



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



Paulina Marsh

BCS number: 48-20

Site description author(s)

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Site location (UTM)

Datum: NAD 83, Zone: 10, Easting: 661311, Northing: 4783827.

General description

“Paulina Marsh is a settling basin for several perennial or seasonal creeks, primarily Silver, Buck and Bridge Creeks. The setting is a mosaic of flood irrigated grassy meadows, sloughs, swales and channels, brush covered uplands and willow thickets along the upper reaches of perennial streams. The road crosses several creek channels and irrigation ditches that hold water well into summer. Spring flooding draws many wetland birds to pause in migration or stay for breeding. In very wet cycles, and with abundant run-off Paulina Marsh fills and overflows into Silver Lake” (USFS, Martin St. Louis, personal communication).

Boundaries and ownership:

Boundaries: Located near the small town of Silver Lake, Oregon, Paulina Marsh starts just north of the town and extends northward about six miles. The basin is limited by the Connley hills to the east and terrain slowly gains elevation to the west so that there are many strips of wetland habitat. The wetland is 7 miles wide (E to W) in some areas.

Ownership: Non-industrial private landowners comprising several mid to large sized ranches own Paulina Marsh. Irrigation and harvest of native meadow hay as well as livestock grazing occurs on much of the area. See Figure 1 for BLM Lakeview District ownership map.

Water levels:

Thompson Reservoir captures and stores water from a fairly large watershed (check with USFS for data) situated south of the town of Silver Lake. The main stem of Silver Creek originates from the reservoir and is joined by the W. Fork of Silver Creek and some water is impounded at a smaller diversion dam (South Gulch Reservoir) and diverted for irrigation. Silver Creek continues north into Paulina Marsh. Buck and Bridge Creeks flow to the northwest side of Paulina Marsh. Water amount and timing of run-off are extremely variable and dependent on over winter precipitation and snowfall. In extremely wet cycles runoff is abundant and most of Paulina Marsh is covered in water, and overflows into Silver Lake. The marsh is sometimes dry (Rakestraw 2007).

Focal Species Use and Timing

“Raptors such as Bald Eagle, Golden Eagle, and Northern Harrier are possible in any season. Rough-legged Hawk and Ferruginous Hawk show up in winter. During spring and early summer, look for Cinnamon Teal and Northern Pintail. Wading birds such as Sandhill Crane, Great Egret, and Great Blue Heron are present. Scan distant fence posts for perching Willet, Long-billed Curlew, and Wilson's Snipe. Shallow-water is the place for less common Black-bellied Plover and Dunlin” (USFS).

When water is present, Black-necked Stilts, American Avocets, Willets, Long-billed Curlews and Wilson’s Phalaropes can be seen (Rakestraw 2007).

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

*The focal species for Oregon’s aquatic 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 (especially spring) waterfowl:

- American Widgeon
- Blue-winged Teal
- Canada Goose
- Canvasback
- Cinnamon Teal
- Gadwall
- Green-winged Teal
- Lesser Scaup
- Mallard
- Northern Pintail
- Northern Shoveler
- Redhead
- Ring-necked Duck
- Ruddy Duck
- Trumpeter swan have successfully nested in the NW corner of Paulina Marsh

Breeding and migrating secretive marsh birds:

- American Bittern
- Pied-billed Grebe
- Sora
- Virginia Rail

Breeding (White-faced Ibis) and migrating colonial nesting water birds:

- Black-crowned Night Heron
- Black Tern
- California Gull
- Caspian Tern
- Clark's Grebe
- Double-crested Cormorant
- Eared Grebe
- Forester's Tern
- Great Egret
- Ring-billed Gull
- Western Grebe
- White-faced Ibis

Breeding and migrating ground based aquatic birds:

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

Migrating (esp. spring) 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 and wet meadow areas

*See Figure 2 for USFWS National Wetlands Inventory (2008) layer in Google Earth (2008).

Access to Type 1 and Type 2 habitats

Pitcher Lane is the best route into the marsh. It extends northward from HWY 31 at Silver Lake. "Pitcher Lane passes through private property on both side, both traffic light and birding is good from the car" (Rakestraw 2007). Access to private land for survey work may be difficult to obtain.

Roadside survey (Pitcher Lane) habitat conditions may be variable across years due to changing run-off regimes and subsequent habitat conditions.

See Figure 3 for general road access to the area (Google Map 2009).

Audibility/visibility of focal species

Audibility/visibility issues would be present as it relates to accessibility along Pitcher Lane. Traffic is generally light and sporadic in contrast to more established routes and highways.

Conservation issues

The addition of nutrients from cattle grazing may stimulate invertebrate populations and thus waterbird food sources. Livestock ranching operations provide for habitat diversity due to haying and grazing and are beneficial to several guilds of waterbirds. Grazing generally occurs post breeding season, fall through spring and not within field to be hayed. Haying generally occurs later in breeding season or post breeding season for most species.

Conversion from flood irrigation to sprinkler would diminish wetland and waterbird values.

Conservation measures taken, in progress, or proposed

Importance has been identified with Natural Resources Conservation Science (NRCS) personnel who guide funding and technical assistance to private land cost share programs.

