



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

Siuslaw River Estuary

BCS number 47-32

Site description author(s)

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Site Location (UTM)

Datum: NAD 83, Zone: 10, Easting: 411590, Northing: 4868720

General description

“The Siuslaw River enters the Pacific Ocean near Florence, on the central Oregon coast, Lane County [. . .] [and] includes submerged lands, tidelands, and lower salt marshes of the Siuslaw River from Duncan Inlet downstream to the mouth of the river.” (National Audubon Society 2010). The total size of the Siuslaw estuary was measured at 3,060 acres in 1970, and is possibly larger today due to restoration of diked former wetlands (Good 2000, but see Ecotrust 2002 under “Water levels” below).

Boundaries and ownership

Boundaries:

The mouth of the estuary is bordered by the Pacific Ocean, the city of Florence and the Oregon Dunes National Recreation Area; it continues eastward through the Siuslaw National Forest to just west of the city of Mapleton, at the junction of State Highways 36 and 126 (Google, Inc. 2009).

Ownership:

Combination of U.S. Forest Service, private industrial and private non-industrial land (Ecotrust 2002).

Water levels

Water levels are much lower today than they have been historically because of diking and drainage of over half of the original wetlands in the estuary below Mapleton (Ecotrust 2002).

Focal species use and timing

Large numbers of shorebirds, mostly peeps, are found in the area during spring and fall migrations (Bayer and Lowe 1988, Page et al. 1992). The estuary is an important wintering area for Tundra Swans (Bayer and Lowe 1988).

Focal Group/Species	Wintering	Breeding	Migration
Secretive Marsh Bird Group	Present ⁴	Unknown	Unknown
Colonial Nesting Bird Group	Present ^{1,3,4}	Unknown	Present ^{1,3,4}
Migrating Shorebird Group	Present ^{1,3,4}	Unknown	Present ^{1,2}
Ground-based Waterbird Group	Present ^{1,3}	Present ³	Present ³
American Bittern	Unknown	Present ⁴	Present ⁴
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	Present ^{3,4}	Unknown	Present ⁴
California Gull	Present ⁴	Present ⁴	Present ^{3,4}
Caspian Tern	Unknown	Present ⁴	Present ³
Clark's Grebe	Unknown	Unknown	Unknown
Common Loon	Present ⁴	Present ⁴	Present ⁴
Dusky Canada Goose	Unknown	Unknown	Unknown
Eared Grebe	Unknown	Unknown	Present ⁴
Forster's Tern	Unknown	Unknown	Unknown
Franklin's Gull	Unknown	Unknown	Unknown
Great Blue Heron	Present ⁴	Present ⁴	Present ^{3,4}
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	Present ⁴	Present ⁴
Pied-billed Grebe	Unknown	Unknown	Unknown
Red-necked Grebe	Present ⁴	Unknown	Present ⁴
Snowy Egret	Present	Unknown	Present ³
Sora	Unknown	Unknown	Unknown
Upland Sandpiper	Unknown	Unknown	Unknown
Virginia Rail	Present ⁴	Unknown	Unknown
Western Grebe	Present ⁴	Unknown	Present ⁴
Western Snowy Plover	Unknown	Unknown	Unknown
White-faced Ibis	Unknown	Unknown	Unknown
Yellow Rail	Unknown	Unknown	Unknown
Tundra Swan	Present ¹	Unknown	Present ¹

1. Bayer and Lowe (1988)
2. Page, et al. (1992).
3. eBird (2009).
4. Birdnotes (n.d.).

Location of Type 1 and 2 habitat within the site

See Figure 1 for distribution of major habitat types within the site.

