



## Submitted via www.,chehalisbasinstrategy.com/eis

October 29, 2018

Major Ryan A. Baum,
U.S. Army Corps of Engineers, Acting Commander and
Gordon White, SEPA Responsible Official
Washington State Dept. of Ecology, and
Anchor QEA
Chehalis River Basin Flood Control Zone District EIS
720 Olive Way, Suite 1900
Seattle, WA 98101

RE: Scoping Comments on the Proposed Chehalis River Basin Flood Damage Reduction Project Environmental Impact Statement, Lewis County, Washington

Dear Major Baum, Mr. White and Anchor QEA,

Please accept the following scoping comments from Trout Unlimited (TU) and the Washington Council of Trout Unlimited (collectively referred to in this document as "TU") on the proposed Chehalis River Basin Flood Damage Reduction Project (referred to as "project") proposed by the Chehalis River Basin Flood Control Zone District in Lewis County, Washington. We submit these comments to be used in the preparation of an Environmental Impact Statement (EIS) for the Corps of Engineers (Corps), as required by National Environmental Policy Act (NEPA), and for the State of Washington's concurrent effort as they prepare an EIS, as required by the State Environmental Policy Act (SEPA). Trout Unlimited requests that our comments be shared with **both** agencies as they prepare their separate EIS's, as identified in the federal register's Notice of Intent (NOI). Trout Unlimited appreciates this opportunity to provide input on this important proposed action.

Trout Unlimited participated in the Washington State Programmatic EIS (PEIS), offering comments (attached) to the Draft PEIS in November 2016. Throughout this scoping letter, we will reference our relevant comments from the PEIS for those areas we would want to highlight.

## Summary of our concerns

1. The NOI for the proposed action fails to address a clean purpose and need description.

<sup>1</sup> American Rivers and Trout Unlimited. 2016. "Comments on Chehalis Basin Strategy Draft Programmatic Environmental Impact Statement". Dated November 14, 2016. Addressed to Mr. Gordon White. Attached with this document.

- 2. The EIS should include analyses for the third proposed action identified in the NOI -- construction of a larger dam with up to 130,000-acre feet of storage.
- 3. The EIS must provide appropriate and sufficient ranges of alternatives, rigorously explore and objectively evaluate these alternatives, and include reasonable alternatives not within the jurisdiction of the lead agency. (National Environmental Policy Act—NEPA—Section 102(2)(E)).
- 4. The proposed project will have major ecological impacts throughout the Chehalis River Basin and the EIS must provide thorough analyses on all these impacts.
- 5. Impacts to salmon and steelhead populations from the proposed actions will be significant. The EIS must include detailed analyses on these impacts, including all connected actions.
- 6. Fish passage analysis included in the EIS must address the impacts and all connected actions.
- 7. Economic analyses related to design and implementation, and supportive industries and communities dependent upon the fisheries and other natural environments (forestry, retail, tourism, recreation, etc.) must be included in the EIS.
- 8. The EIS must include discussions and analyses that illustrate how the flood risks will be removed through the implementation of the proposed actions. Current project descriptions do not confirm reductions of flood risks.
- 9. Appropriate mitigation measures must be addressed in the EIS with discussions on avoidance, minimizing and mitigating impacts.
- 10. Climate change analyses and its impact should be considered in the EIS.
- 11. The EIS needs to address the issue of future dam management responsibilities and expansion requirements.

# **Interested Party Background**

Trout Unlimited is a national coldwater conservation organization with more than 300,000 members and supporters organized into 400 chapters from Maine to Alaska. Our mission is to conserve, protect, and restore North America's coldwater salmon and trout fisheries and their watersheds. In 2017 alone, TU chapter members invested 734,824 volunteer hours on their local streams and rivers to restore habitat for trout and salmon, conducted youth conservation and fly-fishing camps, engaged in veteran's service programs, community events and Take a Kid fishing events. In Washington, our 17 chapters composed of 4,400 members enjoy the benefits of healthy rivers, abundant fisheries, and plentiful opportunities to recreate in the Chehalis River Basin. Trout Unlimited members have dedicated 20,172 volunteer hours to protect, restore, and reconnect native fish habitat in Washington State.

