The Center for Environmental Law & Policy

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Bobbak Talebi
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https://admin.ecology.commentinput.com?id=6U54ErkfW

**Re: SEPA Revised Draft EIS for the Chehalis Flood Damage Reduction Project**

Dear Mr. Talebi,

The Center for Environmental Law and Policy (CELP) appreciates this opportunity to provide comments on the Revised SEPA Draft Environmental Impact Statement for the proposed Chehalis River Basin Flood Damage Reduction Project (the DEIS).

CELP is a statewide 501(c)(3) nonprofit whose mission is to protect, preserve, and restore Washington's waters through education, advocacy, policy reform, and public interest litigation. Our programmatic focus areas include protecting instream flows, water availability including tribal water rights, clean water, healthy habitat, fish passage and climate resilience.

In watersheds, such as the Chehalis, which contain a variety of uses including forestry, agriculture, residential, and commercial/industrial, good floodplain management is essential to restoring and maintaining high quality water and fish habitat. Where poor floodplain management is allowed, fish habitat and drinking water supplies suffer and flood damages increase.

Unfortunately, it appears that much of the Chehalis basin is on a pathway that will result in additional floodplain damage and harm to water quality and fish habitat, and this DEIS is likely to exacerbate these trends, at an exorbitant cost and with little benefit. The DEIS declares multiple impacts for which it offers inadequate mitigation. The DEIS also fails State Environmental Policy Act (SEPA ) requirements for alternatives analysis.

It is therefore our position that this DEIS should be withdrawn. If the project is to proceed a new DEIS should be submitted to address concerns.



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1. **The DEIS fails to reasonably and fairly compare a reasonable range of alternatives**.

When an EIS is required, the SEPA rules mandate analysis of reasonable alternatives, along with the proposed action and the no-action alternative. WAC 197-11-440(5)(b). A "reasonable" alternative includes actions that could feasibly attain or approximate a proposal's objectives, but at a lower environmental cost or decreased level of environmental degradation. *Id*. An EIS shall "[d]evote sufficiently detailed analysis to each reasonable alternative to permit a comparative evaluation of the alternatives including the proposed action.

The stated objectives of the proposed action are:

> Reduce flood elevations during a 100-year flood at the following locations:
> - 10 feet at the Doty gage (USGS No. 12020000)
> - 1 foot at the Mellen Street gage (USGS No. 12025500)
> - Not extend the boundaries of the existing 100-year floodplain.
> - Provide future leaders in the Chehalis Basin the flexibility to address additional increases in peak flood levels through an adaptable design approach.
>
> DEIS Appendix 1 at 12.

These objectives indicate that the benefits of the proposed action diminish significantly as one moves downstream from the proposed dam site, referred to as the Flood Retention Expandable [structure] (hereinafter "FRE"). The entire proposal only addresses flooding in a portion of the Chehalis Basin. *See* Figure 1-2, DEIS Appendix 1 at 12. In addition, the objectives are such that only a structural solution can achieve them. One can only expand a flood retention structure if one has built one that is expandable. Perhaps the most interesting objective is that the applicant does not want to extend the boundaries of the existing 100-year floodplain. However as a result of development and fill in the floodplain, along with the impacts of climate change, the actual floodplain in the project area has already expanded. It's only FEMA's mapping of it, based on old data from the 1970's, that hasn't expanded. *See* Table G-6, DEIS Appendix G (Lewis County, Pe Ell, and Centralia all using 1981 Flood Insurance Rate Map (FIRM)); *see also* DEIS at 37 (Lewis County flood insurance study based on 1970's data).

In contrast:

> The Local Actions Alternative considers a variety of local-scale options that local governments and agencies could choose to implement in the future to reduce flood damage in the Chehalis-Centralia area. These actions could approximate the Applicant's objective to reduce flooding from storms in the Willapa Hills through improving floodplain function, land use management actions, buying out at-risk properties or structures, and increasing water storage from Pe Ell to Centralia. Elements could include components where the Applicant would support (through local regulatory powers, funding, or technical assistance) local efforts for flood damage reduction.
>
> App. 1 at 55.

