



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



Chewaucan Marsh

BCS number: 48-6

Site description author(s)

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Site location (UTM)

Datum: NAD 83, Zone: 10, Easting: 726949, Northing: 4714054

General description

The Chewaucan River drains into Upper and Lower Chewaucan Marshes near Paisley and terminates in Lake Abert. The privately-owned Chewaucan marshes contain about 30,000 acres that have been developed into flood-irrigated wet meadow habitats, managed for hay and livestock production. More information can be found in "The Chewaucan River" (2004). See Figure 1 for map of Upper and Lower Chewaucan Marsh (Google Earth 2009).

Boundaries and ownership

Boundaries: The boundaries of Chewaucan marsh are clearly defined by wetland habitat within the Abert Basin, Oregon. There are two areas of this site: Upper Chewaucan Marsh (UCM) and Lower Chewaucan Marsh (LCM). Upper Chewaucan Marsh is bordered on the west and south sides mostly by Highway 31 (Fremont HWY) from Paisley to The Narrows and to the north and east sides by Red House Road. Lower Chewaucan Marsh starts at the narrows and extends southwest to Clover Flat Road near Valley Falls. There is wetland basin fringe on the north and east sides of Upper Marsh adjacent to Coglan Buttes and on the west and south side of Lower Marsh adjacent to Tucker Hills.

Ownership: Chewaucan Marsh is owned by non-industry private landowners, specifically two large corporation ranches (ZX and J Spear) plus two large established and long time owned family ranches. See Figure 2 for BLM Lakeview District ownership map.

Water levels

Historically water flowed into Chewaucan Marsh via the large (>235 sq. mi.) Chewaucan watershed, which emptied into Abert Lake. Water level management since the early 1900’s has been dictated primarily by spring run-off from the Chewaucan River watershed and secondly by irrigation diversion. Irrigation diversion begins in late winter (Jan.-Feb.) and fields or subunits are rotationally flooded throughout spring into early summer. Several large sumps exist as water is drained from fields in mid to late summer to facilitate drying prior to mowing vegetation for hay. Water level fluctuations sometimes occur during summer in portions utilized as grazed pastures.

Focal species use and timing

Managed habitat at Chewaucan Marsh provides very important and critical spring staging habitat for migrant ducks (especially Northern Pintail), Tule White-fronted Geese and Wrangel Island/Western Canadian Arctic Population Snow Geese. These areas support very high densities of nesting Canada geese, ducks, American Coots and Sandhill Cranes, and have supported nesting colonies of White-faced Ibises, Black-crowned Night-herons, Great Egrets and Snowy Egrets in recent years. Nesting secretive marsh birds are probably very prolific in Chewaucan Marsh. Trumpeter Swans have successfully nested in the Upper Chewaucan Marsh (Ivey 2000, Martin J. St. Louis, personal communication). In 1994, there were 44 pairs of nesting Sandhill Cranes in Chewaucan Marsh (Littlefield et al. 1994).

Focal Guild/Species	Wintering	Breeding	Migration
Secretive Marsh Birds*	Unknown	Present	Present
Colonial Nesting Waterbirds	Unknown	Present	Present
Ground-based Aquatic Birds	Unknown	Present	Present
Migrating Shorebirds	Unknown	Present	Present
American White Pelican			
Barrow’s Goldeneye			
Black-necked Stilt	Unknown	Present	Present
Bufflehead			
Dusky Canada Goose	Unknown	Present	Present
Franklin’s Gull			
Greater Sandhill Crane	Unknown	Present	Present
Long-billed Curlew	Unknown	Present	Present
Snowy Egret	Unknown	Present	Present
Red-Necked Grebe			
Upland Sandpiper			
Western Snowy Plover			
Yellow Rail	Unknown	Present	Present

*The focal species for Oregon’s secretive marsh bird monitoring are PBGR, LEBI, AMBI, VIRA, SORA, YERA. In general focal species above are present from late March through November.

