



## **OWEB Focused Investment Partnership Priority OREGON CLOSED LAKES BASIN WETLAND HABITATS**

### **Summary Statement of Priority**

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The OWEB Board will consider proposals for investment in the **Closed Lakes Basin wetland habitats** for initiatives that address habitat conservation and restoration needs to achieve ecological outcomes over time at the landscape scale<sup>1</sup>.

OWEB's Focused Investment Priority for Closed Lakes Basin wetland habitats guides voluntary actions that address primary limiting factors related to the quality of this habitat type. These actions also will support and/or improve watershed functions and processes. **These actions will be guided by the habitat, limiting factors, ecological outcomes, and conservation approaches outlined in the Oregon Conservation Strategy and the Intermountain Joint Venture's (IWJV) Habitat Conservation Strategy Implementation Plan, which are listed on page 4 of this document.**

Focal areas for this Priority are identified as high-priority wetland and floodplain habitat for migratory and resident bird and native fish species in the associated plans. These areas exist within the Oregon portion of the Closed Lakes Basin area (within Harney, Lake and a small portion of Malheur counties).

### **Background**

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#### **Where it occurs**

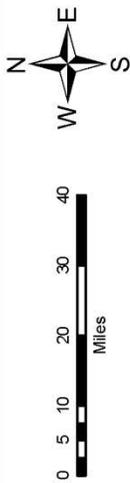
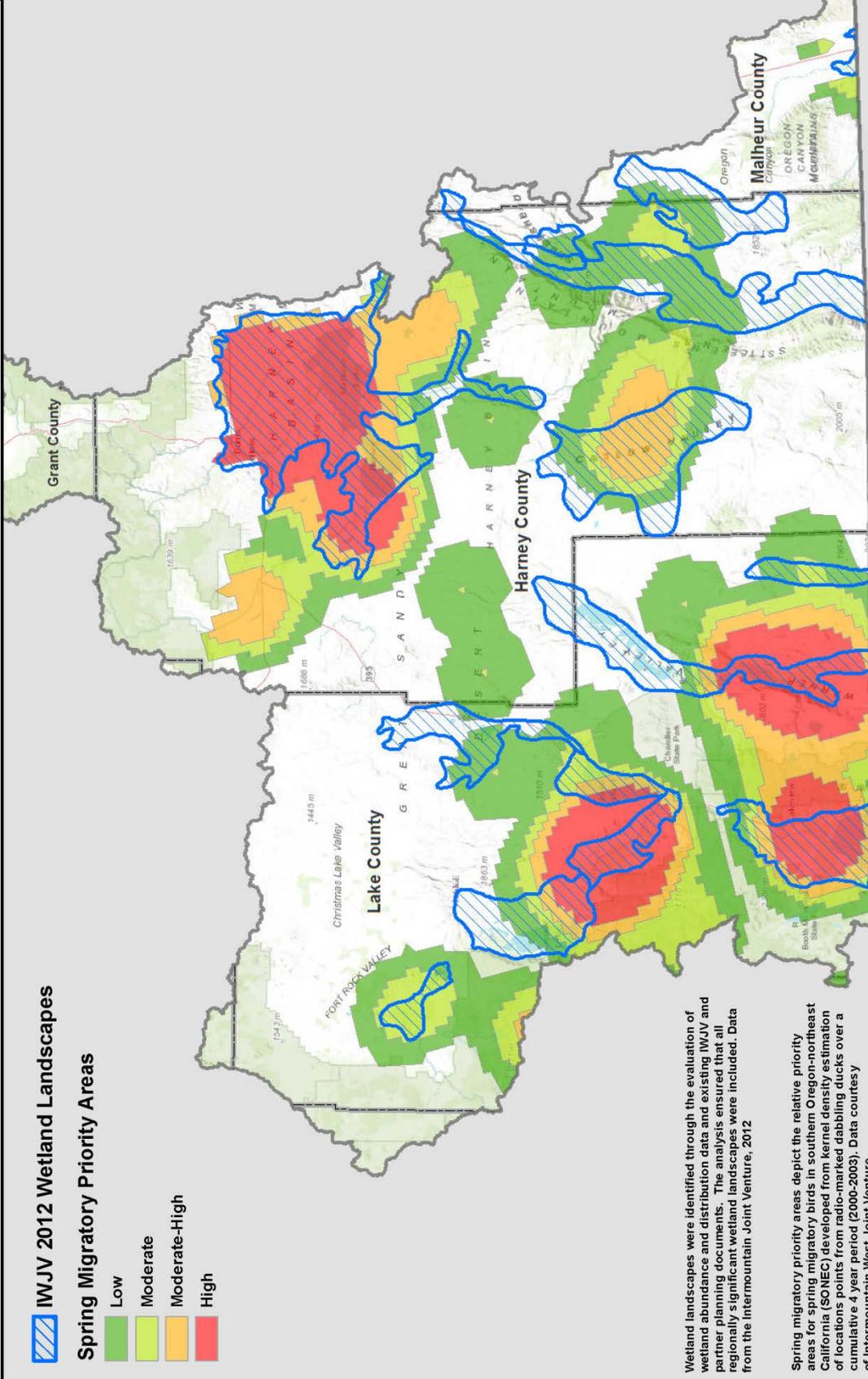
The Closed Lakes Basin wetlands exist within the Southern Oregon Northeast California (SONEC) region, which is a portion of the Closed Lakes network within the Great Basin (see map). The SONEC region geography and habitat has been defined by the IWJV and in the federal North American Waterfowl Management Plan. The Closed Lakes Basin within the SONEC region is an important part of the intercontinental Pacific Flyway. Within the SONEC region, 75% of wetland habitat is located on private lands, most of which is managed as flood-irrigated hay and pastureland. These areas also support native fish species, including ESA-listed sucker fish.