Here, the objectives of the alternative are described as flood damage reduction and improving floodplain function. A specific amount of flood damage reduction is not identified. In contrast, for the FRE alternative, the applicant has chosen 635 structures of value protected from a 100-year flood, DEIS Appendix 1 at 12, (*but see* DEIS at 136, 635 structures of value protected from damage in a catastrophic flood. These are two different standards). The DEIS includes modeling of the number of structures subject to inundation under various climate change scenarios for the FRE alternative and the no-action alternative. The modeled numbers for structures protected in mid and late century catastrophic floods median and maximum climate change scenarios range from 1,985 to 2,774. *See* Exhibit 5.7-3, DEIS at 136 (*but see* blue inset on the same page including different estimates of the number of structures protected by the FRE alternative). All of the DEIS estimates exceed the goal of 635 structures protected, such that it makes one wonder how and why the goal was chosen? Still, no such comparison analysis was done that included the local actions alternative. *See* DEIS at 135-136. The DEIS does not disclose how many structures of value would be protected under the local actions alternative. This failure precludes a reasonable comparison analysis of the local actions alternative vis-a-vis the FRE and No-Action alternatives.

There should be an estimate of the flood damage protection to structures provided by the local actions alternative. For example:

> The Programmatic EIS (Ecology 2017) found that within Lewis, Thurston, and Grays Harbor counties, approximately 75% of the residential homes in the Chehalis River floodplain could feasibly be elevated or floodproofed. For other buildings (commercial, industrial, government, schools), it was assumed that approximately 25% of the buildings in the 100-year floodplain of the Chehalis River could feasibly be raised, retrofitted, or floodproofed by constructing flood barriers or walls.
>
> DEIS App. 1 at 64.

How does this compare with the FRE alternative? At this point, it's "apples and oranges," but one of the requirements for an EIS is that it provide "sufficiently detailed analysis…to permit a comparative evaluation." WAC 197-440(5)(c)(v). Despite the fact that it was possible in 2017 to quantify the number of structures that could be elevated or floodproofed, the folks in charge of the 2025 analysis for the DEIS failed to do so. The failure to compare the number of structures protected from flood damage by the alternatives is a fatal flaw.

It is our understanding that, over the last few years, funding has been available for landowners who want to raise or floodproof their homes. How many landowners have taken advantage of this voluntary program? Are landowner decisions being influenced by the possibility that an FRE or dam may be built, at federal and state taxpayer expense, thereby reducing the incentive to floodproof their structures?

**2. The local actions alternative lacks targets and governance and funding structures**

The local actions alternative is not a legitimate alternative as it does not have a specific set of actions nor even a way of identifying a specific set of actions. The alternative mentions "a variety of local-scale options that local governments and agencies could choose," DEIS at 28, but it doesn't even identify which governmental entities would make these decisions nor does it address how such entities would decide. Must all counties in the basin agree on a suite of actions? What about city governments?

What funding sources are planned to support the local actions alternative? The description of this alternative implies that it would be implemented with local funding. DEIS App. 1 at 55. It is common knowledge how limited any available cash or financing local governments would have. We note that funding from FEMA is identified as a potential source, *see e.g.*, App. 1 at 72 (funding for raising or relocating residences), but it's likely that this source has already dried up under the Trump Administration's budget cuts. The DEIS notes that estimated costs for infrastructure projects identified in the Local Actions No Dam Alternative (LAND) report range from $1.25 to 1.9 billion. App. 1 at 61. However, the LAND report is not the same as the local actions alternative in this DEIS, nor is the LAND alternative included in the DEIS. Still, this estimate begs the question – how much would the local actions alternative cost and where would the funding come from? Similarly, the FRE alternative is estimated, by its proponent the FCZD, to cost $1.3 to 2.3 billion, purportedly including mitigation. *See* Washington Dept. of Ecology, Office of Chehalis Basin, Chehalis Flow Through Dam for Flood Control (Updated January 2026), found on January 28, 2026 at: https://officeofchehalisbasin.com/wp-content/uploads/2026/01/LTS-Flow-Through-Dam-fact-sheet-Nov25.pdf. Where is this funding going to come from? The DEIS does not acknowledge how federal budget cuts will intensify competition for scarce funds. Exacerbating this, the current federal administration has recently vetoed funding for drinking water supplies to conservative rural communities in southeast Colorado that was unanimously supported by Congress. *See* https://www.nytimes.com/2026/01/17/us/politics/colorado-water-trump-veto.html (found on January 28, 2026). Alternatively, the state of Washington is experiencing budget shortfalls and is far from flush with funding for large water projects such as this. The actual cost of the FRE alternative, and the potential sources of funding to implement it, are at best unsettled and it would be unacceptable and irresponsible to advance a project given unknown costs, or one relying on unsecured or unstable funding sources.

