



Oregon Coordinated Aquatic Bird Monitoring:
Description of Important Aquatic Bird Site

Coos Bay

BCS number: 47-8

*****NOTE:** *The completion of this site description is still in progress by our Primary Contact (listed below). However, if you would like to contribute additional information to this description, please contact the Klamath Bird Observatory at kbo@klamathbird.org.*

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Site location (UTM)

Datum: NAD83, Zone: 10, Easting: 394143, Northing: 4802686

General description

The Coos Bay estuary covers 54 square miles of open channels and tide flats located near the towns of the Coos Bay and North Bend on the southern Oregon coast. The estuary ranges between a mile and a mile and a half wide. A 42 ft. deep, sixteen-mile long ship channel is maintained from the harbor entrance to the Port of Coos Bay. Numerous slough systems and freshwater channels flow into Coos Bay. The narrow estuary is maintained at its mouth by two rock jetties extending from North Spit on the north and Coos Head on the south. From the harbor entrance the main channel bears northward past the communities of Charleston, Barview and Empire, then east around the city of North Bend, and south past downtown Coos Bay. At Coos Bay the channel bears east to the mouth of the Coos River. About two miles upstream the river divides into the Millicoma River on the left and the South Fork of the Coos River on the right. (Provided by Jennifer Powers)

Boundaries and ownership

Boundaries:

The South Slough subestuary is located directly south of the mouth of Coos Bay in Charleston. North Slough and Haynes Inlet enter the bay from the north, across from the city of North Bend. Pony Slough drains northward through the city of North Bend to the bay. Kentuck Inlet and Willanch, Catching, Isthmus, Coalbank, and Shinglehouse sloughs flow into the eastern and southern portions of the bay. The Coos and Millicoma Rivers above the head of tide contribute approximately 60 percent of the fresh water entering Coos Bay. (Provided by Jennifer Powers)

Ownership:

Ownership is variable between private ownership, industrial uses, commercial purposes, and reserve lands for research studies.

Water levels

“About half of the estuary is dominated by marine waters that enter on flooding tides. The remaining half is composed of a mixture of mesohaline and riverine waters (Figure 2). Nearly 50 percent of the total volume of the estuary is within the tidal prism. A 42 ft. deep (MLLW), sixteen-milelong ship channel is maintained from the harbor entrance to the Port of Coos Bay. At low tide, a substantial portion of water in the bay is held within the ship channel. Extensive tide flats flanking the ship channel are exposed at low tide.” (Garfield et al. 2005)

Focal species use and timing

The Coos Bay estuary provides abundant food and water resources that draw nearly every species of duck in the Pacific flyway and several kinds of geese, to visit during the year. Also the bay’s rich and varied habitats ranging from forest to tidal mudflats and from cattail marshes to marine waters combine with its moderate climate entice many to overwinter. (Provided by Jennifer Powers)

Focal Group/Species	Wintering	Breeding	Migration
Secretive Marsh Bird Group	Unknown	Present	Unknown
Colonial Nesting Bird Group	Present	Present	Present
Migrating Shorebird Group	Present	Present	Present
Ground-based Waterbird Group	Present	Present	Present
American Bittern	Unknown	Unknown	Unknown
American White Pelican	Unknown	Unknown	Unknown
Barrow's Goldeneye	Present	Unknown	Unknown
Black Tern	Unknown	Unknown	Unknown
Black-crowned Night Heron	Unknown	Unknown	Unknown
Black-necked Stilt	Unknown	Unknown	Unknown
Bufflehead	Present	Unknown	Unknown
California Gull	Unknown	Present	Present
Caspian Tern	Unknown	Present	Unknown
Clark's Grebe	Present	Unknown	
Common Loon	Present	Unknown	Present
Dusky Canada Goose	Unknown	Unknown	Unknown
Eared Grebe	Unknown	Unknown	Unknown
Forster's Tern	Unknown	Unknown	Unknown
Franklin's Gull	Unknown	Unknown	Unknown
Great Blue Heron	Present	Present	Present
Greater Sandhill Crane	Unknown	Unknown	Unknown
Green Heron	Unknown	Unknown	Unknown
Least Bittern	Unknown	Unknown	Unknown
Lesser Sandhill Crane	Unknown	Unknown	Unknown
Long-billed Curlew	Present	Unknown	Unknown
Pied-billed Grebe	Present	Present	Unknown
Red-necked Grebe	Present	Unknown	Present
Snowy Egret	Present	Present	Unknown
Sora	Unknown	Present	Unknown
Upland Sandpiper	Unknown	Unknown	Unknown
Virginia Rail	Unknown	Unknown	Unknown
Western Grebe	Unknown	Present	Present
Western Snowy Plover	Unknown	Unknown	Unknown
White-faced Ibis	Unknown	Unknown	Unknown
Yellow Rail	Unknown	Unknown	Unknown