## **General Scoping Discussion**

Trout Unlimited recognizes there is no simple answer regarding dams and their impacts, particularly on trout and salmon populations, habitat, and fishing opportunities. We have a history of concern with respect to the impacts of dams; we also recognize that many dams continue to provide important benefits. Trout Unlimited is committed to finding common-sense, pragmatic solutions to dam problems that degrade or destroy important fisheries habitat and impair angling opportunities.

In the Northwest, our work in finding solutions to large dam problems involves many partners including federal, state and local communities. More than 70 miles of salmon and trout habitat have been reconnected on the Elwha River thanks, in part, to TU's involvement on this project. Scientists predict that native salmon and steelhead populations will rebound from their current estimates of several thousand per year to over 300,000 in a matter of decades. For anglers and communities economically dependent

on salmon and steelhead fisheries, these are dramatic and exciting victories that offer hope for the future of salmon populations.

As we mentioned in our comments in the PEIS, the Chehalis Basin is the second largest watershed in the state, and it supports what is likely the largest floodplain matrix in the state. This watershed has the capacity to support robust populations of salmon and Steelhead, however many populations have experienced significant declines and are at risk of Endangered Species Act (ESA) listings. The watershed supports a spring Chinook population that is just a fraction of its historical abundance, while at the same time it supports one the largest remaining fall Chinook runs in Washington State. The proposed dam location would inundate the highest-quality Chinook spawning areas in the Chehalis, which will have significant negative effects on the population. The Chehalis is also critically important for winter Steelhead, with a high density of Steelhead spawning just upstream of the proposed dam structure. In addition to fish species, the Chehalis also supports the highest diversity of amphibians in the state, including species protected under the ESA such as Oregon Spotted Frog. The Chehalis serves as a key upland habitat connection between the Cascade Foothills, Willapa Hills, and Olympic Mountains.

Trout Unlimited encourages the consideration of all forms of flood control be reviewed and analyzed including proposals such as the Restorative Flood Protection (RFP) alternative and the Aquatic Species Restoration plan (ASRP). As presented, these plans will have significant positive impacts on salmon, amphibians, and other species by restoring habitat, the natural river channel and floodplain processes, and landscape habitat connectivity. Restoring these natural processes will also reduce flood damage by buffering high flow events and work in concert with Local Flood Damage Reductions actions.

This is a very complex and controversial proposal. The issues we address present the inevitable environmental impacts that come with dam construction and management. All aspects of this proposal, including the management schematic once such a facility is built, must be considered. This includes water storage and release flows (timing and volumes) which affect water quality, fish and wildlife species, public recreation opportunities, and local communities and their economies upstream and downstream. It is our hope that the EIS will address all of these concerns in an in-depth manner as any future decision for the Basin will have lasting and major implications for people and the ecosystem.

#### **Specific Scoping Discussion**

1. The NOI for this proposed project fails to address a clean purpose and need description. The NOI fails to provide an unambiguous statement of purpose and need for this project. Presented is a statement that discusses the construction of a temporary Flood Retention Expandable (FRE) facility structure which is being designed to support future construction of a larger dam with more storage, along with a second proposed action to raise the elevation of the Centralia-Chehalis Airport levee in Chehalis, Washington. The need and the purpose of the proposed actions should be articulated individually by actions, provide sufficient supportive data for basing the proposal and focus on the decision(s) to be made. NEPA provides a fundamental legal guidance on Purpose and Need Statements where the Purpose and Need Statement "shall briefly specify the underlying purpose and need to which the agency is responding in proposing the alternatives including the proposed action." (NEPA CEQ regulation, Section 1502.13).