Functional Group	Type 1 Habitat	Type 2 Habitat
Ground Based Aquatic Birds	Wetlands / Emergent Herbaceous Wetlands	Water / Open Water
Secretive Marsh Birds	Tidal Marshes	Water / Open Water
Colonial Nesters	Wetlands / Emergent Herbaceous Wetlands	Water / Open Water
Migrating Shorebirds	Mudflat or Littoral	Water / Open Water

Access to Type 1 and Type 2 habitats

- “Winds can pick up late in the day and can make for difficult paddling [...] It is suggested that boaters do not paddle beyond the Lane County rock dock” (SWT n.d.).
- Ocean swells can be large and currents can be strong along the Surf the Jetty trail. The river can experience drastic tidal flux along the South Bank Adventure Loop, which can result in being stuck in the mud of the tidal flats. (SWT n.d.).
- See Figure 2 for general road access and Figure 3 for a water trail map of the estuary.

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

“About 58% of the original wetlands in the estuary below Mapleton have been diked or drained. Dredging of the channel, and the funneling effect of the jetty likely results in a leakage of wood and nutrients to the ocean [...] Most of the remaining wetlands in the estuary are privately owned and only partly protected from development” (Ecotrust 2002).

Conservation measures taken, in progress, or proposed

Plans to restore former tidal wetlands in parts of the estuary by removing dikes and tidegates (Ecotrust 2002).

Past and current surveys

- Monthly aerial censusing of waterfowl, 1978-1987 by USFWS biologists (Bayer and Lowe 1988).
- 90 bird and mammal censuses, 1979-1981, using bionoculars and zoom spotting scope (Bayer and Lowe 1988)
- 11 days of bird and mammal censusing in September 1986-July 1987, using binoculars or telescope (Bayer and Lowe 1988).

Potential survey methods

Description:

“In spite of some shortcomings of aerial censusing, the USFWS aerial censuses are the only feasible way to regularly census the entire Siuslaw Estuary and the Oregon Coast” (Bayer and Lowe 1988).

Selection bias:

Censusing only the shallow waters of embayments and not the deep Siuslaw Channel would result in low numbers of loons, grebes, cormorants, and alcids (Bayer and Lowe 1988).

Measurement error and bias:

Unknown

Potential Pilot Studies

Unknown

Literature cited

- Bayer, R.D. and Lowe, R.W. 1988. Waterbird and Mammal Censuses at Siuslaw Estuary, Lane County, Oregon. *Studies in Oregon Ornithology*. No. 4. 101 pp.
<http://hdl.handle.net/1957/8416>. Accessed February 06, 2010.
- Birdnotes. n.d. Birdnotes.net website. Available at <http://www.birdnotes.net>. Accessed February 23, 2010.
- eBird. 2010. eBird: An online database of bird distribution and abundance [web application]. Version 2. eBird, Ithaca, New York. Available at <http://www.ebird.org>. Accessed February 23, 2010.
- Ecotrust. 2002. A Watershed Assessment for the Siuslaw Basin.
<http://www.inforain.org/siuslaw>. Accessed February 06, 2010.
- Good, J.W. 2000. Summary and Current Status of Oregon's Estuarine Ecosystems. Chapter III: Health of Natural Systems and Resources. Oregon State of the Environment Report. Oregon progress board. pp. 33-44.
http://www.shiba.oregon.gov/DSL/WETLAND/docs/soer_ch33.pdf. Accessed February 06, 2010.
- Google Map. 2010. Map of Siuslaw River. <http://maps.google.com/>. Accessed February 06, 2010.
- National Audubon Society. 2010. Important Bird Areas in the U.S.
Available at <http://www.audubon.org/bird/iba>. Accessed February 05, 2010.
- Page, G.W., W.D. Shuford, J.E. Kjelson and L.E. Stenzel. 1992. Shorebird Numbers in Wetlands of the Pacific Flyway: A Summary of Counts from April 1988 to January 1992. Point Reyes Bird Observatory. Stinson Beach, California.
- Siuslaw Water Trail (SWT). n.d. <http://www.siuslawwatertrail.com>. Accessed February 06, 2010.

Figure 1: Ecotrust (2002) map of Siuslaw Estuary Major Habitat Types.

