



MUCKLESHOOT INDIAN TRIBE

Office of the Tribal Attorney
39015 – 172nd Avenue S.E. • Auburn, Washington 98092-9763
Phone: (253) 939-3311 • FAX: (253)876-3181



VIA CERTIFIED MAIL – RETURN RECEIPT REQUESTED

February 23, 2011

John McHugh, Secretary
Department of the Army
1400 Defense, Pentagon
Washington, D.C. 20301-1400

Gary Locke, Secretary
Department of Commerce
1401 Constitution Avenue NW
Washington, DC 20230

Lt. Gen. Robert L. Van Antwerp, Jr.
Commanding General
U.S. Army Corps of Engineers
441 G. Street, NW
Washington, DC 20314-1000

Eric C. Schwaab
Assistant Administrator for Fisheries
National Marine Fisheries Service
Silver Spring Metro Center 3
1315 East-West Highway
Silver Spring, MD 20910

Col. Anthony Wright
Commander Seattle District
U.S. Army Corps of Engineers
4735 E. Marginal Way South
Seattle, WA 98134-2339

William W. Stelle, Jr.
Regional Administrator
National Marine Fisheries Service
7600 Sand Point Way NE
Seattle, WA 98115

Re: Notice of Violations of the Endangered Species Act by the United States Corps of Engineers and the National Marine Fisheries Service with respect to the Adoption and Implementation of the Corps' Levee Vegetation Management Program

To Whom It May Concern:

Pursuant to 16 U.S.C. § 1540(g), I am writing on behalf of the Muckleshoot Indian Tribe, to notify you of violations of the Endangered Species Act ("ESA"), 16 U.S.C. §§ 1531 – 1544, and other applicable law, by the Corps of Engineers ("COE") and National Marine Fisheries Service ("NMFS") in connection with the COE's levee vegetation management program described in COE Guidelines for Landscape Planting and Vegetation Management ETL No. 1110-2-571, Notice of Process for Requesting a Variance from Vegetation Standards for Levees and Floodwalls, 75 FR 6364-68 (February 9, 2010), a 1995 Seattle District Variance, and related program documents. More specifically, the COE has adopted and is implementing a levee vegetation management program with respect to federal and nonfederal levees affecting listed Puget Sound Chinook salmon, steelhead, and bull trout, without having properly ensured through the ESA consultation process that the program does not jeopardize these species or adversely

modify their critical habitat as required by § 7(a)(2) of the ESA. 16 U.S.C. § 1536(a)(2). In addition, the COE with the concurrence of NMFS, has erroneously determined that removal of trees and vegetation from the left bank of the Cedar River in the vicinity of the Renton Municipal Airport is not likely to adversely affect threatened Chinook salmon and steelhead, or designated Chinook critical habitat. *See*, December 19, 2010 Letter Re: Endangered Species Act Section 7 and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Consultation for the Floodwall Maintenance Vegetation Removal, Cedar River at Renton, King County, WA. HUC 171100120106 (Lower Cedar River) COE Reference No.: PL-10-13, William W. Stelle, Jr. Regional Administrator NMFS to Evan Lewis, Chief Environmental Resources Section, Seattle District COE (“December 10, 2010 Letter of Concurrence”). As a result, the COE and NMFS are in violation of Sections 7 and 9 of the ESA, the Administrative Procedures Act, and other applicable law, and are subject to citizen suit.¹

The Muckleshoot Indian Tribe believes that compliance with the ESA to insure that the COE levee vegetation management program does not jeopardize listed species or adversely affect critical habitat can be accomplished consistent with concerns for human safety and protection of property. Proper consultation under the ESA should lead to the identification of reasonable and prudent alternatives that result in safe, secure levees that promote the survival and recovery of listed salmon, steelhead, and bull trout. As NMFS has already found, “an increasing amount of scientific information demonstrates that root structure and brushy vegetation protect levee stability and decrease levee failures.” Endangered Species Act – Section 7 Consultation and Final Biological Opinion on Implementation of Nation Flood Insurance Program in the State of Washington Phase One Document – Puget Sound Region, (“NFIP Biological Opinion) Sept. 22, 2008 at 85.