As a new Federal NEPA action, the Purpose and Need description must be independent of its referencing and tiering the proposed action to a separate State document (such as the Washington PEIS). Defining a clear and precise purpose and needs sets the stage for the development and consideration of a range of alternatives in the EIS. The NOI does not define the problem to be solved other than to unreasonably narrow the action by simply stating the intent to reduce flood damage; the need should provide

supportive data to support the existence of the problem or purpose of the project proposal. The importance of a strong and descriptive purpose and need section connects it to the delineation of alternatives and the ability for the agencies to subsequently evaluate the strength of the proposed alternatives. Due to the significance of this proposal and its large-scale ramifications, we recommend the EIS contain, in Chapter 1, a definitive purpose and need section that will prepare the agency and public with the available information on the purpose and needs which must be addressed for this proposed action.

- 2. The EIS should include analyses for the third proposed action, construction of a larger dam with up to 130,000-acre feet of storage. The NOI identifies the *Proposed Action* as two-fold: first, for the construction of a new flood retention expandable facility (dam) and second, for raising the levees at the Centralia-Chehalis Airport. However, the NOI mentions a third proposed action not included in the original *Proposed Action* paragraph statement but under the *Project Description* section: the construction of a larger dam with up to 130,000-acre feet of storage. This third action is clearly intended and connected to the proposed FRE facility construction and thus, a reasonably foreseeable future action could result from the proposed action itself. We ask the Corps to address this in the EIS. While we are not asking the Corps for an environmental analysis that would ultimately approve a bigger dam but rather that the proponent's full dam development proposal should be disclosed and considered in any environmental analysis the Corps and the State prepares. This third proposed action is within the existing location of the proposed FRE facility where there are known resources and impacts which can be analyzed with specificity.
- 3. The EIS must provide appropriate and sufficient ranges of alternatives, rigorously explore and objectively evaluate these alternatives, and include reasonable alternatives not within the jurisdiction of the lead agency. (National Environmental Policy Act—NEPA—Section 102(2)(E)). Since the alternatives to be developed and evaluated will be based on the purposes and needs of the proposed action, TU is concerned that the lack of a well-defined purpose and need will negatively affect the preparation of a wide range of alternatives. Alternatives will not be reasonable without the construction of a strong *Purpose and Need Statement* and could potentially limit the range and type of alternatives presented. In addition, because of the significance of the environmental effects of the proposed action, TU requests that the EIS provide substantial analysis and details in each of its alternatives considered. We are pleased to read in the NOI that the Corps and the State intend to "...address an array of alternatives for providing alternatives suitable for reducing flood damage in the Chehalis River Basin." The following include our recommendations but are not limited to just these considerations:
  - We request the inclusion, among the range of alternatives, for analysis of a no-facility approach to mitigate the problematic flooding. Numerous nationwide studies have been completed that review the value of retaining natural systems as flood protection<sup>2</sup> and we recommend the EIS include these options. In addition to the referenced studies, we also encourage the inclusion of the National Flood Insurance Program through FEMA and the Basin-wide ASRP for consideration in the development of alternatives to reduce flood damage. Finally, none of these alternatives should be interpreted as mitigation measures, especially the ASRP as it is independent of the dam proposal and must continue regardless of the future of this proposed action.

TU's Mission: To conserve, protect, and restore North America's coldwater fisheries and their watersheds.

<sup>&</sup>lt;sup>2</sup> Earth Economics. 2010. "Flood Protection and Ecosystem Services in the Chehalis River Basin." Prepared by Earth Economics for the Chehalis River Basin Flood Authority. May 2010; Friends of the Verde River. *Multi-purpose Flood Control Projects: Scottsdale, Arizona*. <a href="http://www.scottsdaleaz.gov/Asset9243.aspx">http://www.scottsdaleaz.gov/Asset9243.aspx</a>; *Johnson Creek Restoration*, Portland, Oregon. <a href="http://rrcsolutions.org/johnson-creek-restoration-portland-oregon/">http://rrcsolutions.org/johnson-creek-restoration-portland-oregon/</a>; *Cedar Mill Creek Flood Remediation Collaborative*, <a href="http://cedarmillcreek.org/">http://cedarmillcreek.org/</a>.; *Jowa Watershed Approach: HUD Disaster Resilience Grant*. <a href="https://www.iowawatershedapproach.org/">https://www.iowawatershedapproach.org/</a>.