**3. THE DEIS does not fully mitigate impacts to salmonids**

Appendix E-3, Fish Species and Habitats Discipline Report of the DEIS describes impacts to key salmon species namely Spring-Run Chinook Salmon, Spring-Run Chinook Salmon, Coho Salmon and Steelhead. These species are all highly-prized to local tribes, fishers and wildlife enthusiasts

for their direct and intrinsic value as well as their well-established role in the broader ecosystem including their importance to seabirds and endangered Southern Resident Killer Whales (SRKW). The DEIS relies heavily on the flow-through nature of the FRE, to assuage concerns about salmonid impacts, but fails to mitigate the likely impacts on salmonids, and even the stated analysis reveals glaring impacts which could result in unacceptable and unmitigated losses to salmonid abundance.

CELP's concerns extend to inadequate mitigation during construction, FRE Operations flow through and FRE Operations Flood Retention.

From the Appendix E Fish Species and Habitats Discipline Report:

Table E.3-4. Estimated Juvenile Salmonid Downstream Migrant Passage Effectiveness During FRE Operations – Non-Flood Retention:

- Spring-Run Chinook Salmon: 85%
- Fall-Run Chinook Salmon: 85%
- Coho Salmon: 85%
- Steelhead: 95%

Table E.3-5. Estimated Adult Salmonid Upstream Passage Effectiveness During FRE Facility Operations – Non-Flood Retention:

- Spring-Run Chinook Salmon: 34%
- Fall-Run Chinook Salmon: 65%
- Coho Salmon: 65%
- Steelhead: 69%

Table E.3-7. Estimated Juvenile Salmonid Upstream Migrant Passage Effectiveness During FRE Construction and Non-Flood Retention Operations:

- Spring-Run Chinook Salmon: 64%
- Fall-Run Chinook Salmon: 64%
- Coho Salmon: 64%
- Steelhead: 79%

Table E.3-8 (partial). Estimated Passage Effectiveness for Kelts* Downstream Passage During FRE Facility Construction and Non-Flood Retention Operations:

- Steelhead Kelts* (cumulative): 43%

Table E.3-9. Estimated Juvenile Salmonid Upstream Migrant Passage Effectiveness Through the FRE Facility During Flood Operations:

- Spring-Run Chinook Salmon: 50%
- Fall-Run Chinook Salmon: 50%
- Coho Salmon: 50%
- Steelhead: 54%

App. E Fish Species and Habitats Discipline Report at 3-11 through 3-19

These potential losses in fish passage of 5-66% are unacceptable and are not fully mitigated in this DEIS, likely leading to population-level declines over time. This is especially egregious given the well-established high value placed on these species by the members of the public and treaty-protected fisheries, as well as other ecosystem-related impacts that would result from population declines, including those of endangered Southern Resident Killer Whales.

*For clarity: steelhead kelts are out-migrating steelhead adults that have just successfully spawned. Unlike salmon, these fish would potentially be able to return to spawn again in future years, assuming rehabilitation and survival during the interim period. This is a highly vulnerable life-stage, due to the expenditure of energy reserves during the spawning run.

