology Discipline Report Review, pp. 1-2.

Accordingly, the DEIS fails to comply with NEPA requirements to fully disclose and analyze the past, present and future direct, indirect, and cumulative impacts from construction and operation of the proposed Project.

D. Mitigation is Not Described or Analyzed as Required by NEPA.

As set forth above, NEPA requires that mitigation for environmental effects identified in the DEIS be identified and discussed in enough detail that a decision maker can understand and assess whether and to what extent significant impacts can be avoided or mitigated. If impacts cannot be avoided or mitigated, that fact must be disclosed and disclosed clearly. And, while it is useful for the DEIS to describe where impacts can or will be “minimized,” minimization is not mitigation and that must be clearly disclosed and the difference discussed. The DEIS fails on each of these counts.¹⁷

¹⁷ This section addresses the failure of the DEIS to adequately identify and analyze mitigation measures for the impacts that are identified in the DEIS. It must be noted, however, that the multiple failures of the DEIS to adequately disclose, analyze and/or discuss the many adverse impacts from the dam/levee Project, also mean that the mitigation discussion is, at its core, inadequate because it does not include any mitigation discussion for the impacts that the DEIS missed or underestimated.

An adequate discussion of mitigation measures in the DEIS requires at least:

- identification of what mitigation is being considered;
- which impact each proposed mitigation measure will address (e.g. for which species as well as the type of impact for example spawning or rearing or migration);
- a general analysis and discussion of the potential success and magnitude of success of the particular measure, including any barriers to that success;
- timing of mitigation and whether that will negatively affect the success of that mitigation measure;
- proposed general locations of the mitigation measures because that will likely affect the success or at least magnitude of success of the proposed measure.

While detailed and definite mitigation plans need not be completed for environmental review under NEPA, the descriptions and discussion of mitigation must not be a mere list, must not be perfunctory, and must be definite enough that the reasonableness and success of the mitigation measure can be judged with some assurance that the intended mitigation will occur if the measure is implemented. There are significant gaps in the mitigation measures presentation in this DEIS, with no substantive statement of impact scale or intensity, no link to the mechanism of impact, and no analysis of the likelihood of mitigation reducing the impact to a lower level or consequence. This is particularly true regarding the pervasive ecosystem and aquatic species impacts from the operation of the FRE dam. The mitigation provisions in the DEIS particular to ecosystem and aquatic species impacts do not meet the basic requirements of federal law.

First, the mitigation section of the DEIS claims that the Final EIS (“FEIS”) will present “updated potential mitigation measures” (DEIS at 265). Deferring a detailed disclosure and qualitative discussion and analysis of mitigation measures to the FEIS deprives the public of the opportunity to be informed on mitigation and to comment, contrary to either the mitigation requirements or public participation requirements of NEPA.

Second, the DEIS wholly fails to identify or analyze actual mitigation of the most serious ecosystem impacts identified in the DEIS that will have the most significant impact on the Nation, much less mitigation that is “reasonable and capable of being accomplished.” *See*, NEPA EIS Comment Matrix, comments 89-112; Critical Review of Proposed Chehalis River Basin Flood Damage Reduction Project NEPA DEIS: Geology Discipline Report Review; Terrestrial Species and Habitats Comment Matrix, comment 34.

The DEIS does not disclose or discuss mitigation measures that are actually intended to be taken nor does it qualitatively analyze, even in general terms, how that mitigation might work, what species impacts will be addressed by which mitigation measures or when, where, by whom and over what duration the mitigation measures will be implemented. The proposed mitigation measures in the DEIS include actions that would be normal elements of any dam operation, such as a breach flood warning system, construction BMPs, and a vegetation management plan. None of these elements minimize or reduce impact mechanisms, and thus, are not actual mitigation for impacts. NEPA EIS Comment Matrix, comment 15.

The “conceptual framework” of Section 7.4 is nothing more than the “mere list” that has been repeatedly rejected by federal courts. The DEIS does not target mitigation measures to the mechanism, scale, or intensity of significant impacts that are actually identified, particularly to spring Chinook and other already-threatened salmonids. The DEIS does not indicate what the intended environmental benefits of mitigation measures are for significant adverse impacts, does not discuss their technical feasibility and economic practicability, and makes no mention of whether there is any indication that a mitigation measure is capable of being accomplished, because of course, there are no actual mitigation measures identified to assess whether they can be accomplished. Section 7.4 does not even make clear *where* the mitigation measures might be taken other than to say the applicant is “focusing on an area that is largely the same as the upper Chehalis Basin upstream of where the Skookumchuck River empties into the Chehalis River.” DEIS at 269. The Chehalis River at that location is not at all like the upper reaches where the dam will be. Further, that description is unclear in that it could be referring to the Chehalis or the Skookumchuck sub-basin. There is no tethering of this very general list of potential best management practices in some unspecific location at some unspecified point in the future to the actual impacts and the type and magnitude of mitigation that will actually be needed. The DEIS discloses only the possibility of some mitigation proposal (not actual mitigation), someday, post-EIS, that may or may not propose to address the actual impacts to salmon, aquatic habitats, and wetlands.

