

Appendix C

Biological Opinions, Commitments,
and Authorizations

Puget Sound Chinook Salmon

Puget Sound Chinook salmon will be exposed to injurious levels of underwater noise from the impact pile driving of the concrete piles. The noise will extend up to 59 feet away from the impact pile driving and impact 0.5 acre of aquatic habitat. However, there will only be nine days of impact pile driving. Therefore, only a small percentage of juvenile Chinook salmon that use this 0.5-acre of aquatic habitat will be exposed and experience the sublethal adverse effects described above. These sublethal effects will not have an observable effect on the spatial structure, productivity, long-term abundance, or diversity of the PS Chinook salmon ESU.

Puget Sound Chinook salmon will be exposed to increased levels of PAHs in the water column during and immediately following the demolition of the creosote-treated timber structures and dredging. Puget Sound Chinook salmon will also be exposed to increased levels of PAHs in their prey items within the action area. Fish foraging in the area will be exposed to increased PAH levels in their prey from the start of construction to up to three years after. The exposed fish will likely experience immunosuppression and reduced growth which may lead to increased mortality. However, the area subjected to increased PAHs is a very small fraction of the total habitat available to juvenile PS Chinook salmon, and prey items from this area will make up a very small percentage of any individual fish's diet. Furthermore, juvenile Chinook salmon from multiple populations use the action area. Therefore, the effects from PAH exposure will not have an observable effect on the spatial structure, productivity, long-term abundance, or diversity on any single population or the PS Chinook salmon ESU as a whole.

Puget Sound Chinook salmon will be exposed to elevated pollutant levels from stormwater discharges. Juveniles using the dilution zones during stormwater discharges will likely experience increased physiological stress, reduced feeding, impaired ability to detect predators, and behavior alterations. However, only a subset of the juveniles in any given year will migrate within the dilution zone of the outfalls. Furthermore, migration of Chinook salmon through the action area occurs from late-spring to early-fall when rain events large enough to cause stormwater discharges are less frequent. Only individuals within the dilution zones during stormwater discharges will be affected. Given the infrequency of rain events during the Chinook salmon migration times, and the small area of the dilutions zones compared to the amount of habitat in the action area, the elevated pollutant levels from stormwater discharges will not have an observable effect on the VSP parameters of the ESU as a whole.

The removal of the Tank Farm pier and the other creosote-treated timber structures will substantially improve habitat conditions in the action area. It will remove 7,775 tons of creosote-treated timber from the marine environment and 2.97 acres of over-water cover. This will lead to a long-term increase in water quality and significantly improve the ability of juvenile Chinook salmon to forage and migrate through the area. Overall, the project will improve the VSP parameters of the ESU.

Puget Sound Steelhead

Puget Sound steelhead are larger than PS Chinook salmon when they enter the Sound. They spend very little time in nearshore areas and migrate rapidly to the ocean. While any individuals exposed to the stressors from this project will experience the same adverse effects as PS Chinook salmon, both the absolute number individuals and the percentage of the population that will be exposed to these stressors will be substantially lower. Therefore, the project will not have an observable effect on the VSP parameters of the DPS.

Southern Resident Killer Whales

Several factors identified in the recovery plan for SRKW may be limiting recovery. These are quantity and quality of prey, toxic chemicals that accumulate in top predators, and disturbance from sound and vessels. Oil spills are also a risk factor. It is likely that multiple threats are acting together. Although it is not clear which threat or threats are most significant to the survival and recovery of SRKWs, all of the threats are important to address.

The entire SRKW DPS is a single population of 85 whales. The effective population size of less than 30 whales is very small, and this, in combination with the absence of gene flow from other populations, may elevate the risk from inbreeding. A delisting criterion for the SRKW DPS is an average growth rate of 2.3 percent for 28 years (NMFS 2008a). The current average growth rate of 0.3 percent, the risk of stochastic events, and genetic issues underscore the importance for the population to grow quickly.

