## Aquatic Habitats (click on name of priority habitat for further information)

**Priority Habitat**

| |
|---|
| Freshwater Wetlands - Fresh Deepwater |
| Instream |
| Nearshore – Coastal |
| Nearshore – Open Coast |
| Nearshore – Puget Sound |

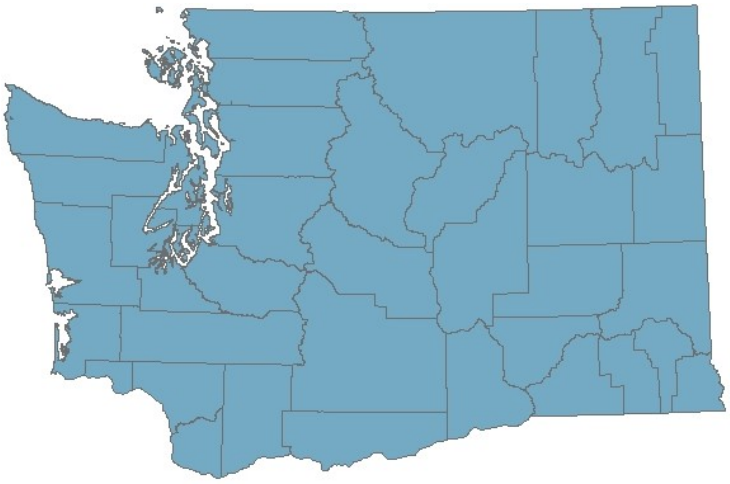
# Freshwater Wetlands and Fresh Deepwater*

## Priority Area Description

Freshwater Wetlands: Lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water. Wetlands must have one or more of the following attributes: the land supports, at least periodically, predominantly hydrophytic plants; substrate is predominantly undrained hydric soils; and/or the substrate is nonsoil and is saturated with water or covered by shallow water at some time during the growing season of each year.

Fresh Deepwater: Deepwater habitats are permanently flooded lands lying below the deepwater boundary of wetlands. Deepwater habitats include environments where surface water is permanent and often deep, so that water, rather than air, is the principal medium within which the dominant organisms live. The dominant plants are hydrophytes; however, the substrates are considered nonsoil because the water is too deep to support emergent vegetation. These habitats include all underwater structures and features (e.g., woody debris, rock piles, caverns).

## Washington Distribution by County



Online information and guidelines for management of **Freshwater Wetlands and Fresh Deepwater**:

Wetland Mitigation in Washington State: Part 1

Wetland Mitigation in Washington State: Part II

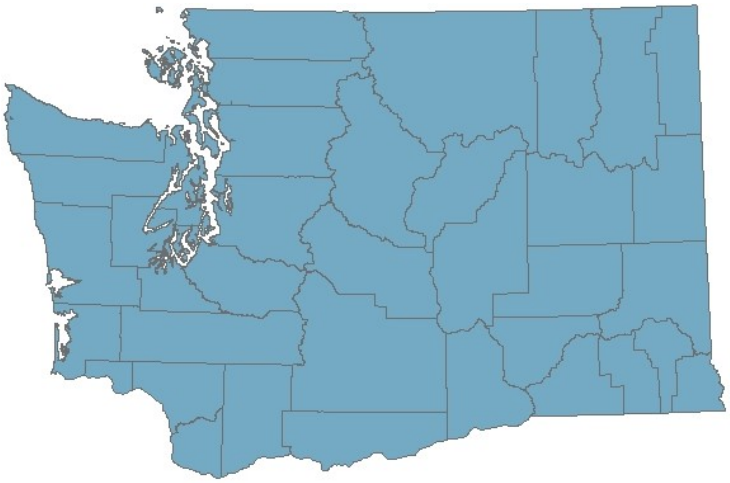
* The Washington Department of Fish and Wildlife does not map locations of Fresh Deepwater in the Priority Habitat and Species database. Fresh Deepwater data should be obtained through other sources (e.g., DNR's Hydrography data).

# Instream*

## Priority Area Description

The combination of physical, biological, and chemical processes and conditions that interact to provide functional life history requirements for instream fish and wildlife resources.

## Washington Distribution by County



Online information and guidelines for management of **Instream**:

Aquatic Habitat Guidelines

* The Washington Department of Fish and Wildlife does not map locations of Instream in the Priority Habitat and Species database. Instream data should be obtained through other sources (e.g., DNR's stream data).