A specific example of the lack of qualitative analysis and discussion concerns the claim to unspecified “habitat improvements including culverts.” Tribes have been waiting decades for culverts, which harm fish to such an extent that the failure to address them by the State has been found to be a violation of Treaty rights, to be addressed. There is no discussion of how this Project Applicant will make any measurable progress such that it will mitigate the extreme damage from this dam/levee Project when various government entities have so thoroughly failed for decades. Culverts are a pointed example of how this is a mere list of things that harm salmon that could be fixed. It is not a discussion of mitigation measures for the comprehensive suite of processes, systems, habitats, and species which this dam/levee Project will impact that is adequate under federal law.

The failure of the DEIS to adequately identify actual mitigation and discuss and analyze how effective that mitigation might be (or even where it might occur), means that the dam/levee Project will cause all the harm now with the unspecific potential of some mitigation of unknown quality and quantity later.

Finally, NEPA requires that if an impact cannot feasibly be mitigated, an EIS must state this. As demonstrated above based on credible science, ecosystem scale impacts and species extinction cannot be feasibly mitigated. The DEIS should have so indicated.

For the many failures to properly address mitigation as required under NEPA, the DEIS is inadequate.

E. Other NEPA Requirements Not Met.

1. *DEIS fails to include adequate environmental justice impacts analysis.*

Overall, the environmental justice analysis requires that no minority or low-income population group bear a disproportionate share of adverse environmental and socioeconomic impacts resulting from major projects such as the dam/levee Project proposed for the Chehalis Basin. In addition, special efforts must be made to reach out to such communities to ensure that they understand the proposed project, its potential impacts on them, and to ensure that those communities' concerns and the effects upon them are heard and understood by the decision makers so that decisions can be altered to avoid burdens being disproportionately-borne. Both CEQ and EPA identify special considerations particular to Tribes in this regard.

The DEIS fails to properly analyze or consider the impacts of the proposed Project from an environmental justice perspective, particularly the impacts on the Nation's cultural, economic, and historic interests as well as the impacts to the Nation's Treaty rights.

The EIS must examine the environmental justice impacts, particularly impacts to salmon and the riverine processes that create and sustain salmon habitat, and must do so from the perspective of how specifically this affects the Nation and the magnitude of those effects. It must be at least a qualitative discussion with adequate detail for the decision-makers and the public to understand the nature and magnitude of the effects, including cumulative effects to the Nation over time. Here, the DEIS, while acknowledging tribal interests in fishing, hunting, gathering and ecosystem services generally, and acknowledging high adverse unavoidable impacts to fish, including extirpation of spring Chinook, the DEIS fails utterly to grapple with or discuss in any detail or in a qualitative way, the very negative and specific impacts to members of the Nation from the dam/levee Project.

The DEIS primarily follows a census block methodology for identifying any environmental justice concerns or impacts. That is, to be considered an environmental justice impact, it must occur to a community that is in actual physical proximity to the Project or the river itself. This is an incomplete and unanalytical approach to environmental justice considerations. While there might be some impacts to certain communities from reduced flooding along the river, the primary impact of concern for environmental justice is the further decimation of salmon stocks and the riverine processes that create and sustain viable salmon habitat in the Chehalis Basin. This identified "high" adverse impact will most negatively affect communities that rely on those fish, communities that may have very little physical proximity to the river. That is, the census block approach to assessing environmental justice concerns from the dam/levee project focuses more on the density of environmental justice communities in the region and fails to focus on the real concern which is the intensity (or "density") of actual impact from decimation of fish populations which will affect any persons or communities that rely on those fish whether or not they reside close to the river. The physically-proximate census block approach therefore completely fails to address the most serious and most negative impacts on communities like the Nation, as well as commercial fishing families, from the dam/levee Project.

