

WAC 220-660-400 Marinas and terminals in saltwater areas. This section applies to constructing, maintaining, and repairing marinas and terminals in saltwater areas.

(1) Description:

(a) A marina is a public or private facility providing vessel moorage space, fuel, or commercial services. Commercial services include overnight or live-aboard vessel accommodations (RCW 77.55.011(13)).

(b) A terminal is a public or private commercial wharf located in the navigable waters of the state and used, or intended to be used, as a port or facility to store, handle, transfer, or transport goods, passengers, and vehicles to and from vessels (RCW 77.55.011(14)).

(2) **Fish life concerns:** Marinas and terminals can alter the physical processes that create or maintain habitat that supports fish life. Impacts may include altering the light regime, hydrology, substrate conditions, and water quality under and adjacent to structures. Marinas and terminals often have a larger impact area than residential docks and are often associated with heavy boat traffic and human use. Thus, the size and magnitude of the potential impacts to fish life may be greater than those from residential docks.

(3) Marina and marine terminal design - Generally:

(a) The department may require a person to provide physical modeling, numerical modeling, or other information that demonstrates adequate water exchange and circulation after construction.

(b) The department will require a seagrass/macroalgae habitat survey for a new construction unless the department can determine the project will not impact seagrass and kelp beds and in herring spawning beds other macroalgae used as spawning substrate. A survey is not required for replacement of an existing structure within its original footprint.

(c) Whenever feasible, locate new marinas and terminals in areas that will minimize impacts to fish life.

(i) Locate new marinas and terminals in naturally deep areas to avoid or minimize the need for dredging.

(ii) Locate new marinas and terminals in areas deep enough to protect the bed from propeller wash impacts.

(iii) Locate new marinas and terminals in areas with existing low or impaired biological value such as heavily industrialized areas.

(d) Whenever feasible, design marinas and terminals to allow light penetration to intertidal and shallow subtidal water areas.

(i) Design marinas and terminals so that most over-water coverage is in the deepest water feasible.

(ii) Minimize the amount of pier area that directly contacts the shoreline.

(iii) Minimize the width of over-water and in-water structures.

(iv) Design and construct piers and other above-water structures as high as feasible to increase light transmission.

(v) Whenever feasible, use light-reflecting materials on the underside of over-water structures that are not grated.

(4) Marina design:

(a) The department prohibits constructing marinas on or over the following saltwater habitats of special concern: Pacific herring spawning beds and lingcod and rockfish settlement and nursery areas.

(b) The location and construction of new marinas must follow the mitigation sequence to protect surf smelt and Pacific sand lance spawning beds, seagrass and kelp beds and intertidal wetland vascular plants.

(c) The department may require a marina design to include grating to minimize impacts to juvenile salmonid migration corridors and native aquatic vegetation.

(i) If grating is required, locate flotation under the solid decked area only.

(ii) Orient grating so the lengthwise opening maximizes the amount of light penetration. Any objects that are not part of the structure on, above, or below the grating should not block light penetration.

(iii) Grating material must have at least a sixty percent open area.

(d) Whenever feasible, place slips for smaller boats in shallower water and place slips for larger boats in deeper water.

(e) Locate new boathouses, houseboats, and covered moorages waterward of the phototrophic zone.

(f) Any replacement roof for covered moorage or a boathouse in landward of the phototrophic zone must use translucent materials or skylights in the roof.

(g) If artificial nighttime lighting is used in the design, use low-intensity lights that are located and shielded to prevent light from attracting fish or disrupting fish migration behavior, unless there are safety constraints.

(h) The following provisions apply to marina construction landward of the existing OHWL:

(i) A single entrance may be required; and

(ii) The entire inner shoreline must comply with bank protection provisions in WAC 220-660-370.

(i) The following provisions apply to marina construction waterward of the OHWL:

(i) If a person must protect the bank area inside the marina they must comply with bank protection provisions in WAC 220-660-370. Between the elevation of the toe of the bulkhead and MLLW, the beach slope must not exceed one and one-half feet horizontal to one foot vertical.

(ii) For a single entrance or breach marina, the breakwater structure may not exceed one and one-half feet horizontal to one foot vertical slope inside and outside the marina.