Focal Species information collected from eBird species checklist data (2008-2010)

Location of Type 1 and 2 habitat within the site

Functional Group	Type 1 Habitat	Type 2 Habitat
Ground Based Aquatic Birds	Tidal Flats, Eelgrass Beds	Unknown
Secretive Marsh Birds	Tidal Marshes, Eelgrass Beds	Unknown
Colonial Nesters	Emergent Vegetation, Riparian Habitat	Unknown
Migrating Shorebirds	Tidal Flats, Tidal Marshes	Unknown

Access to Type 1 and Type 2 habitats

Briefly describe challenging aspects of accessing bird habitat., e.g. the road to aspen lake has not been graded for many years, 4WD is recommended. Or access by boat only
Unknown

Audibility/visibility of focal species

Describe any issues that would diminish the detectability of birds. e.g Secretive marsh birds are difficult to detect due to hwy noise
Unknown

Conservation issues

- Sedimentation in the bay
- Invasive species introduced from transportation vessels
- Water supply and use for domestic/industrial purposes
- Fishing/shellfish harvesting in the bay

Conservation measures taken, in progress, or proposed

“The nation's first Estuarine Research Reserve, [the South Slough National Estuarine Research Reserve] was established here in 1974 on seven square miles of abandoned farmland and cut-over forest bordering Coos Bay's South Slough.... Many are watching the reclamation experiments taking place at SSNERR to see how wildlife and plants flourish when estuary dikes are breached and upland forests allowed to re-grow.”
(Oregon Coastal Atlas n.d.)

Past and current surveys

Briefly describe past and or current surveys, and how completed. Refer to certain protocols/other documents or persons (list contact info) if survey specifics are unknown
Unknown

Potential survey methods

Description: (describe survey methods that are appropriate for your site and recommend the best means in which to complete them considering the limitations and history above. Include information on suggested standardized or specialized protocols)
Unknown

Selection bias: (Discuss the potential for selection bias when designing a survey in the future, especially when sub-sample of the site will be studied. Point out how bias could be introduced and recommend ways to prevent this)
Unknown

Measurement error and bias:

Unknown

Potential pilot studies

Unknown

Literature cited

- eBird. 2010. eBird: An online database of bird distribution and abundance [web application]. Version 2. eBird, Ithaca, New York. Available: <http://www.ebird.org>. Accessed May 13, 2010.
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- Google, Inc. 2010. Coos Bay. Google Earth (Version 5.1.3533.1731) [Software]. Available from <http://earth.google.com>. Accessed May 13, 2010.
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- Oregon Coastal Atlas. n.d. Coos Bay Estuary. http://www.coastalatlantlas.net/index.php?option=com_custompages&e=14&Itemid=68. Accessed May 13, 2010.
- U. S. Fish and Wildlife Service (USFWS). 2010. National Wetlands Inventory website. U.S. Department of the Interior, Fish and Wildlife Service, Washington, D.C. <http://www.fws.gov/wetlands/>. Accessed May 13, 2010.

Figure 1: Google Earth (2010) map of Coos Bay, Oregon with the USFWS National Wetlands Inventory (2010) layer.