**4. THE DEIS does not fully mitigate impacts to water quality**

The Water Discipline Report (appendix N) indicates that FRE would result in unacceptable and unmitigated losses to water quality, including but not limited to temperature, turbidity and dissolved oxygen, all of which are crucial to salmonid survival, rearing and spawning.

a) Temperature Impacts. From the Water Discipline Report:

> When the FRE facility is not storing water and the Chehalis River passes through the facility outlets, [seven-day maximum] temperatures of the portion of the Chehalis River in the temporary reservoir footprint could increase by up to 1.8°C in mid- to late summer (e.g., June through September) under both mid-century and late-century conditions relative to the No Action Alternative.
>
> …Chehalis River water temperatures are often already elevated above water quality criteria between June and August under historical baseline conditions. The [seven-day maximum] water temperature increases attributable to the Proposed Action would exceed water quality standards (i.e., 0.3°C) and increased water temperatures would more generally result in increased frequency to the number of days water temperatures are non-compliant with water quality standards. Therefore, the operation of the FRE facility would result in an adverse impact on water quality.
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> …With the FRE facility, under mid-century and late-century conditions, [seven-day maximum] temperatures immediately downstream (RM 107 to RM 102) could be up to 0.9° to 1.5°C warmer than with no FRE facility, exceeding temperature water quality criteria and therefore representing an adverse impact on water quality. These temperature increases would be greatest during mid- to late summer.
>
> …The increased water temperatures would exceed water quality standards and have significant adverse impacts to surface water quality and designated uses of the Chehalis River and Crim Creek for salmonid habitat.
>
> App. N, Water Discipline Report at 89-90

Despite these temperature impacts, the proposed mitigaton plan is woefully inadequate, relying on an aspirational to-do list of potentially beneficial projects that are not calculated to avert projected declines in water quality mentioned in the same section of the report. These proposed mitigation measures include:

1) minimizing shade reduction and associated temperature impacts through implementation of a Vegetation Management Plan (VMP);
2) riparian enhancement and reforestation along the mainstem Chehalis River and Bunker Creek;
3) forest conversion of industrial forest to an old-growth successional forest; and
4) riparian buffer enhancement of stream under forest conversion.

> Implementation of the VMP would reduce the loss of shade trees by active planting of flood-tolerant species,- which, combined with riparian planting of stream bank, would provide sufficient shade for mitigation (see Section 3.2.4).
>
> *Id.* at 90-91

It should be obvious that minimizing additional shade reduction (future harm avoidance), while beneficial, does nothing to avert concurrent harms from the FRE, rendering them ineffective for FRE mitigation. These harms would begin to happen immediately during construction and continue unabated at least until the other proposed solutions were biologically mature. The DEIS does not include a timeline for riparian habitat to be established and completely ignores the decades required to complete a "transition from industrial forest to an old-growth successional forest", nor does the DEIS and/or Appendix N indicate if the forest landowners would share the goals or would contract to provide them, leaving one to doubt whether they would be implemented at all.

The DEIS also notes regulatory uncertainty as to whether these measures would be approved or implemented at all:

> The plan must meet regulatory requirements and be approved by Ecology and other applicable agencies as part of the Section 401 and NPDES permit applications. The plan must provide reasonable assurance that water quality standards and designated in-water uses would be met.
>
> *Id.* at 91

b) Turbidity Impacts. From the Water Discipline Report:

> The predicted periodic exceedances of turbidity water quality criteria would violate water quality standards because the reservoir outflow turbidity would be more than 10% higher than the reservoir inflow turbidity and represent a significant adverse impact on water quality resulting from operation of the FRE facility.

c) Dissolved Oxygen Impacts. From the Water Discipline Report:

> Warmer water holds less DO (dissolved oxygen) than cooler water and can also increase demand for DO by stimulating biological activity; therefore, the river temperature increases resulting from FRE facility operations would contribute to decreased DO concentrations. The footprint water quality modeling predicted differences in DO levels between the Proposed Action and the No Action Alternative at the FRE facility site, with the differences due mostly to lower saturation concentrations resulting from warmer water temperatures. The modeling showed small (less than 0.2 mg/L) differences for much of the year with larger differences (up to approximately 0.3 mg/L) in summer months. These differences would likely result in DO criteria exceedances.
>
> …While average DO decreases were relatively small, [single-day minimum] DO decreases from 0.2 to 0.3 mg/L were simulated to occur immediately downstream of the proposed FRE facility (RM 107.1 and 102.1). These downstream DO decreases would exceed water quality standards (i.e., [single-day minimum] DO decrease of 0.2 mg/L) and would be a significant adverse impact to surface water quality.

