



UNITED STATES DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
NATIONAL MARINE FISHERIES SERVICE  
Northwest Region  
7600 Sand Point Way N.E., Bldg. 1  
Seattle, WA 98115

NMFS Tracking No.:  
2007/05324

August 21, 2007

Mark Ziminske, Chief  
Environmental Resources Section  
Corps of Engineers, Seattle District  
Post Office Box 3755  
Seattle, Washington 98124-3755

Re: Endangered Species Act Section 7 Informal Consultation for the Puget Sound Dredge Disposal Analysis (PSDDA) program. (HUCs, Latitudes, and Longitudes: 171100200306 Lower Dungeness River, 171100200403 Ennis/Tumwater Creek, 171100020204 Anacortes, 171100020104 Lower Whatcom Creek, 171100110202 Lower Snohomish River, 171100130399 Lower Green River, 171100140599 Lower Puyallup River, 171100190503 Anderson Island).

Dear Mr. Ziminske:

This correspondence is in response to your request for consultation under the Endangered Species Act (ESA). The Army Corps of Engineers (COE) re-submitted the March 2005 Biological Evaluation (BE) and supporting documents to the National Marine Fisheries Service (NMFS) for the above referenced project on August 14, 2007 and requested NMFS' concurrence with a determination of "may affect, not likely to adversely affect" for Southern Resident (SR) killer whales (*Orcinus orca*) and SR killer whale critical habitat. This is a reinitiation of consultation with the COE under section 7(a)(2) of the ESA, and its implementing regulations, 50 CFR 402, on an ongoing project and covers impacts of the PSDDA program on SR killer whales and critical habitat through 2012. The PSDDA program has previously been addressed through several concurrence letters to address Puget Sound (PS) Chinook salmon (*Oncorhynchus tshawytscha*) and its critical habitat, Hood Canal summer run chum salmon (*O. keta*) and its critical habitat, Steller sea lions (*Eumetopias jubatus*), and humpback whales (*Megaptera novaeangliae*) (NMFS Nos. 1999/01195, 1999/01261, 2000/00696, 2005/00484, and 2007/03507). NMFS reviewed the PSDDA program impacts and concurred with the "may affect, not likely to adversely affect" determinations for PS Chinook salmon, Hood Canal summer-run chum salmon, Steller sea lions, and humpback whales, and for designated PS Chinook salmon and Hood Canal summer chum salmon critical habitat. The June 14, 2005 letter (NMFS No.2005/00484) also documented a conference determination of no jeopardy for SR killer whales.

The COE proposes to continue disposing of dredge material at sites that have been approved by the Puget Sound Dredge Disposal Analysis (PSDDA) program. There are eight PSDDA sites, five non-dispersive and three dispersive. The non-dispersive sites are located in Bellingham Bay,



Port Gardner, Elliott Bay, Commencement Bay and Nisqually Reach near Ketron Island. These non-dispersive sites have maximum bottom current velocities of 25 centimeters per second.

Material dumped into these sites is expected to remain within the site. The dispersive sites are located in Rosario Strait near Anacortes, in the Strait of Juan de Fuca near Port Townsend, and the Strait of Juan de Fuca near Port Angeles. The dispersive sites have bottom current velocities in excess of 100 centimeters per second. Material dumped into dispersive sites is dispersed and does not accumulate. The material placed in PSDDA sites is relatively clean and may not exceed specific criteria for contaminant levels. Material that exceeds these criteria is deposited in approved upland landfills. Dredge material is generally transported to the PSDDA sites via modern bottom dump barges that are designed to minimize the loss of dredge material during transit.

### **Species Determination, Southern Resident Killer Whale**

NMFS published the final rule listing SR killer whales as endangered on November 18, 2005 (70 FR 69903). The final rule identified several potential factors that may have resulted in the decline or may be limiting recovery of SR killer whales including: quantity and quality of prey, toxic chemicals which accumulate in top predators, and disturbance from sound and vessel traffic. The rule further identified oil spills as a potential risk factor for the small population of SR killer whales.

SR killer whales have been documented in the project area with varying frequency throughout the year. A review of sighting data compiled by the Whale Museum in Friday Harbor, Washington from 1990 to 2003 indicates that SR killer whales have been seen in the vicinity of all eight PSDDA disposal locations. NMFS analyzed the potential effects of the proposed disposal activities on SR killer whales and determined that the potential effects will be insignificant as presented below.

This project is expected to have insignificant effects on quantity and quality of prey for SR killer whales. The main source of prey for SR killer whales has been identified as adult salmon, and more specifically Chinook salmon. Previous consultations on the PSDDA program documented concurrence with the determination of “may affect, not likely to adversely affect” for PS Chinook salmon and its critical habitat, as well as Hood Canal chum salmon and its critical habitat. Impacts to SR killer whale prey are insignificant because there is a very low likelihood that any salmon would interact with disposed material, and any adult salmon that may pass through PSDDA sites when returning to spawn would be transient and would avoid areas with high suspended sediment concentrations. Dredging, and thus dredge disposal, is conducted at times of the year when juvenile salmonids are unlikely to be present; in addition, small (less than 70mm) PS Chinook or Hood Canal chum salmon juveniles are unlikely to be found at any of the PSDDA sites. The proposed disposal activities do not present a barrier to salmon migration, do not alter the food base for salmon, and have transient, insignificant effects on water quality. We do not expect this project will have a measurable impact on SR killer whale prey, and therefore effects to quantity of prey are insignificant.