The DEIS purports to include consideration of impacts to tribal members living outside the census blocks that are physically proximate to the river, at 239, but the DEIS then goes on to analyze in detail the impacts to the proximate census blocks while shunting an extremely general and conclusory statement about the Nation to the very end of the environmental justice section. Therefore, it appears that the environmental justice analysis and discussion focuses almost exclusively on those communities proximate to the river. The census block approach especially fails to address the disproportionate impact on Quinault members who may rely on fish for food. It further fails to address the disproportionate impact on the culture of the Quinault Nation, both due to the census block approach, but also due to the complete failure to even discuss in a detailed and qualitative way, the importance of salmon, including spring Chinook, on the Nation's culture. Only at the very end of the environmental justice section of the DEIS are two short paragraphs, generally acknowledging that "some people" may depend on these [aquatic and terrestrial] species for food, medicine, fiber, economic livelihood and cultural and spiritual values. In only one sentence, the DEIS says that the Quinault and Chehalis people will be disproportionately adversely affected by the impacts from the dam/levee Project. DEIS at 247.

The environmental justice section is also inadequate because it includes a false comparison of environmental justice effects as between the no-action alternative and the dam/levee alternatives. As noted above, the DEIS fails to consider a non-dam alternative and as such, does not meet the requirements of NEPA. But, that failure carries over and compounds other failures such as with the environmental justice analysis. A non-dam alternative would have far fewer negative effects on the Nation than either the FRE or FRO Alternative. And, because a non-dam alternative would likely be designed to address flooding through habitat and wetland restoration and measures designed to preserve and protect the environment, it would not have the negative effects of increased or continued flooding that the DEIS claims is the downside of the no action alternative. A non-dam alternative is plainly an important consideration in the weighing and discussion of environmental justice and the highly disproportionate effects the dam/levee Project will have on the Quinault people. Also, as to the increased or continued flooding from the no-action alternative and its effect on some lower income communities, the DEIS fails to grapple with the fact that low income people will still be in harm's way even after the dam/levee Project is constructed.¹⁸ By failing to consider a reasonable range of alternatives, the DEIS also fails to properly and fully analyze environmental justice concerns and considerations.

Finally, the claimed "flood reduction benefits" of the dam/levee Project to select members of the community will come at an extremely high cost to the Quinault people, meaning not just that the Nation will suffer disproportionate negative impacts, but will get none of the benefits, a double negative impact. This repeats a historic pattern of sacrificing the interests and rights of

¹⁸ It is also likely that low-income communities throughout the Chehalis Basin will be disproportionately affected by the dam/levee Project, yet nowhere is that discussed. For example, "high value" properties like the airport and/or commercial properties are clearly favored. Similarly, "high value" property may be receiving funds for this Project, leaving less public money available for habitat restoration (critically important to the Nation) or less public money available to move individuals out of harm's way.

Tribes to other concerns or communities that is nowhere acknowledged or discussed in the environmental justice sections of the DEIS. That kind of failure runs directly counter to the methods and considerations spelled out in CEQ and EPA Guidance.

In sum, the DEIS fails to conform to environmental justice requirements to assess and discuss disproportionate impacts to the Quinault Nation from the proposed Project. The DEIS is inadequate in its failure to adequately address environmental justice impacts on the Nation.

2. *DEIS fails to adequately analyze negative socioeconomic consequences of dam/levee Project.*

Overall, the analysis of socioeconomic impacts from the dam/levee Project is so deficient the results cannot be used or relied up on for decision-making. Because the very purpose of the DEIS is to inform decision-makers and the public about the impacts of the proposed project such that decision-makers and the public can make informed choices regarding the project, the DEIS does not meet the most basic requirements of NEPA. *See generally*, Executive Summary of Socioeconomic Impact Analysis Review (“Socioeconomic Review”). Further, cumulative economic and socioeconomic impacts, along with the high cost of operating the dam/levee Project, are significantly underestimated while ecosystem costs are not quantified or evaluated at all. In fact, it is likely that if the damage to ecosystem services were properly valued and considered, the dam/levee project would overall damage the economy of the Chehalis Basin. Socioeconomic Review, p. 15. Therefore, the DEIS’s economic analysis is also misleading. This comment will highlight and summarize the inadequacies of the DEIS’s socioeconomic analysis. For details, refer to the Socioeconomic Review.

As noted, the DEIS is severely deficient in its assessment of socioeconomic impacts from the dam/levee Project. The DEIS is missing data, has partial or incomplete analysis, over and under-estimates important components such as economic benefits or costs of mitigation, and is a complete failure in that there is no assessment of the economic impact of the most significant adverse impacts of the project—impacts to salmon and ecosystem services. *See*, Socioeconomic Review generally, and at 7-11. An example of the incomplete and/or inaccurate data problem concerns the focus primarily on timber and agriculture as regional economies yet nothing about fisheries---commercial, recreational or subsistence. This renders data about the local economies and costs or benefits there utterly useless. Socioeconomic Review, p. 11. Similarly, the estimated jobs and benefits therefrom for the Project are clearly overestimated, particularly because it is unlikely that the jobs will all be filled from within the Chehalis Basin. Socioeconomic Review, p. 19.

