



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



## Silver Lake

BCS number: 48-22

### Site description author(s)

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### Site location (UTM)

Datum: NAD 83, Zone: 10, Easting: 671855, Northing: 4773673.

### General description

Silver Lake is a very ephemeral terminal lake that rarely has much water. When flooded, emergent marsh growth and waterbird use is tremendous. At moderate levels of flooding vegetation growth is prolific and the wetland extremely productive. Even at low levels of flooding, waterbird use can be substantial. Moderate to high levels of flooding have been observed in only 4-5 out of the past 30 years. The elevation of the lake is 4324 ft (1318 m). See Figure 1 for map of Silver Lake (Google Earth 2009).

### Boundaries and ownership

*Boundaries:* The lake's boundaries are highly ephemeral and total nearly 10,000 acres when full. Oregon Hwy 31 borders the north and east sides, and Duncan Reservoir Road on the north, Dead Indian Rim on the west and Weaver Lane on the south.

*Ownership:* The entire perimeter (with the exception of a small BLM holding on the southeast side) is under private ownership involving about 8-10 landowners. Oregon Division of State Lands controls submerged lands within the meander line. See Figure 2 for BLM Lakeview District ownership map.

## Water levels

In recent times this highly ephemeral lake has been mostly dry. Historically, prior to development of agricultural irrigation developments near the town of Silver Lake flows to Silver Lake from Silver Creek watershed, water was probably more persistent. Significant water has been present in just 4-5 out past 30 years. During periods of very high precipitation and snowfall in the region, Silver Lake receives inflow from a channel flowing from the northeast side of Paulina Marsh. Other smaller watersheds (Duncan and Willow Creeks) also provide small amounts of run-off from the west and south. Runoff occurs primarily during early spring sometimes extends into early summer when snowpack is heavy.

## Focal Species Use and Timing

\*\*NOTE: Only when moderate to high water levels occur. \*\*

<b>Focal Guild/Species</b>	<b>Wintering</b>	<b>Breeding</b>	<b>Migration</b>
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		Present	Present
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 Wigeon  
Blue-winged Teal  
Bufflehead  
Canada Goose  
Canvasback  
Cinnamon Teal  
Common Goldeneye  
Gadwall  
Greater White-fronted Goose (esp. Tule sub-species), Redhead  
Green-winged Teal  
Northern Pintail  
Northern Shoveler  
Lesser Scaup  
Lesser Snow Goose, Wrangel Is. Russia pop.  
Mallard  
Ring-necked Duck  
Ruddy Duck

Breeding and migrating secretive marsh birds:

American Bittern  
Pied-billed Grebe  
Sora  
Virginia Rail

Breeding and migrating colonial nesting water birds:

Black-crowned Night Heron  
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
- Marsh Wren
- Killdeer
- Red-winged Blackbird
- Spotted Sandpiper
- Tricolored Blackbird
- Willet
- Wilson's Phalarope
- Yellow-headed Blackbird

Migrating (esp. spring) shorebirds:

- Dunlin
- Black-bellied Plover
- Greater Yellowlegs
- Least Sandpiper
- Lesser Yellowlegs
- Long-billed Dowitcher
- Marbled Godwit
- Pectoral Sandpiper
- Short-billed Dowitcher
- Sprague's Pipit

**Location of Type 1 and 2 habitat within the site**

Functional Group	Type 1 Habitat	Type 2 Habitat
Ground Based Aquatic Birds		
Secretive Marsh Birds		
Colonial Nesters		
Migrating Shorebirds		

**Access to Type 1 and Type 2 habitats**

Accessing bird habitat would be very difficult due to private land ownership. See Figure 3 for general road map (Google Map 2009).

**Audibility/visibility of focal species**

The visibility/audibility of birds here should be unhindered. The remoteness, topography and vegetation are conducive for detecting birds during a survey.

**Conservation issues**

The addition of nutrients from cattle grazing may stimulate invertebrate populations (waterbird food sources). Livestock grazing has historically occurred when the lake bed is dry and when water returns, waterbird response has been tremendous. It is possible for grazing to be beneficial to several guilds of waterbirds.

**Conservation measures taken, in progress, or proposed**

None known.

**Past and current surveys**

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

Colonial nesting water birds have been surveyed in important wetland basins across Lake County annually since 1990, and the emergent marsh portion of this site has also been surveyed.

**Potential survey methods**

Manning and Hartley (2006) suggest that when conditions are favorable, monitoring of focal species from floating craft should be considered. Whether a migrating shorebird survey and a secretive marshbird survey would be beneficial has yet to be determined.