Risks to prey quality from toxic chemical contamination are reduced to insignificant levels due to the conservation measures in place during the proposed project. These include using dredged material testing protocols to ensure the suitability of materials for unconfined, open-water discharge and conducting site monitoring activities to assess impacts at disposal sites. Any dredge material that exceeds suitability criteria is deposited in approved upland locations. The low concentration of contaminants that may be present in materials that are acceptable for disposal is not expected to affect SR killer whales; bioaccumulation of these contaminants is not expected, as PSDDA disposal locations are located in deeper waters where movement of any contaminants into the food web is less likely. SR killer whale prey are not expected to be present in disposal areas. Thus, we expect effects on the quality of SR killer whale prey from contaminants will be insignificant.

For the same reasons, we expect any direct effects of contaminants on SR killer whales to be insignificant.

Effects from vessel activity and associated noise during the proposed transport and disposal activities will be insignificant for SR killer whales. Vessels used for dredge material disposal are slow moving and are detectable by whales, so the risk of a vessel strike is extremely unlikely. Sound produced by these vessels is generally low frequency, which is audible to the whales but well below their peak hearing sensitivity. Vessels will not be targeting the whales, and if there are encounters, any minor behavioral effects are likely to be short-term in nature and insignificant.

Because the action is expected to have insignificant effects on SR killer whales, NMFS concurs with the COE effect determination of “may affect, not likely to adversely affect” for SR killer whales.

### **Critical Habitat Determination, Southern Resident Killer Whale**

NMFS published the final rule designating critical habitat for Southern Resident killer whales on November 29, 2006 (71 FR 69054). Critical habitat includes approximately 2,560 square miles of inland waters including waters around the San Juan Islands and in Puget Sound, but does not include areas with water less than 20 feet deep relative to extreme high water. The Primary Constituent Elements (PCEs) for SR killer whale critical habitat are: (1) water quality to support growth and development; (2) prey species of sufficient quantity, quality, and availability to support individual growth, reproduction and development, as well as overall population growth; and (3) passage conditions to allow for migration, resting, and foraging.

The PSDDA disposal locations occur in critical habitat for SR killer whales. NMFS analyzed the potential impacts of the project on SR killer whale critical habitat and determined that effects on that habitat will be insignificant for the following reasons:

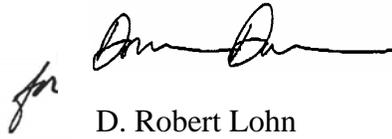
1. Conservation measures ensure this project will have insignificant effects on water quality. Water quality will temporarily be slightly worse due to this project while dredge material is being disposed at PSDDA locations, but these effects will be localized, infrequent, and of short duration. During disposal activities, dredge material settles quickly with minimal loss to the surrounding water column. Dredged material testing protocols will ensure the suitability of materials for unconfined, open-water discharge. For these reasons, effects on water quality to support growth and development are expected to be insignificant.
2. The proposed project is unlikely to affect the quantity, quality, or availability of the salmon prey-base for SR killer whales. Previous consultations on the PSDDA program concurred with the determination that proposed activities are not likely to adversely affect salmon species believed to be important prey for SR killer whales, as well as not likely to adversely affect salmon critical habitat. As described in this letter, the proposed project is not expected to affect salmon migration or alter the food base for salmon, and would have insignificant effects on quantity and quality of prey for SR killer whales. Thus, effects on this PCE of killer whale critical habitat will be insignificant.
3. The potential for the project to interfere with passage conditions is expected to be insignificant. Although disposal of dredge material will affect water quality at the disposal sites, as described above these effects would be localized, infrequent, and of short duration and we do not expect this will significantly affect passage conditions. In addition, there is sufficient space for the whales to navigate around the PSDDA sites during the short duration of dredge disposal activities. For these reasons, effects on passage conditions during proposed dredge disposal activities are considered insignificant. No other aspect of the proposed project is expected to affect passage conditions.

For these reasons, NMFS concurs with the COE effect determination of “may affect, not likely to adversely affect” for SR killer whale critical habitat.

This concludes informal consultation on this action in accordance with 50 CFR 402.13 and 402.14(b)(1). The COE should reinitiate consultation if (1) new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not considered in this consultation, (2) the action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in this consultation, or (3) a new species is listed or critical habitat for another species is designated that may be affected by this project.

If you have questions regarding the ESA consultation, please contact Lynne Barre at (206) 526-4745, or by electronic mail at [lynne.barre@noaa.gov](mailto:lynne.barre@noaa.gov).

Sincerely,

A handwritten signature in black ink, appearing to read "D. Robert Lohn". The signature is written in a cursive style with a large initial "D".

D. Robert Lohn  
Regional Administrator

cc: Nancy Brennan-Dubbs, USFWS  
Kenneth Brunner, COE