*Id.* at 91

Summary of Surface Water Quality Impacts from FRE Facility Operations. From the Water Discipline Report:

> The increased water temperatures, decreased DO, and exceedances of turbidity would exceed water quality standards and be significant adverse impacts to surface water quality and designated uses of the Chehalis River for salmonid habitat.

*Id.* at 91

Why does the DEIS calculate these significant surface water impacts without proposing adequate and specific mitigation elements that are calculated to avoid the consequences declines in water quality in a meaningful timeframe. Why does the DEIS not calculate additional impacts to salmonid species populations resulting from the declines in water quality? What will be the cumulative impact of habitat alteration, water quality impacts and fish passage reductions on salmonids?

**5. Postponing the analysis of mitigation feasibility and practicability undermines the goal of the SEPA process.**

The DEIS postpones analyzing the effectiveness of proposed mitigation measures thereby frustrating the goal of determining what the environmental impacts of the various alternatives are likely to be. For example, in the context of impacts to river temperature, dissolved oxygen, and turbidity due to operating the proposed FRE, it states:

> Mitigation is proposed by the Applicant to develop and implement a Surface Water Quality Mitigation Plan to address these impacts; however, there is uncertainty around whether the implementation of a plan is technically feasible and economically practicable. The Proposed Action would have **significant and unavoidable** adverse impacts on surface water quality, unless the Applicant develops a Surface Water Quality Mitigation Plan that meets regulatory requirements and for which implementation is feasible. The plan must be approved by Ecology and other applicable agencies as part of the Section 401 and NPDES permit applications. The plan must provide reasonable assurance that water quality standards and designated in-water uses will be met.
>
> DEIS at 58 (emphasis in original).

At a minimum, an applicant should submit enough information about how they intend to mitigate impacts so that public and agency reviewers can determine whether it is likely that potential impacts can be avoided. Here, Ecology admits that the applicant hasn't provided sufficient information to determine whether mitigation is either technically feasible or economically practicable. Those are key threshold determinations.

Examining the effectiveness of mitigation measures is a key aspect of the DEIS process. *See* WAC 197-11-440(4) (EIS must examine the effectiveness of mitigation measures and significant adverse impacts that cannot be mitigated); *See also id*. at (6)(a) (discuss reasonable mitigation measures that would significantly mitigate impacts); *id*. at (6)(c)(v) (summarize significant adverse impacts that cannot or will not be mitigated). One cannot identify adverse impacts that cannot be mitigated without making an assessment of the feasibility and practicability of the proposed mitigation. *See e.g*., DEIS at 68 ("significant adverse impacts would be **unavoidable unless** the proposed mitigation plans meet regulatory requirements and implementation is feasible") (emphasis in original).

While the Applicant has submitted one or more mitigation plans, the feasibility and practicality of these plans haven't received sufficient attention. One of the applicant's proposed plans is a riparian and stream buffer expansion plan. DEIS at 65. *See also* DEIS App. N at 114. Ecology critiques the plan as follows:

> Evaluation of the Applicant's *Proposed FRE Mitigation Plan* concluded that there is uncertainty if mitigation is technically feasible and economically practicable. For example, while components of the *Proposed FRE Mitigation Plan* are based on sound, reasonable, and commonly applied techniques, several aspects do not rely on proven mitigation techniques (e.g., water quality mitigation), do not incorporate the most up-to-date scientific guidance (e.g., site potential tree height for riparian habitats), do not promote resilient and self-sustaining functions over an adequate time scale, do not address temporal loss sufficiently, and do not adequately incorporate and mitigate for the recurring impacts from facility operation.
>
> App. N at 114.

It is good that Ecology has examined the proposed mitigation, at least to this extent. However, the defects identified by Ecology indicate that the Applicant's proposed mitigation is technically inadequate and will need to cover more land, e.g., riparian buffers site potential tree height in width, over a longer time period (in perpetuity, like mitigation for wetland loss). *Compare* DEIS Appendix E at 170 (mitigation for impacts to aquatic habitats must be provided in perpetuity via legally-binding commitments). Consequently, the cost of this mitigation will increase, likely significantly. The Applicant's $2.3 billion cost estimate is likely an underestimate.