A small number of SRKWs will be affected by pile driving activities, and the most significant effect will be behavioral response. Behavioral responses can include changes in speed of travel, direction, or dive profile; moderate to extended cessation or modification of vocal behavior; minor or moderate avoidance of the sound source, and change in group distribution. Exposed killer whales may be displaced and precluded from foraging in the project vicinity, though there are alternate foraging areas available. Exposed individuals are also likely to alter their travel pattern around the sound instead of passing through the area. Any additional distance traveled is unlikely to cause a significant increase in an individual's energy budget, and the effects would be short-term. The likely behavioral responses, even considering potential for repeat exposures of individual whales, are not anticipated to reduce the reproductive success or increase the risk of injury or mortality for any individual SRKW.

As described above, the effects of the proposed action on prey quality or quantity will be insignificant. Additionally, vessels associated with the proposed action are extremely unlikely to affect SRKWs. Effects of the action, when added to threats that are part of the environmental baseline, and when cumulative effects are considered, will not appreciably reduce the species' ability to survive and recover.

Steller Sea Lions

The eastern DPS of Steller sea lions is a large population, which over the past 30 years has increased approximately three percent per year. Steller sea lions are generalist predators and are able to respond to changes in prey abundance. There are no substantial threats to the species, and NMFS has proposed removing the eastern DPS from the Federal List of Endangered Wildlife and Plants.

The nearest regularly used haul outs are 19 and 23 miles from the project. Any Steller sea lions in the action area will likely spend less time foraging in the immediate vicinity. However, there are alternative foraging areas available to the affected individuals. Short-term displacement is likely to cause disruptions in their normal behavioral patterns in the action area. There are no current threats to the species that are either part of the environmental baseline or cumulative effects in the action area that will affect Steller sea lion in addition to the activities of the proposed action. Effects of the action, in addition to threats that are part of the environmental baseline or cumulative effects, will not appreciably reduce the species' ability to survive and recover.

Humpback Whales

The current abundance of humpback whales in the North Pacific is approximately 18,000 to 21,000. Approximately 2,000 of those whales are part of the Washington/Oregon/California stock. Humpback whales are sighted with increasing frequency in the inside waters of Washington, primarily during the fall and spring months. However, occurrence is uncommon.

Based on the available information about foraging habits and space use of humpback whales inside waters of Washington, a few whales are likely to pass through and may forage in the project vicinity. The potential exposure of humpback whales to underwater sound may elicit behavioral responses within the range of previously documented responses by low-frequency hearing specialists to non-pulse sound. Based on a review of these documented responses, NMFS concludes that humpback whales exposed to sound from the vibratory pile driving may respond by either a deviation in their course to deflect around the sound (migrating whales) or by avoiding the area (feeding whales). Exposed humpback whales may be displaced and precluded from foraging in the project vicinity. However, there are alternate foraging areas available. Exposed humpback whales may also deflect around the sound instead of passing through the area. The likely short-term behavioral responses, even considering potential for repeat exposures of individual whales, will not reduce the reproductive success or increase the risk of injury or mortality for any individual humpback whale. Effects of the action, in addition to threats that are part of the environmental baseline or cumulative effects will not appreciably reduce the species' ability to survive and recover.

2.7 Conclusion

After reviewing the current status of the listed species, the environmental baseline within the action area, the effects of the proposed action, and cumulative effects, it is NMFS' biological

opinion that the proposed action is not likely to jeopardize the continued existence of SRKWs, the eastern DPS of Steller sea lion, or humpback whales, or destroy or adversely modify SRKW critical habitat.

2.8. Incidental Take Statement

Section 9 of the ESA and Federal regulation pursuant to section 4(d) of the ESA prohibit the take of endangered and threatened species, respectively, without a permit or exemption. Take is defined as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct. Harm is further defined by regulation to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering. Incidental take is defined as take that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity. Section 7(b)(4) and Section 7(o)(2) provide that taking that is incidental to an otherwise lawful agency action is not considered to be prohibited taking under the ESA, if that action is performed in compliance with the terms and conditions of this incidental take statement.

NMFS is not including an incidental take authorization for marine mammals at this time because the incidental take of marine mammals has not been authorized under section 101(a)(5) of the Marine Mammal Protection Act and/or its 1994 Amendments. Following the issuance of such regulations or authorizations for marine mammals, NMFS may append this Opinion to include an incidental take statement for marine mammals.

2.8.1 Anticipated Amount or Extent of Take

Effects of the action will coincide with the presence of PS Chinook salmon and PS steelhead such that the incidental take is reasonably certain to occur. The take described below cannot be accurately quantified as a number of fish because NMFS cannot predict, using the best available science, the number of individuals of listed fish species that will be exposed to these stressors. Furthermore, even if NMFS could estimate that number, the manner in which each exposed individual responds to that exposure cannot be predicted.