**Potential pilot studies**

## Literature cited

Bureau of Land Management, Lakeview District ownership map.

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Google Earth version 5.0. 2009. Image: Silver Lake, Oregon. Accessed March 20, 2009.

Google Map. 2009. Map of Silver Lake, Oregon.

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Manning, Ann and Laura Hartley. March 2006. Important sites for aquatic birds in Eastern Oregon. Version 2.0.

U. S. Fish and Wildlife Service (USFWS). 2009. National Wetlands Inventory website.

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<http://www.fws.gov/wetlands/>. Accessed March 20, 2009.

**Figure 1:** Google Earth (2009) map of Silver Lake.





**Figure 2:** BLM Lakeview District ownership map. The red box indicates Silver Lake.

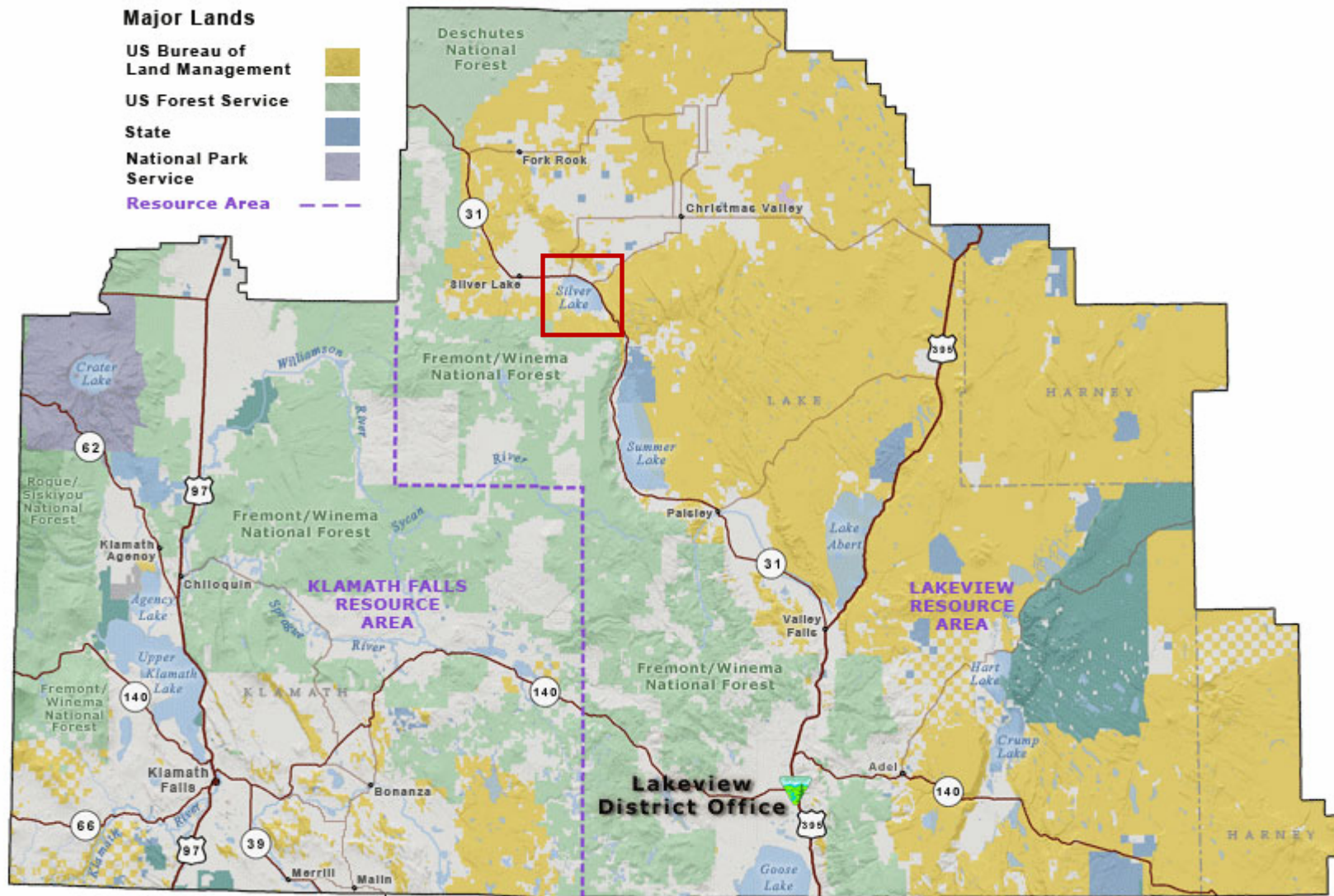




Figure 3: Google Map (2009) road view of Silver Lake.

