

Conservation Measures for Activities Covered under the Lake Washington Programmatic Consultation Letter of Concurrence

- CM 1. Construction and in-water work of the covered activity will comply with the appropriate recommended work windows and timing restrictions for the project site for the protection of species listed under the Federal ESA and the species they forage upon, as listed on the Corps website.
- CM 2. Repair/replacement of decking or other above-water components of overwater structures performed outside of the recommended work window would not include in-water work or the use of a barge or other vessel. All such work would be performed from the overwater structure using hand tools, and would implement Best Management Practices (e.g., tarps) to prevent any contaminant or materials releases from the proposed action into the aquatic environment.
- CM 3. To reduce shading impacts on the aquatic environment, grating will be installed on fixed and floating structure surfaces greater than 4 ft in width during replacement of decking material to provide light transmission through the overwater structure and reduce shading impacts. Floatation materials, if used, would be positioned so that they do not block the grating and associated light transmission.
- CM 4. Treated wood pilings associated with the float(s) must incorporate design features (e.g., plastic or metal bands) to minimize abrasion from the contact between the treated wood and the float(s) or attachments to the float(s). The design features must cover the entire portion of the piling in contact with the float or attachments during all lake level fluctuations.
- CM 5. New or replacement skirting will not be installed.
- CM 6. Watercraft and their grids or lifts will not rest on the substrate at any time during or after construction. The bottom of any vessel, watercraft grid or watercraft lift shall be at least one foot above the level of the substrate during all lake level fluctuations.
- CM 7. Floats used on a seasonal basis and removed during the off-season will be stored either on land (beach or upland area) or in water (sheltered cove or boathouse) in a location that is secure from storm events, to protect nearshore areas.
- CM 8. The minimum number of piles necessary for structural support will be included in the project design and implementation.
- CM 9. A bubble curtain or other noise attenuation method (wood blocks or mircata blocks) will be used during impact installation or proofing of steel piling. For steel piling greater than or equal to 12 inches in diameter, a bubble curtain and wood/mircata block must be used when impact proofing or driving the piling.
- CM 10. If creosote or pentachlorophenol-treated wood piles are removed as part of the project, vibratory pile extraction equipment will be used instead of pulling of piles (e.g., with a crane) to reduce the potential for exposure of listed resources to the wood treatment contaminants.

- CM 11. Existing piling will be either removed completely, cut a minimum of two ft below the substrate elevation, or partially cut with a new piling secured to the existing piling. Hydraulic water jets will not be used to remove piling.
- CM 12. The holes left by removed piling that are treated with creosote and are either fully or partially removed will be capped with an appropriate material, such as clean sand or gravel, and will match the existing substrate at the site, unless the applicant demonstrates that the hole would be immediately filled in by the surrounding substrate materials.
- CM 13. All treated wood will be contained during and after removal to preclude sediments and any contaminated materials from re-entering the aquatic environment.
- CM 14. Removed creosote-treated piling will be cut into maximum lengths of 4 ft prior to disposal at an approved facility. All contaminated materials will be disposed of at an approved and permitted disposal facility that is in compliance with the Act. No reuse of treated wood will occur.
- CM 15. All creosote-treated material, pile stubs, and associated sediments will be disposed of by the contractor in a landfill which meets the liner and leachate standards of the Minimum Functional Standards, Chapter 173-304 WAC.
- CM 16. No creosote- or pentachlorophenol-treated timber piles or coal-tar treated steel piles will be used.
- CM 17. If treated wood is deemed necessary for the proposed action, ACZA treatment would be used. Such wood treatment would be in accordance with the April 17, 2002 revised Amendment to Best Management Practices for the Use of Treated Wood in Aquatic Environments; USA Version – Revised July 1996 – Western Wood Preservers Institute. If treated wood is used, measures will be implemented to (e.g., plastic, dense rubber or steel) to prevent abrasion damage of treated wood to reduce the potential for the release of arsenic, copper, and other treatment contaminants.
- CM 18. Concrete shall be sufficiently cured prior to contact with water to prevent leaching. Uncured concrete shall not be allowed to come into contact with surface waters.
- CM 19. Any imported material (e.g., ballast, armoring rock, gravel) will be clean/washed and commercially obtained from an approved source.
- CM 20. During all sediment-generating activities, a site-appropriate water quality Best Management Practices (e.g., sediment curtain) will be deployed and maintained prior to commencing work.
- CM 21. Heavy equipment will be operated from the uplands or from a barge during construction. If a construction barge is used, it will not ground or rest on the substrate at any time.
- CM 22. All equipment used for work below the Ordinary High Water mark (OHWM) will be cleaned of accumulated grease, oil, mud, etc. and leaks will be repaired prior to arriving at the project site. Thereafter, all equipment will be inspected daily for leaks, accumulations of grease, etc. and any identified problems will be fixed before using the equipment below OHWM.

- CM 23. Equipment used for work in a riparian corridor will be fueled and serviced in an established staging area. When not in use, equipment and vehicles will be stored in the staging area. Staging areas will be located a minimum of 150 ft from surface waters or other sensitive habitats, such as wetlands.
- CM 24. Two oil absorbing floating booms appropriate for the size of the work area will be available onsite during all phases of work whenever land-based heavy equipment operates within 150 ft of the OHWM, and when there is potential for hazardous materials to enter surface waters. The booms will be placed in a location that facilitates an immediate response to potential petroleum leakage or spill.
- CM 25. The contractor will implement a written spill prevention, control, and countermeasures (SPCC) plan. The SPCC plan will describe measures to prevent or reduce impacts from potential accidental spills (fuel, hydraulic fluid, etc.). In addition, the SPCC plan will contain a description of all hazardous materials that will be used, including inventory, proper storage and handling, and monitoring methods. The contractor will maintain a spill kit onsite during construction in order to respond to accidental spills in a timely manner.
- CM 26. All man-made debris will be removed from the beach and riparian zone, and will be transported and disposed of at an appropriate upland location.
- CM 27. The contractor will retrieve any floating debris generated during construction. Debris will be disposed of at an approved upland location.
- CM 28. Whenever activities will generate sawdust, drill tailings or wood chips from treated timber, tarps or other containment material will be used to prevent debris from entering the water. If tarps cannot be used (because of the location or type of structure) a containment boom will be placed around the work area to capture debris and cuttings.
- CM 29. No solvents or other chemicals shall be used in or over the water during boat cleaning or other maintenance during construction or operation of the proposed action.
- CM 30. Depressions or trenches in beach areas waterward of OHWM, created during construction shall be immediately restored to the original pre-project conditions (e.g., elevation and substrate material type).
- CM 31. Only existing roads and access routes will be used to deliver material and equipment to the project site. No new temporary or permanent access roads or routes would be used to transport equipment or supplies to the project site.
- CM 32. Any vegetation removed as part of the proposed action will be replanted with appropriate native vegetation upon completion of the project. Vegetation replanted in association with a covered activity will be monitored once per year for a period of five years to ensure planting success, and will meet the following minimum requirements:
- a. Years 1 through 3 – survival of 100 percent of the vegetation planted
 - b. Year 5 – survival of 80 percent, of the vegetation planted