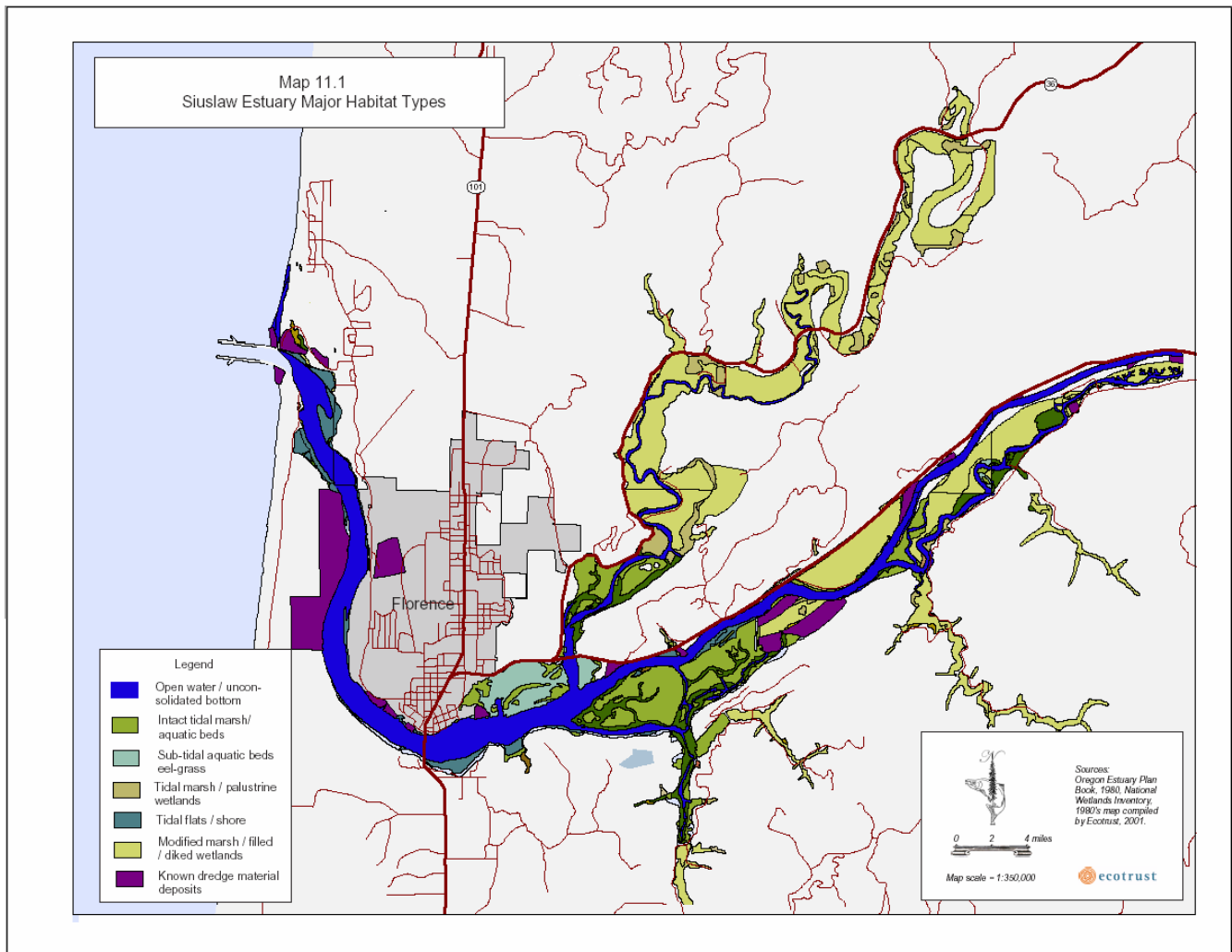


Figure 2: Google Map (2010) road view map of Siuslaw River Estuary.