Ecology's critical assessment on an issue as important as riparian habitat restoration and protection means that the FRE alternative has a long way to go before it can meet the claims of its backers that, it will not only fully mitigate the FRE's impacts, but that it will make salmon habitat better. *See* Flood Zone Control District FAQ's at https://www.chehalisriverbasinfczd.com/ (accessed January 30, 2026) ("The goal of the Revised Mitigation Plan is to offset impacts and improve habitat function over existing conditions, providing an ecological lift for fish and wildlife"). These mitigation plans need to be subject to more multi-agency review (including tribes) and public review and these reviews need to occur at the time projects are being subjected to review for their environmental impacts. The adequacy of proposed mitigation is crucial to determining the extent of environmental impacts likely to result from a proposed action. At this point, the FRE alternative must be assumed to have significant adverse impacts in all areas where the proposed mitigation has not been shown to be both feasible, practicable, and committed to by the Applicant.

Other proposed mitigation plans also seem unreasonably incomplete for this stage of environmental review. For example, WDFW reviewed the Applicant's mitigation plan and declared:

> WDFW evaluated the Applicant's *Proposed FRE Mitigation Plan* for aquatic species and habitats and concluded that the plan does not sufficiently compensate for the scale, duration, and recurrence of impacts resulting from both construction and long-term operation of the Proposed Action (WDFW 2025). Although several components of the plan employ common and technically feasible practices to protect aquatic habitat…WDFW identified lack of clear demonstration of ecological lift and functional gain from these activities and key deficiencies in the magnitude of mitigation proposed, temporal loss compensation, adaptive management, and long-term habitat protection. WDFW recommended a range of additional mitigation elements to address these deficiencies, particularly in relation to maintaining habitat functions and values over the 50+ year operational life of the FRE facility.
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> DEIS App. E at 171.

There is a summary of additional recommendations from WDFW, *id*. at 172, along with the notable caution that water and habitat work done to mitigate for the impacts of the FRE not be

confused with the restoration being conducted under the Aquatic Species Restoration Program. *Id*. at 172-73. And again, due to the inability to show the feasibility and the practicability of the various mitigation measures discussed, it has to be assumed that there will be significant impacts. *Id*. at 173-74 (impacts summarized).

The DEIS is also deficient in requiring specified impact monitoring, enumerated, appropriate and mandatory corrective-action measures, with adequate public reporting requirements. How would the public have objective confidence that adaptive management responses were being followed to minimize impacts?

The Applicant's proposed mitigation plan appears fraught with defects that have yet to be worked out. It is completely unclear whether the Applicant will be willing or even able to implement the recommendations/requirements of the state agencies for the various portions of the plan (Wetland, Wildlife, Fish and Aquatic Species and Habitat, Vegetation Management, Riparian and Stream Buffer Expansion, Surface Water Quantity and Quality Mitigation, etc.). None of these mitigation plans appear to have surmounted the feasibility and practicability hurdles. As a consequence, one has to assume that none of the mitigation will be effective and these impacts are not acceptable. This seems like a wasteful and preventable outcome that appears to stem from rushing the DEIS out for review before all of its components were ready. Arguably, this does not serve the interests of either the Applicant or the public.

6. **Why should state and federal taxpayers finance a multi-billion-dollar flood control project when the residents benefitting from the project refuse to do their part to limit their own flood damage?**

Every time one drives on Interstate 5 between exits 72 and 82, it's a reminder that Lewis County and the cities of Centralia and Chehalis have chosen floodplain development over responsible floodplain management. As of August 2024, the City of Chehalis had close to 1,700 acres of floodplain and about 573 individual parcels that are partially or entirely located within the floodplain (60% (341 parcels) are developed, and 40% (232 parcels) are vacant). *See* City of Chehalis Floodplain Management (Publication for floodplain owners and renters) August 14, 2024.