- The current proposed action appears to be targeted to one specific subbasin yet will impact a significantly larger geographic expanse, have larger environmental impacts, human-related impacts, and socio-economic impacts. Clearly impacts to the larger geographic expanse must be considered and the question of whether the proposed action will actually reduce flooding impacts must be addressed. The NOI narrowly addresses a small portion of the larger Chehalis River Basin which drains an area of approximately 2,700 square miles. Piecemealing the problem by building a FRE facility to provide temporary flood storage confuses the need addressed in the Washington State's SEPA PEIS and the Governor's Chehalis Basin Work Group<sup>3</sup> and the resulting Chehalis Basin Strategy. We recommend the EIS include the review and consideration presented in the Strategy.
- The proposed project's dual actions of constructing a new flood retention facility within the upper Chehalis River and the raising of levees at the Centralia-Chehalis Airport must have separate alternatives provided in the EIS; each action represents a separate and significant impact to the environment.
- Mitigation measures are not considered to be alternatives; the EIS should not mistake one for the other as both are key requirements of an EIS. Therefore, we request that alternatives be considered separately and in detailed discussions to achieve the best possible outcomes with the least amount of environmental harm. The Supreme Court has stated that an EIS must discuss mitigation measures in order to provide a complete picture of the impacts of the project. While we recognize that there is confusion on how to treat mitigation measures differently from alternatives there is support for agencies to discuss mitigation measures in much more detail than required in order to reveal a project's total impacts. 6
- 4. The proposed project will have major ecological impacts throughout the Basin and the EIS must provide thorough analyses on all these impacts. The EIS must include analysis on all ecosystem resources within the Basin which will be impacted through the construction and management of the dam. The following issues need to be included in the EIS analysis:
  - Sediment transport and its impacts, erosion and deposition effects on aquatic habitat upstream and downstream from the dam;
  - Impacts to fisheries and their life cycles; this includes impacts to salmon, steelhead, and lamprey
    populations and how the Corps plans to mitigate their proposed loss;
  - Upstream impacts caused by the water retention, the presence of back pools, and environmental consequences from the temporary nature of the holding facilities;
  - Downstream environmental affects must be included in the EIS that address impacts to wetlands, wildlife refuges, and all associated dependent species within these areas.
  - Aquifer recharge areas and effects to fish and wildlife;

 $\frac{https://s3.wp.wsu.edu/uploads/sites/2180/2014/11/ChehalisBasinWorkGroupRecommendationsReport\_Final\_00}{04.pdf}$ 

<sup>&</sup>lt;sup>3</sup> Chehalis Basin Strategy: *Governor's Chehalis Basin Work Group, 2014 Recommendation Report*. Final November 25, 2017.

<sup>&</sup>lt;sup>4</sup> Chehalis Basin Strategy: Final EIS Executive Summary. "Reducing Flood Damage and Restoring Aquatic Species Habitat". Department of Ecology, State of Washington. June 2, 2017.

<sup>&</sup>lt;sup>5</sup> Methow Valley, 490 U.S. at 349–50. Interestingly, NEPA itself does not explicitly mention mitigation. 42 U.S.C. § 4321 (2012).

