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

Umpqua River Estuary & Winchester Bay

BCS number: 47-39

***NOTE: *We were unable to determine all necessary information for this site description. If you would like to contribute the needed information to this description, please contact the Klamath Bird Observatory at kbo@klamathbird.org.*

Site description author(s)
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Primary contact for this site
N/A

Site location (UTM)
Datum: NAD83, Zone: 10, Easting: 406092, Northing: 4842397

General description
"The [Umpqua River] estuary is approximately 6544 acres in area and has a watershed of approximately 605 square miles. The Umpqua River estuary is designated as a Shallow Draft Development estuary under the Oregon Estuary Classification system [Jennings, Jennings, and Bailey 2003]. The geomorphology of the area is that of a River Dominated Drowned River Mouth estuary." (Oregon Coastal Atlas n.d.)

Boundaries and ownership
Boundaries:
Located in Douglas County, Umpqua River Estuary is located on the Oregon coast at Reedsport and Winchester Bay, west of Hwy 101. The estuary opens to the ocean at the southern tip of the Oregon Dunes National Recreational Area, and to the north of the Umpqua River Light.

Winchester Bay is accessed from Hwy 101 and borders the estuary on the southern shore with a bay formed as an inlet from the estuary, primarily consisting of boat docks and crabbing spots.

Ownership:
Unknown

Water levels
Briefly outline historical water levels, since being managed. What causes water level fluctuations? How does water level fluctuate throughout the year?
Unknown, but water levels will increase and decrease with tidal fluctuations.

Focal species use and timing

Please indicate Presence/Absence/Unknown for each species and section of annual cycle. If you feel like adding another guild or species that is important to the area and warrants more interest, indicate it in the blank spaces at the bottom.

Focal Group/Species	Wintering	Breeding	Migration
Secretive Marsh Bird Group	Unknown	Unknown	Unknown
Colonial Nesting Bird Group	Unknown	Present	Present
Migrating Shorebird Group	Present	Present	Present
Ground-based Waterbird Group	Unknown	Unknown	Unknown
American Bittern	Unknown	Unknown	Unknown
American White Pelican	Unknown	Unknown	Unknown
Barrow's Goldeneye	Unknown	Unknown	Unknown
Black Tern	Unknown	Unknown	Unknown
Black-crowned Night Heron	Unknown	Unknown	Unknown
Black-necked Stilt	Unknown	Unknown	Unknown
Bufflehead	Unknown	Unknown	Unknown
California Gull	Unknown	Present	Present
Caspian Tern	Unknown	Unknown	Unknown
Clark's Grebe	Unknown	Unknown	Unknown
Common Loon	Unknown	Unknown	Unknown
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	Unknown	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	Unknown	Unknown	Unknown
Pied-billed Grebe	Unknown	Unknown	Unknown
Red-necked Grebe	Unknown	Unknown	Unknown
Snowy Egret	Unknown	Unknown	Unknown
Sora	Unknown	Unknown	Unknown
Upland Sandpiper	Unknown	Unknown	Unknown
Virginia Rail	Unknown	Unknown	Unknown
Western Grebe	Unknown	Present	Unknown
Western Snowy Plover	Unknown	Unknown	Unknown
White-faced Ibis	Unknown	Unknown	Unknown
Yellow Rail	Unknown	Unknown	Unknown

Location of Type 1 and 2 habitat within the site

Functional Group	Type 1 Habitat	Type 2 Habitat
Ground Based Aquatic Birds	Mudflats, submerged vegetation	Unknown
Secretive Marsh Birds	Saltmarshes, emergent vegetation	Unknown
Colonial Nesters	Emergent vegetation	Unknown
Migrating Shorebirds	Sandflats, mudflats,	Unknown

Access to Type 1 and Type 2 habitats
Access to the estuary by foot can be gained through Winchester Bay at the harbor or shorelines. There are few roads that give direct access to the estuary aside from Salmon Harbor Drive which navigates the edge of the estuary and Winchester Bay on the southern edge of the estuary. The Oregon Dunes National Recreational Area to the north of the estuary and on the opposite shore from Winchester Bay would offer good viewing spots so long as navigation through the area is possible. Other than that, access by boat would give the best range of viewing options.

Audibility/visibility of focal species
Unknown, but Winchester Bay has harbors with boats docking and leaving which may compromise the ability to observe timid species.

Conservation issues
Many bivalves and crabs are harvested from the estuary, which is a major food source for many of the aquatic birds in the area especially migrating shorebirds.

Conservation measures taken, in progress, or proposed
Aquaculture of bivalves has been proposed and is becoming an industry in the area to sustain populations of oysters. "[F]ood-grade tanks are filled with warmed incubation water from the Umpqua Estuary at high tide, rich in algae and phytoplankton.... After the young oysters are attached, the temperature of the incubation tanks is gradually lowered to match the temperature of the bay. The young oysters, now called spat, are moved in their nets to the triangular breakwater to grow." (Umpqua Aquaculture Inc., 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

Jennings, A., T. Jennings, and R. Bailey. 2003. Estuary management in the Pacific Northwest: an overview of programs and activities in Washington, Oregon, and Northern California. Pacific Northwest Coastal Ecosystems Regional Study/Oregon Sea Grant, Corvallis, Oregon. ORESU-H-03-0111. 126 pp.