As Ecology and local governments in the Chehalis basin are aware, floodplains are valuable for storing floodwaters, reducing flood damage, recharging groundwater, and providing vital fish and wildlife habitat. *See e.g*., DEIS at 33. *See also National Wildlife Federation v. FEMA*, 345 F. Supp. 2d 1151, 1158 (W.D. Wash 2004) (healthy floodplains provide good salmon habitat and water quality and retard runoff). The National Marine Fisheries Service also recognizes the importance of floodplains:

> Lands that are periodically flooded provide safe off-channel refugia, with abundant food items, for rearing juvenile salmonids during periods of high flow when mainstem channels cannot be occupied, functions essential to decrease mortality in juvenile salmonids. Filling in floodplains to remove them from the mapped floodplain decreases the extent of off channel habitat and impairs the natural processes that create and maintain these habitats, removing these functions. Fill in floodplains also reduces flood water storage. This causes higher water levels downstream, greater water velocity during high flow events, and increased erosion, which have adverse effects on salmon.

*See* NMFS, ESA Section 7 Consultation Final Biological Opinion: Implementation of the National Flood Insurance Program in the State of Washington, Phase One Document – Puget Sound Region, NMFS Tracking No. 2006-00472) (September 22, 2008) at 85.

At least as far back as 2011, consultants were recommending floodplain development regulations for Chehalis basin communities and some of those recommendations are still being ignored. For example, the consultant ESA Adolfson, in conjunction with a Chehalis Basin Flood Authority work group, developed a set of recommendations, including 16 "basic" recommendations that all jurisdictions should follow and five "ideal" recommendations that all jurisdictions should consider. *See generally* Memo to Chehalis River Basin Flood Authority from ESA Adolfson, Regarding Floodplain and Land Use Regulations (January 13, 2011). Among the "basic" recommendations that some jurisdictions are ignoring are:

> Recommendation 1 -- Require that all new residential structures in the floodplain (Special Flood Hazard Area) be built 2 feet above the base flood elevation.
> Recommendation 5 - Require a lower threshold for substantial improvements.
> Recommendation 6 - Require that substantial improvements be counted cumulatively within a specific time period such as 10 years.

Among the "ideal" recommendations that most jurisdictions are ignoring are:

> "Ideal" Recommendation 1 - Require compensatory storage for fill in the floodplain. Consider a 1:1 or 1.5:1 requirement for storage.
> "Ideal" Recommendation 2 - Adopt a zero-rise policy in the floodplain.
> "Ideal" Recommendation 3 - Restrict development in the floodplain, requiring all development proposals to acquire a special permit or reasonable use exception.

*Id.*

In April 2015, French and Associates produced its Chehalis Basin Floodplain Management Assessment Master Report (April, 2015). It contained a number of recommendations regarding the need for improved floodplain management by Chehalis basin communities. Among them, are the following:

> Recommendation 1. Where the flood of record was higher than the FEMA base flood elevation, communities should regulate the area flooded and require protection to or

> above either the level of the flood of record or a specified freeboard above the base flood, whichever is higher. The Chehalis HEC-RAS hydraulic model should be used to provide more accurate maps of the floodplain area and the depth of funding.
>
> Recommendation 2. FEMA should be asked to prepare new maps with detailed data for all areas expected to develop over the next 10 – 20 years. They should be based on studies that account for recent flooding.
>
> Recommendation 4. Preserve the remaining undeveloped open areas in the floodplain in open space uses like parks, agriculture, or natural reserves. The Flood Authority could help communities identify alternatives to outright (and expensive) acquisition of the remaining open areas, such as using tax incentives and buffer type regulations.
>
> *See generally* French and Associates Report.

More recently, another report was received by the Chehalis Basin Board on June 5, 2025. The report's recommendations, while diplomatically vague, can be summarized as "Perteet's findings reinforce previous recommendations." *See* Floodplain Management Recommendations Update Presentation to the Chehalis Basin Board (June 5, 2025) at Frame 21.