(j) The following provisions apply when a marina includes breaches that form shore breakwaters (jetties) and detached breakwaters:

(i) The toe of the shore breakwaters (jetties) may extend seaward to 0.0 feet MLLW, but may not extend seaward more than two hundred fifty feet from OHWL;

(ii) The shore breakwaters must have a slope of at least one and one-half feet horizontal to one foot vertical throughout;

(iii) The breaches between the shore breakwaters and the detached breakwaters must be at least twenty feet wide measured at the toe of the slope;

(iv) Removable, floating breakwaters or wave boards should be used whenever feasible; and

(v) Avoid the use of continuous sheet piles whenever feasible.

(5) **Terminal Design:** The location and construction of new terminals must follow the mitigation sequence to protect saltwater habitats of special concern.

(6) **Piling design:**

(a) Use the smallest diameter and number of pilings needed to construct a safe structure.

(b) The use of creosote or pentachlorophenol piling is prohibited. New and replacement piling can be steel, concrete, recycled plastic, or untreated or department-approved treated wood.

(c) Treated wood piling must incorporate design features to minimize abrasion of the piling from contact with vessels, floats, or other objects.

(d) Whenever feasible, all pilings must be fitted with devices to prevent perching by fish-eating birds.

(7) **Marina and marine terminal construction:**

(a) Operate and anchor vessels and barges so that they do not adversely impact seagrass and kelp beds and in herring spawning areas other macroalgae beds used as herring spawning substrate.

(b) The pier and dock(s) centerline must be reestablished during construction using the same methodology used to establish the centerline during the seagrass/macroalgae habitat survey.

(c) When installing steel piling, a vibratory hammer is preferred.

(d) If impact pile driving is used, set the drop height to the minimum needed to drive the piling.

(e) Use appropriate sound attenuation to minimize harm to fish from impact pile-driving noise.

(f) Whenever feasible, limit impact pile driving to daylight hours to avoid attracting fish to light at night.

(g) When removing piling:

(i) Use a vibratory system to dislodge piling whenever feasible;

(ii) After removal, place the piling on a construction barge or other dry storage site. The piling must not be shaken, hosed off, left hanging to dry or any other action intended to clean or remove adhering material from the piling;

(iii) If a treated wood piling breaks during extraction, remove the stump from the water column by fully extracting the stump or cutting it three feet below the substrate; and

(iv) Fill holes left by piling extraction with clean sediment that matches the native material.

(h) When removing creosote piling:

(i) Containment booms and absorbent booms (or other oil absorbent fabric) must be placed around the perimeter of the work area to capture wood debris, oil, and other materials released into marine waters as a result of construction activities to remove creosote pilings. All accumulated debris must be collected and disposed upland at an approved disposal site; and

(ii) Creosote logs and timbers must be fully suspended during removal so no portion of the log drags through the water or onto the beach.

(i) Securely anchor floats and mooring buoys.

(j) Dispose of replaced piers, ramps, floats, docks, lines, chains, cables, or mooring anchors in an upland disposal site.

(k) Place floats and buoys removed seasonally in an upland area. Do not store on the beach.

(8) **Marina and marine terminal maintenance:**

(a) Upon request, the department must issue a renewable, five-year HPA for regular maintenance activities of a marina or marine terminal.

(b) In this section, regular maintenance activities may include the following work:

(i) Maintain or repair a boat ramp, launch, or float within its existing footprint;

- (ii) Maintain or repair an existing over-water structure within its existing footprint;
 - (iii) Maintain or repair boat lifts or railway launches;
 - (iv) Maintain or repair pilings, including replacing bumper pilings;
 - (v) Dredge less than fifty cubic yards of material;
 - (vi) Maintain or repair shoreline armoring or bank protection;
 - (vii) Maintain or repair wetland, riparian zone, or estuarine habitat; and
 - (viii) Maintain or repair an existing outfall.
- (c) A five-year permit must include a provision that a person give the department a fourteen-day notice before regular maintenance activities start.

[Statutory Authority: RCW 77.04.012, 77.04.020, and 77.12.047. WSR 15-02-029 (Order 14-353), § 220-660-400, filed 12/30/14, effective 7/1/15.]