In circumstances where NMFS cannot estimate the amount of individual fish that would be injured or killed by the effects of the proposed action, NMFS assesses the extent of take as an amount of modified habitat and exempts take based only on that extent. This extent is readily observable and therefore suffices to trigger reinitiation of consultation, if exceeded and necessary (see H.R. Rep. No 97-567, 97th Cong., 2d Sess. 27 (1982)).

NMFS cannot estimate the number of individuals that will experience adverse effects from underwater sound. Impact pile driving will occur episodically throughout the in-water work seasons. NMFS cannot predict the number of individual fish that will be exposed. Furthermore, not all exposed individuals will experience adverse effects. Therefore, NMFS will use the physical and temporal extent of injurious levels of underwater sound as a surrogate for the number of fish. NMFS exempts take from impact pile driving (cumulative SEL greater than 187dB) for the area within 59 feet of the new concrete piles (0.5 acre).

NMFS cannot estimate the number of individuals that will experience adverse effects from exposure to contaminants. The numbers of each species within the action area varies year to year. NMFS also cannot estimate the proportion of fish each year that will enter the impact zones. Therefore, NMFS will use the area within 150 feet of the creosote-treated timber structure demolition and within 300 feet of the dredging as a surrogate for the number of Chinook salmon and steelhead affected. NMFS exempts take from contaminant exposure for the areas within 150 of the existing terminal, existing fishing pier, and the Tank Farm pier (16.8 acres) and within 300 feet of dredging (14.5 acres).

NMFS cannot predict the number of Chinook salmon and steelhead that will be exposed to the stormwater discharges. Stormwater discharges will occur in perpetuity. The numbers of each species within the action area varies year to year as does the number of rain events that produce stormwater effluent. NMFS also cannot estimate the proportion of fish each year that will enter the dilution zones. Therefore, NMFS will use the distance from the outfalls where dissolved copper and dissolved zinc are above the biological effects thresholds described above as a surrogate for the number of Chinook salmon and steelhead affected. NMFS exempts take from stormwater discharges (dissolved zinc 5.6 µg/l over background concentrations and dissolved copper at 2.0 µg/l over background concentrations) for:

1. The area within 21.0 feet of the Brewery Creek (4-24) outfall for dissolved zinc and within 12.9 feet for dissolved copper;
2. The area within 46.2 feet of the Japanese Gulch (5-30) outfall for dissolved zinc and within 19.1 feet for dissolved copper; and
3. The area within 15.5 feet of the Japanese Gulch (6-XX) outfall for dissolved zinc and within 4.71 feet for dissolved copper.

2.8.2 Effect of the Take

The effect of take on PS Chinook salmon and PS steelhead is describe above in Section 2.4 and 2.6, and will not jeopardize either species.

2.8.3 Reasonable and Prudent Measures

“Reasonable and prudent measures” (RPMs) are nondiscretionary measures to minimize the amount or extent of incidental take (50 CFR 402.02). “Terms and conditions” implement the reasonable and prudent measures (50 CFR 402.14). These must be carried out for the exemption in section 7(o)(2) to apply.

The FTA shall minimize take of species PS Chinook salmon and PS steelhead. These reasonable and prudent measures are necessary and appropriate to minimize the take of these species. The FTA shall:

1. minimize incidental take from impact-driving of concrete piles;

2. minimize incidental take from contaminants; and
3. minimize incidental take from stormwater discharges;

