



Snohomish County
Public Works

Aaron Reardon
County Executive

3000 Rockefeller Ave., M/S 607
Everett, WA 98201-4046

(425) 388-3488
FAX (425) 388-6449

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CECW-CE, Douglas J. Wade
U.S. Army Corps of Engineers
441 G Street NW
Washington, DC 20314-1000

Dear Mr. Wade,

Thank you for the opportunity for Snohomish County to comment on the proposal to change the vegetation variance process, detailed in the Federal Register February 9th, 2010, titled "Process for Requesting a Variance from Vegetation Standards for Levees and Floodwalls." Snohomish County requests that the Corps abandon their current proposal and use broadly-accepted scientific research to guide future revisions to variance procedures.

Snohomish County participated in the February 26, 2009 workshop held in Renton, Washington, with the Corps and National Marine Fisheries Service that resulted in the Corps agreeing to conduct a pilot study using scientific methods to understand the effects of vegetation on levee stability. Division Commander Brigadier General William Rapp committed to base any policy changes to the existing regional variance on scientific research and until such time as this research is complete the Seattle District regional variance would remain in effect. Snohomish County was willing, and remains so, to work with the agencies to facilitate that needed research that would then be used to derive a regionally effective vegetation policy.

The proposed changes to the vegetation variance process present a conflict to the county in its floodplain management practices as it tries to recover threatened salmonid species listed under the Endangered Species Act while meeting the requirements of the Clean Water Act and the National Environmental Policy Act. As written, the proposed revision will prove to be too complicated, arduous and rarely, if ever, used. The result will be levees with minimal, low growing vegetation to remain eligible for federal assistance and increased legal intercourse over the reduction of essential habitat for listed species. Neither of these results will increase the body of knowledge regarding vegetated levees, address public safety concerns nor recover threatened salmon.

The Corps of Engineers and Snohomish County work closely operating and maintaining county levees and dikes. When repairs are needed, we strive to include project elements that improve the local habitat while avoiding negative impacts to the structure. Our experience has shown that levees that have a robust vegetation component fare much better in major floods than levees that have minimal vegetation.

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The national levee vegetation maintenance standards, developed decades ago and based primarily on river systems in regions outside of Puget Sound, are no longer appropriate. We request a coordinated, locally-driven variance process, in which local jurisdictions collaborate with the local Corps district, National Marine Fisheries Service and the U.S. Fish and Wildlife Service to address the unique circumstances of our area, based on scientifically-developed observations and results.

In closing, Snohomish County joins King County, Whatcom County and other Puget Sound Counties, in requesting that the Corps:

1. Withdraw the current variance proposal and base any future levee vegetation policy changes on the best available science, drawing upon regionally-developed technical studies and scientific research conducted in partnership with local jurisdictions and other affected federal and state agencies;
2. Consult with the National Marine Fisheries Service and the U.S. Fish and Wildlife Service under Section 7 of the ESA regarding the impact of the Corps' levee vegetation requirements on listed species; and
3. Should the variance policy proceed as proposed, allow the Corps' Seattle District regional variance to remain in place, and extend the deadline for existing variances by a minimum of two years due to the extensive, costly, and time-consuming documentation required to adhere with the new process of obtaining a variance.

Snohomish County supports King County's detailed response to the Federal Register, as follows:

Supplementary Information

The Corps issued a draft Finding of No Significant Impact (FONSI) in accordance with the National Environmental Policy Act requirement for assessing the environmental impact of proposals. The FONSI was issued on the basis that "changing the process for applying for a variance does not itself affect the environment."

While the proposed change is indeed only a procedural change, the changes are such that obtaining a vegetation variance would be time consuming and expensive. Because of the burdensome requirements of the proposed variance process, this procedural change would affect the environment in a way that would degrade existing riparian conditions and preclude future improvement of riparian habitat necessary for recovery of salmonids listed as threatened under ESA.

The National Marine Fisheries Service's Biological Opinion to the Federal Emergency Management Agency, issued in September 2008, describes the serious adverse affects to ESA-listed salmonids in Puget Sound resulting from the removal of levee vegetation.¹ Similarly, the National Marine Fisheries Service's 2003 review of the Corps' Programmatic Biological Assessments of the Flood Control Projects Maintenance Inspection Program concluded that removal of riparian vegetation is an action that is "likely to adversely affect" listed fish species; a copy of the letter to the Corps documenting the National Marine Fisheries Service's findings is attached for your review. Removing existing riparian vegetation and precluding the growth of additional riparian vegetation would also exacerbate existing water temperature problems for rivers listed as impaired under Section 303(d) of the Clean Water Act.

1. A copy of the Biological Opinion can be found on the National Marine Fisheries Service website at:
https://pcts.nmfs.noaa.gov/pls/pcts-pub/sxn7.pcts_upload.download?p_file=F3181/200600472_fema_nfip_09-22-2008.pdf

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As we have requested in the past, we think the Corps should reinitiate consultation with the National Oceanic and Atmospheric Administration's National Marine Fisheries Service and the U.S. Fish and Wildlife Service regarding the impact of the Corps' levee vegetation requirements on species listed under the ESA. The Corps initiated consultation with the National Marine Fisheries Service in 2003; however, the consultation process was subsequently halted by the Corps. Consultation is appropriate since the vegetation policy itself is a federal action, per 50 CFR 402.02, and subject to ESA Section 7 consultation requirements.

Section 5.