<sup>&</sup>lt;sup>6</sup> See Ocean Mammal Inst. v. Gates, 546 F. Supp. 2d 960, 983 (D. Haw. 2008) (requiring mitigation measures in narrowly crafted injunction to avoid harm to marine mammals caused by the Navy's use of sonar in training exercises, instead of shutting down those exercises). See N.W. Indian Cemetery Protective Ass'n v. Peterson, 795 F.2d 688, 697 (9th Cir. 1986) (holding EIS inadequate for failure to discuss mitigation measures in sufficient detail), rev' d on other grounds, sub nom. Lyng v. N.W. Indian Cemetery Protective Ass'n, 485 U.S. 439 (1988).

- Terrestrial impacts to habitat and species including big game migration corridors;
- Impacts to sensitive (endemic Olympic Mudminnow), threatened and endangered (Bull trout, green sturgeon, pacific eulachon, Oregon spotted frog, marbled murrelet, northern spotted owl), and native species (e.g. pacific lamprey, cutthroat trout, resident rainbow trout, and a diversity of amphibian species).
- Discussion and analysis of impacts from potential increase in floodplain development as a result of the dam; review of future zoning development impacts to fish, wildlife, recreation, etc.
- 5. Impacts to salmon and steelhead populations from the proposed actions will be significant. The EIS must include detailed analyses on these impacts including all connected actions. Salmon and Steelhead populations require healthy and resilient ecosystems to survive. Despite recovery attempts, both species remain challenged in their ability to function. Modeling should be conducted in the EIS that considers all parameters that affect the viability and life cycle of salmon and Steelhead populations and how flooding will affect them. Included should be the following:
  - Detailed evaluation and updated data assessments of the impacts to Chehalis River Basin Chinook
     Salmon and Steelhead and what impacts might influence all wild salmonid populations;
  - Analysis must include information affecting their genetic population structure, spawning importance both upstream and downstream, and water quality influences. Current studies are assessing population and spawning dynamics and TU recommends the EIS include this information in its analysis. Included in this detailed evaluation of the impacts to Chehalis River Basin Chinook Salmon and Steelhead and wild salmonids should be references regarding influences on their genetic population structure<sup>7</sup>, spawning importance both upstream and downstream<sup>8</sup>, and water quality influences.
  - Environmental harm to species dependent upon native salmonid populations must be evaluated including orcas and the Southern Resident Killer Whale population; Chinook salmon contribute to 80 percent of the whale's diet. The Chehalis provides essential Chinook habitat for this Killer Whale population and the proposed dam will impact this food source.
  - The EIS must include a thorough review of the influences of hatcheries and hatchery fish, as the science is clear in illustrating the reduced fitness of offspring from the spawning of hatchery salmon and Steelhead with wild/natural origin fish. Hatcheries as mitigation will likely reduce the long-term sustainability of wild fish populations in the watershed (exacerbating the negative impacts from a dam vs. mitigating them).
  - Connected actions that are closely related to the proposed action (as described in 40 CFR 1508.25) including roads, electric lines, and other interdependent activities that occur as a larger action required in order to implement the proposed action.
- **6. Fish passage analysis included in the EIS must address the impacts and all connected actions.** Fish passage is a major concern with TU. Fish passage is a long-term commitment that is very expensive and is not always successful and contributes to further environmental issues. Likely the biggest concerns are for downstream migration of juvenile salmon and upstream and downstream migration of lamprey. The NOI discusses how fish passage will be *conducted* but Trout Unlimited requests the EIS contain

<sup>&</sup>lt;sup>7</sup> Brown, Sarah K., T.R. Seamons, C. Holt., S. Ashcraft, and M. Zimmerman. October 2017. **Population Genetic Analysis of Chehalis River Basin Salmon** (*Oncorhynchus tshawytscha*). FPT 17-13. Washington Department Fish and Wildlife, Olympia, Washington.