The Tribe understands that the Seattle District, NMFS and various other governmental agencies recently convened a working group to develop a regional framework to address this important issue and that a formal invitation for the Tribe to participate in that process will be extended. The Tribe welcomes this effort and would be pleased to work with the COE and other agencies to develop the basis for a new regional variance that addresses both public safety concerns and the needs of listed species. However, we are concerned that until a new regional variance is developed and approved, the COE continues to implement its existing policies requiring the removal of vegetation from area levees and floodwalls in violation of the ESA. We therefore request that the COE suspend implementation of its existing policies until a new regional variance has been developed and is approved after completion of required Section 7 consultations with both the NMFS and USFWS.

¹ The Muckleshoot Indian Tribe hereby joins in and incorporates by reference the sixty-day notice letters dated August 2, 2010, addressed to Lt. Gen. Robert L. Antwerp, Jr., by the Center for Biological Diversity, and February 9, 2009, addressed to Peter Geren, Secretary of the Army by Earthjustice on behalf of American Rivers. This letter borrows liberally from American Rivers notice letter of February 9, 2009.

Overview of the COE's Vegetation Management Program

The ETL (Engineer Technical Letter) guidelines generally require removal of vegetation other than perennial grasses from levee structures and a 15' strip on each side of a levee or floodwall. Although, the Seattle variance currently allows small trees up to 4" in diameter, the 2010 variance policy will supersede all earlier regional variances and require compliance with the ETL, unless a new variance application is requested and approved.

With respect to federal levees and floodwalls, the COE's levee vegetation management program is directly implemented by the COE as exemplified by the COE's proposed removal of vegetation along 1620 feet of floodwall near the mouth of the Cedar River which is described in the Seattle District COE Biological Evaluation Floodwall Maintenance Vegetation Removal Cedar River at Renton, Washington (November 2010). Alternatively, levee vegetation management for federal levees constructed by the COE and maintained by a local sponsoring jurisdiction may be laid out in a levee specific operations and maintenance manual.

With respect to the nonfederal levees, the ETL is implemented by the COE under the P.L. 84-99 levee Rehabilitation and Inspection Program ("RIP"). 33 U.S.C. § 701n; 33 C.F.R. §§ 203.12, 203.41. As set forth in more detail in the American River's sixty-day notice, the COE inspects nonfederal levees for compliance with the COE's levee vegetation management program. Owners of levees that do not comply are advised of the need to implement levee management i.e. remove noncompliant vegetation to remain eligible for the RIP program.

For example, the Seattle District recently transmitted Periodic Inspection Reports to King County addressing eleven King County Flood Control District levees. Six of these levees were rated unacceptable and 5 rated minimally acceptable. A major factor in these ratings was the presence of "unwanted" vegetation and trees on the levees inconsistent with the COE's levee vegetation management program. The reports advise the County to immediately implement "vegetation management" (i.e. remove riparian vegetation) to address the deficiency. Letter of January 11, 2011 from Col. Anthony O. Wright to Steve Bleifuhs, King County Surface Water Management. Where levees are out of compliance and rated unacceptable by the COE, the COE will not authorize RIP program funding for repair and rehabilitation in the event of flood damage, or for flood emergency preparations, lighting, or rescue operations.

Listed Species Affected by the COE's Actions

NMFS listed Puget Sound Chinook as a threatened species under the ESA in March 1999. 64 F.R. 14308 (March 24, 1999). Puget Sound Chinook require properly functioning habitat, which includes healthy functioning riparian ecosystems. The Chinook listing explicitly identifies

increased temperature and the loss of riparian vegetation and large woody debris as factors in the decline of Chinook. *Id.* at 14311.

In 2005, NMFS affirmed that Chinook remain threatened under the ESA. 70 FR 37160 (June 28, 2005). In affirming the status of Puget Sound Chinook, NMFS identified the removal of riparian shade canopy and large woody debris as the kind of activity that is likely to harm listed salmon through habitat modification and constitutes a violation of §9 of the ESA. *Id.* at 37196. In 2005, NMFS also designated hundreds of river and stream miles in Puget Sound as critical habitat for Chinook, including the portion of the Cedar River which is the subject of the December 10, 2010 Letter of Concurrence. *See*, 70 FR 52630 (Sept. 2, 2005).