The definition of levee systems is overly broad and would extend the need to apply for individual project variance requests to various river embankments and flood conveyance channels that, technically speaking, may not be levees. We request that this section be clarified to apply only to those systems that are enrolled in a current Corps program, consistent with Section 9.b. of this notice.

Section 6.a.(2).

The proposed policy presents no objective standard for evaluating when a proposed variance conflicts with safety, structural stability, and accessibility objectives. Until an objective threshold is defined, any attempt to apply the policy is subjective and, therefore, arbitrary. We request that the Corps continue to partner on regionally-specific research to define the conditions in which levee vegetation increases or decreases the safety, structural integrity, and functionality of levees.

Section 6.

This section outlines the variance request and approval process, but it offers no option for an appeal of variance decisions in the event requests are denied. Because the variance process affects the mandates of multiple federal agencies, an appeal process should be included in the proposal that draws upon input from the agencies impacted by the Corps' decisions regarding vegetation variances.

Section 6.f.

This section indicates that the "The district shall notify the appropriate regional offices of the federal resource agencies when a vegetation variance request has been received." However, the proposal does not define resource agency or indicate which agencies will be notified, nor does it describe the role these resource agencies may have with respect to commenting on the variance requests or the Corps' decision to approve or deny the request. The role of the federal resource agencies charged with protecting resources affected by the variance process needs to be clearly defined.

Section 7.c.(4).

Suggesting that structural measures (such as armoring or overbuilt sections) are needed to preserve system reliability and resiliency and to mitigate vegetation impacts does not recognize that vegetation can actually *enhance* levee performance and resilience over time.

It has been the experience of King County that native vegetation on levees can provide structural reinforcement due to the binding effect of root systems, as well as can reduce fluvial erosion of the levee system by lowering flow velocities and boundary shear at the levee face. While we agree that some vegetation (i.e. non-native species or species with shallow root systems) may not be appropriate for levees, our experience is that native vegetation can enhance levee stability and allow for routine inspections and the identification of damages or other structural issues associated with levees.

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To “mitigate” the beneficial results of the presence of native vegetation through structural means may diminish the structural benefits conferred by vegetation on levees and will certainly reduce the habitat benefits that levee vegetation provides to threatened salmonids listed under the Endangered Species Act.

Section 7.e.

Requiring an engineering analysis on a levee system scale as a precondition for a vegetation variance will be excessively costly and time consuming for nearly all jurisdictions attempting to obtain a variance. For example, the lower Green River levee system in King County is comprised of some 42 levees that extend for 19 miles, making any attempt to conduct an engineering analysis of the system extraordinarily difficult due to staff and resource constraints.

Section 9.b.

The statement that the variance process would not apply to “channels...or riverbank protection systems such as revetments” is at odds with the definition of levee systems provided in Section 5, which includes “embankment sections...and flood damage reduction channels.” Moreover, the exclusion of the listed features in Section 9 from the variance process leaves it completely unclear as to whether vegetation is allowed on these features.

Section 9.e.

Section 9 concludes that vegetation poses a threat to levee system reliability, which remains unconfirmed by any scientific research results to date. In addition, the claim that vegetation poses a threat to observation of system response during high water conditions is contradicted by the fact that observation of visible vegetation above the floodwater surface would be the only way to determine whether the system is performing to its designed standards during conditions where the system is completely or partially submerged by high water.

The vegetation-free area defined in this section does not offer significant opportunities to enhance structural stability with vegetation, nor does it allow for substantial enhancement of riparian habitat for threatened fish species. As a result, this provision of the proposal makes the benefits of vegetation on levees that we identify practically impossible to obtain.

Furthermore, in many areas the only vegetation currently present on leveed river reaches is on the landward side of the levee in a narrow area between the levee backslope and surrounding development. The prohibition on vegetation in this area will result in the removal of most of the remaining vegetation, resulting in a significant, and potentially irreversible, impact to natural resources.

Section 10.

The statement is made that “[a]ll existing vegetation variances...that are not submitted for an Agency Technical Review (ATR) via the process described herein, by 30 September 2010, may no longer be considered valid.” We urge the Corps to extend the deadline for existing variances for a minimum of two years on the basis that the documentation required to adhere with the new process is extraordinarily extensive, costly, and time-consuming for a jurisdiction such as King County, which is the local sponsor of 121 levees countywide that extend for approximately 43.8 river miles. Requiring jurisdictions with existing variances to submit all proposed documentation within this tight time frame places natural resources at risk of irreversible impacts.

Section 11.

Suggesting that the local sponsor is responsible for all Endangered Species Act compliance, including Section 7 consultation, implies that implementation of levee vegetation management—whether through a variance or through application of the national standard—has an effect on aquatic habitat and also implies that a federal action is present. We believe the national vegetation standard is *itself* a federal action—as defined by 50 CFR 402.02—that affects

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listed critical habitat. As a result, we encourage the Corps to consult with the National Marine Fisheries Service and the U.S. Fish and Wildlife Service on the vegetation management policy to ensure that no negative impacts to endangered and threatened fish species or their critical habitat result through the implementation of the national vegetation standard. This consultation should include an analysis of the impacts of the national vegetation standard on Essential Fish Habitat, as regulated by the *Magnuson-Stevens Fishery Conservation and Management Act*.

Respectfully,



Steven E. Thomson, P.E., Director
Snohomish County Department of Public Works

cc: Dave Lucas
John Engel
Debbie Terwilleger