<sup>&</sup>lt;sup>8</sup> Ashcraft, Sara, C. Holt, M. Scharpf, M. Zimmerman, and N. Vanbuskirk. December 2017. Final Report: **Spawner Abundance and Distribution of Salmon and Steelhead in the Upper Chehalis River, 2013-2017**. FPT 17-12. Washington Department of Fish and Wildlife, Olympia Washington.

analysis on the impacts of proposed fish passage implementation. Adequacy of fish passage facilities require thorough modeling, analysis and review. Healthy fish populations need to move to different areas of the watershed to satisfy different life cycle needs, from food to shelter to reproduction. Salmon and other anadromous species migrate upstream from the ocean and dams can and do significantly hinder their ability to reach their spawning grounds. Furthermore, unimpeded downstream migration is critical for salmonid juvenile rearing and smolting, and for steelhead kelts on their way back to the ocean. Therefore, the EIS must include the following analysis:

- Impacts on mortality as they relate to salmonids and their habitats and function;
- Upstream and downstream migration considerations, particularly referencing how fish will navigate fish ladders and altered habitat conditions;
- A dam will further reduce aquatic species in the Chehalis Basin. Of particular concern is the susceptibility of lamprey, a species of significant value to the Quinault and Chehalis Tribes, to extirpation from the Basin as a result of blocked passage. Proposed fish-passage mechanisms are likely to have low success rates at passing lamprey, since there are no proven examples to draw upon. The EIS must include analysis that provides consideration for mitigating these impacts.
- Upstream and downstream habitat restoration considerations and affected spawning reaches;
- Cumulative impacts analysis that includes short- and long-term effects on salmon from the dam implementation, future dam expansion and evaluation and inclusion of all efforts underway in the Chehalis River watershed to improve salmon recovery must be included in the EIS.
- Volume, temperature and timing releases and the impacts to resident and anadromous fish species must be analyzed.
- 7. Economic analyses related to design, implementation, and supportive industries and communities dependent upon the fisheries. There are a host of formidable economic issues associated with this proposal that must be analyzed. They include:
  - Accurate cost estimates of the design, build, operational, maintenance, mitigation and future expansion must be included in the EIS. New dams are expensive and regularly exceed forecasted budgets.
  - Evaluation of the significant economic commerce dependent upon salmon and other fisheries in the Basin; the Basin is also important to a multitude of other critical economic commerce involving natural environments (forestry, retail, tourism, recreation, etc.).
  - Impacts to cultural, historic and current tribal fisheries should be considered in this analysis as a major connected effect from this proposed action and not a separate consideration as it appears to be in the PEIS.
- 8. The EIS must include discussions and analyses that illustrate how the flood risks will be removed through the implementation of the proposed actions. Current project descriptions do not confirm reductions of flood risks. Literature on the FRE is fairly limited and perhaps exploratory at best. While we understand the implication behind the design of the FRE, TU requests that the EIS provide in-depth discussion on how this system will affect flood risk and lessen environmental harm.
  - The EIS should include the descriptive estimates of what the percentage of flood reduction would be, in each region of the Chehalis Watershed, with the implementation of this proposal.
  - The EIS should clarify that peak flow attenuation does not necessarily lead to flood damage reduction, and alternative actions, beyond those impacting peak flow levels, should be considered to meet the objective of flood damage reduction. The Newaukum River, a major tributary downstream from the proposed dam site, can continue to cause significant flooding in Chehalis,