Puget Sound steelhead were listed as a threatened species in 2007. 72 FR 26722 (May 11, 2007). In listing steelhead, NMFS concluded that a primary threat to steelhead is the past and threatened destruction of habitat, observing that loss of riparian habitat was a key factor in the decline of the species. NMFS further noted that loss of steelhead due to predation was a concern in some areas. *Id.* at 26732.

Puget Sound bull trout were listed as a threatened species in 1999. 64 FR 58910 (November 1, 1999). In its listing decision the Fish and Wildlife Service noted the importance to bull trout of riparian vegetation for temperature control, cover, bank stability, and detrital input. *Id.* at 58922. The FWS further found that destruction and alteration of riparian habitat by activities that result in the degradation of cover, temperature and migratory corridors used by bull trout are potential sources of prohibited take under § 9 of the ESA. *Id.* at 58929.

Removal of Vegetation under the COE Vegetation Management Program Adversely Affects Listed Species and their Critical Habitat

There can be no doubt that implementation of the COE levee vegetation program may adversely affect listed Chinook salmon, steelhead, and bulltrout, and adversely modify riparian habitat designated as critical habitat for Chinook salmon under the ESA. The threshold for a “may affect” determination requiring formal consultation is low. *See*, 51 Fed. Reg. 19926, 19949 (June 3, 1986) (“Any possible effect, whether beneficial, benign, adverse or of an undetermined character, triggers the formal consultation requirement”); Endangered Species Consultation Handbook, USFWS and NMFS, March 1998 at 3-12 – 3-13 (“Is likely to adversely affect – the appropriate conclusion if any adverse effect to listed species may occur as a direct or indirect result of the proposed action . . . and the effect is not: discountable, insignificant, or beneficial. . . . In the event the overall effect of the proposed action is beneficial to the listed species but also likely to cause some adverse effects, then the proposed action ‘is likely to adversely affect’ [and] requires formal Section 7 consultation.”)

Numerous scientific documents and technical recovery plans have identified loss of riparian vegetation – which leads to loss of cover and shade, reduced large woody debris, increased temperatures, and reduction on organic matter – as one of the key factors in the decline of Puget Sound Chinook and other aquatic species. See e.g. NMFS, ESA Section 7 Consultation on EPA’s approval of Washington State Water Quality Standards (Feb. 8, 2008) at 104-05. The Chinook Recovery Plan specifically identifies the conflict between levee maintenance standards requiring riparian vegetation removal and the needs of listed Chinook salmon.

Riparian function depends on vegetated banks, and the removal of large trees precludes the recruitment of large woody debris, essential to a varied channel structure. Dikes and levees generally have maintenance requirements that prohibit vegetation, largely eliminating the production of food for salmon and the recruitment of large woody debris for cover and diverse channel structure.

Final Chinook Recovery Plan at 81. Similarly, the 2008 Puget Sound Partnership “Action Agenda” identifies the conflict between the COE’s vegetation management program and the requirements for healthy riparian salmon habitat.

In 2003 the COE sought NMFS concurrence in a determination that that the COE’s Flood Control Inspection and Maintenance Program for Washington State was not likely to adversely affect several listed species. The NMFS did not concur in the COE’s effects determination stating, “The proposed action includes a host of activities that NOAA fisheries believes are likely to adversely affect listed fish, including periodically removing vegetation from levees” NMFS further noted that maintenance of conditions that are inadequate to support the biological needs of listed species fails to meet the standards for a not likely to adversely affect determination. Letter Re: Section 7 Consultation Request for U.S. Army Corps of Engineers, Seattle District, Flood Control Maintenance Projects Maintenance Inspection Program for Washington State, Steven W. Landino to Mark Ziminske (October 16, 2003).