2.8.4 Terms and Conditions

1. To implement RPM 1, the FTA shall:
 - a) Impact drive the concrete piles during low tides to the maximum extent practicable;
 - b) When impact driving concrete piles in water three or more feet deep, monitor underwater noise as described in Appendix C of the BA; and
 - c) Submit the results of the underwater noise monitoring to NMFS.
2. To implement RPM 2, FTA shall:
 - a) Conduct all dredging between November 1 and February 15;
 - b) Use an enclosed bucket for dredging;
 - c) Conduct pile removal activities and demolition of creosote-treated timber elements of the 655-foot section of the Tank Farm pier above the future navigation channel between July 15 and February 15;
 - d) Conduct pile removal activities and demolition of creosote-treated timber elements of the other section of the Tank Farm pier between September 1 and February 15;
 - e) Install floating booms during all demolition and pile removal activities for the Tank Farm pier, existing terminal pier, and existing fishing pier;
 - f) Equip the floating booms shall with absorbent pads to contain any oil sheens;
 - g) Fill any holes from the removed creosote piles from the Tank Farm pier with clean sand or gravel;
 - h) Cap the area within two feet of the removed creosote piles from the Tank Farm with clean sediment;
 - i) Use the stable grain size for the 25-year return period storm event as calculate by Coast and Harbor Engineering (2012) for the sediment cap;
 - j) Submit the following to NMFS: (1) the DMMP Compliance Sediment Characterization Report or equivalent, (2) the results of any other future contaminant sampling of marine sediments in the project area, (3) a turbidity monitoring report by April 1 following each construction season, (4) a contaminants monitoring report

which will include the BMPs implemented to control the release of contaminants into marine waters and the disposition of creosote-treated wood and contaminated sediments; and

- k) Report any violations of the WDFW's Hydraulic Project Approval or Ecology's requirements to NMFS.
3. To implement RPM 3, the FTA and WSDOT shall implement the programmatic approach to monitoring detailed in "Programmatic Monitoring Approach for Highway Stormwater Runoff in Support of Endangered Species Act (ESA) Section 7 Consultations." The sites selected for this programmatic monitoring approach shall be representative of conditions within the action area, including average daily traffic and seasonal and temporal variations in stormwater runoff quantity and quality. If the programmatic monitoring shows that the analysis performed for this project has underestimated the end of pipe effluent concentrations or the size of the dilution zones then the reinitiation provisions of this opinion may be triggered.

2.9. Conservation Recommendations

Section 7(a)(1) of the ESA directs Federal agencies to use their authorities to further the purposes of the ESA by carrying out conservation programs for the benefit of the threatened and endangered species. Specifically, conservation recommendations are suggestions regarding discretionary measures to minimize or avoid adverse effects of a proposed action on listed species or critical habitat or regarding the development of information (50 CFR 402.02).

NMFS has identified the following measures to further minimize or avoid adverse effects to listed species:

1. Relocate outfall # 4-24 away from sand lance spawning areas;
2. Use translucent structural glass or another light-penetrating surface for the deck of the new fishing pier; and
3. Use permeable pavement in all areas of post-project PGIS where the infiltrated stormwater would not encounter contaminated soils or ground water.

2.10 Reinitiation of Consultation

As provided in 50 CFR 402.16, reinitiation of formal consultation is required where discretionary Federal agency involvement or control over the action has been retained (or is authorized by law) and if: (1) the amount or extent of incidental take is exceeded, (2) new information reveals effects of the agency action on listed species or designated critical habitat in a manner or to an extent not considered in this opinion, (3) the agency action is subsequently modified in a manner that causes an effect on the listed species or critical habitat not considered in this opinion, or 4) a new species is listed or critical habitat designated that may be affected by the action.

2.11 “Not Likely to Adversely Affect” Determinations

Yelloweye Rockfish, Canary Rockfish, and Bocaccio

Rockfish fertilize their eggs internally and the young are extruded as larvae. Rockfish larvae are pelagic, often found near the surface of open waters, under floating algae, detached seagrass, and kelp. Juvenile bocaccio and canary rockfish settle onto shallow nearshore water in rocky or cobble substrate that support kelp and other macroalgae at 3 to 6 months of age, and move to progressively deeper waters as they grow (Love et al. 2002). Juvenile yelloweye rockfish do not typically occupy shallow waters (Love et al. 1991) and are very unlikely to be within the action area. Adult yelloweye rockfish, canary rockfish, and bocaccio typically occupy waters deeper than 120 feet (Love et al. 2002).

Larval yelloweye rockfish, canary rockfish or bocaccio could occur within the project and action area, though they are readily dispersed by currents after they are born, making the concentration or probability of presence of larvae in any one location extremely small (NMFS 2003). The size of the project and action area where effects could occur to larval ESA-listed rockfish, combined with the short duration of project activities, make it extremely unlikely, and therefore discountable, that a larvae will be present and exposed to project activities. Because all potential adverse effects are discountable, NMFS concurs with the determination of may affect, not likely to adversely affect for yelloweye rockfish, canary rockfish, and bocaccio.