Most egregious, the DEIS makes *zero* effort to quantify, assess, or even acknowledge the economic impacts of the substantial adverse effects to salmon and ecosystem services. The DEIS claims this stems from the fact that these impacts are “difficult to predict,” “quantify,” or “measure.” Even if true, (and it is not), the DEIS fails to follow the clear procedures laid out in the rules for when data is not available. If in fact, information is truly lacking, 40 C.F.R. § 1502.22 makes clear what the preparer must do. First, get the information. Second, if the information is relevant and truly cannot be obtained, the DEIS must state it is relevant and in

what way, describe what information is needed but unavailable, summarize what information is available and the agency's assessment of that information, and the agency must apply the best theoretical approaches and/or research generally accepted in the science community to fill the gap in information as much as possible. None of that has occurred in this DEIS and it appears no effort was made to comply with this requirement in the rules as to the socioeconomic impacts related to damage to fisheries and ecosystem services.

Importantly, the statement that information is not available or that the socioeconomic impacts cannot be assessed, is simply false. Despite significant harm to Chehalis Basin salmon runs being the most significant impact of the dam/levee project, the DEIS "shows no level of expertise in understanding fisheries." Socioeconomic Review, p. 27. Information regarding Washington fisheries in particular and the larger impacts of Washington salmon on area economies is readily available. *See*, Socioeconomic Review, pp. 24-25, 28 for just a sample of available information. Salmon fisheries---and the economic impact of their decline---have been well-studied and it is ridiculous for the DEIS to suggest that that information is not available or cannot be used to estimate the impacts of substantial damage to the Chehalis Basin salmon runs. The utter failure of the DEIS to assess these likely large economic losses from the dam/levee Project renders the minimal DEIS effort to do a comparative "cost/benefit" analysis baseless and useless.

Particular to the Quinault people, the DEIS section on socioeconomic impacts fails to note or discuss the fact that economic impacts to the Nation will be felt through food costs, commercial fishing costs, and cultural and spiritual costs. While there is an extremely general acknowledgment of cultural and spiritual importance for ecosystem services and fishery resources, the DEIS then simply states they are irreplaceable and therefore cannot be measured in dollars. That statement may be true, but if that is indeed correct, then those resources must be considered priceless such that their loss will always exceed the limited "benefits" from the dam/levee project. Nowhere does the DEIS attempt to analyze and discuss those relative concepts. Instead, the DEIS simply ignores the socioeconomic impact of the devastation.

The Socioeconomic Review outlines a number of steps and/or sources of information that will help correct the glaring deficiencies in the DEIS, *see, e.g.*, Socioeconomic Review, p. 17. The Corps must follow those steps and seek the information to conform to the rule requirements for this analysis. Under a proper and thorough socioeconomic analysis, "[i]t is highly likely that the 'beneficial' economic impacts of the proposed Project will be completely offset by the negative impacts on the economic benefits of ecosystem services to the local economy and amenity support in-migration. For that reason, it is also highly likely that the proposed Project would, overall, damage the economic vitality and well-being of the Chehalis Basin." Socioeconomic Review, p. 15.

3. *DEIS fails to identify conflicts with state and local plans.*

The DEIS ignores the legal framework and obligations of the Chehalis Basin Strategy embodied in State law and directing the Office of Chehalis Basin and its oversight board the responsibility "to aggressively pursue implementation of an **integrated** strategy and administer funding for long-term flood damage reduction and aquatic species restoration in the Chehalis

river basin.” RCW 43.21A.730(1). In fact, the Washington State Legislature directed that the Programmatic EIS (2016) guide this integrated approach. RCW 43.21A.731(5). The PEIS analyzed several suites of actions including two types of dams: one with a temporary pool referred to as a Flood Retention Only (FRO) dam, and one with a permanent reservoir referred to as a Flood Retention Flow Augmentation (FRFA) facility. Neither of these dams were considered in the DEIS, but rather the proposed Project is an expandable dam—the FRE—which was not considered in the PEIS. The analysis of the FRE in this DEIS is contrary to state legislative direction, and arguably arbitrary and capricious.