# Coastal Nearshore[1]
# (estuary bay)

## Priority Area Description

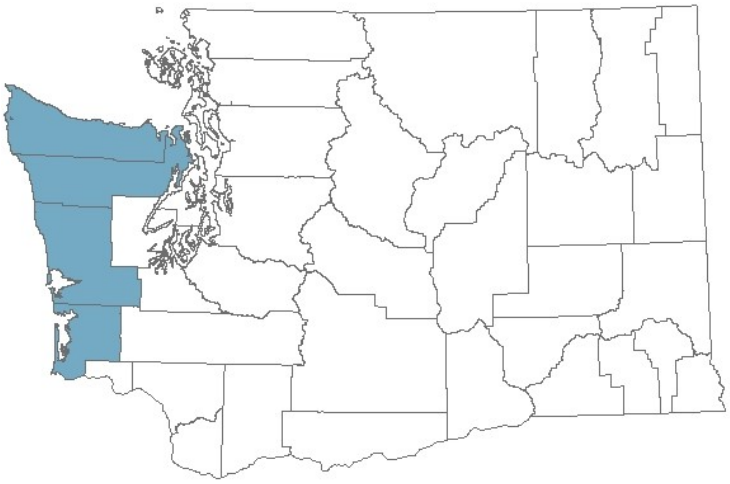
Encompasses relatively undisturbed nearshore estuaries of Washington's outer coast, including Gray's Harbor, Willapa Bay and the mouth of the Columbia River. In the Columbia River, this zone includes waters west of the Astoria-Megler Bridge. Estuary bays are semi-enclosed bodies of water that have free connection with the open ocean. Priority habitat zones are:

Shore – Also called the marine riparian zone, shore habitat extends inland from the Ordinary High Water Mark (OHWM) to that portion of the terrestrial landscape that is influenced by, or that directly influences, the aquatic ecosystem. The shore includes feeder bluffs (i.e., eroding bluffs), as they are an important source of sediments that form and sustain beaches. Shores consisting of native vegetation (e.g., trees, shrubs, dune grasses), fine-grained sand, imbedded large woody debris, or actively eroding bluffs are of particular importance. Headlands with concentrated seabird use are also significant.

Intertidal – Extends from the OHWM to the extreme lower low water (ELLW). Intertidal areas consisting of rocky substrate, native vegetation (e.g., native eelgrass[2], macroalgae, emergent vegetation) or habitat-forming species (e.g., native oyster reefs) are of particular importance. Intertidal areas within a river/stream delta or an area used for spawning by forage fish are also significant.

Subtidal – Extends waterward from ELLW to the maximum depth within the bay. Subtidal areas consisting of rocky substrate, native vegetation (e.g., eelgrass[2], macroalgae), or habitat-forming species (e.g., native oyster reefs) are of particular importance. Subtidal areas within an estuarine embayment or an area used for spawning by forage fish are also significant.

## Washington Distribution by County



Online information and guidelines for management of **Coastal Nearshore**:

SalmonScape (site helps planners identify and prioritize restoration and protection activities)

[1] WDFW does not map the entire nearshore in the PHS database. Nearshore should be located by accessing other data sources (e.g., DNRs ShoreZone Inventory). WDFW maps some nearshore habitat elements (e.g., kelp, eelgrass beds) using DNR data.

[2] This reference to eelgrass excludes *Zostera japonica*.

# Open Coast Nearshore[1]

## Priority Area Description

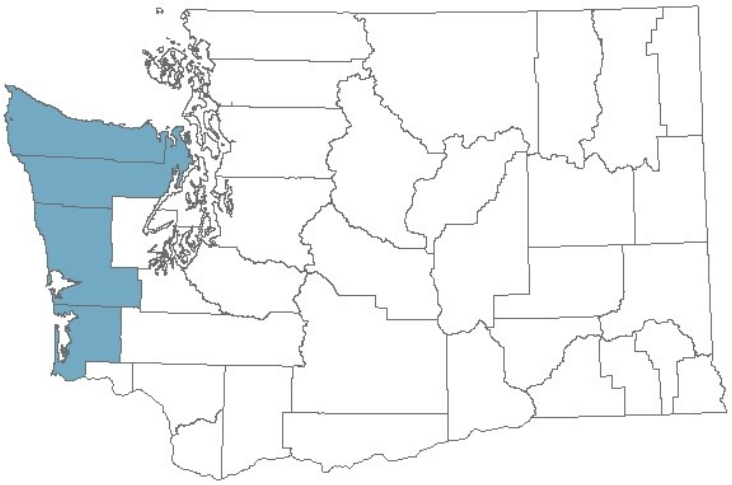
Encompasses relatively undisturbed non-estuarine nearshore of Washington's outer coast, from the Canadian border south to the Oregon border. Priority habitat zones are:

Shore – Also called the marine riparian zone, shore habitat extends inland from the Ordinary High Water Mark (OHWM) to that portion of the terrestrial landscape that is influenced by, or that directly influences, the aquatic ecosystem. The shore takes in feeder bluffs (i.e., eroding bluffs), as they are an important source of sediments that form and sustain beaches. Shores consisting of native vegetation (e.g., trees, shrubs, dune grasses), fine-grained sand, imbedded large woody debris, or actively eroding bluffs are of particular importance. Headlands with concentrated seabird use are also significant.