Green Sturgeon and Eulachon.

The southern DPSs of green sturgeon and eulachon have been documented in Puget Sound, but are uncommon. Puget Sound has a long history of commercial and recreational fishing and fishery-independent monitoring of other species that use habitats similar to those these species, but very few have been observed. NMFS believes it is very unlikely that green sturgeon or eulachon will occur in the action area, and even more improbable that they will be exposed to the six hours of impact pile driving. Therefore, NMFS concludes that the effects to the southern DPS green sturgeon and southern DPS eulachon are discountable.

3. MAGNUSON-STEVENSON FISHERY CONSERVATION AND MANAGEMENT ACT

The consultation requirement of section 305(b) of the MSA directs Federal agencies to consult with NMFS on all actions or proposed actions that may adversely affect EFH. The MSA (section 3) defines EFH as “those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity. Adverse effects include the direct or indirect physical, chemical, or biological alterations of the waters or substrate and loss of, or injury to, benthic organisms, prey species and their habitat, and other ecosystem components, if such modifications reduce the quality or quantity of EFH. Adverse effects on EFH may result from actions occurring within EFH or outside EFH, and may include site-specific or EFH-wide impacts, including individual, cumulative, or synergistic consequences of actions (50 CFR 600.810). Section 305(b) also requires NMFS to recommend measures that can be taken by the action agency to conserve EFH.

This analysis is based, in part, on the EFH assessment provided by the Federal action agency and descriptions of EFH contained in the fishery management plan developed by the Pacific Fishery Management Council (PFMC) and approved by the Secretary of Commerce for groundfish (PFMC 1998a), coastal pelagic species (PFMC 1998b), and Pacific Coast salmon (PFMC 1999).

3.1 Essential Fish Habitat Affected by the Project

The proposed action and action area for this consultation are described in the Introduction to this document. The action area includes areas designated as EFH for groundfish, coastal pelagic species, and Pacific Coast salmon, but does not occur within a Habitat Area of Particular Concern.

3.2 Adverse Effects on Essential Fish Habitat

NMFS determined that the proposed action will have adverse effects to EFH designated for groundfish, coastal pelagic species, and Pacific Coast salmon, based on information provided in the BA and the analysis of effects presented in the ESA portion of this document. NMFS determined that the proposed action will adversely affect EFH by temporarily elevating contaminant levels and permanently discharging stormwater. EFH will also be improved by the removal of the Tank Farm pier.

The EFH within 59 feet of the new concrete piles (0.5 acre) will be affected by impact pile driving (cumulative SEL greater than 187dB).

The EFH within 150 of the existing terminal, existing fishing pier, and the Tank Farm pier (16.8 acres) and within 300 feet of dredging (14.5 acres) will be affected by increased contaminants.

The following is the amount of EFH that will be adversely affected by stormwater discharges:

1. The area within 21.0 feet of the Brewery Creek (4-24) outfall for dissolved zinc and within 12.9 feet for dissolved copper;
2. The area within 46.2 feet of the Japanese Gulch (5-30) outfall for dissolved zinc and

within 19.1 feet for dissolved copper; and

3. The area within 15.5 feet of the Japanese Gulch (6-XX) outfall for dissolved zinc and within 4.71 feet for dissolved copper.

3.3 Essential Fish Habitat Conservation Recommendations

1. NMFS expects that full implementation of these EFH conservation recommendations would protect, by avoiding or minimizing the adverse effects described in section 3.2 above, approximately 395 acres of designated EFH for Pacific coast salmon. These conservation recommendations are a subset of the ESA terms and conditions. NMFS recommends that FTA:
2. Impact drive the concrete piles during low tides to the maximum extent practicable;
3. When impact driving concrete piles in water three or more feet deep, monitor underwater noise as described in Appendix C of the BA;
4. Submit the results of the underwater noise monitoring to NMFS.
5. Conduct all dredging between November 1 and February 15;
6. Use an enclosed bucket for dredging;
7. Conduct pile removal activities and demolition of creosote-treated timber elements of the 655-foot section of the Tank Farm pier above the future navigation channel between July 15 and February 15;
8. Conduct pile removal activities and demolition of creosote-treated timber elements of the other section of the Tank Farm pier between September 1 and February 15
9. Install floating booms during all demolition and pile removal activities for the Tank Farm pier, existing terminal pier, and existing fishing pier;
10. Equip the floating booms shall with absorbent pads to contain any oil sheens;
11. Fill any holes from the removed creosote piles from the Tank Farm pier with clean sand or gravel;
12. Cap the area within two feet of the removed creosote piles from the Tank Farm with clean sediment;
13. Use the stable grain size for the 25-year return period storm event as calculate by Coast and Harbor Engineering (2012) for the sediment cap;
14. Submit the following to NMFS: (1) the DMMP Compliance Sediment Characterization

