

PROGRAMMATIC ENDANGERED SPECIES ACT CONSULTATION

**Piling Replacement
List of Requirements**

Version: May 3, 2017

Programmatic Endangered Species Act (ESA) Consultations [U.S. Fish and Wildlife Service (USFWS) reference number 01EWF00-2015-I-0104, National Marine Fisheries Service (NMFS) reference number WCR-2005-07506] have been completed for the activities listed below. If you can design your project to meet all or most of the requirements of the Programmatic Biological Evaluation as summarized on this List below, then the U.S. Army Corps of Engineers' (Corps) ESA review of your permit application will be expedited and streamlined. The submittal of this List to the Corps is not required. However, to further expedite your review, you may include a description of how you meet these requirements in your permit application materials.

Programmatic ESA Requirements
1. The project is for replacement or repair of piling only. Any additional changes to structures associated with the piles (such as decking replacement) are not covered under this programmatic.
2. Work will be performed within the approved work windows for listed species and forage fish. The action shall only occur once within the approved work window for a single and complete project. These work windows are located on the Corps website at www.nws.usace.army.mil . Select Regulatory Branch, Permit Information, Permit Guidebook, Chapter X. Work Windows.
3. Work will be completed within 14 days.
A. Piling Repair –repairing piling by splicing or other repair method
4. Up to 40 timber piles will be repaired. (<i>Note:</i> Required to meet USFWS programmatic conditions only. No limit for repair of timber piles for NMFS programmatic conditions.)
5. Existing piles will be partially cut with a new pile secured directly on top using a sleeve.
6. Sleeve is connected to the existing pile and stub pile by bolting or by placement of concrete.
7. If using concrete, a steel form/collar will be placed around the seams where the sleeve meets the piles and secured so that no concrete will leak out of the sleeve.
8. All concrete will be contained within the sleeve and not allowed to leak into the water.
9. Alternatively, piles can be repaired by securing with fiber-form jackets, installing rebar around the pile, and sealing the bottom with sealant plugs to allow grout to be pumped inside the jacket. Once grout is cured, jackets are removed and the repaired pile is supported by rebar and grout. (<i>Note:</i> Meets USFWS programmatic conditions only. If proposed, the Corps must consult individually with NMFS.)
10. Only untreated or ACZA-treated wood will be used and treatment must comply with the Western Wood Preservers Institute Best Management Practices. Design measures will prevent abrasion of the treated wood and reduce the potential for the release of contaminants into the aquatic environment. If necessary, a containment boom will be placed around the work area to capture debris and cuttings.

	Programmatic ESA Requirements
	11. Removed creosote-treated pile sections shall be disposed of in a manner that precludes their further use. Piles will be cut into manageable lengths (4-foot or less) for transport and disposal in an approved upland location that meets the liner and leachate standards of the Minimum Functional Standards, Chapter 173-304 WAC and that is in compliance with the Endangered Species Act. No reuse of treated wood will occur. In all cases, applicants should be prepared to provide documentation of disposal with the Certificate of Compliance.
	B. Piling Replacement
	12. Replacement piles will be steel piles up to 12-inches in diameter or concrete piles up to 24 inches diameter or timber or plastic/fiberglass piles (with no size limit).
	13. Following completion of pile driving, the permittee will provide the following information to U.S. Fish and Wildlife Service (USFWS) (510 Desmond Drive SE, Suite 102, Lacey, Washington, 98503-1292), referencing the Corps permit number and permittee's names as indicated on the permit: 1) actual dates and duration of pile driving; and 2) average number of piles installed per day and strikes per pile.
	14. Piles will be replaced in the same general location and will not extend beyond the footprint of the existing structure (i.e., pier).
	15. If using impact-hammer pile driving or proofing, sound attenuation devices (a bubble curtain and wood or Micarta block) will be used.
	16. <u>In marine areas, piles will be installed according to (a) or (b) below:</u> a. Steel piles will be 12 inches or less in diameter, and may be installed with vibratory pile installation or impact-hammer pile driving. For 12-inch diameter steel piles installed by impact-hammer pile driving, there will be less than 225 piles strikes per day. b. Steel piles less than 12 inches in diameter, concrete piles 24 inches or less in diameter, and wood, plastic or fiberglass piles (any size) will be installed with vibratory pile installation or impact-hammer pile driving with no limit to the number of pile strikes per day.
	17. <u>In marine areas (except Ports of Tacoma and Seattle):</u> Number of piles being replaced is 20 or less (<i>Note: Meets both USFWS and NMFS programmatic conditions</i>).
	18. <u>In marine areas (except Ports of Tacoma and Seattle):</u> Number of steel piles being replaced is between 21 and 40. Number of timber, concrete or plastic piles being replaced is between 21 and 100 (<i>Note: Meets NMFS programmatic conditions only. If proposed, the Corps must consult individually with USFWS</i>).
	19. <u>In Ports of Tacoma and Seattle:</u> a. Number of timber, concrete or plastic piles being replaced is 100 or less (<i>Note: Meets both USFWS and NMFS programmatic conditions</i>). b. Number of steel piles being replaced is between 41 and 100 (<i>Note: Meets USFWS programmatic conditions only. If proposed, the Corps must consult individually with NMFS</i>).
	20. <u>In marine/estuarine waters:</u> No piling will be installed where the piling is located in or within 25 feet of eelgrass beds.