Breeding and migrating waterfowl:

American Wigeon
Blue-winged Teal
Canada Goose
Canvasback
Cinnamon Teal
Gadwall
Green-winged Teal
Lesser Scaup
Mallard
Northern Shoveler
Northern Pintail
Redhead
Ring-necked Duck
Ruddy Duck

Breeding and migrating secretive marsh birds:

American Bittern
Pied-billed Grebe
Sora
Virginia Rail
Yellow Rail

Breeding and migrating colonial nesting water birds:

Black-crowned Night Heron
Black Tern
Forester's Tern
Great Egret
Ring-billed Gull
White-faced Ibis

Breeding and migrating ground based aquatic birds:

American Coot
American Avocet
Common Snipe
Common Yellowthroat
Killdeer
Marsh Wren
Red-winged Blackbird
Spotted Sandpiper
Tricolored Blackbird
Willet
Wilson's Phalarope
Yellow-headed Blackbird

Migrating shorebirds:

Black-bellied Plover
Dunlin
Greater Yellowlegs
Least Sandpiper
Lesser Yellowlegs
Long-billed Dowitcher
Marbled Godwit
Pectoral Sandpiper
Short-billed Dowitcher
Western Sandpiper

Location of Type 1 and 2 habitat within the site*

Functional Group	Type 1 Habitat	Type 2 Habitat
Breeding waterfowl	Emergent, seasonally flooded and wet meadow wetlands for most species. Open water with tall emergent fringe important for diving ducks.	Open water areas
Colonial nesting waterbirds	Emergent and seasonally flooded wetlands.	Open water area
Secretive waterbirds	Emergent and seasonally flooded wetlands	Wet meadows
Ground based aquatic birds	Emergent, seasonally flooded and wet meadow wetlands.	Open water areas

*See Figure 2 for map of Upper and Lower Chewaucan Marsh (Google Earth 2009).

Access to type 1 and type 2 habitats

Access will be entirely at the discretion of private landowners. A road/canal network is present in portions of the interior and around most of the perimeter. See Figure 3 for general road view of Upper and Lower Chewaucan Marsh (Google Map 2009).

Audibility/visibility of focal species

Audibility/visibility should not be an issue.

Conservation issues

Privately owned land of this type can be drained at the landowner’s discretion. Periodic draining occurs now; change of current land use is a much greater threat. If land management moves away from agricultural uses to other uses, wetland habitat loss may result. Also, conversion from flood irrigation to sprinkler would diminish wetland and waterbird values.

Landowners may need more information for conservation issues to inform their management decisions.

Almost the entire perimeter of these marshes is bordered by high speed roads, creating a barrier for species that use habitat on both sides of the road. This issue is not great, since the Upper and Lower Marshes are discrete and connected by the Chewaucan River, similar to the neck of an hourglass.

Fire suppression, grazing and other land management has encouraged growth of pine/juniper stands and loss of aspen and willow in the Chewaucan River watershed, causing loss of biodiversity and risk of catastrophic wildfire (BLM Lakeview Field Office, 2000).

Diversion and channelizing of the Chewaucan river for irrigation and conversion of marshland to cattle pasture starting in the late 1800’s had caused loss of much of the historic Upper Chewaucan Marsh east of Paisley (Wray 2006). How this relates to the

existing condition, waterbird adaptation and future use is unclear. Diversion for irrigation maintains wetland features currently important to waterbirds. Livestock grazing and haying provides additional habitat diversity beneficial to several guilds of waterbirds. Grazing generally occurs post breeding season, fall through spring and not within fields to be hayed. Haying generally occurs later in breeding season or post-breeding season for most waterbird species.

Conservation measures taken, in progress, or proposed

The restoration of native redband trout runs started in 2002 (Wray 2006).

Past and current surveys

The Oregon Department of Fish and Wildlife (ODFW) conducts Statewide Waterfowl Breeding population surveys annually since mid-1990's, using two transects within emergent marsh portion of the site.

Colonial nesting water birds have been surveyed in important wetland basins across Lake County annually since 1990.

Potential survey methods

a. Description:

- Nest searches for grebes and other waterbirds nesting in the emergent vegetation in small colonies. Canoe will be necessary for access.
- Colony counts for nesting ibis, gulls, and terns. Aerial surveys will likely be necessary to at least determine location and size of any colonies in the area.
- Census for waterfowl on the open water using aerial surveys.
- Area searches for migrating shorebirds from observation points near Type 1 habitat.
- Census for gulls and terns during waterfowl counts

b. Selection bias:

c. Measurement error and bias:

Potential pilot studies

- Systematic sampling, probably including the use of playback calls, for secretive marsh birds from the road and from a canoe along channels.