Report or equivalent, (2) the results of any other future contaminant sampling of marine sediments in the project area, (3) a turbidity monitoring report by April 1 following each construction season, (4) a contaminants monitoring report which will include the BMPs implemented to control the release of contaminants into marine waters and the disposition of creosote-treated wood and contaminated sediments.

15. Report any violations of the WDFW's Hydraulic Project Approval or Ecology's requirements to NMFS;
16. Implement the programmatic approach to monitoring detailed in "Programmatic Monitoring Approach for Highway Stormwater Runoff in Support of Endangered Species Act (ESA) Section 7 Consultations." The sites selected for this programmatic monitoring approach shall be representative of conditions within the action area, including average daily traffic and seasonal and temporal variations in stormwater runoff quantity and quality. If the programmatic monitoring shows that the analysis performed for this project has underestimated the end of pipe effluent concentrations or the size of the dilution zones then the reinitiation provisions of this opinion may be triggered;
17. Relocate outfall 4-24 away from sand lance spawning areas;
18. Use translucent structural glass or another light-penetrating surface for the deck of the new fishing pier; and
19. Use permeable pavement in all areas of post-project PGIS where the infiltrated stormwater would not encounter contaminated soils or ground water.

3.4 Statutory Response Requirement

As required by section 305(b)(4)(B) of the MSA, the Federal agency must provide a detailed response in writing to NMFS within 30 days after receiving an EFH Conservation Recommendation from NMFS. Such a response must be provided at least 10 days prior to final approval of the action if the response is inconsistent with any of NMFS' EFH Conservation Recommendations, unless NMFS and the Federal agency have agreed to use alternative time frames for the Federal agency response. The response must include a description of measures proposed by the agency for avoiding, mitigating, or offsetting the impact of the activity on EFH. In the case of a response that is inconsistent with NMFS Conservation Recommendations, the Federal agency must explain its reasons for not following the recommendations, including the scientific justification for any disagreements with NMFS over the anticipated effects of the action and the measures needed to avoid, minimize, mitigate, or offset such effects [50 CFR 600.920(k)(1)].

In response to increased oversight of overall EFH program effectiveness by the Office of Management and Budget, NMFS established a quarterly reporting requirement to determine how many conservation recommendations are provided as part of each EFH consultation and how many are adopted by the action agency. Therefore, we ask that in your statutory reply to the

EFH portion of this consultation, you clearly identify the number of conservation recommendations accepted.

3.5 Supplemental Consultation

The FTA must reinitiate EFH consultation with NMFS if the proposed action is substantially revised in a way that may adversely affect EFH, or if new information becomes available that affects the basis for NMFS' EFH conservation recommendations [50 CFR 600.920(1)].

4. DATA QUALITY ACT DOCUMENTATION AND PRE-DISSEMINATION REVIEW

Section 515 of the Treasury and General Government Appropriations Act of 2001 (Public Law 106-554) (Data Quality Act) specifies three components contributing to the quality of a document. They are utility, integrity, and objectivity. This section of the biological opinion addresses these Data Quality Act (DQA) components, documents compliance with the DQA, and certifies that this opinion has undergone pre-dissemination review.

4.1 Utility--Utility principally refers to ensuring that the information contained in this consultation is helpful, serviceable, and beneficial to the intended users. These users include three agencies of the Federal government (NMFS, FTA, and USACE), the WSDOT, the residents of the City of Mukilteo, Snohomish County, the State of Washington, and the general public.

Individual copies were provided to the above-listed entities. This consultation will be posted on NMFS Northwest Region website (<http://www.nwr.noaa.gov>). The format and naming adheres to conventional standards for style.