- Centralia and Interstate 5 even with the building of this dam. Addressing who and where the benefits of this proposal must be in the EIS.
- Comprehending and applying the viability and compatibility of a variety of modeling approaches and their applicability to the entire Chehalis River Basin is important in understanding the decision-making process the agencies will be taking in making their decisions. As an example, the Corps initiated a study<sup>9</sup> in 2014 that contained Basin-wide hydraulic modeling scenarios which should be included in the EIS analysis. Modeling efforts should be expanded to consider all ranges of alternatives across the entire watershed (e.g. the Restorative Flood Protection alternative was only pursued/modeled in the Newaukum subbasin).
- 9. Appropriate mitigation measures must be addressed in the EIS with discussions on avoidance, minimizing and mitigating impacts. NEPA requires federal agencies to consider appropriate mitigation measures to avoid or minimize specific impacts during the NEPA process. Mitigation is recognized as a continuous process throughout the entirety of writing and completing the EIS. In addition, since the Corps is the lead and Corps Section 10/404 permitting has very specific requirements for mitigation, we ask the following to be addressed in the EIS:
  - Mitigation measures must be considered which evaluate impacts to fish, fish passage and their design and success, long-term health of aquatic habitat conditions, and sustainable fishing futures;
  - Mitigation measures for loss of habitat including riparian vegetation, upstream and downstream wetlands, big game habitat and critical migration corridors;
  - Mitigation measures for loss of economic commerce to local businesses, tourism, recreation, lost fishing and hunting revenue opportunities to agencies and communities.
  - Address the five-step process required by Corps section 10/404<sup>10</sup>; in addition, the Corps must consider compensatory mitigation required for impacts to waters of the U.S. that cannot be avoided or minimized.
  - Consideration of alternative mitigation options provided by non-agency groups, organizations or the public as measures that offer means for reducing environmental harm.
  - Consultation with U.S. Fish and Wildlife Service and development of requisite mitigation options.
  - In addition to the development of mitigation measures, the EIS must provide separate Monitoring and Adaptive Management options for addressing environmental impacts from the proposed dam. Such options will assist in collecting data to assess predicted project impacts and the effectiveness of mitigation after initial and ongoing implementation of the project, should it be approved. Any mitigation efforts that are not being effective can then be adapted.
- 10. Climate change analyses and its impact should be considered in the EIS. Climate change factors influence short-term and long-term environmental conditions and scientific research and evidence has shown that global atmospheric emissions are increasing in concentrations and are significantly affecting

<sup>&</sup>lt;sup>9</sup> https://www.nws.usace.army.mil/Missions/Civil-Works/Programs-and-Projects/Projects/Chehalis-River-Basin-Ecosystem-Restoration/.

<sup>&</sup>lt;sup>10</sup> U.S. Army Corps of Engineers, Section 404 Requirements. Corps Section 10/404 permitting process has very specific requirements for mitigation including a five-step process of (1) impact avoidance, (2) minimization, (3) rectifying impacts, (4) reduce and/or (5) resource-specific mitigation measure development and application to compensate for unavoidable impacts under their jurisdiction.

the Earth's climate.<sup>11</sup> Trout Unlimited urges the EIS to include the best available science in determining how climate change predictions will affect the proposed project. We respectfully ask that the EIS include analysis on the following issues:

- Consider the implications of climate change predictions for the larger Chehalis River Basin and the economic and social cost-benefit assessments of investing in the proposed dam;
- Provide a level of analysis that is commensurate with the anticipated environmental effects of climate change and their worth in including it in the EIS, as identified by CEQ.
- Include discussion and analysis on the impacts by regional and geographic references and predictions with respect to heavier flooding caused by more frequent storms and increased intensity of storms, the harm to water resources, to fish and wildlife and to ecosystems in general.
- 11. The EIS needs to address the issue of future dam management responsibilities and expansion requirements. The NOI contains no references to participation from other federal agencies and their acting role in the management of the FRE facility, once completed. Specifically, the EIS should include a discussion on the role the Bureau of Reclamation (Bureau) or other federal entities will have in future management actions should there be any. The regulatory responsibilities on new dam projects remains in many ways unchronicled territory—there is very little information on how the Corps and Bureau collectively address new dam infrastructure development, criteria, and language for managing new dams. In the past, Bureau dams have had flood control overlap with the Corps and multi-purpose dams between flood control and conservation storage made management issues complicated.