Intertidal – Extends from the OHWM to the extreme lower low water (ELLW). Intertidal areas consisting of rocky substrate, native vegetation (e.g., eelgrass[2], macroalgae, emergent vegetation) or habitat-forming species (e.g., goose-necked barnacles, mussel beds) are of particular importance. Intertidal areas within a river/stream delta or an area used for spawning by forage fish are also significant.

Subtidal – Extends from ELLW to -100 meters. Subtidal areas within an estuarine embayment or areas consisting of rocky substrate, native vegetation (e.g., eelgrass[2], macroalgae), or habitat-forming species (e.g., corals, sponges) are of particular importance.

## Washington Distribution by County



Online information and guidelines for management of **Open Coast Nearshore**:

SalmonScape (site helps planners identify and prioritize restoration and protection activities)

[1] WDFW does not map the entire nearshore in the PHS database. Nearshore should be located by accessing other data sources (e.g., DNRs ShoreZone Inventory). WDFW maps some nearshore habitat elements (e.g., kelp, eelgrass beds) using DNR data.

[2] This reference to eelgrass excludes *Zostera japonica*.

# Puget Sound Nearshore[1]
(estuary fjord)

## Priority Area Description

Encompasses relatively undisturbed nearshore Puget Sound, including the Strait of Juan de Fuca, Admiralty Inlet, the San Juan Islands and Hood Canal. Priority habitat zones are:

Shore – Also called the marine riparian zone, shore habitat extends inland from the Ordinary High Water Mark (OHWM) to that portion of the terrestrial landscape that is influenced by, or that directly influences, the aquatic ecosystem. The shore takes in feeder bluffs (i.e., eroding bluffs), as they are an important source of sediments that form and sustain beaches. Shores consisting of native vegetation (e.g., trees, shrubs, dune grasses), fine-grained sand, imbedded large woody debris, and actively eroding bluffs are of particular importance. Headlands with concentrated seabird use are also significant.

Intertidal – Extends from the OHWM to the extreme lower low water (ELLW). Intertidal areas consisting of rocky substrate, native vegetation (e.g., eelgrass,[2] macroalgae, emergent vegetation) or habitat-forming species (e.g., native oyster reefs) are of particular importance. Intertidal areas within a river/stream delta, estuarine embayment, or a pocket beach, or an area used for spawning by forage fish are also significant.

Subtidal – Extends from ELLW to -30 meters. Subtidal areas consisting of rocky substrate, native vegetation (e.g., eelgrass,[2] macroalgae), or habitat-forming species (e.g., sea pens, native oyster reefs) are of particular importance. Subtidal areas within an estuarine embayment or an area used for spawning by forage fish are also significant.

## Washington Distribution by County

Online information and guidelines for management of **Puget Sound Nearshore**:

Protecting Nearshore Habitat and Functions in Puget Sound

SalmonScape (site helps planners identify and prioritize restoration and protection activities)

White Paper - Protection of Marine Riparian Functions in Puget Sound, Washington

[1] WDFW does not map the entire nearshore in the PHS database. Nearshore should be located by accessing other data sources (e.g., DNRs ShoreZone Inventory). WDFW maps some nearshore habitat elements (e.g., kelp, eelgrass beds) using DNR data.

[2] This reference to eelgrass excludes *Zostera japonica*.

# Appendices

## Appendix 1. Glossary of nearshore priority habitat terminology.

Embayment – An indentation in a shoreline forming an open bay.

Extreme Lower Low Water – The lowest tide occurring during a lunar month, usually near the new or full moon.

Habitat-forming species – An organism that creates or modifies habitats that are in turn used by other organisms for shelter, feeding, or other purposes. In the marine environment, this typically is a sessile organism such as corals or barnacles.

Ordinary High Water Mark – A mark that will be found by examining the bed and banks and ascertaining where the presence and action of waters are so common and usual, and so long continued in all ordinary years, as to mark upon the soil a character distinct from that of the abutting upland.

Relatively Undisturbed Nearshore – Any nearshore habitats that retain some essential elements or functions important to the maintenance of native species use (e.g., native eelgrass for herring spawning).

Rocky substrate – Seafloors and land consisting of rocks, boulders, bedrock, and consolidated sediments exceeding 10 inches in diameter. Consolidated sediments consist of aggregates of clay, sand, gravel, and cobble compressed in to hard texture features resembling rock.