While the FRE alternative fails to recommend improved floodplain development regulations, the local action alternative contains a relatively comprehensive set of recommendations. *See* DEIS Appendix 1 at 62-65. Perhaps most revealing is seeing which local jurisdictions have adopted the most improved floodplain regulations. If one examines Table 1-4, DEIS App. 1 at 65, it is apparent that it is the downstream local governments, the ones with the residents least potentially benefitted by the FRE alternative, who have adopted the most protective regulations. For example, the City of Chehalis requires only 1 foot of freeboard whereas the recommendations call for 3 feet. *Compare* City of Chehalis Floodplain Management (August 14, 2024 at 1; and DEIS App. 1 at 63. Lewis County and the cities of Centralia and Pe Ell all still rely on the 1981 Flood Insurance Rate Map which is based on data from the 1970's. DEIS App. 1 Table G-6 at 19. Most downstream jurisdictions have updated their floodplain maps. *Id*. FEMA proposed a revised flood insurance rate map update to Lewis County and the cities of Chehalis and Centralia in 2014, but subsequently pulled it back for obscure reasons. Until a jurisdiction accepts a new map, it gets to rely on its existing map. *See Id*. at Table G-6, note 2. We note that one of the key objectives of the FRE alternatives is to "not extend the boundaries of the existing 100-year floodplain." DEIS App. 1 at 12. The only reason we can think of as to why someone would not want mapped floodplain boundaries to conform to the actual floodplain is that they want to be able to allow activities in the actual floodplain that would not be allowed inside the mapped floodplain.

One of the impacts of building dams is that they tend to promote additional growth in and even adjacent to the areas that they theoretically protect from flooding. *See e.g.*, DEIS at S-16. *See*

*also* "How the Safe Development Paradox Shapes Risky Floodplain Growth," https://www.floods.org/news-views/research-and-reports/how-the-safe-development-paradox-shapes-risky-floodplain-growth/, found on January 30, 2026. It is not clear how this tendency to promote growth in the floodplain figured into the calculation of benefits and costs of the FRE alternative. However, the impression that an FRE might allow for additional "safer" floodplain development may explain the reluctance of Lewis County communities to adopt the full suite of long-recommended floodplain development regulations. State and federal decision-makers should decline to spend taxpayer funds on flood protection for communities that refuse to adopt flood damage reduction measures, like zoning and floodplain development regulations, that are within their power and traditional bailiwick to adopt.

**7. The DEIS is fraught with ambiguity, assertions, errors and omissions.**

In addition to the above comments CELP has reviewed comments submitted by MORI-Ko, LLC (Gary Morishima) and incorporates those here by reference. We share his view that the DEIS is problematic and incomplete, including his concerns that the Local Action alternative is not fully evaluated, and the LAND analysis is not included in any substantive way. CELP concurs that the cumulative impacts analysis is similarly inadequate.

**8. Conclusion**

The DEIS fails to reasonably analyze the alternatives it presents. It does not explain how the FRE alternative or the local action alternative will be funded or implemented. It fails to discuss the effectiveness of the mitigation it proposes or may propose, thereby precluding any assessment of what the actual impacts of the FRE alternative or the local actions alternative would be.

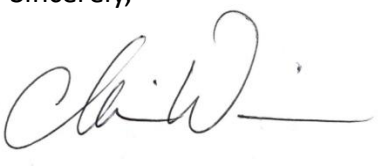
One can only assume that adverse impacts to fish and wildlife, recreational and commercial fisheries and the reserved rights of Indian tribes are inevitable. Rather than taking responsibility for their own floodplain management and doing what various experts have recommended for over 15 years, local governments in the area that would be benefitted by the FRE alternative have continued to permit development in the floodplain thereby increasing flood damage risks to residents and harming fish and wildlife habitat and populations that have already suffered enough. It is not acceptable for local governments to externalize their costs onto federal and state taxpayers, members of the public and Indian tribes.

Given the clear indication of significant fish passage and water quality impacts detailed in sections 5 and 6 of this letter, CELP concludes that the DEIS is inadequate for protecting salmonids, water quality and likely the affected ecosystem as a whole. In addition to its concerns for salmonid populations and water quality, CELP is similarly concerned with impacts to non-salmon fish species, and carbon sequestration impacts due to lost riparian habitat in the construction phase and in the upstream flood areas.

The DEIS should be withdrawn and the Chehalis Basin process needs to take a good hard look at how it can better manage flood risks, water quality and habitat protection.

Thank you again for this opportunity to provide comments.

Sincerely,



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