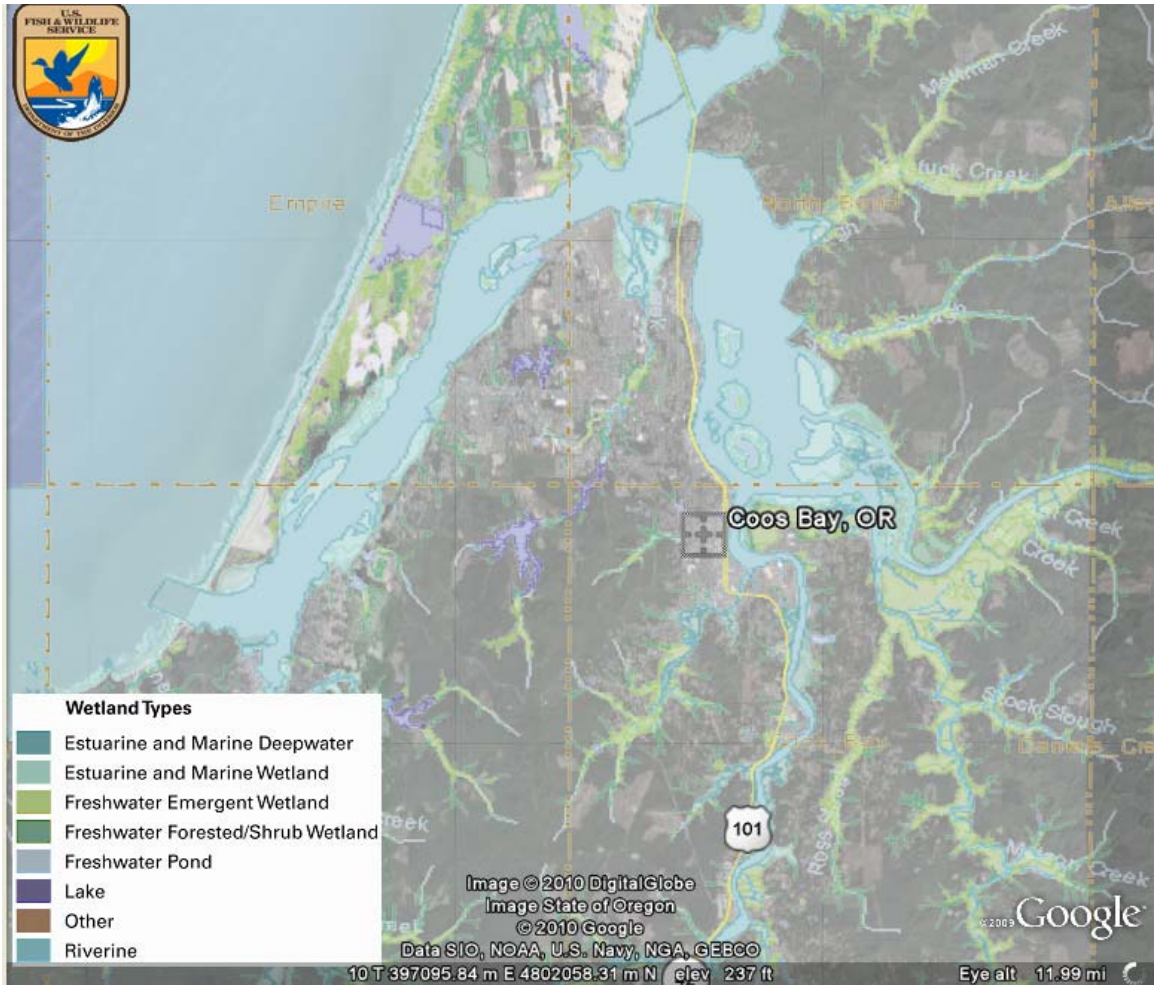


Figure 2: Lower Coos Bay map (Garfield et al. 2005) showing harbor entrance and shipping channel.



Figure 2.

Lower Coos Bay showing harbor entrance and shipping channel

-  Marine Dominated
-  Mesohaline
-  Riverine
-  Shipping Channel

Figure 3: Google Map (2010) road view of Coos Bay.

