

Lower Columbia Basin

Description

The lower Columbia is a relatively small basin draining the westernmost floodplains and tidal reaches of the Columbia River. Skipanon, Young's, and Clatskanie rivers flow into the lower Columbia from the Coast Range. About 43% of the basin is publicly owned.

This OWEB basin also includes the Sandy River watershed, which flows from the west side of Mt. Hood to join the Columbia near the community of Troutdale. The Sandy basin is heavily forested, and provides significant drinking water, recreational and fish and wildlife benefits in close proximity to Oregon's largest metropolitan area. Portions of the Sandy are protected under the state and federal wild and scenic rivers programs.

The lower Columbia's tidal wetlands serve as the gateway between the entire Columbia system and the Pacific and are extremely important for anadromous fish, especially young out-migrating salmon seeking food and cover prior to entering the ocean. Nearly two-thirds of the shallow marshes and side channels along the lower Columbia have been converted to other uses, primarily farm and pastureland but also, more recently, hybrid cottonwood plantations. Restoring tidal wetlands is considered critical to ecosystem health on the lower Columbia.

The Oregon Biodiversity Project identified Columbia River bottomlands as a conservation opportunity area, noting that since there is already significant public ownership in these areas, it is possible to restore and manage critical wetlands on a larger scale than in some other parts of the state. The Lower Columbia River Estuary Management Plan seeks to restore 3000 acres of tidal wetlands along the lower 46 miles of the river in order to return tidal wetlands to 50% of their 1948 level. The priority attributes identified for this basin are consistent with these recommendations.

Priority Ecological Systems

Coastal western hemlock forest
Depressional wetland shrublands
Freshwater aquatic beds
Freshwater emergent marsh
Freshwater mudflats⁶
Herbaceous balds and bluffs
Intertidal freshwater wetlands
Intertidal mudflat
Lowland riparian woodland and shrubland

⁶ Freshwater and intertidal mudflats and tidal salt marsh in the lower Columbia Basin are for the most part already in public ownership as state-owned submerged and submersible lands. From an ecological standpoint, they are clearly a high priority – significantly reduced from historic levels and providing important fish and wildlife habitat. Proposals to acquire lands and restore them to these system types should be considered a high priority by OWEB in this basin.

Oak woodland⁷
Sitka spruce forest
Subalpine or montane wet meadow
Tidal salt marsh
Western Oregon upland prairie and oak savanna
Western Oregon wet prairie

Rare or At-Risk Plant Communities

Bigleaf maple - red alder / sword fern - fringe cup
Black cottonwood - red alder / salmonberry
Black cottonwood / creek dogwood / touch - me - not
Bog blueberry / slough sedge shrub swamp
Bog blueberry / sphagnum shrub swamp
Bog blueberry / tufted hairgrass - slough sedge shrub swamp
Brodiaea prairie
California oatgrass valley grassland
Columbia sedge marsh
Common downingia vernal pool
Creeping lovegrass - lowland cudweed vernal pool
Creeping spikerush - one-sided sedge marsh
Creeping spikerush - water purslane marsh
Dense sedge - tufted hairgrass prairie
Douglas spiraea - bog blueberry / slough sedge / sphagnum
Douglas spiraea / sphagnum fen
Fragrant popcorn-flower vernal pool
Geyer willow - Piper willow
Lobb buttercup aquatic bed
Martindale lomatium rock garden
Nootka rose / tufted hairgrass brush prairie
Nootka rose / water parsley shrub swamp
One-sided sedge - meadow barley prairie
Oregon ash / Dewey sedge - stinging nettle
Oregon ash / spreading rush
Pacific willow / stinging nettle
Roemer fescue valley prairie
Sitka spruce / creek dogwood - Hooker willow tideland
Tufted hairgrass - California oatgrass valley prairie
Water purslane - waterpepper marsh
Western hemlock / western Labrador tea / slough sedge - skunk cabbage swamp
Western Labrador tea / darlingtonia / sphagnum bog
Western Labrador tea / slough sedge / sphagnum bog
White oak / Idaho fescue savanna
White oak / snowberry / sword fern

⁷ Prairie and oak systems are extremely rare in the Lower Columbia Basin; any occurrences would easily meet the criteria for high priority systems.

Lower Columbia Basin – Priority Species

<i>Fish</i>	<i>Birds</i>	<i>Mammals</i>	<i>Amphibians and Reptiles</i>	<i>Invertebrates</i>	<i>Plants</i>
Chinook Salmon (Fall Run) Chum salmon Coastal Cutthroat Trout Coho Salmon Pacific Lamprey Steelhead Trout	Bald Eagle (nest sites only) Band-Tailed Pigeon Bullock’s Oriole Dunlin Great-blue Heron (nest/roost sites only) Olive-Sided Flycatcher Pacific Slope Flycatcher Peregrine Falcon (nest sites only) Purple Finch Sandhill Crane Trumpeter Swan Willow Flycatcher	Columbian White-Tailed Deer Townsend’s Bib-Eared Bat	Cope’s Giant Salamander Red-legged Frog	<i>Anodonta californiensis</i> (California Floater) <i>Deroceras hesperium</i> (Evening Fieldslug)	<i>Howellia aquatilis</i> (Howellia)