Regardless, the proposed Project addresses only a small component of one of the goals of that overall Strategy, leaving most of the Chehalis River Basin and its residents unprotected. The proposed dam/levee Project would provide some flood damage reduction to a small area within the Chehalis Basin at an extreme cost that may well eliminate opportunity for flood reduction projects elsewhere in the Basin. Furthermore, the catastrophic impacts on ecosystems and aquatic resources and habitats are antithetical to the Strategy’s goal of Basin-wide aquatic species restoration.

The DEIS assumes state forest practices permits will be obtained for Project activities, but fails to acknowledge the conflicts and obstacles as they relate to the proposed Project. For example, the necessary Class IV Special authorization to convert forested lands to non-forested lands is unattainable under current state law. *See*, Forest Practices Technical Analyses Review, p. 1. An Alternate Plan would be required under state law, but obtaining one would be unlikely. *Id.* at 3. Compliance with state and federal CWA requirements related to forest roads would be similarly difficult but is not acknowledged. *Id.* at 4-6; Aquatic Species and Habitats Comment Matrix, comments 81, 82.

Similarly, the DEIS acknowledges the need for various County permits and approvals (DEIS, Appendix F at F-13), however, it fails to acknowledge the conflicts between activities permissible under County Code and the unlikelihood of obtaining such County approvals. Geology Comment Matrix, comments 11, 33.

While the DEIS notes the over-appropriation of water rights in the Chehalis Basin and that new water rights might be difficult to obtain (DEIS, p. 51, 54), it fails to discuss this in the context of needing a new water use permit. *Id.* at F-12. *See*, Water Quantity and Water Quality Comment Matrix, comment 8; Aquatic Species and Habitats Comment Matrix, comment 76.

The FRE construction work windows identified in the DEIS are not realistic and do not take into consideration likely restrictions under state law and for various federally-protected fish and wildlife species. *See*, NEPA EIS Comment Matrix, comments 9, 28, 57, 103, 105, 108; Aquatic Species and Habitats Comment Matrix, comments 20, 48, 52-54.

Key federal guidelines and standards should have been referenced and integrated into the DEIS analysis to support planning, analysis and considerations for dam design. *See*, Geology Discipline Report Review, p. 7. The failure to indicate whether these documents were properly used in the planning, analysis, and consideration of design in the DEIS results in significant

information being omitted from the DEIS and fails to properly inform decision makers about important safety requirements.

F. Clean Water Act Requirements Are Not Met and 404 Permit Cannot Be Issued.

As discussed above in Section II.A., the Corps' determination of whether it can issue a 404 permit depends on meeting four prerequisites. The Nation analyzes each in light of the DEIS herein.

The first criterion is: “[N]o discharge of dredged or fill material shall be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem, so long as the alternative does not have other significant adverse environmental consequences.” 40 C.F.R. § 230.10(a) (emphasis added). Because of the unreasonably narrow purpose and need statement, only two dam alternatives are analyzed in the DEIS. However, a practicable non-dam alternative was analyzed in the SEPA DEIS and is in the process of being further developed by the Office of Chehalis Basin. A non-dam alternative should have been analyzed in this DEIS. Because a non-dam alternative is viable and would have a significantly less adverse impact on aquatic ecosystems than the proposed FRE or FRO, this criterion is not met. Further, because of the errors, omissions, and misrepresentations present in the DEIS related to the geomorphic model, the hydrologic and groundwater analyses, flaws in the representation of the frequency and duration of FRE facility operation, and the failure to include any quantitative analysis of climate change, no accurate understanding of adverse impacts to waters, wetlands, and aquatic resources can be determined. These flaws result in a gross underestimation of the frequency, duration, and spatial extent of reservoir formation and in the potential impacts to waters and wetlands, as well as associated floodplain and instream aquatic habitat, as well as the amplification of impacts over time if the proposed project is approved for construction and operation. Because the Phase 2 alternatives screening evaluated whether any of the alternatives “would cause substantially greater impacts to the aquatic environment relative to each other,” the level of impacts is a key consideration in what constitutes a viable alternative and which alternative would have “less adverse impact.” It is not possible to have determined that only the FRE and FRO facilities met the screening criteria when the analysis contains such fundamental flaws in the methods used to present the scale and intensity of impacts. This criterion cannot be met based on the analysis presented in this DEIS.

The second criterion is: “No discharge of dredged or fill material shall be permitted if it . . . [c]auses or contributes, . . . to violations of any applicable State water quality standard . . . [or] [j]eopardizes the continued existence of species listed as endangered or threatened under the Endangered Species Act . . . or results in likelihood of the destruction or adverse modification of . . . a critical habitat . . .” 40 C.F.R. § 230.10(b). As pointed out in numerous comments in the attached Comment Matrices, the DEIS does not accurately or fully confirm the proposed Project will comply with applicable State water quality standards. Comments in the Aquatic and Terrestrial Species and Habitats comment matrices demonstrate the proposed Project will jeopardize ESA-listed species. This criterion is not met.