Google, Inc. 2010. Umpqua River Estuary and Winchester Bay. Google Earth (Version 5.1.3533.1731) [Software]. Available from http://earth.google.com. Accessed April 22, 2010.

Google Map. 2010. Map of Umpqua River Estuary and Winchester Bay, Oregon. http://maps.google.com/. Accessed April 22, 2010.

National Audubon Society. 2010. Important Bird Areas in the U.S. Available at http://audubonportland.org/local-birding/iba/iba-map/umpqua. Accesses April 22, 2010.

Oregon Coastal Atlas. n.d. Umpqua River Estuary. http://www.coastalatlas.net/index.php?option=com_custompages&e=13&Itemid=68. Accessed April 22, 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 April 22, 2010.

Umpqua Aquaculture Inc. n.d. Oregon grown Umpqua triangle oysters. http://www.umpquaoysters.com/Growing-Oysters-from-Seed.html. Accessed April 22, 2010.

Figure 1: Google Earth (2010) map of Umpqua River Estuary and Winchester Bay with the USFWS National Wetlands Inventory (2010) layer.

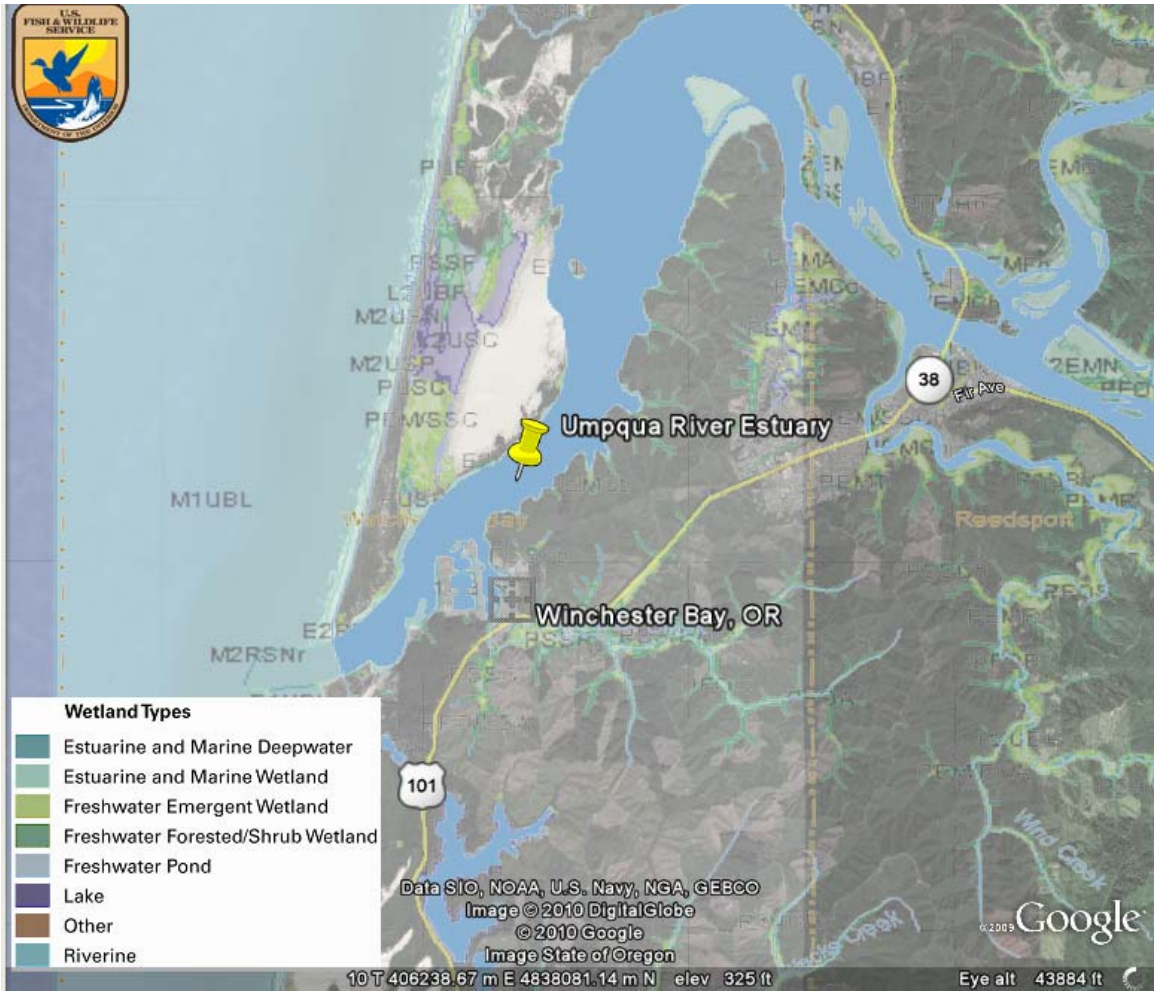

Figure 2: Google Map (2010) road view of Umpqua River Estuary and Winchester Bay.