	Programmatic ESA Requirements
	21. <u>In marine areas:</u> Existing piles will either be fully extracted <u>or</u> cut below the mudline (2 feet below if treated wood or 1 foot below if untreated wood). If piles cannot be fully extracted or cut below the mudline, they may be cut at or near the mudline and the remaining portion driven 1 foot or 2 feet below the mudline. Piles are cut by a diver underwater using a pneumatic saw.
	22. <u>In marine areas:</u> No installation or replacement of sheet piling will occur.
	23. <u>In marine areas:</u> All piles, including dolphins, will be capped with a device to preclude perching by piscivorous birds, such as the brown pelican.
	24. <u>In marine areas:</u> All pile driving will occur during daylight hours only and work will occur between 2 hours after sunrise and 2 hours before sunset during marbled murrelet nesting season (April 1 to September 15).
	25. <u>In marine areas:</u> A marine mammal buffer area will be monitored during and immediately before pile driving activity and pile driving will not be initiated, or will be temporarily suspended, if an ESA-listed marine mammal is within a 400-foot radius of the work site.
	26. <u>In freshwaters, including the lower Columbia River, piles will be installed according to (a), (b), or (c) below:</u> a. Steel piles smaller than 12-inch diameter will be installed with vibratory pile installation to the greatest extent possible and impact driving will be limited to proofing or locations where vibratory installation is not feasible. Pile strikes are not limited for piles smaller than 12-inch diameter. b. Concrete piles 24-inch diameter or smaller will be installed with vibratory pile installation or impact-hammer pile driving (no limit to number of pile strikes per day). c. Timber, plastic, and fiberglass piles of any size may be installed with vibratory or impact-hammer pile driving (no limit to number of pile strikes per day).
	27. <u>In freshwaters except the lower Columbia River:</u> a. Steel piles will be limited to 12-inch diameter. (<i>Note:</i> Meets both USFWS and NMFS programmatic conditions). b. For all 12-inch diameter steel piles, vibratory installation will be used. (<i>Note:</i> Meets both USFWS and NMFS programmatic conditions). c. For all 12-inch diameter steel piles, impact-hammer pile driving, including proofing, will be used. (<i>Note:</i> Meets NMFS programmatic conditions only. If proposed, the Corps must consult individually with USFWS).
	28. <u>In the lower Columbia River:</u> Steel piles will be limited to 12-inch diameter. Impact-hammer pile driving may be used to proof 12-inch-diameter steel piles, provided there are less than 225 pile strikes per day and a bubble curtain and/or block will be used for sound attenuation. (<i>Note:</i> Meets both USFWS and NMFS programmatic conditions).
	29. <u>In freshwater areas:</u> Number of piles being replaced is 20 or less (<i>Note:</i> Meets both USFWS and NMFS programmatic conditions).
	30. <u>In freshwater areas:</u> Number of steel piles being replaced is between 21 and 40. Number of timber, concrete or plastic piles being replaced is between 21 and 100 (<i>Note:</i> Meets NMFS programmatic conditions only. If proposed, the Corps must consult individually with USFWS).