4.2 Integrity--This consultation was completed on a computer system managed by NMFS in accordance with relevant information technology security policies and standards set out in Appendix III, 'Security of Automated Information Resources,' Office of Management and Budget Circular A-130; the Computer Security Act; and the Government Information Security Reform Act.

4.3 Objectivity

4.3.1 Information Product Category--Natural Resource Plan.

4.3.2 Standards--This consultation and supporting documents are clear, concise, complete, and unbiased; and were developed using commonly accepted scientific research methods. They adhere to published standards including NMFS ESA Consultation Handbook, ESA regulations, 50 CFR 402.01, et seq., and the MSA implementing regulations regarding EFH, 50 CFR 600.920(j).

4.3.3 Best Available Information--This consultation and supporting documents use the best available information, as referenced in the Literature Cited section. The analyses in this opinion and EFH consultation contain more background on information sources and quality.

4.3.4 Referencing--All supporting materials, information, data and analyses are properly referenced, consistent with standard scientific referencing style.

4.3.5 Review Process--This consultation was drafted by NMFS staff with training in ESA and MSA implementation, and reviewed in accordance with Northwest Region ESA quality control and assurance processes.

5. REFERENCES

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August 15, 2013

Mr. William W. Stelle, Jr.
National Marine Fisheries Service
7600 Sand Point Way NE
Building 1
Seattle, WA 98115

NMFS Tracking No. 2012/9334

**Re: Washington State Ferries Mukilteo Multimodal Project:
Response to Essential Fish Habitat Recommendations**

Dear Mr. Stelle:

This letter responds to the July 31, 2013 Biological Opinion (BO) for the Mukilteo Multimodal Project (NMFS Tracking No.: 2012/9334). The BO includes Essential Fish Habitat (EFH) conservation recommendations proposed by the National Marine Fisheries Service (NMFS) to avoid, mitigate, or offset the impact the proposed action has on EFH. The Magnuson-Stevens Act and 50 CFR 600.929(j) require the Federal Transit Administration (FTA) to respond in writing to the recommendations. For your convenience, a copy of the complete EFH analysis and recommendations is attached.

FTA and WSDOT will fully implement 16 of the 18 conservation recommendations. An explanation is offered below for the two conservation recommendations that are not being accepted by FTA and WSDOT.

**NMFS Conservation Recommendation No. 16:
Relocate outfall 4-24 away from sand lance spawning areas.**

Outfall 4-24 is the outlet for Brewery Creek and the location where the creek discharges into Possession Sound. Relocating the mouth of the creek would require us to disturb known cultural resources and violate the conditions of our Section 106 Memorandum of Agreement (MOA) with the tribes, SHPO, and other parties. In addition, it has the potential to adversely affect creek habitat. FTA therefore finds this recommendation infeasible.

**NMFS Conservation Recommendation No. 18:
Use permeable pavement in all areas of post-project PGIS where the infiltrated stormwater would not encounter contaminated soils or ground water.**

William W. Stelle, Jr.
August 15, 2013

The project does plan to use permeable pavement wherever feasible. For example, it is exploring whether permeable pavement would work at the transit center and for walking areas such as the promenade in areas that are not associated with hazardous materials and cultural resources. On the other hand, permeable pavement is not appropriate for use in the holding area due to subsurface contamination. The presence of significant subsurface cultural resources on the project site also precludes soil-disturbing activities (required to install such pavement) over much of the holding area. On the main roadway, WSF maintenance requirements preclude the use of permeable pavement. In short, the project will be capturing and providing enhanced treatment to runoff via infiltration wherever possible, and will collect and treat runoff from all impervious surface, but will not be able to fully implement the conservation recommendation.

FTA will of course reinitiate EFH consultation with NMFS if the proposed action is substantially revised in a way that may adversely affect EFH, or if new information becomes available that affects the basis for the EFH conservation recommendations (50 CFR 600.920(1)).

Thank you for your interest in the Mukilteo Multimodal Project. Input from NMFS has helped us create a more sustainable project.

Sincerely,



R.F. Krochalis
Regional Administrator

Attachment: EFH Conservation Recommendations

cc (by email): Nicole McIntosh (WSDOT)
George Ritchotte (WSDOT)
Mike Grady (NMFS)