Past and current surveys

Oregon Department of Fish and Wildlife (ODFW) conducts Statewide Waterfowl Breeding population aerial cruise surveys annually since 1994. Two transects are situated across Paulina Marsh. American Coots, Sandhill Cranes and Trumpeter Swans are counted.

Colonial nesting water birds surveyed in important wetland basins across Lake County annually since 1990, emergent marsh portion of this site surveyed.

Potential survey methods

a. Description: A potential survey would include a roadside survey along Pitcher Lane.

b. Selection bias:

c. Measurement error and bias:

Potential pilot studies

Literature cited

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<http://www.blm.gov/or/districts/lakeview/images/LakeviewDetailedMap.jpg> .

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Rakestraw, J. 2007. Birding Oregon: 44 Prime birding areas with more than 200 specific sites. Guilford, Conn.: Falcon, c2007. 1st Edition.

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Sites: Paulina Marsh. [http://www.fs.fed.us/r6/centraloregon/wildlife/sites/25-](http://www.fs.fed.us/r6/centraloregon/wildlife/sites/25-paulinamarsh.shtml)

[paulinamarsh.shtml](http://www.fs.fed.us/r6/centraloregon/wildlife/sites/25-paulinamarsh.shtml). Accessed December 1, 2008.

Figure 1: BLM Lakeview District ownership map. The red box indicates Paulina Marsh.

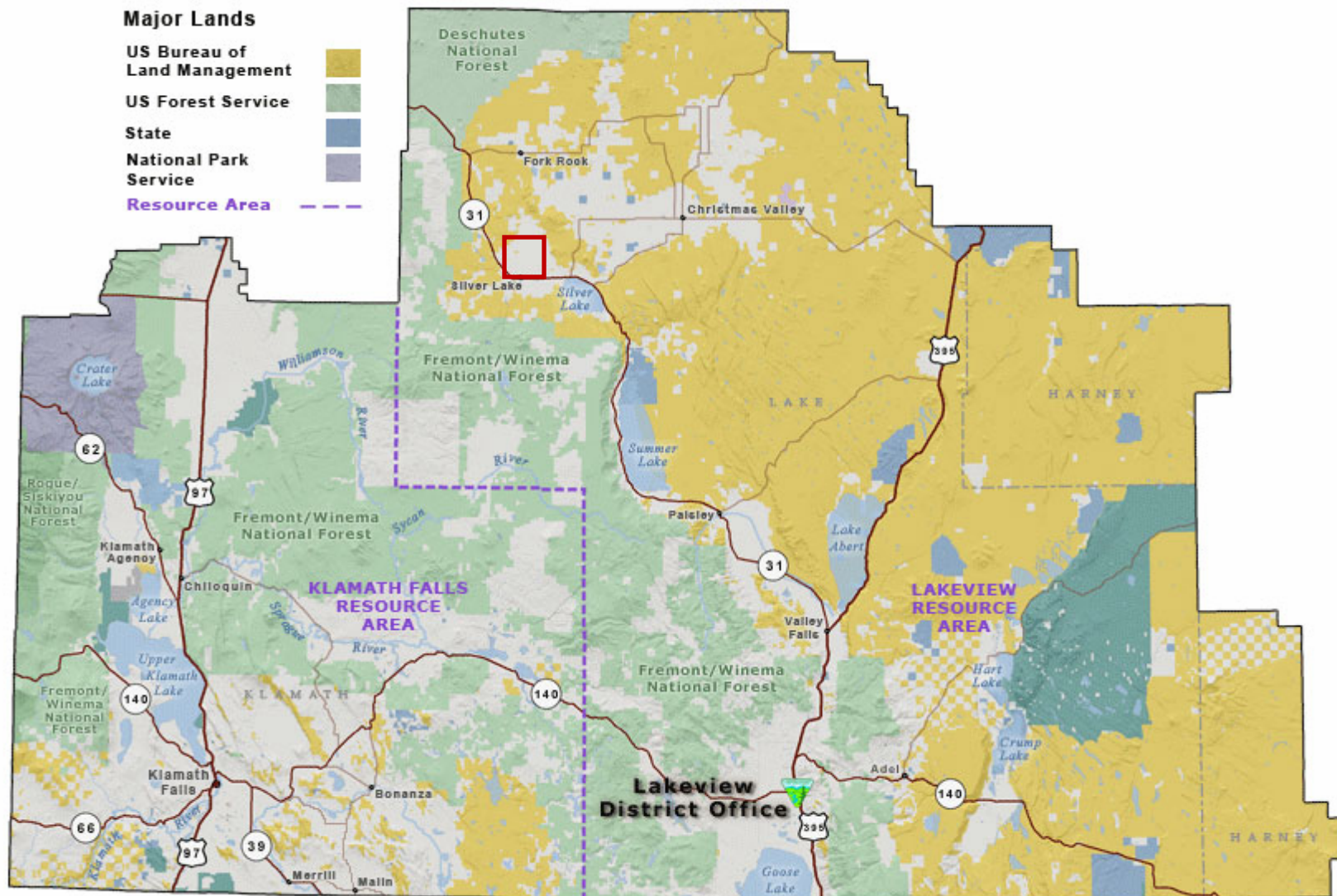


Figure 2: Google Earth (2008) map of Paulina Marsh with the USFWS National Wetlands Inventory (2008) layer.



Figure 3: Google Map (2009) road view of Paulina Marsh area.