In Oregon, Closed Lakes Basin wetland habitat exists primarily in Lake and Harney Counties (including Malheur National Wildlife Refuge), with a small portion in Malheur County. Closed Lakes Basin wetland habitats include shallow lakes and marshes, wet meadows, and irrigated pasturelands. Many of the managed wetland/pastures exist in the floodplain of tributaries and lakes in the area. Closed Lakes Basin wetlands represent a unique chain of desert oases that, as an integrated network, provide critical habitat and food for waterbirds throughout the seasonal cycle.

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<sup>1</sup> The landscape scale refers to the scale at which environmental, economic, and social factors intersect.

# Focused Investment Priority for Oregon Closed Lakes Basin Wetland Habitats



## 2012 IWJV Wetland Landscapes and Spring Migratory Priority Areas Within the Lakes Reporting Basin



### **Indicator species and/or species of interest supported by this habitat**

An estimated 70 percent of migratory birds—including over 6 million waterbirds—annually pass through the SONEC region, which includes the Oregon Closed Lakes Basin. Moreover, the Closed Lakes Basin provides critical habitat to important bird species that utilize this region as part of the Great Basin network of habitat: 1) most of North America’s snowy plovers (federally listed under the Endangered Species Act [ESA]) breed in the region; 2) most of North America’s eared grebes, long-billed dowitchers, and all of the world’s Wilson’s phalaropes use the region during migration; 3) most of the world’s American avocets (a keystone species) use the region for an extended post-breeding period, and over 50% of this species breeds in the Great Basin; 4) most of the world’s white-faced ibis breed in the Great Basin; and 5) about 80% of nesting greater sandhill cranes in Oregon are found into the Closed Lakes Basin. Additional migratory and resident bird species also rely on this habitat.

Of particular importance is habitat for shorebird species and migratory birds on the spring migration path. This region provides a diversity of food production at different salt regimes throughout the year; thus, seasonal water conditions drive habitat function and productivity. Additionally, the Closed Lakes Basin wetlands support native fish species such as Warner and Modoc sucker fish (ESA-listed), tui chub, and redband trout.

### **Why it is significant to the state**

Closed Lakes Basin wetlands are ecologically unique high-desert wetlands that provide critical habitat for numerous migratory and resident bird species. This region has international importance as habitat for migratory birds, including the ESA-listed species cited above. Oregon’s Closed Lakes Basin wetlands habitat are a significant portion of the greater SONEC complex of wetlands that are so critical to the millions of birds that travel the Pacific Flyway each year. The Intermountain West Joint Venture recognizes the SONEC region as one of two priority areas in the Intermountain West for wetland-dependent birds. Greater sage-grouse depend on these wetland habitats for foraging habitat for brooding (see related priority). ESA-listed Warner and Modoc sucker fish also are found in this habitat, as referenced above.

The region also fosters an historic and vitally important ranching community and associated economy that depends on the ecological health of these wetland habitats. In addition, Malheur National Wildlife Refuge and other wildlife areas in the Closed Lakes Basin are critical recreational and economic resources for these rural counties. The U.S. Fish and Wildlife Service has documented over 65,000 annual visitors to the Malheur National Wildlife Refuge alone.

Finally, the implications of climate change in this region may lead to a reduction in water availability, further altering the natural hydrologic regime, which could lead to higher salinity levels in lakes and wetlands. This issue lends added urgency to the importance of conservation efforts concerning this unique habitat.

**Key limiting factors and/or ecological threats, with a focus on ecosystem function and process**

- Loss and degradation of wetlands habitat, including salinization and an imbalance of seasonal saline gradients;
- Seasonal water availability as a result of altered natural hydrologic functioning, including the conversion to sprinkler irrigation from flood irrigation that provided surrogate wetland habitat and impacts of climate change;
- Proliferation of invasive common carp, whose feeding behavior has destroyed vast natural marsh habitat by uprooting vegetation and increasing suspended sediments and turbidity that significantly reduces vegetation otherwise available as a food source for birds and other wildlife; and
- Invasive plant and macroinvertebrate species, which can reduce food production for native bird species.

**Reference plans**

- 1) Oregon Conservation Strategy  
([http://www.dfw.state.or.us/conservationstrategy/read\\_the\\_strategy.asp](http://www.dfw.state.or.us/conservationstrategy/read_the_strategy.asp))
- 2) North American Waterfowl Management Plan  
(<http://www.fws.gov/birdhabitat/NAWMP/Planstrategy.shtm>)
- 3) Intermountain West Joint Venture Habitat Conservation Strategy Implementation Plan  
(<http://iwjv.org/2013-implementation-plan>)