Programmatic ESA Requirements	
	31. <u>In freshwater:</u> Concrete piles will be limited to 24 inches in diameter or less.
	32. <u>In freshwater:</u> All pile driving will occur during daylight hours.
	33. <u>In freshwater:</u> Existing piles will be either fully extracted <u>or</u> cut at the mudline using best management practices. Partial cutting can be used if the pile is partially deteriorated. Full extraction of piles is used if partial cutting is not possible and when piles are too deteriorated to remove without breaking; piles are cut by a diver underwater at the mudline using a pneumatic saw.
	34. Hydraulic water jets will not be used to remove or place piles.
	35. No piles will be associated with log raft booms.
	36. No sheet piling will be used in lieu of pole piling.
	37. The minimum number of piles necessary for structural support will be used.
	38. Unless it can be demonstrated that the surrounding substrate will fill the hole within 1 day, or if precluded by the Environmental Protection Agency or Washington State Department of Ecology due to locations within a Superfund or Model Toxics Control Act (MTCA) site, the holes left when pulling or cutting treated piling will be capped with appropriate material (such as clean sand, or a plastic or steel pile cap for cut piling). If fill (i.e., clean sand) is used to cap the area, the fill material will match sediment substrate of the site.
	39. No piling treated with creosote or pentachlorophenol will be used. No coal-tar treated steel piles will be used.
	40. For timber piling, only untreated or ACZA-treated wood will be used. If ACZA-treated, treatment must comply with the Western Wood Preservers Institute BMPs. Design measures will prevent abrasion of the treated wood and reduce the potential for the release of contaminants into the aquatic environment. If necessary, a containment boom will be placed around the work area to capture debris and cuttings.
	41. Treated timber piling associated with floats will incorporate design features to minimize contact between the treated wood and the float(s) or attachments to the float(s) during all water levels.
	42. Removed creosote-treated piles shall be disposed of in a manner that precludes their further use. Piles will be cut into manageable lengths (4-foot or less) for transport and disposal in an approved upland location that meets the liner and leachate standards of the Minimum Functional Standards, Chapter 173-304 WAC and that is in compliance with the Endangered Species Act. No reuse of treated wood will occur. In all cases, applicants will be prepared to provide documentation of disposal with the statement of compliance.

General Conditions (as applicable)	
	G1. No new access roads, routes, or trails will be included as part of the proposed action.
	G2. Any fill material (e.g., sand, gravel, and rock) will be washed and cleaned prior to being brought to the site.
	G3. All fill material will be obtained from a commercial source that is operating in compliance with the Endangered Species Act.

	General Conditions (as applicable)
	G4. No stockpiling or staging of material will occur waterward of the Ordinary High Water Mark (OHWM) or High Tide Line currently Mean Higher High Water).
	G5. No trenching will occur through any water of the U.S. (i.e., for electrical cables).
	G6. No work will be performed and structures and fill materials will not be placed in or adjacent to vegetated shallows (except where such vegetation is limited to State-designated noxious weeds), wetlands, special aquatic sites, or suitable forage fish spawning habitat.
	G7. Barges will not be used within 25 feet and material will not be placed in or on vegetated shallows (e.g., eelgrass; except where such vegetation is limited to State-designated noxious weeds) or other special aquatic sites.
	G8. If a barge is used to deliver material, the barge or other structures shall not ground out on the bottom.
	G9. The bottom of any structure, vessel, watercraft grid or watercraft lift will be at least 1 foot above the level of the substrate during all water levels.
	G10. All equipment that will operate over water or waterward of the OHWM or High Tide Line will be cleaned of accumulated grease, oil, or mud. All leaks will be repaired prior to arriving on site. Equipment will be inspected daily for leaks, accumulations of grease, etc., and any identified problems will be fixed before operating over water or below the OHWM or High Tide Line.
	G11. No solvents or other chemicals will be used in or over the water during the construction or operation of the proposed action.
	G12. No waste material, including material associated with treated wood decks, will enter the waterbody.
	G13. All waste material and construction debris will be collected and disposed of at an approved facility that is in compliance with the Endangered Species Act.
	G14. Any leftover construction materials will be collected and disposed of off-site.
	G15. All floating debris generated during construction will be retrieved, removed, and disposed of at an approved upland location.
	G16. Two oil absorbing floating booms, appropriate for the size of the work area, will be available onsite whenever heavy equipment operates within 150 feet of open water and there is a potential for hazardous materials to enter surface waters. The booms will be stored in a location that facilitates immediate deployment in the event of a spill.
	G17. Fueling and servicing of equipment will be confined to an established staging area that is at least 150 feet from open water or wetlands. Spill containment systems must be adequate to contain all fuel leaks.
	G18. Equipment and vehicles will be stored in established staging areas when not in use (excluding cranes, which cannot be easily moved).
	G19. A written spill prevention, control, and countermeasures plan should be prepared for activities that include the use of heavy equipment. The plan should describe measures to prevent or reduce impacts from accidental leaks or spills, and will contain a description of all hazardous materials that will be used, proper storage and handling, and monitoring methods. A spill kit should be available onsite during construction and stored in a location that facilitates immediate deployment if needed.