The third criterion is: “[N]o discharge of dredged or fill material shall be permitted which will cause or contribute to significant degradation of the waters of the United States.” This

includes adverse effects “on life stages of aquatic life and other wildlife dependent on aquatic ecosystems” Such effects “are not limited to, loss of fish and wildlife habitat or loss of the capacity of a wetland to assimilate nutrients, purify water, or reduce wave energy[.]” 40 C.F.R. § 230.10(c). The DEIS relies on inaccurate hydraulic and geomorphic modeling to project impacts on downstream floodplain wetlands and waters, fails to utilize climate change projections to assess impacts, and presents a simplistic and inaccurate picture of the magnitude and intensity of impacts that will result from modifying the flow of water, sediment, and wood once the Chehalis River is confined to flowing through the low-level outlets of the proposed FRE facility. *See*, Section IV.B. above. Equally problematic, the analyses of impacts on salmon and other aquatic species from the proposed Project were not sufficiently analyzed in the DEIS and are likely underestimated. *Id.*; *and see*, Addendum to Cascade of FRE Ecosystems Effects Technical Memo. The third criterion is not met and cannot be met given the magnitude of impacts that cannot be mitigated.

The fourth criterion is: “[N]o discharge of dredged or fill material shall be permitted *unless appropriate and practicable steps have been taken which will minimize potential adverse impacts of the discharge on the aquatic ecosystem.*” 40 C.F.R. § 230.10(a) (emphasis added). As described above, the DEIS provides no actual mitigation or demonstration that adverse impacts to the aquatic ecosystem have been, or can be, minimized. The fourth criterion is not met.

The analysis in the DEIS fails to support issuance of a 404 permit. **Accordingly, the Corps cannot issue a 404 permit based on this DEIS because the CWA criteria for issuance have not been met.**

G. DEIS Improperly Fails to Analyze Significant Impacts to Treaty Rights.

The Nation has Treaty-reserved rights and interests as outlined in its scoping letter of October 29, 2018, that will be significantly adversely affected by the proposed dam/levee Project. *See*, discussion at I above. The DEIS entirely ignores the extensive scoping comments provided by the Nation. In the brief paragraphs discussing Cultural Resources, the DEIS mentions the Treaty of Olympia, but utterly fails to discuss impacts to Treaty rights and resources. Indeed, the DEIS incorrectly characterizes the Nation’s Treaty area: “Usual and accustomed fishing grounds are treaty-reserved areas where tribes traditionally fished, hunted and gathered.” DEIS, p. 20 footnote. As explained in the scoping comments submitted by the Nation, the usual and accustomed fishing area includes the entire Chehalis River Basin, and the Nation further reserved the right to hunt and gather on open and unclaimed land.

The DEIS considered impacts from the proposed Project on aquatic and terrestrial species and habitats (including fish, shellfish, aquatic plants, and marine mammals), discussed in Chapter 4. Though these species and habitats are Treaty resources, the DEIS does not consider these impacts or the biological implications of the impacts through the lens of Treaty obligations.

As explained above at Section IV.B., the consequences to the Nation’s Treaty fishing resources have been grossly underestimated and, in fact, the Nation’s Treaty fishing rights and interests will be severely adversely affected by the proposed Project.

The Corps had more than adequate opportunity between the time it received the Nation's scoping comments (November 14, 2016) and its publication of the DEIS for public comment (September 18, 2020) to engage in government-to-government consultation, as requested in the Nation's scoping comments, in order to more fully ascertain and address impacts to the Nation's Treaty rights. Meaningful consultation has not occurred. *See* footnote 7 above. The Corps' failure to consult with the Nation is in stark contradiction to the requirements in Executive Order 13175 and the Corps' commitments to Indian tribes in its Consultation Policy and Related Documents.

Based on the underestimation of impacts to fish resources, and the significant but underreported impacts to the Nation's Treaty rights, issuance of a 404 permit for the proposed Project would violate the Treaty of Olympia and the Corps' trust responsibility to protect Treaty resources.

H. Future Compliance with Federal Laws Fails to Properly Inform Decision Makers.

The DEIS defers compliance with various federal laws pertaining to fish and wildlife species to future consultations and permitting processes. In doing so, the DEIS undermines the essential purpose of NEPA—to provide comprehensive up-front environmental analysis to ensure informed decision-making.