On October 23, 2018 Congress passed the America's Water Infrastructure Act of 2018<sup>12</sup> (AWIA 2018; S.3021) which will have significant implications for the proposed FRE facility and future potential dam. The Act's basic guidance is "to provide improvements to the rivers and harbors of the Unites States, to provide for the conservation and development of water and related resources, to provide for water pollution control activities, and for other purposes". Historically, Congress enacted the Water Resources Development Act (WRDA) as a means for providing infrastructure resource support for proposed projects and requiring biennial updates (referred to as Corp's Chief's Reports). Reauthorization of WRDA's biennial efforts did not always occur; however, in 2014 efforts were revived once again and Congress developed and implemented new processes for identifying site-specific studies and projects, and financial support.<sup>13</sup> We believe the EIS should contain analysis and requirements created through the passage of AWIA 2018.

Like the Corps, the Bureau is involved in the building and management of dams, including the operation of such dams. While we understand the Corps builds dams for flood control and the Bureau builds dams for water supply, there is the potential for competing interests based on future pressures from climate change scenarios and operational responsibilities. Trout Unlimited is interested in understanding how the agencies will delegate who manages the future volume, timing, and release of water storage that will

<sup>&</sup>lt;sup>11</sup> The 2007 Fourth International Panel on Climate Change Assessment (IPCC, 2007, pg. 2) finds that "Warming of the climate system is unequivocal, as is now evident from observations of increases in global average air and ocean temperatures, widespread melting of snow and ice, and rising global average sea level.

<sup>&</sup>lt;sup>12</sup> 115<sup>th</sup> Congress. October 23, 2018. Signed by President Trump. **S. 3021: America's Water Infrastructure Act of 2018.** https://www.govtrack.us/congress/bills/115/s3021/text.

<sup>&</sup>lt;sup>13</sup> 114<sup>th</sup> Congress. **Water Resources Reform and Development Act of 2014.** The 114<sup>th</sup> Congress enacted the Water Infrastructure Improvements for the Nation Act (WIIN; P.L. 114-322) which then focused U.S. Army Corps of Engineers to follow guidance for programs and projects (Water Resources Development Act (WRDA) of 2016).

affect water quality, fish populations, spawning events, wildlife, public recreation and other impacts. We are also concerned about the process by which the Bureau conducts environmental reviews, should operating regimes change. If the EIS provides adaptive management options based on monitoring results that indicate some level of dam operation requires changes, will the Bureau provide a NEPA process for public involvement and other agency reviews? We ask these questions based on past performance by the Bureau where the reduction of dam releases on a river did not require environmental reviews. <sup>14</sup> Recent court cases have adjusted some decisions and the Bureau must now do NEPA reviews when alternatives for dam management occur under the Endangered Species Act<sup>15</sup>; however, routine dam operations may still be exempt from NEPA.

#### Summary

Trout Unlimited appreciates the opportunity to provide our comments on this complex and controversial proposed project. There is much to consider and many inherent tensions with respect to this particular proposal. We understand the efforts the Corps is undertaking in trying to solve problems associated with devastating flooding. We ask that the Corps and the State of Washington also address what new problems might be presented from the actions of this proposal.

We offer our comments in good faith and will continue to participate as this proposal moves forward.

Sincerely,

Luke Kelly

Olympic Peninsula Restoration Project Manager

10318 35<sup>th</sup> Lane SE

Olympia, WA 98513

Luke.Kelly@tu.org

360-789-8282

**Brad Throssell** 

State Chair Washington Council of Trout Unlimited

12819 SE 38th Street, #462

Bellevue, WA 98006

425-260-0861

wacounciltu@gmail.com

<sup>&</sup>lt;sup>14</sup> 1990. *Upper Snake River Chapter of Trout Unlimited v. Hodel*. The 9<sup>th</sup> Circuit Court of Appeals held that the BOR did not need to do an environmental review before reducing dam releases into the South Fork Snake River.

<sup>&</sup>lt;sup>15</sup> San Luis & Delta-Mendota Water Authority v. Jewell. 9<sup>th</sup> Circuit Court of Appeals.