	General Conditions (as applicable)
	G20. If work will be done in or within 25 feet of an existing or previously designated Superfund site or Washington State Model Toxic Control Act (MTCA) site, BMPs established by EPA during CERCLA coordination or Washington State Department of Ecology during MTCA will be followed.
	G21. All activities that may result in sound levels of 92 dBA or more within suitable marbled murrelet nesting habitat, or less than 92 dBA and located within 11 yards of suitable marbled murrelet nesting habitat, will occur outside the breeding period (April 1 to September 15).
	G22. All activities that may result in sound levels of 92 dBA or more within suitable northern spotted owl nesting, roosting, and/or foraging habitat, or less than 92 dBA and located within 20 yards of suitable northern spotted owl nesting, roosting, and/or foraging habitat, will occur outside the early breeding period (March 1 through July 15).
	G23. Projects located within Wahkiakum and Cowlitz Counties, west of Longview and east of Skamokawa, will not alter woodland or tidal spruce forest that are suitable Columbia white-tailed deer habitat and will not enable higher traffic speeds or volumes.
	G24. Projects constructed on islands in the Columbia River between 2 miles east of Cathlamet and 2 miles west of Skamokawa will not occur from June 1 through June 30 to protect Columbia white-tailed deer fawning.
	G25. Projects within 1/4 mile of suitable western snowy plover nesting or foraging habitat will not occur from March 15 through September 30.
	G26. The project will comply with the <i>General Implementation Conditions</i> for our programmatic consultations (Note: These are located on our website at www.nws.usace.army.mil . Select Regulatory Branch, Permit Information, Forms & Templates).

Programmatic Requirement	NMFS Restrictions	USFWS Restrictions
Number of piling allowed for replacement	Up to 100 timber, concrete or plastic Up to 40 steel	Up to 20 of any material per structure or site over 10 years Up to 100 of any material in Ports of Tacoma and Seattle
Size of piling	Up to 12-inch steel Up to 24-inch concrete Any size timber or plastic	Up to 12-inch steel Up to 24-inch concrete No size limit for timber, plastic/fiberglass.
Impact hammer pile driving (including proofing)	Allowed for steel piles up to 12-inches if includes sound attenuation from use of micarta pile caps	Allowed for steel piles with 10-inch diameter with no limit of pile strikes per day

<p>Impact hammer pile driving (including proofing)</p>	<p>Allowed for concrete piles up to 24-inches (no sound attenuation requirements)</p> <p>No restriction on size and no sound attenuation requirements for timber or plastic</p> <p>Marine mammal monitoring plan may be required</p>	<p>Not allowed for steel piles with 12-inch diameter in most freshwaters</p> <p>Allowed for steel piles with 12-inch diameter in lower Columbia River or marine waters with up to 225 strikes/day</p> <p>Allowed for other materials with no limit of pile strikes per day</p> <p>Sound attenuation required for all materials and locations: bubble curtain and wood or Micarta block.</p> <p>Marbled murrelet monitoring plan may be required</p>
<p>Duration of work</p>	<p>14 work days for piling replacement</p>	<p>14 days for 20 piles in freshwater or marine waters</p> <p>90 days for 100 piles in Ports of Tacoma and Seattle</p>