1. *Endangered Species Act.*

The Corps has “determined the proposed project would adversely affect listed species. After receipt of comments from this public notice, the Corps will evaluate any additional potential impacts and will initiate Section 7 consultation with the NMFS and USFWS as appropriate.” Public Notice No. NWS-2014-1118.

Section 7 of the ESA and the CWA require consultation with USFWS and NMFS to provide “an adequate review of the effects that an action may have upon listed species or critical habitat.”

The DEIS fails to provide complete information about impacts to ESA-listed species. For instance, Southern Resident Killer Whales are mentioned, but impacts from the proposed Project were only cursorily addressed in the DEIS. Salmon from the Chehalis Basin, particularly spring Chinook, are a key food source for Killer Whales and increasing the abundance of spring Chinook is critical for their recovery. *See*, Aquatic Species and Habitats Comment Matrix, comments 40, 41. The dam/levee Project has potential to severely harm spring Chinook runs, and therefore, harm Killer Whales. *See*, Quinault Nation scoping comments and attachments.

Marbled Murrelets are a federally- and state-listed Threatened species. The DEIS fails to fully consider impacts on Marbled Murrelets and the forested habitat they rely on for nesting; the proposed Project is not consistent with the USFWS Marbled Murrelet Recovery Plan, which states that suitable habitat should be preserved in large, contiguous blocks to minimize nest predation. Terrestrial Species and Habitats Comment Matrix, comments 2, 20-25, 35.

The DEIS fails to consider the ESA petitions to list two species present in the Chehalis Basin. On August 18, 2020, the Xerces Society for Invertebrate Conservation filed a petition with the U.S. Fish and Wildlife Service to consider listing the Western Ridged Mussel under the ESA. The DEIS should have given greater consideration to this species and evaluated the possible implications should it become listed under the ESA. Aquatic Species and Habitats Comment Matrix, comment 64. Likewise, the Columbia Torrent Salamander (*Rhyacotriton kezeri*) has been found within the FRE reservoir footprint. On September 17, 2015, the USFWS responded to a petition filed by the Center for Biological Diversity to list this Salamander. Having conducted the initial 90-day determination, the USFWS found that the petition presents substantial scientific or commercial information indicating that the petitioned action may be warranted. The DEIS fails to recognize the significance of and risk to the local Columbia Torrent Salamander population, and fails to acknowledge the potential for impact to the viability of this imperiled species as a direct result of the proposed Project. Terrestrial Species and Habitats Comment Matrix, comments 2-4.

Failure to initiate consultation with USFWS and NMFS and include relevant measures to protect ESA-listed species that will be harmed by this Project fails to provide decision makers with adequate information to make a fully informed permit decision.

2. *Bald and Golden Eagle Protection Act.*

The BGEPA prohibits the take, possession, sale, purchase, barter, offer to sell, purchase or barter, transport, export or import, of bald or golden eagles, including any part, nest, or egg, unless permitted under the authority of USFWS. “Take” includes acts to “pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb.”

The DEIS fails to consider the loss of potential nesting habitat for Golden Eagles as a result of the construction of the FRE facility and the clearing of forest in the upstream inundation area. Three historic Golden Eagle nests have been identified within the vicinity of the upstream inundation area of the FRE. Although not currently active nests, these data show that Golden Eagles have historically utilized the area as nesting habitat and could potentially use it again in the future. Given their status as a protected species, and the lack of any survey of the project area for Golden Eagles, potential impacts to Golden Eagles should have been, but were not, considered in the DEIS. Terrestrial Species and Habitats Comment Matrix, comment 13. The DEIS also fails to consider the potential for direct construction impacts as well as indirect effects on Bald Eagle populations from operations of proposed FRE facility. *Id.* at comments 18-21; Appendices Comment Matrix, comment 10.

3. *Migratory Bird Treaty Act of 1918.*

The MBTA prohibits the take of protected migratory birds, their eggs, parts, or nests unless authorized by a permit under the authority of USFWS. “Take” includes acts to “pursue, hunt, shoot, capture, collect, kill, or attempt to pursue, hunt, shoot, capture, collect, or kill.”

The DEIS fails to adequately address the likely take of multiple species protected under the MBTA. See, Appendices Comment Matrix, comment 11; Terrestrial Species and Habitats Comment Matrix, comments 6, 23.

4. *Marine Mammal Protection Act.*

The MMPA prohibits, with certain exceptions, the "take" of marine mammals in U.S. waters, including harassment, hunting, capture, collection, or killing, or "any other negligent or intentional act which results in disturbing or molesting a marine mammal."