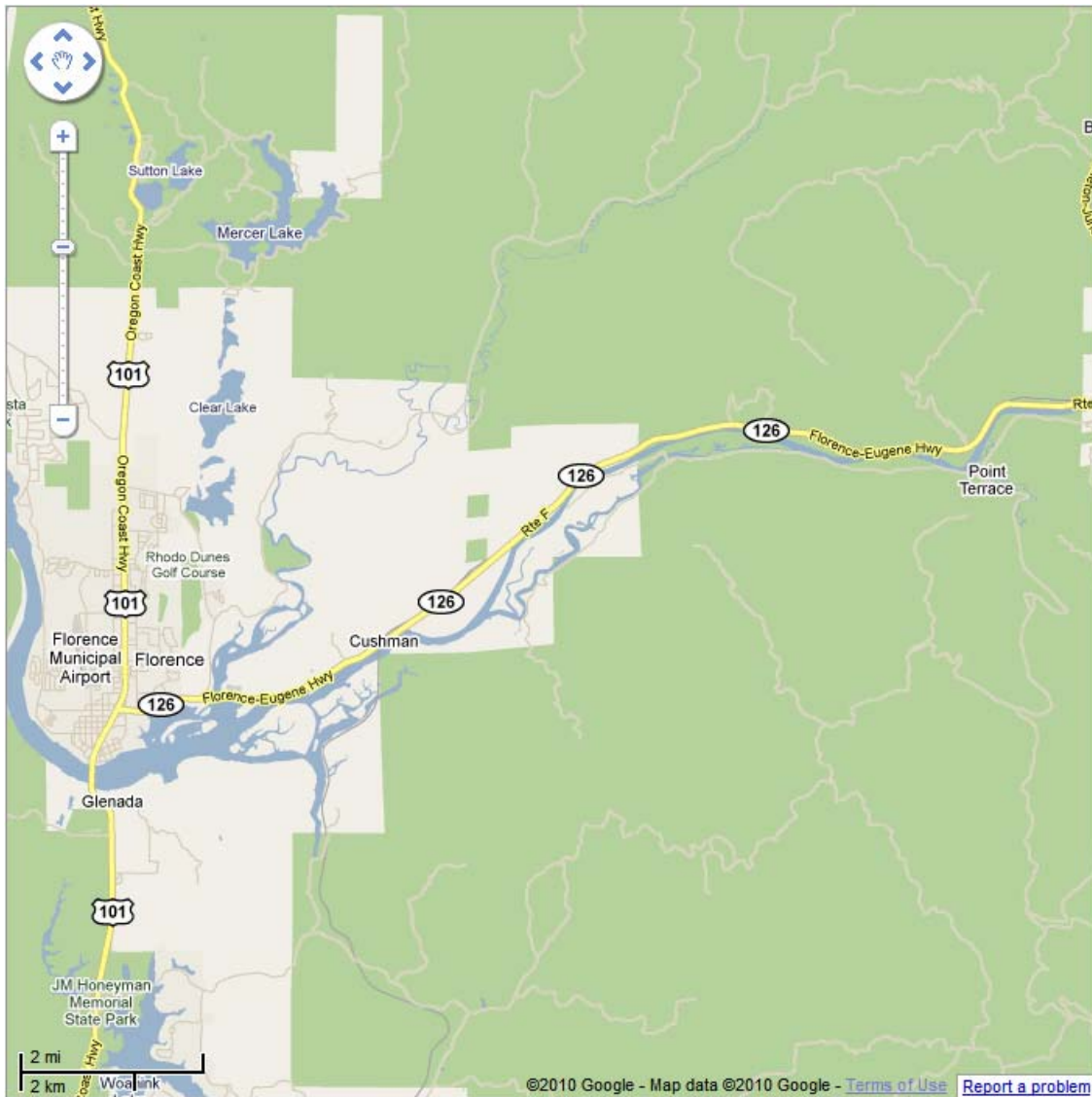


Figure 3: Siuslaw Estuary Water Trail (2010) Map.