More recently in a 2008 biological opinion on the implementation of the National Flood Insurance Program in Puget Sound, NFMS again addressed the COE vegetation maintenance standards. The biological opinion found that the vegetation maintenance standards requiring removal of vegetation from levees was an adverse indirect effect on Chinook salmon of the FEMA flood control program because FEMA relied upon the COE standards. As part of the reasonable and prudent alternatives in that biological opinion developed to avoid violating the ESA, NMFS advised FEMA to avoid reliance upon the COE standards and revise its policies to allow adequate riparian vegetation. *See*, NFIP Biological Opinion at 55, 161.

Similarly, the Fish and Wildlife Service has noted the impacts of the COE's levee vegetation management program and the desirability of formal programmatic Section 7 consultation. While concurring in the COE determination that the Cedar River Floodwall Vegetation Removal Project is not likely to adversely affect listed bull trout for the reason that bull trout utilization of the area is limited and the area is not designated as bull trout critical habitat, the FWS noted the affects of the project on fish habitat, the inadequacy of the proposed mitigation, and the desirability of programmatic Section 7 consultation on the COE vegetation management program.

While the Service recognizes and appreciates the Corp's intent, the on and off-site tree plantings are not anticipated to fully offset the adverse effects of vegetation removal in the short term due to the long duration between vegetation removal and the time at which the plantings will begin to provide benefits to the riparian area comparable to those which would be removed.

Furthermore, the Service is concerned with the long-term adverse effects of the project. Specifically, the project is anticipated to have an adverse effect on water temperature and the abundance of the food base. Most significantly, the project will result in a direct loss of complex stream habitat at the project site as well as downstream. The planting of willow stakes upstream of the project site will provide some shade and food web support, however willows do not have similar size potential as the trees being removed and are not expected provide the same complexity.

Riparian vegetation links terrestrial and aquatic ecosystems, influences channel processes, contributes organic debris to streams, stabilizes banks, and modifies water temperatures (Gregory et al. 1991, pp 547-548). The sustained loss of LWD inputs from reduced recruitment reduces the structural component of instream habitat that creates pools, refugia, and cover from predators. Large wood also enhances invertebrate production and abundance due to the complex range of habitats available for colonization and the retention of fine organic debris (Gurnell et al. 2002, p.603). The natural complexity of wood (i.e., root wad vs. single log) is also correlated with juvenile fish abundance, as abundance is greater in root wad cover than in single logs (Beamer and Henderson 1998, p. 13).

Future projects in accordance with Corps regulations will continue to preclude the establishment of large hardwood and conifer trees along the river corridor, limiting future LWD recruitment at the site. Preventing large hardwoods and mature conifer from becoming established along the river precludes the potential for the riparian areas to function adequately to provide shade (e.g., for cooler temperatures), habitat-forming processes (e.g., LWD recruitment), fallout insects

for prey contribution and food web support, and nutrient contributions. The Service urges the Corps to evaluate the potential adverse effects of levee maintenance regulations at both the watershed and regional scale.

Letter Re. Floodwall Maintenance Vegetation Removal Cedar River at Renton, Washington, Ken S. Berg to Evan R. Lewis (January __, 2011).

The COE's Not Likely to Adversely Affect Determination and the NMFS Concurrence in that Determination are Arbitrary and Capricious and Not in Accordance with Applicable Law

At the outset it should be noted that removal of riparian vegetation during construction was identified by the COE as an adverse impact associated with construction of the floodwall and rock toe along the left bank. The COE proposed to mitigate this impact by "replanting vegetation along the bank, above the rock revetment. Seattle District COE, Cedar River Section 205 Flood Damage Reduction Study, FEIS (August 1997) at 84-85. At the time the COE stated with respect to revegetation planned for the right and left bank:

These plantings will temporarily replace vegetation lost on the left bank during construction and also contribute insects and detrial material to the river to compensate for possibly reduced aquatic invertebrate production. Additionally this riparian vegetation because of its roots and downed limbs/trees will likely create scour pools for additional adult salmon holding habitat.

Id. at 86. The COE's FEIS further indicated that shrub and tree canopy cover by year should be within 5% of the preexisting canopy cover upstream of the south Boeing Bridge.