Among those marine mammals that may be affected by the proposed Project, Southern Resident Killer Whales are among those reliant on salmon from the Chehalis River system. However, the DEIS fails to recognize and evaluate the degree to which the Proposed actions will result in the harassment of local marine mammal populations nor do they provide any viable mitigation proposals to ameliorate the detrimental effects of this harassment. Aquatic Species and Habitats Comment Matrix, comments 40-41, 65, 67, 114.

5. *Magnuson-Stevens Fishery Conservation and Management Act.*

The Corps "has determined the proposed project would adversely affect designated EFH for federally managed fisheries in Washington waters. After receipt of comments from this public notice, the Corps will evaluate any additional potential impacts and will initiate EFH consultation with the NMFS." Public Notice No. NWS-2014-1118. Under the MSA, the Corps must consult with NMFS regarding impacts to EFH and seek recommendations regarding measures that can be taken to conserve it.

Failure to initiate consultation with NMFS and include relevant measures to protect the anadromous fish species using the Chehalis River Basin fails to provide decision makers with adequate information to make a fully informed permit decision.

6. *Fish and Wildlife Coordination Act.*

The FWCA requires consultation with the USFWS about the proposed dam/levee Project. The FWCA also requires consultation with Washington State's Department of Fish and Wildlife ("DFW").

The DEIS does not include an explicit record of wildlife resource loss and damage prevention as required under the FWCA. Failure to initiate consultation with USFWS and State DFW as required under FWCA fails to provide decision makers with adequate information to make a fully informed permit decision.

7. *National Historic Preservation Act.*

Section 106 of the NHPA imposes several obligations that should occur in conjunction with EIS development, including to make a "reasonable and good faith effort" to identify historic

properties within the “area of potential effects, including any data concerning possible historic properties not yet identified.”

The Corps “has determined the proposed project would adversely affect historic properties eligible for inclusion in the [National Register of Historic Places] (two Native American archaeological sites and three Native American Traditional Cultural Properties). After receipt of comments from this public notice, the Corps will evaluate any additional potential impacts and consult with the State Historic Preservation Officer, the Advisory Council on Historic Preservation, Native American Tribes, and other interested consulting parties on a resolution of adverse effects in accordance with Section 106 of the National Historic Preservation Act.” Public Notice No. NWS-2014-1118.

The Section 106 study area for cultural resources did not include the 100-year floodplain, which is not explained in the DEIS. This deficiency results in an unstudied and overgeneralized assessment to impacts in the DEIS. *See*, Critical Review of Chehalis River Basin Flood Damage Reduction Project NEPA DEIS: Cultural Resources Issues. Further, there are most likely many undocumented archaeological sites, above ground built properties, and traditional cultural properties in the unassessed parts of the Study Area, particularly the 100-year floodplain. *Id.* However, a complete analysis has not yet been undertaken to determine the full extent of impacts to the Nation’s cultural interests. *Id.*

CONCLUSION

The DEIS fails to consider all reasonable alternatives for addressing flood damage in the target Chehalis-Centralia area. It relies on a statement of purpose, need, and objectives different than the Applicant’s, and unreasonably narrow, to justify excluding a non-dam alternative from consideration. It provides no justification for an expanded dam, and therefore, no justification for spending tens of millions more to construct an expandable dam.

Despite wholly inadequate analysis and under-representation of many significant impacts having disproportionate negative effect on the Nation, the DEIS admits that significant impacts will result from the proposed Project. Its failure to consider future climate predictions results in an unwarranted underestimation of how frequently the proposed dam will impound flood waters. The DEIS provides no information or discussion regarding whether or how those significant adverse impacts can or will be mitigated.

The DEIS fails to meet fundamental requirements of NEPA and does not provide the requisite hard look at the Project justifying issuance of a CWA 404 permit. Among other significant defects, because the Project will have far more than a *de minimis* impact on the Nation’s reserved Treaty rights, the Corps must deny the permit.

The Nation appreciates consideration of these comments. Should you have any questions concerning these comments, do not hesitate to contact the undersigned. The Nation looks

November 16, 2020

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forward to continuing to work on a more comprehensive and less-damaging strategy for addressing flood damage in the Chehalis Basin.

Sincerely,

A handwritten signature in black ink, appearing to read "Janette K. Brimmer", with a long horizontal flourish extending to the right.

Janette K. Brimmer
Earthjustice
Attorney for the Quinault Indian Nation

Karen Allston
*Senior Assistant Attorney General, Quinault Indian
Nation*