Literature cited

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Wray, P. "A new chapter for the Chewaucan", *Oregonian*, Portland, Oregon, 26 June 2006.

Figure 1: Google Earth (2009) map of Upper and Lower Chewaucan Marsh.



Figure 2: BLM Lakeview District ownership map. The red box indicates Upper and Lower Chewaucan Marsh.

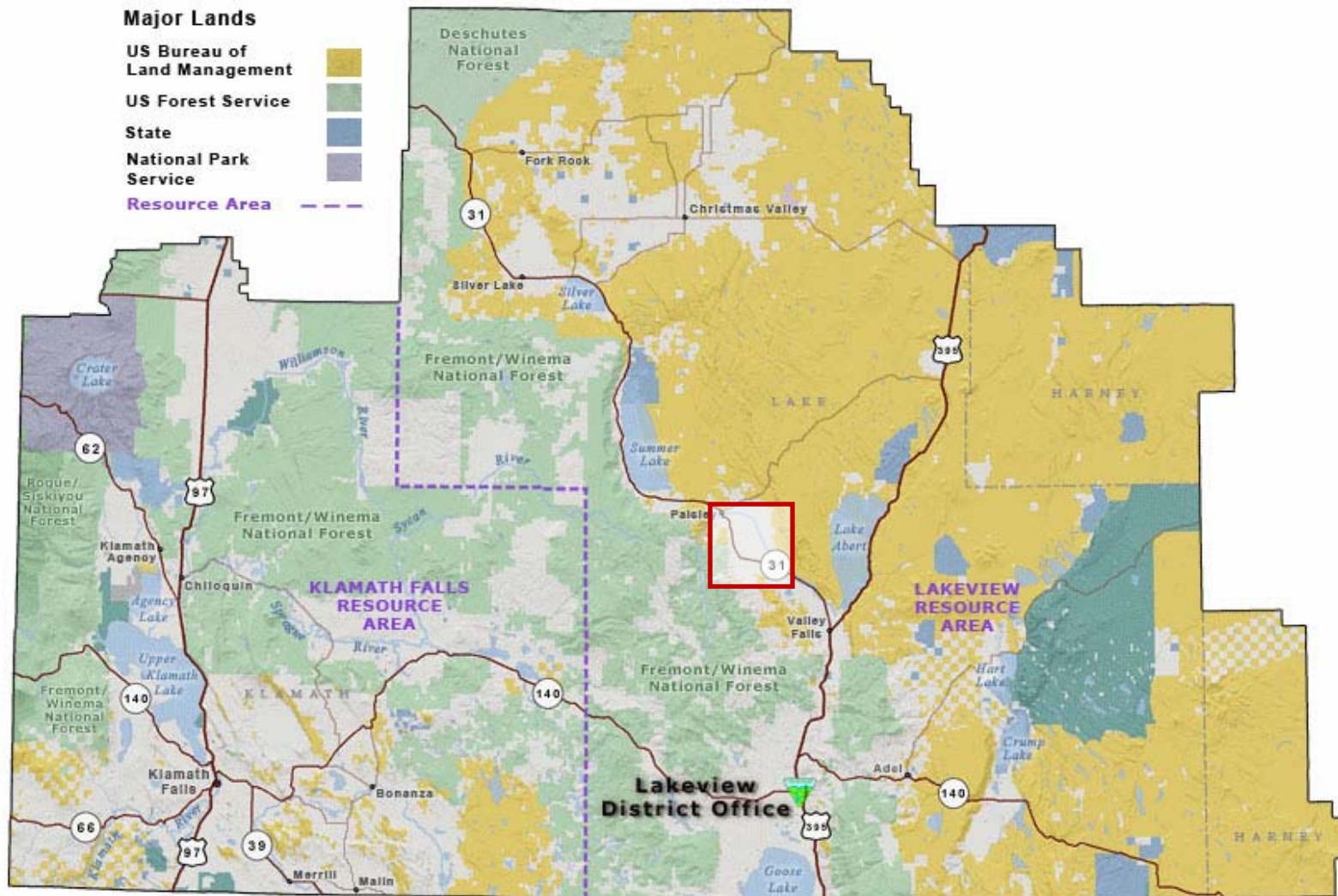


Figure 3: Google Map (2009) road view of Upper and Lower Chewaucan Marsh.