The COE's project notices also describe revegetation of the left bank as an important component of the mitigation for the original project. "Compensatory mitigation includes . . . riparian vegetation plantings along the left and right banks in much of the dredged area to provide nutrients, shading, and pool forming materials to compensate for impacts to the aquatic food web and resident fish." Seattle District COE, Public Notice Reference TB-98-01, Feb. 19, 1998; *see also*, Seattle District COE, Public Notice Reference TB-98-01A, April 7, 1998.

A 2001 vegetation monitoring report indicates that plantings along both the left and right banks from Logan Avenue to the mouth of the Cedar River were completed in May 1999. Golder Associates, Cedar River Section 205 Flood Damage Reduction Project 2000

Vegetation Monitoring Report, Feb. 8, 2001 at 1. The report indicates that both red alder and willow were planted and noted their importance.

Red alder (*Alnus rubra*) and Pacific Willow (*Salix lasinandra*) showed good growth and high survival. Tree species are important on the left bank for two reasons: shading is an effective means of control for many invasive emergent type plants like Reed canary grass, and the deeper roots of the tree species will have greater coherence with soils to prevent further erosion in this unstable riparian area.

Id. at 4. The report recommended additional plantings of red alder and willow along the left bank. *Id.* at 6. *See also* Tables 2.6 – 2.19 (noting mitigation plantings of alder, willow, and cedar along the left bank).

The tree plantings were considered an important part of the mitigation not only for daytime shading, but also for shading the river from artificial light of the highly urbanized environment at night. In discussing adjustments to lighting at the South Boeing Bridge to reduce the amount of stray light reaching the river the Boeing Company noted the importance of the proposed mitigation planting in reducing nighttime light reaching the river.

The proposed overstory of trees, on both sides of the river, contains species that will reach to, above and in front of the lighting that casted (sic) stray light on the Cedar River. In addition, river shrub plantings will cast additional shading from both sides of the river banks, onto the river. The mature height of both the tree overstory and the river bank shrub understory will shade the river from lights both East and West of the River.

Paul B. Crane, Boeing Co, to Ross Hathaway, City of Renton, September 28, 1998.

The COEs biological evaluation and NMFS concurrence fail to note that the proposal involves removal of trees and other vegetation initially planted to mitigate adverse impacts associated with the Section 205 Flood Control Project, and wholly fail to address impacts on listed stocks associated with increased nighttime light reaching the river resulting from the proposal to remove mitigation vegetation. While the BE and NMFS concurrence note that vegetation removal may result in loss of shading and localized temperature increases, loss of high flow refuge, loss of large woody debris, loss of detrial and terrestrial insect inputs, they fail to critically analyze the adverse impacts of these project effects on listed Chinook and steelhead. The BE and concurrence letter indicate that some of these impact will be mitigated by willow planting, but fail to explain how

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planting willows in some areas and offsite mitigation will fully mitigate for loss of riparian vegetation in the 1400 feet of river frontage that will be hydroseeded and not otherwise replanted.

Moreover, the BE's admission that a temporal lag is anticipated for impacts of tree removal between the time of removal and maturation of replacement mitigation plantings is simply at odds with the not likely to adversely impact determination with respect to Chinook and steelhead, and Chinook critical habitat. Even if the mitigation proposed by COE fully compensated for the adverse impacts of the vegetation removal proposed, a proposition not supported by the BE or concurrence letter, the BE and concurrence letter utterly fail to explain why shorter term "temporal" adverse impact that are acknowledged do not require a formal section 7 consultation in light of NMFS previous recognition of the importance of riparian vegetation and the likely §9 take of listed species resulting from removal of riparian vegetation. The facts set forth in the BE and concurrence letter simply do not support the COE and NMFS "not likely to adversely affect" decision.

Conclusion

The Muckleshoot Indian Tribe understands that the Seattle District is currently working to develop a new regional variance to address many of the Tribe's concerns. The Tribe appreciates this effort and believes that it offers a real opportunity to resolve this matter. However, until the COE has completed that process and has appropriately fulfilled its consultation obligations, the Tribe requests that the COE suspend implementation of its existing vegetation management program on levees and floodwalls that affect listed Puget Sound Chinook, steelhead, and bull trout.

Sincerely,

A handwritten signature in blue ink that reads "Richard Reich". The signature is written in a cursive, flowing style.

Richard Reich